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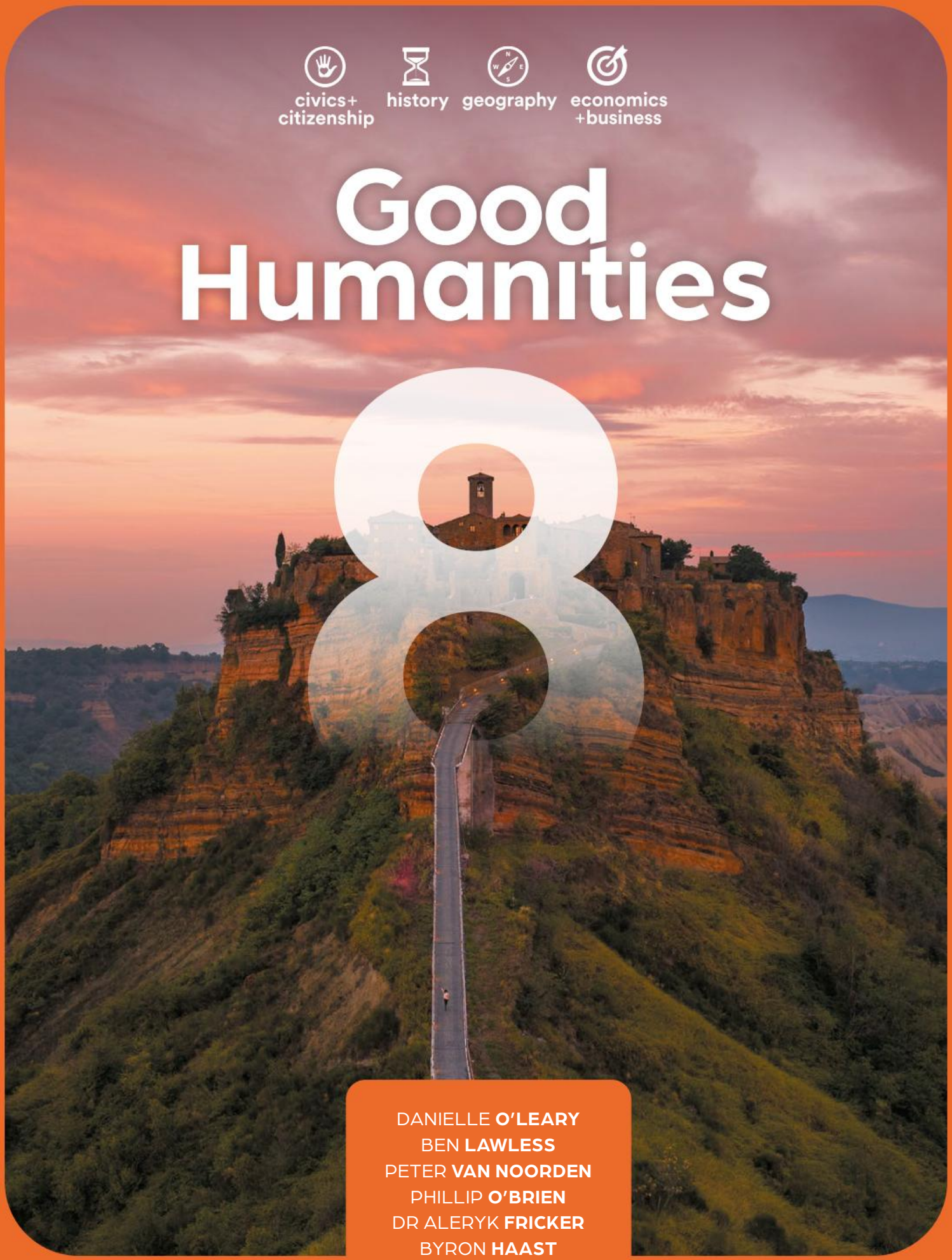
Good Humanities

8



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Good Humanities 8

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Some content in *Good Humanities 8 Victoria 2nd edition* has been sourced and adapted from material contained in titles previously published by Matilda Education: *Good History NSW Stage 4*, ISBN 9780655093428 (first published in 2025), *Good Geography NSW Stage 4*, ISBN 9780655093473 (first published in 2025), and *Macmillan History NSW 8*, ISBN 9781420229783 (first edition published in 2013). The authors of these titles are: Samantha Frappell, Aleryk Fricker, Ben Lawless, Peter van Noorden, Khya Brooks, Lorraine Chaffer, Danielle O'Leary, Joanna Clyne, Rose Searby, Matthew Leeds, Nick Cummins, Luke Cashman and Miriam Meehan.

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Cover design: Ana Cosma

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First published in 2025 by **Matilda Education Australia**, an imprint of Meanwhile Education Pty Ltd

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Publication data

Title: Good Humanities 8

ISBN: 9780655093978

NATIONAL LIBRARY OF AUSTRALIA

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

Printed in Malaysia by Vivar Printing

July 2025

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Europe and the Mediterranean world (c. 600–1750 CE)

Overview: the medieval and pre-modern period

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How can I understand the medieval and pre-modern period?

During the medieval period, the world was a vast network of regions bound together by trade, religion, pilgrimage, war and pandemics. There were significant advances in agriculture and mining, and new cultural ideas emerged that changed societies.

Learning ladder

The Learning ladder lists the knowledge and skills you will learn. Each has five levels of difficulty. Learning skills at the bottom of the ladder will help you to master the skills at the top of the ladder.

Steps in knowledge progression	Background and origins	Significant people, ideas and events	Impact and legacies	Continuity and change	Causes and consequences
5	I can evaluate the impact of the rise and fall of societies.	I can evaluate how societies were influenced by significant people and ideas.	I can evaluate the legacy of a society.	I can evaluate patterns of continuity and/or change.	I can analyse causes and consequences.
4	I can explain why a society developed.	I can explain why ideas influenced people and events.	I can explain why a society has a legacy.	I can explain patterns of continuity and/or change.	I can explain why something was caused or why it led to certain consequences.
3	I can explain how a society developed.	I can explain how ideas influenced people and events.	I can explain the impact of one society on another.	I can explain continuity and change.	I can explain how something was caused or its consequences.
2	I can describe the origins of societies.	I can describe key people, ideas and events.	I can describe the legacy of a society.	I can describe continuity and change.	I can describe causes and consequences.
1	I can identify the origins of societies.	I can identify key people, ideas and events.	I can identify the legacy of a society.	I can identify continuity and change.	I can identify a cause and a consequence.

Knowledge and understanding

Source 1: Himeji Castle was built on Mount Himeyama in Japan in the 14th century CE and reconstructed in 1577 CE. Castles in medieval Japan were fortresses for military defence that were built at strategic locations, such as on mountains and next to rivers and trade routes.

Perspectives	Significance	Interpretations	Chronology	Sources	Steps in skills progression
I can evaluate historical perspectives.	I can evaluate historical significance.	I can evaluate the evidence supporting a historical interpretation.	I can explain change or causality from a timeline.	I can evaluate sources to determine their accuracy, usefulness and reliability.	5
I can compare perspectives.	I can explain why something is historically significant.	I can compare historical interpretations.	I can summarise the events on a timeline.	I can explain the historical context of a source.	4
I can explain a perspective.	I can explain something historically significant.	I can explain an interpretation of history.	I can follow timeline conventions.	I can apply historical knowledge to explain sources.	3
I can describe perspectives.	I can describe something historically significant.	I can describe an interpretation of history.	I can place events on a timeline chronologically.	I can describe a source.	2
I can identify the perspective of a person from the past.	I can identify something historically significant.	I can identify a historical debate.	I can read a timeline.	I can identify the origin of a source.	1

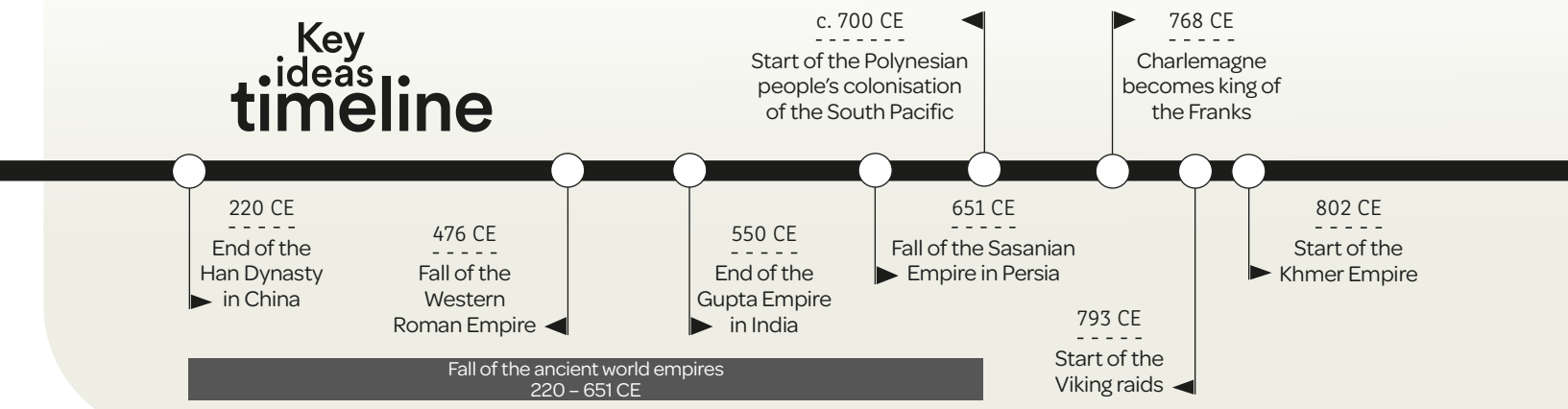
Historical concepts and skills

What can we learn from the medieval and pre-modern period?

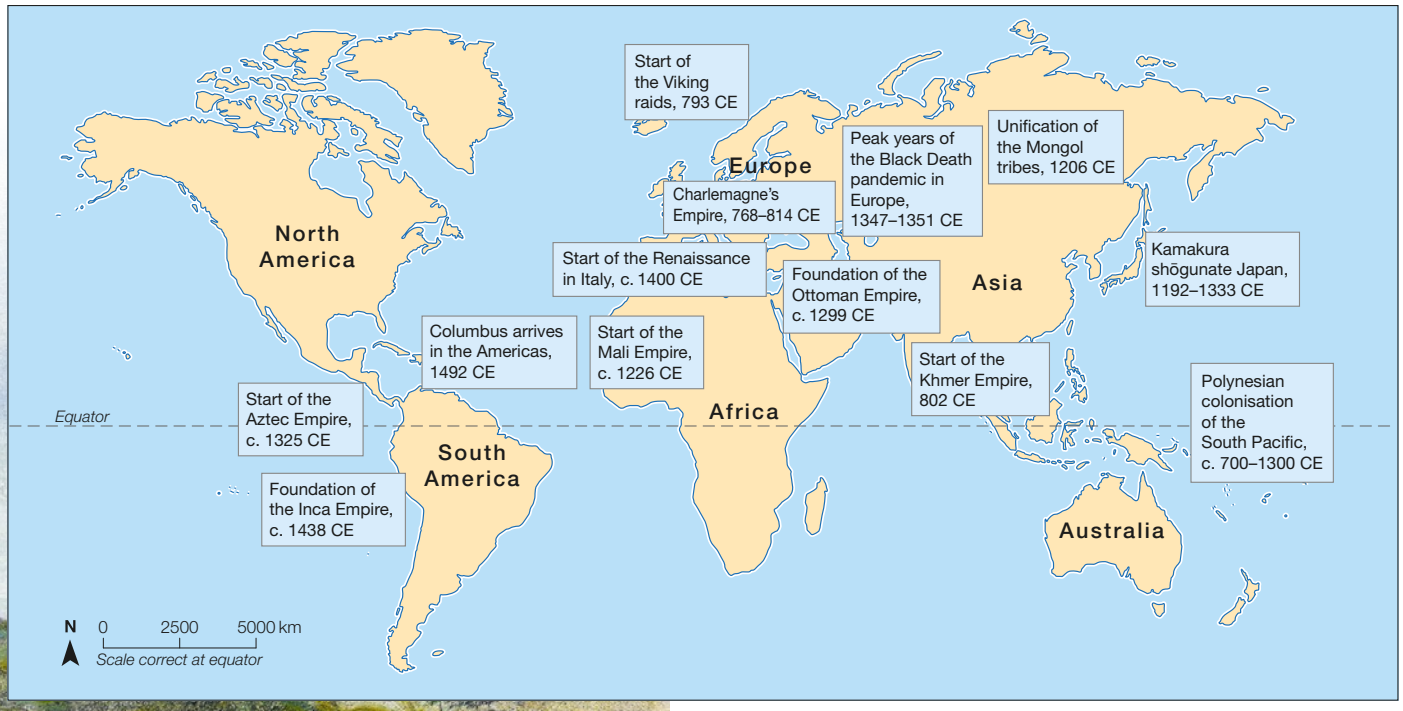
The medieval period began after the collapse of the great ancient empires in the 5th century CE.

Source 1: The Polynesian people's colonisation of hundreds of islands in the Pacific Ocean in the medieval period is one of the greatest feats of human exploration and navigation. The Polynesians crossed the vast expanses of the Pacific Ocean in small canoes.

Source 2: Medieval period timeline



The medieval world

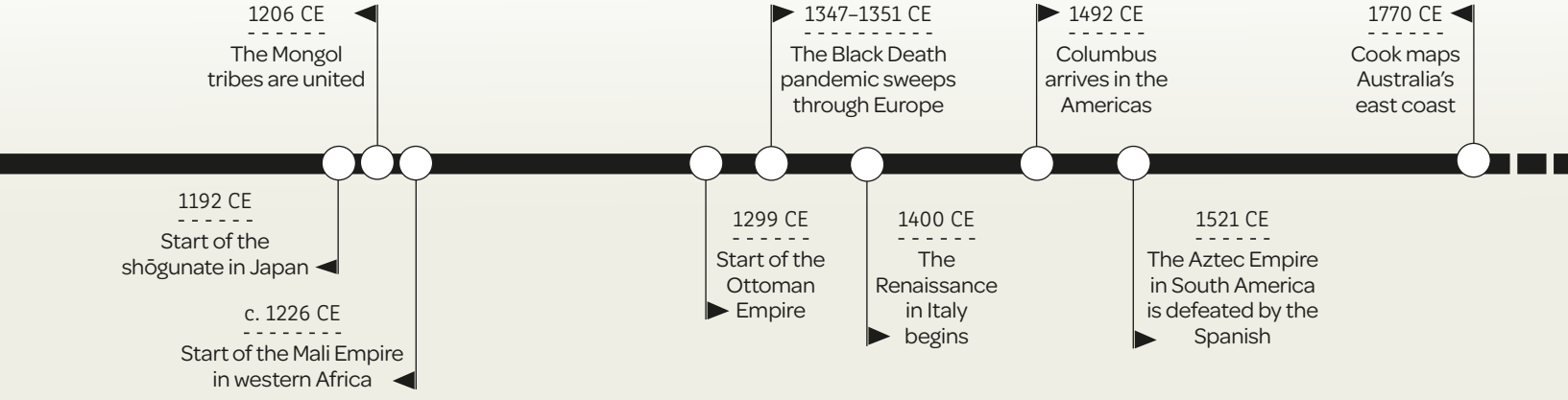


Source: Matilda Education Australia

Source 3: Key dates and locations for the medieval and early modern periods

The collapse of the ancient world

After centuries of power, the great empires of the world suffered decline and disintegration. Beyond the borders of the great empires, tribal peoples began to invade, seeking the wealth and fertile lands of the empires. The Western Roman Empire was overrun by tribes such as the Goths and the Vandals. China's Han Empire split into three rival kingdoms in 220 CE, due to internal discontent and repeated tribal invasions in the north. The Gupta Empire of India fell to the Huns in 550 CE, while the Persian Empire suffered a sudden collapse following a war against the eastern half of the Roman Empire, known as Byzantium.



The medieval period

From the ashes of the ancient empires arose new, vibrant societies. The medieval period was characterised by a vast network of powerful city-states, kingdoms and empires. Extensive trade networks and pilgrimage routes resulted in people exchanging goods and ideas from across the world, boosting economic activity and ushering in the development of new technology and cultural change.

Feudalism

Feudalism was a social structure based on the ruler (the king, emperor or sultan) owning all the land. People gained the right to use or occupy the ruler's land in return for loyalty, labour and military service.

Although many medieval societies throughout the world had a feudal social system – such as Japanese and Ethiopian societies – feudalism was particularly prevalent in western Europe. Western European feudalism began around 900 CE and spread throughout Europe over the next 150 years.

Feudalism in Europe evolved as a response to the constant attacks by raiders, such as the Vikings. It was a system by which the nobles protected the peasants, who were the majority of the people. In return, the peasants provided services to the nobles. The benefits of the feudal system were that it helped to protect peasants from attack and provided stability. The feudal system gave everyone a 'place' in society. It was understood that a person was born into a particular social position because that was what God had intended for them.

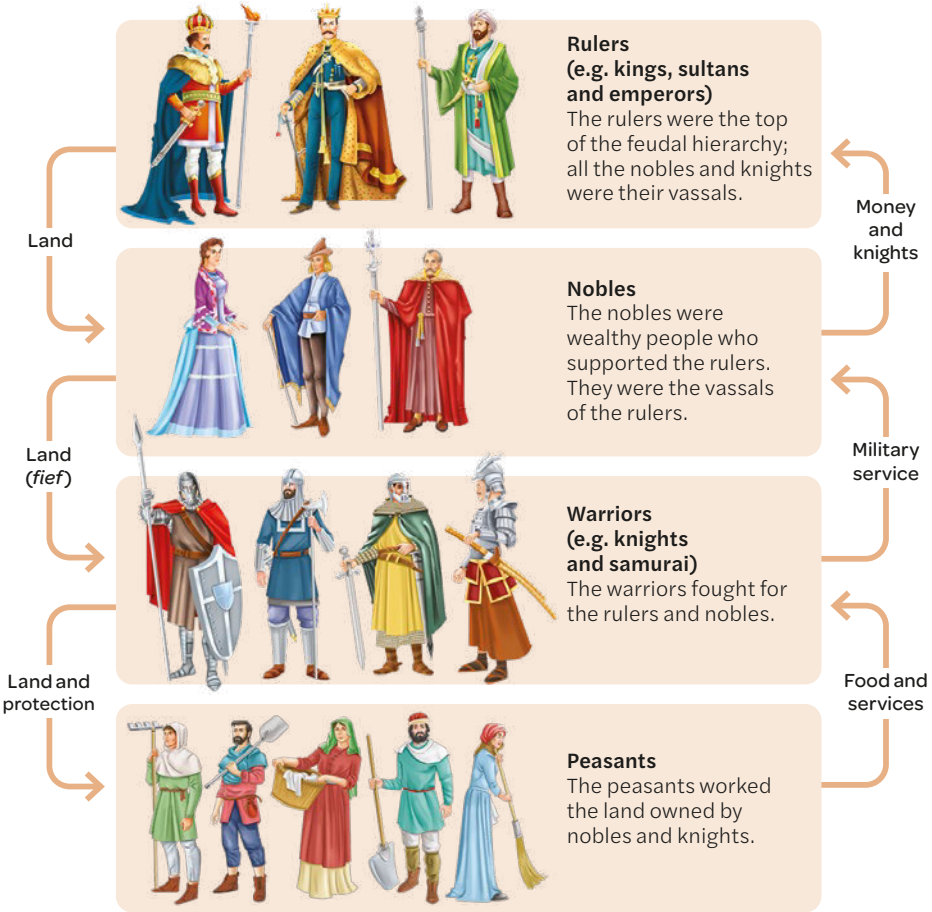
Source 4: Genghis Khan unified the Mongol tribes in 1206 CE and created a vast land empire.

The rise of a wealthy merchant class, higher literacy rates and a huge decline in the European population following the **Black Death** pandemic led to a steady rejection of the old feudal structure. Merchants and artisans, in particular, flocked to the major trading towns, demanding to be released from their feudal obligations to the nobles. At the same time, peasants, whose labour was now much in demand following the high number of deaths in the pandemic, were able to ask for higher wages from the nobles and to leave their estates to search for better conditions.

The pre-modern period

The pre-modern period (also known as the Early Modern period) began in c. 1453 CE and ended around 1789 CE, at the time of the French and Industrial Revolutions. The period is known for a renaissance in the arts, architecture and technology.

European exploration and advances in navigation opened new trade routes across the oceans and led to the colonisation of the Americas, the spread of Christianity and growth in the slave trade. At the end of the pre-modern period, the British and Russian empires emerged as the world's most powerful colonial empires, while the once-great Asian empires – the Ottoman (Türkiye), Mughal (India) and Qing (China) empires – were in decline.



▲ **Source 5:** The feudal system

Learning ladder H0.1

Background and origins

1 **a** Source 3: Identify two events that occured in Asia in the medieval period.

b Source 3: Identify two events that occured in the Americas in the medieval period.

2 Source 1: Describe how Polynesian people expanded their territory in the medieval period.

3 Explain how the ancient empires collapsed.

4 Explain why the feudal system developed in western Europe in particular.

HOW TO

Chronology, page 198

Chronology

1 Source 2: List three events on the timeline that occurred during the 8th century CE (700s CE).

2 List the following events in order, from the oldest to the most recent:

- 1521 CE: Aztec Empire is defeated by the Spanish
- 550 CE: End of the Gupta Empire in India
- 768 CE: Charlemagne's reign begins
- 1192 CE: Start of the shōgunate in Japan.

3 Source 3: Create a timeline using the events on the map.

4 Source 2: Explain the changes that took place between 200–651 CE and 768–1299 CE.

What happened in Europe after the fall of the Western Roman Empire?

Following the collapse of the Western Roman Empire, Christianity played a key role in laying the political, social and cultural foundations of medieval European societies.

The fall of the Western Roman Empire

Back in 395 CE, the Roman Empire had split into two parts: the Western Roman Empire, governed from Rome, and the Eastern Roman Empire (known as Byzantium), governed from Constantinople. Due to internal weaknesses and repeated invasions, the Western Roman Empire collapsed in 476 CE when the last emperor, Romulus Augustulus, was deposed by the Gothic leader Odoacer. The Western Roman Empire was replaced by a range of new kingdoms led by the tribal invaders, such as the Kingdom of Odoacer, the Kingdom of the Visigoths and the Kingdom of the Vandals. Meanwhile, Byzantium would remain as the last remnant of the ancient Roman Empire until 1453 CE.

Christendom

The term 'Christendom' emerged after the fall of the Western Roman Empire. All lands that recognised the authority of the Christian church, including those in the old Eastern Roman Empire and the new kingdoms of Western Europe, were considered part of Christendom. In the medieval period, the Christian church had a great deal of power and authority over government, society and spiritual ideas.

The role of the pope

As the Roman Empire crumbled in the West, the church took over civil administration. The leader of the church in Rome was known as the pope. The popes became an important source of stability in medieval Europe.

Source 1: Pope Gregory I, known as 'the Great'. [This illustration appeared in a French manuscript, c. 1200 CE.]

Source 2: Giulio Cesare Arrivabene (1806–1896 CE), *The Meeting of Henry IV and Gregory VII at Canossa*. This painting shows King Henry IV, who had defied Pope Gregory VII's new ruling and been excommunicated. Barefoot and wearing a hair-shirt to show his remorse, he is begging Pope Gregory VII to end his excommunication.

Pope Gregory I (590–604 CE) was particularly active in establishing this governmental role. During his papacy, there were several invasions by the Germanic tribes and many refugees fled to Rome for safety. Pope Gregory I ensured that food, clothing and money were distributed to the poor and refugees. Gregory's efforts won the hearts and minds of the Roman people, who increasingly looked to him for leadership.

The power of the church

By the 11th century, the power of the pope and the church had increased considerably. In 1075 CE, Pope Gregory VII (1073–1085 CE) declared that the pope was the universal head of the Christian church and that he alone had the authority to depose emperors and appoint bishops. The bishops served as advisors to medieval kings and informed the pope if a king was undermining the pope's authority in any way.

Kings who defied the popes were punished with **excommunication**. If a king was excommunicated it meant that he and all the people in his kingdom were cut off from receiving the **sacraments**. People believed that if they were unable to access the sacraments, they risked going to hell when they died. During the medieval period, 16 kings were excommunicated.

Monastic communities

In addition to its political role, the church laid the cultural foundations of medieval European societies through its monastic communities. Monastic communities consisted of monks (men) or nuns (women) who had devoted themselves to a life of prayer. Medieval Christians considered prayer to be an essential activity, as they thought it appeased God and ensured them safety from war, famine and diseases.

Members of monastic communities also nursed the sick, gave lodgings to travellers and cared for the poor. They sent missionaries to the far reaches of northern Europe to convert people from local polytheistic religions to Christianity. Monks and nuns also composed new types of choral music for religious services, encouraged the development of art to beautify their religious houses, and studied and preserved the classical learning of ancient Greece.

Source 3: This 16th-century illustration shows nuns caring for the sick in the Hotel-Dieu (God's shelter) in Paris. The Hotel-Dieu was founded by the Catholic Church in 829 CE to care for the destitute, infirm and the sick.

Learning ladder H0.2

Background and origins

1. Source 3: Identify the activity shown in the source.
2. Describe the term 'Christendom'.
3. Explain the role of monastic communities in European medieval societies.
4. Source 2: Using the source and your knowledge, explain why the power of the popes to excommunicate kings shaped European medieval societies.

Continuity and change

1. Identify the important change in Western Europe that occurred in 476 CE.
2. Describe how monastic communities promoted cultural continuity and change in Europe.
3. Explain how the fall of the Western Roman Empire demonstrates continuity and change in Europe.
4. Explain why the power of the popes changed in Western Europe.

HOW TO Continuity and change, page 203

What was medieval society like?

Most societies in the medieval period were hierarchical, with a few rich and powerful individuals at the top and a large mass of poor and powerless people at the bottom. This structure ensured order, but also meant that the rights of most people were limited.

Social groups

At the top of most medieval societies were **rulers** (such as popes, caliphs, kings, sultans and emperors). These rulers held both political and religious power. They claimed to be descended from the gods or that their right to rule was a 'divine right' (ordained by the gods). The rulers were supported by **nobles** (wealthy people) and religious leaders (such as bishops or high priests). **Warriors** (including knights and samurai) fought for the rulers and nobles, and sometimes for religious leaders as well.

The majority of people (over 90 per cent) in the medieval period were **peasants**. Peasants were farmers who grew crops and raised animals, often on land owned by rulers, nobles or warriors. The peasants' work was critical as they were responsible for producing food for everyone in their kingdom. But peasants' lives were very difficult, and most died by the age of 40.

By the 1200s CE, medieval towns began to grow rapidly, due to increased trade and improvements to agriculture. As towns grew wealthier, more people left the land and moved to live in towns. The growth of towns led to improved levels of education and greater freedoms.

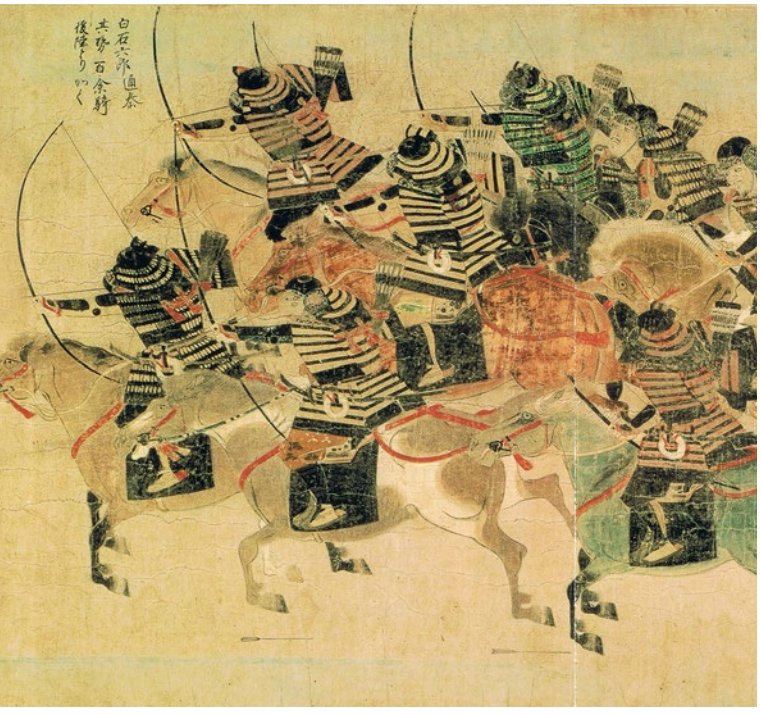
Slavery

Slavery was widespread during the medieval and early modern periods. In some parts of the medieval world, people were enslaved by those in their own society as a punishment for breaking the law or falling into debt. In other societies, people became enslaved after being captured in war.

Sources for medieval society

Numerous sources explain the lives of the wealthy and powerful, but we have far fewer sources for peasants or slaves. This is because only the ruling classes were able to read and write during the medieval period. Only they were wealthy enough to commission artworks or own precious artefacts that had been preserved through the ages. In contrast, the poor were unable to read and write, and the artefacts they owned tended to be everyday items that gradually deteriorated. Therefore, much of what we know about the lives of peasants and slaves is written from the perspective of the wealthy.

Sources about the lives of women and children, even from noble classes, are also limited compared to the number of sources available on the lives of men. Only a small number of noble women were able to receive an education and write of their own experiences. Many of their first-hand accounts of life in the medieval period survive in letters, religious writings and legal documents.



Source 1: This scene from the *Illustrated Account of the Mongol Invasion* (1293 CE) shows the Japanese cavalry riding to the rescue of one of their leaders. It was commissioned by samurai warrior Takezaki Suenaga to record his heroic deeds during the Mongol invasions of Japan.

My daughter, the perfect natural love that I have for you … recognising the imminent, sudden, and early death that I expect at any moment … gives me the desire and the determination to prepare a few little lessons for you while I am still with you, knowing well your inexperience and extreme youth and hoping that in time you will recall these lessons and that they will help you a little …

The first and main point, more important than all others, is that earnestly, and with all your faith and strength, you are careful not to do, say, or think anything that will make God angry at you.

Next, my daughter, to continue our discussion, in great humility of heart consider and recognise who you are and what you come from: a pitiful and depraved creation when it comes to the body, [but] excellent and noble when it comes to the soul …

Source 2: Extract from *Lessons for My Daughter* by Anne of France, c. 1490 CE. Anne of France (1461–1522) was the daughter of King Louis XI and one of the most powerful women in medieval France. She wrote this book for her daughter, Suzanne of Bourbon. [Sharon L. Jansen (2004), *Anne of France: Lessons for my Daughter*, D.S Brewer, Cambridge, pp. 25–27]

Source 3: Boys attending a *maktab* (religious school). In this source, one boy recites his lesson for the teacher, while another boy works the ceiling fan. Usually, noble families paid for their son to attend a maktab, while poorer students ran errands for the teacher in exchange for their tuition. [Yahya ibn Mahmud al-Wasiti (1237 CE), *Maqamat of al-Hariri*]

Source 4: Scene from the illustrated manuscript the *Grimani Breviary* (c. 1510 CE), showing peasants working in the fields. This book was made for the enjoyment of nobles – it was owned by Cardinal Grimani, a wealthy churchman.

Learning ladder H0.3

Significant people, ideas and events

1. Identify the main social groups in medieval society.
2. Describe the role played by peasants.
3. Explain how people became enslaved during the medieval period.
4. Explain why most of the sources available to historians for the medieval period are about male rulers and nobles.
5. What is the impact of the limited range of sources on our understanding of the medieval period?

Sources

1. Source 1: Identify the social class of the person who commissioned this source.
2. Source 3: Describe the scene in this source.
3. Source 2: Explain Anne of France's advice to her daughter.
4. Sources 2 and 3: Explain why these sources on the lives of women and children are available.
5. Source 4: How accurate is this source's depiction of peasant life? Explain your reasoning.

HOW TO Sources, page 201

How influential was religion in the medieval world?

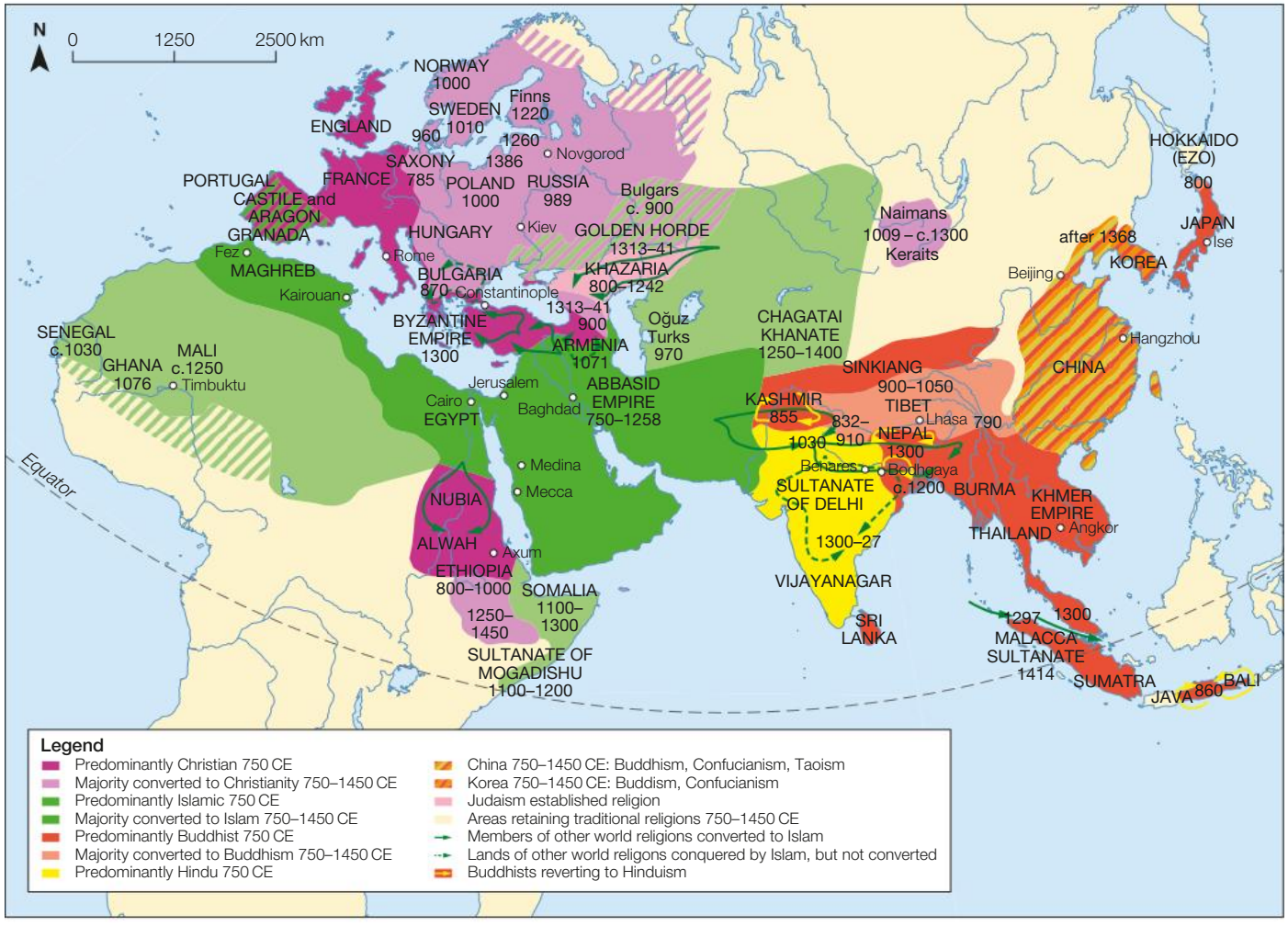
During the medieval period, the major religions of the time – especially Buddhism, Christianity and Islam – grew and spread throughout the world.

Religion

Trade, invasion, pilgrimage and missionary activity helped to spread Buddhism, Christianity and Islam across the medieval world, especially in towns and cities. While these religions grew in popularity, the number of people practising local **polytheistic religions** (the worship of more than one god) declined.

Many people were attracted to the 'universal truths' about moral behaviour that were contained in Christianity, Islam and Buddhism. They began to identify with people of the same faith, rather than with people who lived in the same area. People also began to take long journeys to holy sites. These journeys were known as **pilgrimages**, and the people who made the journeys were known as pilgrims. On the way to the holy sites, pilgrims would often meet people who shared

Religion in the medieval world



Source: Matilda Education Australia

▲ **Source 1:** Islam spread quickly across the Christian Mediterranean world, while Christian missionaries travelled to Africa, Scandinavia and Russia. Buddhism extended into Tibet, China, South-East Asia, Korea and Japan.

Source 2: Borobudur in Indonesia is the largest Buddhist temple in the world. Built in the 9th century CE, medieval pilgrims travelled for weeks and months on foot, by boat, on horseback or on elephants to find the enlightenment that was signified by this Buddhist monument.

their religion but spoke different languages and had different ethnic backgrounds. Through religion, many people gained a sense of identity and belonging with people from other parts of the world.

Buddhism

Buddhism is based on the teachings of Siddhartha Gautama (the Buddha), who lived sometime in the 4th to 6th centuries BCE in Nepal and India. Buddhism involves learning how to achieve spiritual enlightenment. Two main forms of Buddhism emerged: Theravada, practised mainly in South-East Asia, and Mahayana, practised in East Asia. Zen Buddhism – which emphasises wisdom as a way to attain enlightenment – is a school of Mahayana Buddhism.

Christianity

Christianity was originally an offshoot of **Judaism**. Christians believe that Jesus Christ is God's messiah, sent to prepare the world for the kingdom of God. Christianity's central teaching is to love God and to treat others as you would like to be treated yourself. In the medieval period, Christianity spread from the Middle East to India, Persia (now Iran), China, Central Asia, Europe and Africa.

In 1054 CE, European Christianity began to split into two factions: Orthodox and Catholic. Orthodox Christians are led by a patriarch, while Catholic Christians are led by the pope in Rome.

Islam

Islam was founded in Arabia by the Prophet Muhammad following a divine revelation in 610 CE. People who follow the faith of Islam are called **Muslims**. Muhammad's teachings and revelations were written down in the Muslim holy book, the Quran. Islam's core teaching is submission to the will of God. Islam split into two factions – Sunni and Shiite – in the early 660s CE.

During the medieval period, Muslim warriors captured all of Arabia and then conquered the Middle East, North Africa and Spain to create an Islamic Empire.

Learning ladder H0.4

Significant people, ideas and events

1. Identify the three major religions that expanded during the medieval period.
2. Source 1: Describe the religious diversity found in Asia during the medieval period.
3. Source 1: Using the source and your knowledge, explain how the Islamic faith spread.
4. Complete the table below to compare Buddhism, Christianity and Islam.

Religion	Leading figure	Key beliefs	Forms
Buddhism			
Christianity			
Islam			

Causes and consequences

1. Identify three causes for the spread of the major religions across the medieval world.
2. Describe the consequences of the spread of the major religions on polytheistic religions.
3. Explain the consequences of pilgrimages.
4. Source 1: Explain why Christian pilgrimage to Jerusalem might have been a cause of tension during the medieval period.

HOW TO Causes and consequences, page 206

Site study

Why is Jerusalem an important city?

As the site of the Jewish Temple of Jerusalem, the place of Jesus's crucifixion and resurrection, and the destination of Muhammad's Night Journey, the city of Jerusalem in the Middle East is important for the religions of Judaism, Christianity and Islam.

Byzantine rule

From 313 CE to 635 CE, Jerusalem lay within the Byzantine Empire's Palestinian provinces. Christianity was widely practised and churches were constructed throughout the Holy Land. The original Church of the Holy Sepulchre was built in 335 CE on the site of Jesus's crucifixion and tomb. Monasteries were also established in the area, including the Holy Monastery of the Sacred Cross and the Monastery of Saint George.

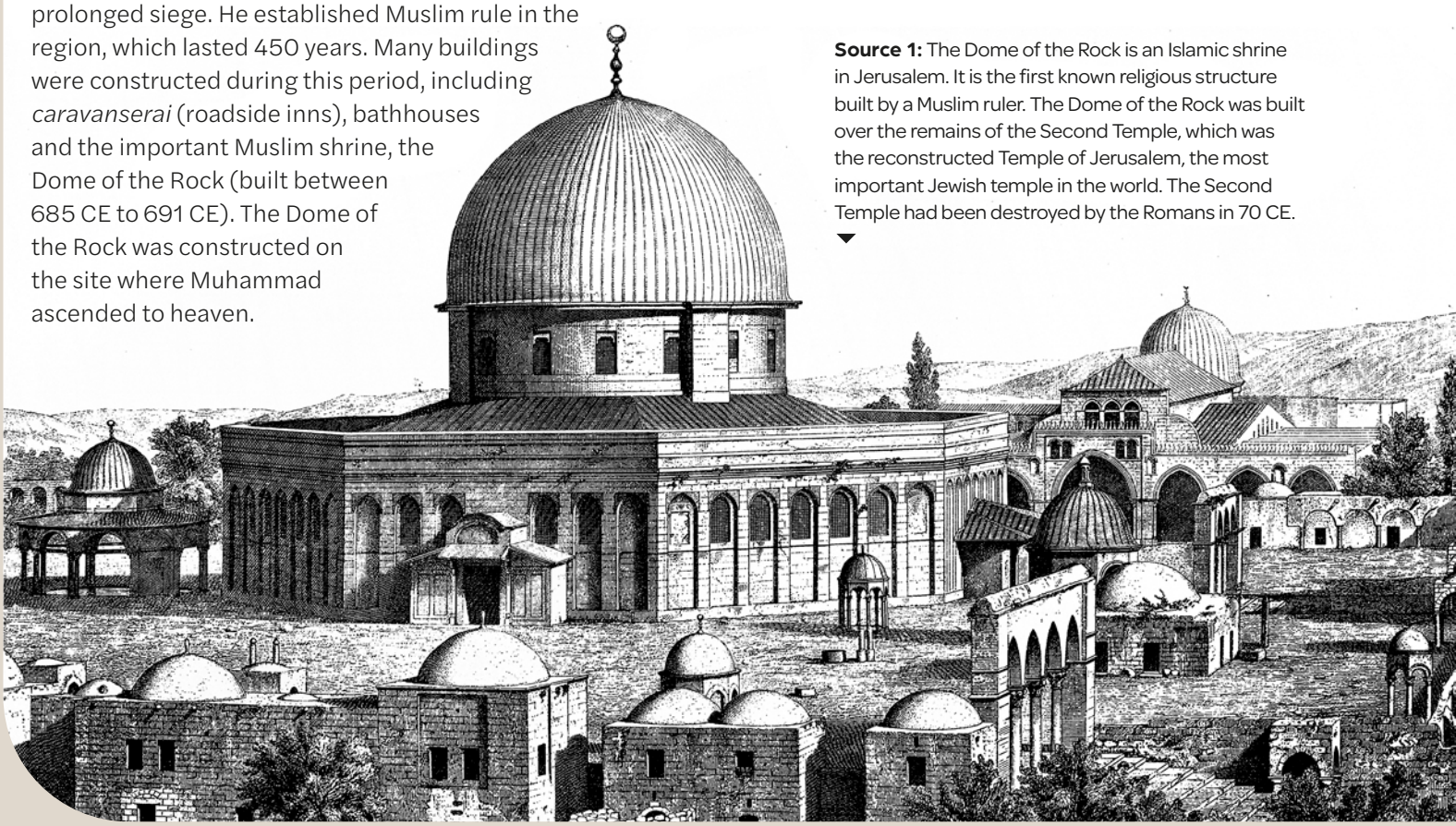
Muslim rule

In 635 CE, Caliph Umar took control of Jerusalem when the city was surrendered by its leaders after a prolonged siege. He established Muslim rule in the region, which lasted 450 years. Many buildings were constructed during this period, including *caravanserai* (roadside inns), bathhouses and the important Muslim shrine, the Dome of the Rock (built between 685 CE to 691 CE). The Dome of the Rock was constructed on the site where Muhammad ascended to heaven.

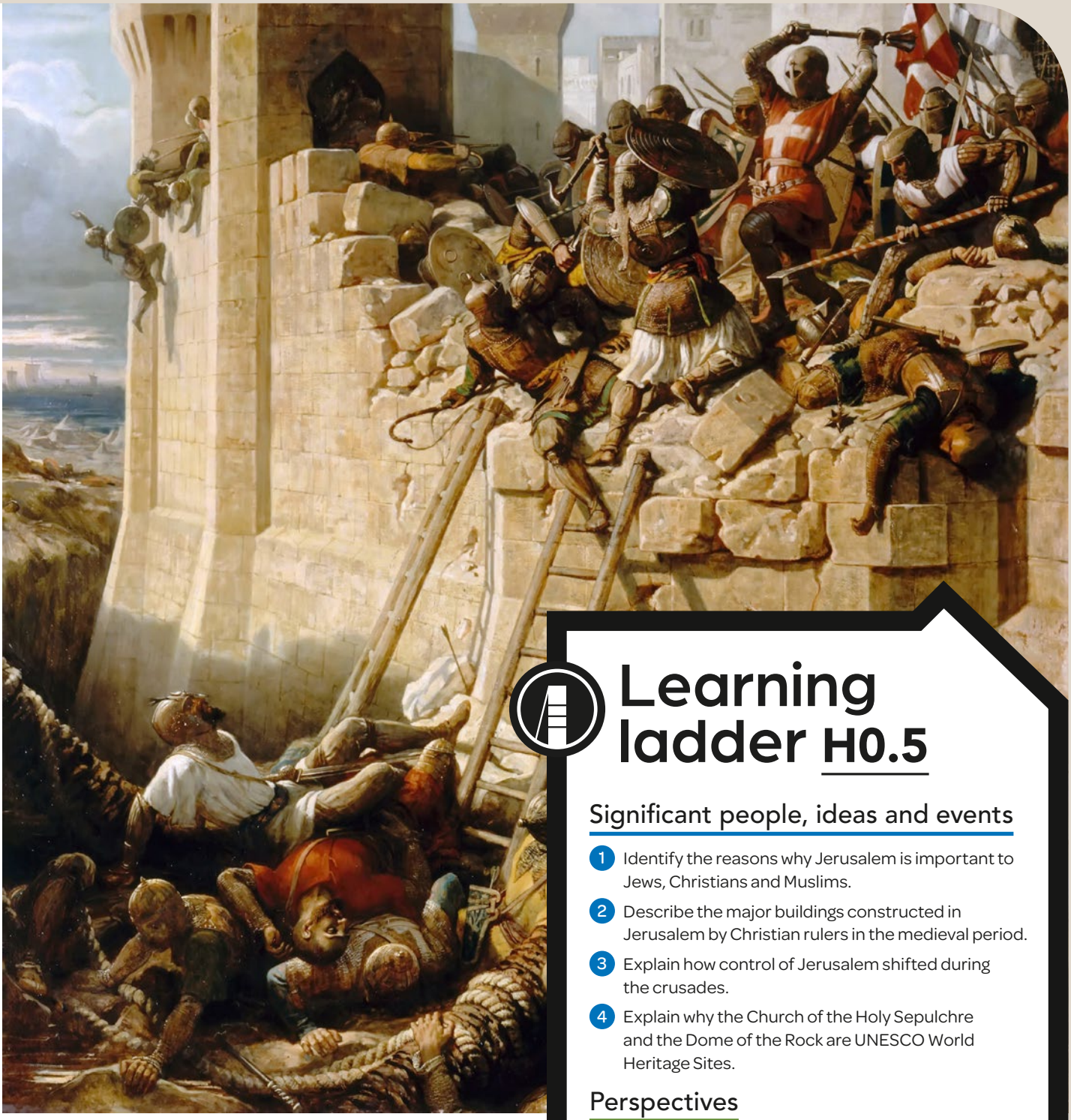
The crusader kingdoms

In 1095 CE, Pope Urban II called on Catholic Christians to undertake a holy war, known as a **crusade**. The object of the First Crusade (1096–1099 CE) was the recapture of Jerusalem. The First Crusade was successful and led to the establishment of Christian kingdoms throughout the Holy Land.

In 1187 CE, Muslim leader Saladin recaptured Jerusalem for Muslim forces. Although Christian forces launched the Third Crusade in an attempt to recapture the city, it would not return to Christian control until 1229 CE, during the Sixth Crusade.



Source 1: The Dome of the Rock is an Islamic shrine in Jerusalem. It is the first known religious structure built by a Muslim ruler. The Dome of the Rock was built over the remains of the Second Temple, which was the reconstructed Temple of Jerusalem, the most important Jewish temple in the world. The Second Temple had been destroyed by the Romans in 70 CE.



Source 2: The siege of Acre took place in 1291 CE. Acre was the last Christian stronghold in the Kingdom of Jerusalem. The fall of Acre to the Mamluks marked the end of Christian crusades to capture the Holy Land. [Dominique Papety (1815–1849 CE), *Guillaume de Clermont Defending the Walls at the Siege of Acre, 1291*.] Dominique Papety was a French artist.

Mamluk rule

The Mamluks were originally slave warriors under the control of Muslim leaders. They established their own powerful empire in 1250 CE. The Mamluks defeated the last crusader kingdoms and ruled Jerusalem from 1291 CE to 1516 CE.

Learning ladder H0.5

Significant people, ideas and events

1. Identify the reasons why Jerusalem is important to Jews, Christians and Muslims.
2. Describe the major buildings constructed in Jerusalem by Christian rulers in the medieval period.
3. Explain how control of Jerusalem shifted during the crusades.
4. Explain why the Church of the Holy Sepulchre and the Dome of the Rock are UNESCO World Heritage Sites.

Perspectives

1. Source 2: Identify the perspective of the artist. Whose side is he on?
2. Describe the significance of Jerusalem from the perspective of Christians.
3. Source 1: Using the source and your knowledge, explain the differences between the Muslim and Jewish perspectives on the site where the Dome of the Rock was built.
4. Source 2: Explain why the Siege of Acre was a significant event from both the Christian and the Mamluk perspectives.

HOW TO

Perspectives, page 210

What was the Magna Carta?

The Magna Carta was a revolutionary document which established a set of rights and freedoms that limited the power of the English monarch. But were these rights for everyone?

The signing of the Magna Carta

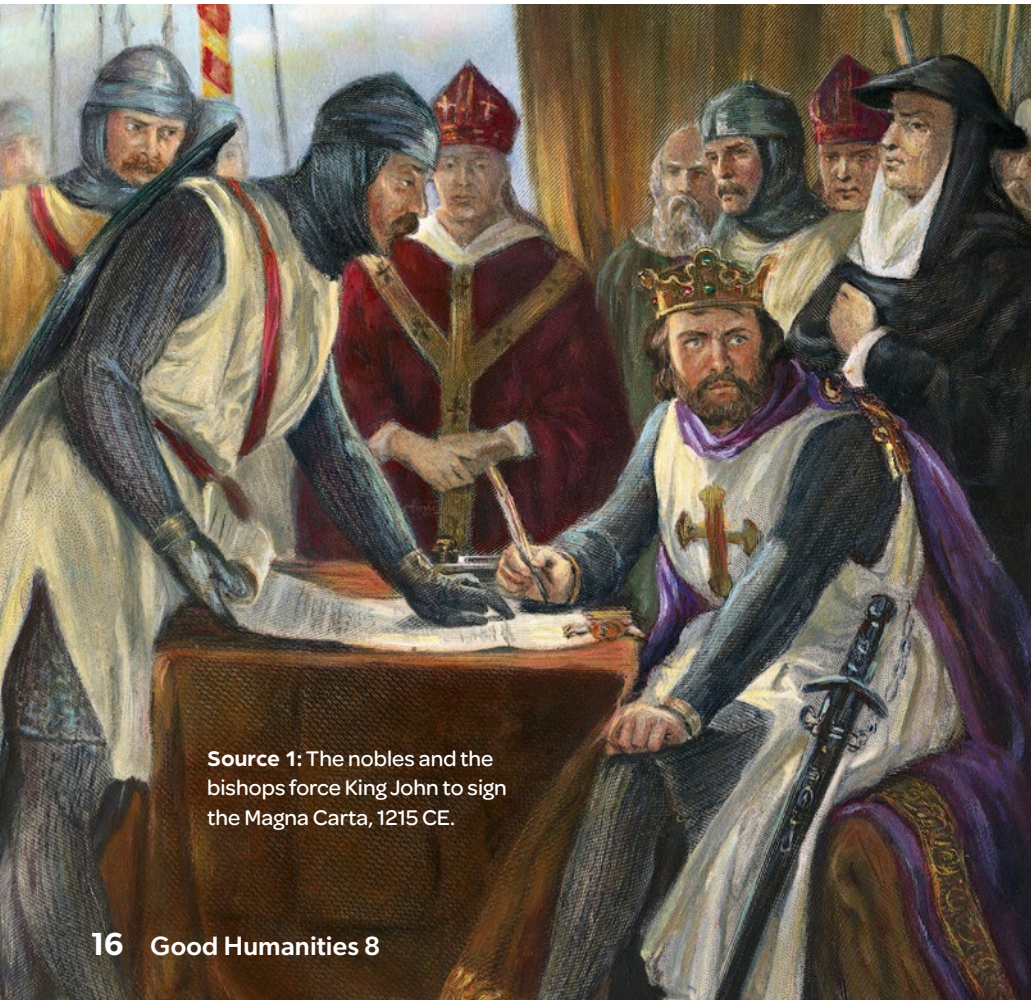
King John of England (1199–1216 CE) was not well-liked. He went to war many times and lost almost all of England's holdings in France. He made his subjects pay very high taxes and, when his nobles could not pay, he took their sons hostage. He was also said to be very cruel, often throwing his subjects into prison and starving them to death.

In 1215 CE, nobles in England, backed by the church, called for King John to stop demanding high taxes for his unpopular and disastrous wars against France. They forced King John to sign a document, known as the **Magna Carta** (Great Charter), which outlined the rights of the nobles.

When John died in 1216 CE, his young son Henry became king. King Henry III issued new versions of the Magna Carta in 1216 CE, 1217 CE and 1225 CE. The Magna Carta of 1225 CE would become the final version.

Rights and freedoms

The Magna Carta established that the king had to consult an assembly of 25 nobles if he wanted to raise taxes. In addition, 'no free man' was to be arrested or imprisoned unless he had been found guilty of a crime in a court of law. Further sections of the Magna Carta protected the freedoms of the church, the freedoms of towns and the rights of widows. Importantly, the Magna Carta also stated that the king had to obey the law like everyone else.



Source 1: The nobles and the bishops force King John to sign the Magna Carta, 1215 CE.

Freedom for all?

The vast majority of people in England at the time the Magna Carta was signed were peasants. Peasants consisted of freemen and serfs. Ten per cent of peasants were freemen who lived on the land of a noble (known as a lord) but owned their land. In contrast, serfs were farmers who lived on the land of a lord and did *not* own their own land. Unlike freemen, serfs were bound to the land of the lord.

Being bound to the land meant that serfs had to work the lord's land and could not leave the lord's estate unless they had permission.

The Magna Carta really only protected the rights of a few hundred nobles. Only nobles were allowed to sit on the assembly and decide how much tax was to be paid. Knights, townsfolk, freemen and serfs had no say.

No free man shall be taken or imprisoned, or be disseised [dispossessed] of his property, or liberties, or free customs, or be outlawed, or exiled, or in any other ways destroyed; nor will we pass judgement upon him, nor condemn him, unless he breaks the law of the land. We will sell to no man, we will not deny or defer to any man, either justice or right.

Source 2: Chapter 29, the Magna Carta (1215 CE)

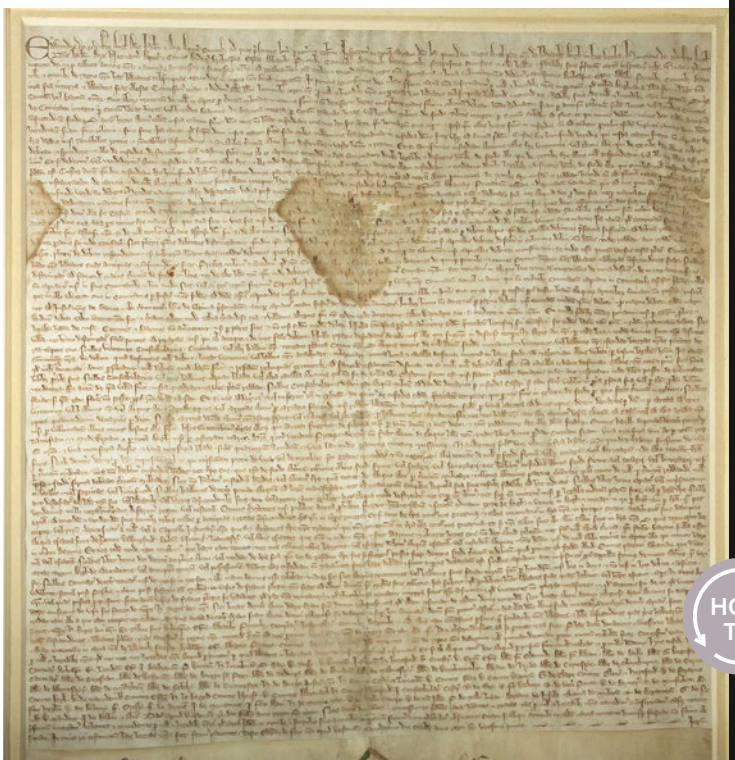
Furthermore, only 'free men' were entitled to protection under the law. Women had no protection or representation, and in most cases were denied the opportunity to give evidence in court. Moreover, while 'free men' included men who were knights, townsfolk and peasants, serfs (whether male or female) were not protected under the law. They could therefore be treated unfairly by the lords on whose estates they worked.

Peasants and the Magna Carta

The Magna Carta was proclaimed throughout England, with copies sent to every county and cathedral with orders that it be read aloud to the people twice a year.

In spite of its limitations, by the 1250s CE, many people were referring to the Magna Carta in court to protect their rights. In c. 1320 CE, the peasants of Bocking, Essex, went to the manorial court to complain about one of the officials working on the lord's estate. In their petition they argued that they should be judged by their peers in accordance with 'the Great Charter' rather than suffer the official's harsh punishments, which had brought them to 'ruin and distress'.

Source 3: A 1297 CE copy of the Magna Carta, on display in the Members' Hall of Parliament House, Canberra



The significance of the Magna Carta

The Magna Carta may have begun as an attempt to protect the rights of nobles, but in time it helped create a society based on the rule of law and parliamentary representation. It has had a significant impact on the Australian Constitution, which upholds the rule of law and trial by jury, and enshrines the existence of parliament. The Magna Carta also led to the establishment of the Westminster System, which is named after Britain's parliament at Westminster Palace.

Learning ladder H0.6

Significant people, ideas and events

1. Source 3: Identify the key document shown in this source.
2. Source 1: Describe the events that led to the introduction of the Magna Carta.
3. Source 2: Using the source and your knowledge, explain the rights and freedoms established by the Magna Carta.
4. Explain why the nobles wanted the king to sign the Magna Carta.
5. Source 3: Why is the Magna Carta on display in Parliament House in Canberra?

Interpretations

1. Identify the debate about the Magna Carta.
2. Describe the difference between peasants and freemen.
3. Explain how the Magna Carta protected:
   - **a** the rights of noble men
   - **b** the rights of women
   - **c** the rights of peasants.
4. Explain why the peasants of Bocking used the Magna Carta to assert their rights.
5. Analyse the extent to which the Magna Carta protected people's rights and freedoms.

HOW TO Interpretations, page 214

H0.7

What cross-cultural interactions took place?

Increased trade and travel led to greater wealth, new products and new ideas spreading across the world.

The Silk Road

The **Silk Road** was an overland trade route that connected Asia and Europe. It was used by traders for over 1500 years: from c. 130 BCE, when the Han dynasty started trading, to c. 1453 CE, when the Ottoman Empire closed off trade with the West.

Despite the name, silk was not the only product that was traded. Spices, tea, salt, ivory, ceramics, slaves, precious gems and ideas were all transported across vast distances to and from markets in the cities of of Chang'an (now Xi'an), Baghdad, Cairo and Constantinople (now Istanbul).

The use of the Silk Road started declining in the early 800s CE, due to the growth of the Islamic empires, which disrupted trade between Asia and Europe. However, in the 13th century CE, the expansion of the Mongol Empire across Asia, the Middle East and eastern Europe allowed trade to thrive across Afro-Eurasia.

At the eastern end of the Silk Road, the trade route fanned out into South-East Asia, connecting markets in India and China to those in the Khmer Empire, Japan, the Philippines and Indonesia. Products such as rice, fish, tea, ceramics and cloth were exchanged, along with spices, medicines and swords. Buddhism and Hinduism spread into South-East Asia through these networks.

The spice trade

Spices – such as cinnamon, cardamom, nutmeg, sandalwood, ginger, turmeric and pepper – had been **exported** from Asia to the Middle East and Europe since ancient times.

The spice trade expanded greatly during the medieval period, due to advances in navigation and shipbuilding by Islamic mariners. Spices were highly prized in Europe and the Middle East. Merchants who could sell spices to these markets became extremely wealthy.

Source 1: The West Market in Chang'an in north-central China was located at the start of the great trade route known as the Silk Road. It was a vibrant hub, where gold and silver artefacts, gemstones, glassware, spices, silk, porcelain and tea were traded.

In the early medieval period, Islamic mariners' control of the spice trade enabled caliphates (Muslim states) to become rich and powerful. Merchants from the Italian city-states of Venice and Genoa signed treaties with Muslim rulers so that they could buy the spices from Muslim traders. They then sold them in European markets, becoming extremely wealthy in the process.

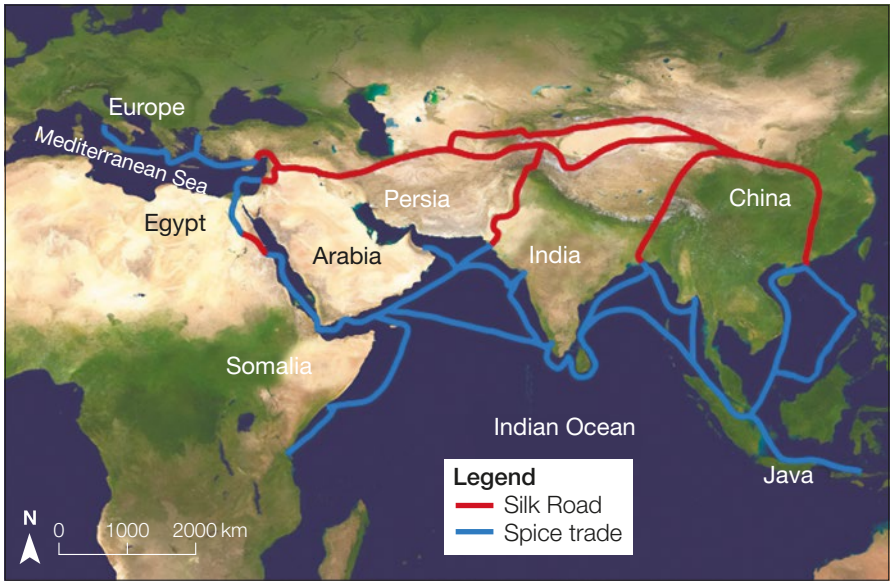
The spread of knowledge

Trade and travel led to the spread of ideas, knowledge, technologies and religious **beliefs** across the world. Scholars from Europe were keen to read the writings of medieval Islamic scholars to refine their understanding of medicine, botany, optics, mechanics and astronomy.

This sharing of ideas led to advances in science and medicine. For example, by building on the work of Islamic physician Ḥunayn ibn Isḥāq (9th century CE), medieval doctors in Europe, North Africa and the Middle East were able to surgically treat cataracts and infections of the eye by the 13th century CE, effectively curing 40 per cent of patients with these conditions.

Another medieval achievement was the invention of fully mechanical clocks, which were developed in northern Europe in the late 13th century CE.

The key trade routes of the medieval world



Source: Matilda Education Australia

▲ **Source 2:** This map shows the Silk Road (in red) and the routes of the spice trade (in blue).

This invention was inspired by the water clocks that had been designed by the ancient Greeks and mechanised by Islamic scholars in the 9th century CE.

Learning ladder H0.7

Impact and legacies

1. Source 2: Identify the two major trade routes in the medieval world.
2. Source 2: Using the source, describe the Silk Road.
3. Source 2: Using the source and your knowledge, explain how spices were transported and sold to markets in Europe.
4. Explain why the Silk Road declined and then expanded during the medieval period.

Causes and consequences

1. Source 1: Identify three products sold at Chang'an.
2. Describe the consequences of trade and travel across the medieval world.
3. Explain how new scientific ideas emerged in the medieval period.
4. Explain why the spice trade had significant consequences for the medieval world.

HOW TO Causes and consequences, page 206

H0.8

Key individual

Who was the Lion King?

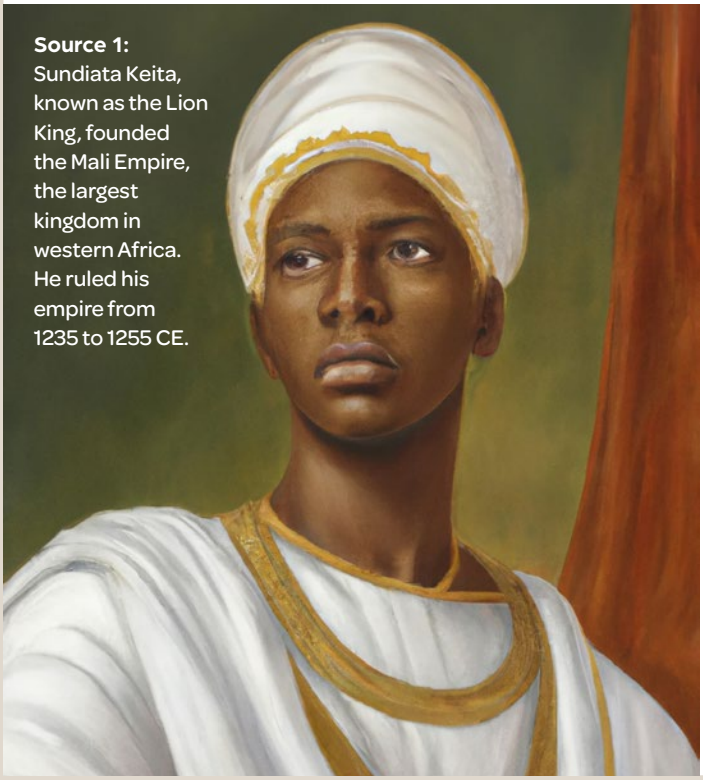
In the medieval world, the Mali Empire was a wealthy, powerful society that had been founded by Sundiata Keita, the Lion King.

The king of Mali

The name Sundiata Keita means 'lion king'. Sundiata was a west African monarch who founded the Mali Empire. He was born in the early 13th century CE to a noble family from the small kingdom of Kangaba located near the upper Niger River, near the modern-day border of Mali and Guinea. He died in 1255 CE.

The foundation of the Mali Empire

In 1235 CE, Sundiata successfully led an army against the powerful Sosso king Sumanguru at the Battle of Kirina. Sundiata then sent his army into the surrounding areas, conquering the lands of the Ghana Empire and establishing the Mali Empire. Sundiata's empire covered a large area of western Africa, including present-day Mali, Senegal, Guinea, the Ivory Coast, the north of Burkina Faso and the west of Niger. In 1240 CE, Sundiata's army seized the city of Kumbi, utterly destroying the capital of the Ghana Empire and cementing the Lion King's rule.



Source 1: Sundiata Keita, known as the Lion King, founded the Mali Empire, the largest kingdom in western Africa. He ruled his empire from 1235 to 1255 CE.

The wealth of the Mali Empire

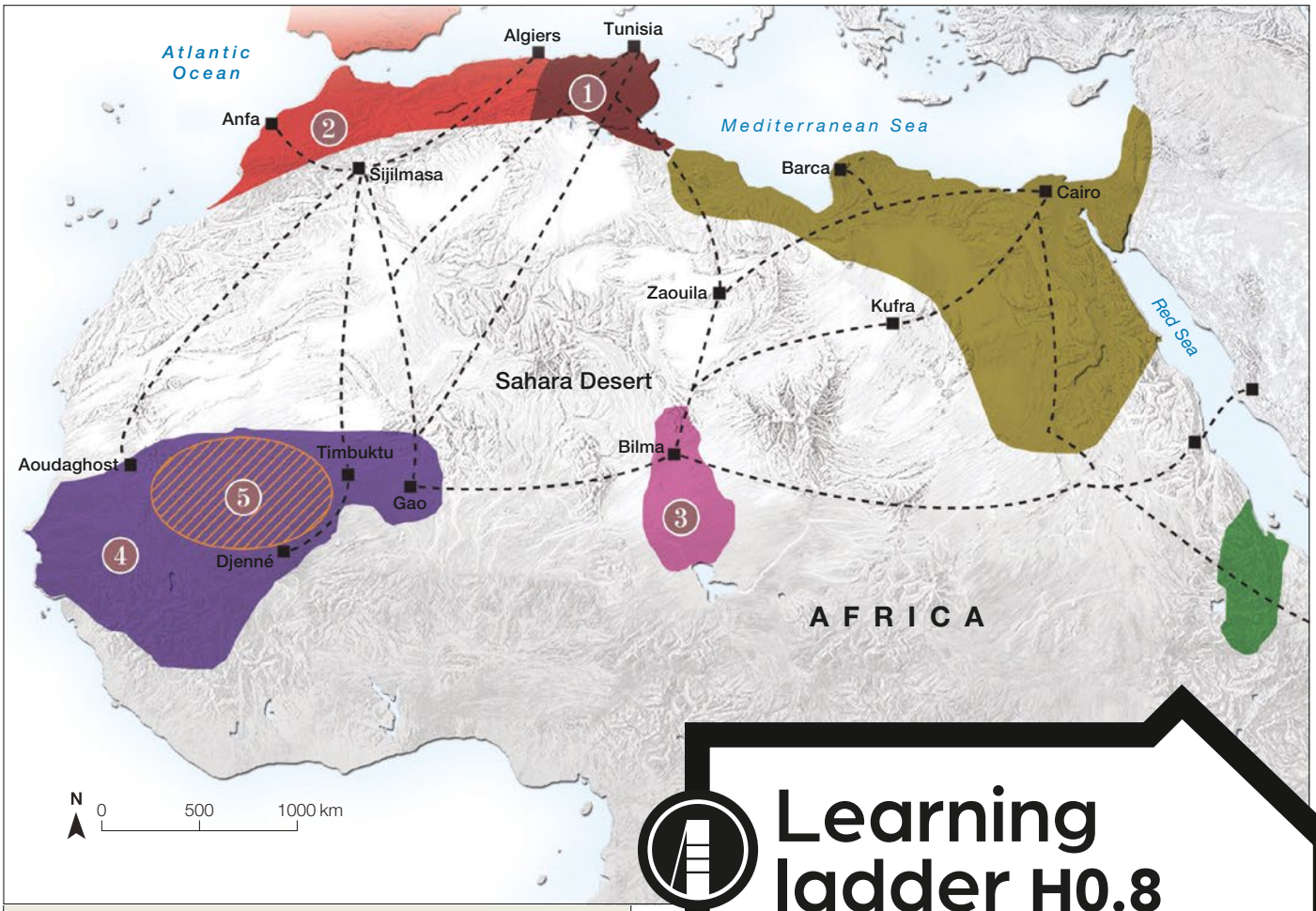
After establishing his empire, Sundiata made the city of Niani in north-east Guinea his imperial capital. Niani became one of the most important trade centres in sub-Saharan Africa. By trading valuable products, including gold and salt, the Mali Empire became rich.

Sundiata Keita's grandson (or great-nephew) Mūsā I ruled Mali from 1307 CE to 1332 CE, which was when the empire was at its peak. Under Mūsā, the Mali Empire conquered the lands of central Niger, including the major trading cities of Timbuktu and Gao.

In 1324 CE, Mūsā, a Muslim, made a pilgrimage to Mecca, the holiest of Muslim cities. Mūsā took with him 60 000 men (including 12 000 slaves) and 80 camels. He brought gold, silk and brocade, and spent lavishly. His enormous wealth made a huge impression on the rulers of northern Africa and Europe.

During his reign, Mūsā established close ties with important Muslim leaders and established Timbuktu as a key centre of Islamic scholarship. He ordered the construction of the famous Djinguereber Mosque in Timbuktu in 1327 CE.

Source: Alamy



Legend

1 Ḥafṣid dynasty
Ḥafṣid was a Muslim dynasty of the 13th to 16th centuries CE. It exported olive oil, wheat, dried fruits, leather and fabrics. It imported wine, paper, weapons and precious stones.

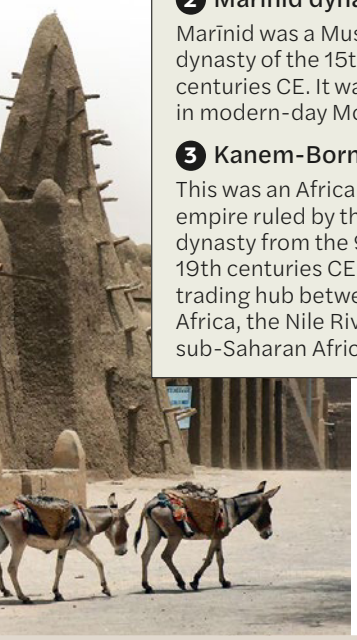
2 Marīnid dynasty
Marīnid was a Muslim dynasty of the 15th and 16th centuries CE. It was located in modern-day Morocco.

3 Kanem-Bornu Empire
This was an African trading empire ruled by the Sef dynasty from the 9th to the 19th centuries CE. It was a trading hub between North Africa, the Nile River and sub-Saharan Africa.

4 Mali Empire
The Mali Empire was in charge of sub-Saharan trade between the 8th and 11th centuries CE. It exported ivory, gold and salt.

5 Ghana Empire
The Ghana Empire exported ivory, gold and salt between the 8th and 11th centuries CE to North Africa, the Middle East and Europe.

Source 2: African empires and their trade routes in the medieval period



Source 3: Mūsā I was said to have paid his architect 200 kilograms of gold to design the Djinguereber Mosque in Timbuktu. The mosque is made almost entirely of compacted earth and wood.

Learning ladder H0.8

Significant people, ideas and events

1. Source 2: Identify three empires engaged in trans-Saharan trade.
2. Source 2: Describe the goods produced in these two territories:
   a The Ḥafṣid dynasty **b** The Mali Empire.
3. Source 2: Explain how the goods produced in the Mali Empire reached Tunisia and Cairo.
4. Using the sources and your knowledge, explain why the Mali Empire was significant in the medieval period.

Significance

1. Source 1: Identify the 'Lion King'.
2. Source 3: Describe the significant building shown in the source.
3. Explain how Sundiata Keita became a significant leader.
4. Explain why Mūsā was a significant leader.
5. Do you think Sundiata or Mūsā was the most significant leader in medieval Mali? Justify your choice.

HOW TO

Significance, page 212

H0.9

How did European society change?

During the medieval and pre-modern periods, the expansion of trade, developments in technology and cultural exchanges led to great changes in European society.

Art and architecture

European art and architecture developed significantly during the medieval period. In the early medieval period, much of the art was based on Roman influences and included mosaics and wall paintings.

From the 11th century CE, the **Romanesque style** developed. Romanesque art features bright colours and large murals. Architecture in the Romanesque style is known for its arches and thick stone walls. Stained glass dates from this period.

The **Gothic style** was dominant from the 12th century CE. Gothic-style architecture includes flying buttress supports and ribbed, vaulted ceilings that enabled medieval builders to construct tall cathedrals. Stained glass was further developed in the 12th century CE.

While realistic sculptures were created throughout the medieval period – based on the styles pioneered in ancient Greece and Rome – most medieval artists depicted figures in two dimensions. However, by the start of the 14th century CE, medieval artists such as Giotto di Bondone (c. 1267–1337 CE), Ambrogio Lorenzetti (c. 1285–1348 CE) and Fra Angelico (c. 1400–1455 CE) began to develop new works of art that contained depth and perspective.

Although art changed greatly during the medieval period, the role of the Christian church as a patron of the arts remained. Cathedrals, churches, monasteries and other religious buildings were highly decorated, and most of the art during this period depicted religious figures and stories.

Source 1: This fresco is called *The Annunciation* ▶ and was painted by Fra Angelico around 1447 CE. This work demonstrates the developing ideas about perspective in medieval art.

Scientific development

Scientific understanding in Europe also underwent significant development in the medieval period. In collaboration with scientists from all over the world, medieval European astronomers mapped the stars and started to question the idea that the Sun revolved around the Earth. Nicolaus Copernicus (1473–1543 CE) – a Polish astronomer who argued that the Earth revolved around the Sun – based much of his work on the observations of 13th-century-CE Persian astronomer Nasir al-Din al-Tusi and 14th-century-CE astronomers Jean Buridan of France and Ibn al-Shatir of Syria. European scholars also studied herbs and plants to find cures for diseases, and invented eyeglasses, mechanical clocks and a 'dry' compass that worked on ships at sea. Some scientists practised 'alchemy', an early form of chemistry, in which scientists attempted to transform base metals (such as lead and copper) into pure metals (such as silver and gold). The ideas of medieval European scientists formed the basis of the new understandings about chemistry, biology, botany and zoology that emerged in the 1700s CE.

▲ **Source 2:** This mechanical astronomical clock in Prague was installed in 1410 CE. It records the location of the Sun and Moon in the sky. It is the oldest astronomical clock that still works today.

▲ **Source 3:** Sir Isaac Newton (1642–1727 CE) was an English physicist and mathematician. Through his research, he and other scientists who followed him developed theories on gravity, calculus and how light works. In this wood engraving from the 19th century CE, Newton is shown dispersing sunlight through a prism.

The printing press

Perhaps the most important invention of the medieval period was the printing press. In 1440 CE, Johannes Gutenberg invented a mechanised printing press that had moveable metal letters. He used this to print Latin textbooks and leaflets about political and religious ideas.

In 1455 CE, Gutenberg printed his most famous book: the Gutenberg Bible. Gutenberg sold the Bibles for 30 florins, which was expensive for the time, but still much cheaper than hand-copied Bibles, which were the only other type of Bible available in those days. At first, only wealthy people could afford to buy the Gutenberg Bible, but eventually buying a printed Bible would be within the means of most people.

Gutenberg's printing press significantly changed European society. It enabled scholars to read about new scientific developments sooner and to publish their own ideas more quickly, speeding up the rate of technological change. In addition, it ensured that new ideas could be accessed by a wider group of people in society than before. This enabled people to make up their own minds, rather than believing what they were told by nobles and the church. This led to profound social, religious and political changes.

The Reformation

The Protestant movement arose in the 14th century CE to challenge the power of the Catholic Church. Protestant reformers such as John Wycliffe (1328–1384 CE) and Jan Hus (1370–1415 CE) called for Christians to reject the authority of the pope and to follow the teachings of the Bible for themselves. This was strongly resisted by church leaders, as it potentially undermined their authority as the interpreters of God's will. However, over time, the ability of the printing press to produce thousands of Bibles that more people could afford would encourage the development of Protestantism. At the same time, kings such as Henry VIII of England and Gustav I of Sweden promoted Protestantism in their kingdoms to undermine the pope's power and to enhance their own authority.

Humanism

The humanist movement also emerged in the medieval period. **Humanism** is the idea that an individual is entitled to freedom and self-determination. Humanism also stated that individuals could help to progress society. Therefore, humanists placed great importance on education, especially the classical knowledge of ancient Greece and Rome. They hoped to create a society where all citizens could read and write, give voice to their ideas, and engage in the civic life of their communities.

Source 4: John Wycliffe's writings were banned by the pope in 1401 CE, who ordered that Wycliffe's body be dug up and removed from a church graveyard. This image from 1563 CE shows the bones of John Wycliffe being burned and thrown into the river.

Source 5: Johannes Gutenberg inspects the first proof-sheet of his Bible printed from moveable type in 1455 CE. Gutenberg was a German blacksmith, goldsmith, printer and publisher who invented the Gutenberg press, which made books cheaper and more accessible.

Learning ladder H0.9

Impact and legacies

1. Source 1: Identify the change to European art shown in this source.
2. Describe the main changes in European art and architecture.
3. Explain how scholars around the world contributed to new advances in science.
4. Source 5: Explain why the invention of the printing press changed European society.
5. Evaluate the impact of international collaboration on the development of medieval science and technology.

Continuity and change

1. Source 5: Identify how the event depicted in this image demonstrates continuity and change.
2. Describe how the Protestant movement changed Christianity in Europe.
3. Explain how the humanist movement provided continuity with the past.
4. Source 4: Explain why the pope was opposed to the changes suggested by John Wycliffe.
5. Analyse how the concept of continuity and change was demonstrated in medieval European society.

Continuity and change, page 203

HOW TO

How do I conduct a good inquiry?

Now that you've finished the chapter, it's time to conduct your own historical inquiry on the medieval and pre-modern period. Throughout the chapter you have developed knowledge and understanding of the medieval and pre-modern period. Background knowledge is important because it helps you to make connections to new information, ask better questions and consider different perspectives. As you progressed through the chapter, you have gathered information through classroom discussion, highlighting, note taking and answering questions. Now you are ready to start planning your own historical inquiry!

A historical inquiry gives you the opportunity to be an active historian: forming questions, interrogating sources and communicating insights about the past on a topic of your choice. The chapter has covered the origins and legacies of the medieval world in addition to significant people, events, ideas and beliefs. What would you like to know more about?

- The rise of new kingdoms, page 6
- The spread of religion, page 12
- The Magna Carta, page 16
- The spice trade, page 18
- The invention of the printing press, page 24

Return to the relevant pages in the chapter and read them again.

Next, complete the 'see, think, wonder' process to help develop ideas you might cover in your inquiry.

Jot down your answers to these questions. Your answers will help you to formulate your own research ideas. Once you have worked through this process, you are ready to start the historical inquiry.

Refer to pages 218–25 of the How-to chapter for a step-by-step guide to this process.

See

What do you see?
Who is involved?
What are the key features?
When and where was this happening?

Think

What do you think about that?
How do you think people were affected at the time?
How is this similar to or different from today?
How do we know?

Wonder

What did different groups think about this?
Why is this important to know?
What does it make you wonder?

Level up!

Throughout the chapter, you have been working to move up the Learning ladder. An inquiry investigation is a great opportunity to expand your knowledge and attempt new skills. When planning your inquiry, consider how the experiences and perspectives of individuals and groups shaped societies, beliefs and events in the past. Think about how the past has had an impact on the present. Use the How-to chapter to support your planning and research.

Europe and the Mediterranean world (c. 600–1750 CE)

The Vikings

H1

HOW LARGE WAS THE VIKING WORLD? 34

WERE THE VIKINGS RAIDERS OR TRADERS? 36

WHO WERE THE VIKING GODS? 40

H1.0

How can I understand the Vikings?

The Vikings pillaged, raided and terrorised Europe from c. 789 CE. However, by the start of the 11th century CE, they had become a cultured, settled society of traders and explorers.

Learning ladder

The Learning ladder lists the knowledge and skills you will learn. Each has five levels of difficulty. Learning skills at the bottom of the ladder will help you to master the skills at the top of the ladder.

Steps in knowledge progression	Background and origins	Significant people, ideas and events	Impact and legacies	Continuity and change	Causes and consequences
5	I can evaluate the impact of the rise and fall of societies.	I can evaluate how societies were influenced by significant people and ideas.	I can evaluate the legacy of a society.	I can evaluate patterns of continuity and/or change.	I can analyse causes and consequences.
4	I can explain why a society developed.	I can explain why ideas influenced people and events.	I can explain why a society has a legacy.	I can explain patterns of continuity and/or change.	I can explain why something was caused or why it led to certain consequences.
3	I can explain how a society developed.	I can explain how ideas influenced people and events.	I can explain the impact of one society on another.	I can explain continuity and change.	I can explain how something was caused or its consequences.
2	I can describe the origins of societies.	I can describe key people, ideas and events.	I can describe the legacy of a society.	I can describe continuity and change.	I can describe causes and consequences.
1	I can identify the origins of societies.	I can identify key people, ideas and events.	I can identify the legacy of a society.	I can identify continuity and change.	I can identify a cause and a consequence.

Knowledge and understanding

Source 1: Viking warriors terrorised people in villages and monasteries in European countries. [Panel painted by Danish artist Lorenz Frolich (1883 CE), *Vikings Plundering a Monastery*]

Perspectives	Significance	Interpretations	Chronology	Sources	Steps in skill progression
I can evaluate historical perspectives.	I can evaluate historical significance.	I can evaluate the evidence supporting a historical interpretation.	I can explain change or causality from a timeline.	I can evaluate sources to determine their accuracy, usefulness and reliability.	5
I can compare perspectives.	I can explain why something is historically significant.	I can compare historical interpretations.	I can summarise the events on a timeline.	I can explain the historical context of a source.	4
I can explain a perspective.	I can explain something historically significant.	I can explain an interpretation of history.	I can follow timeline conventions.	I can apply historical knowledge to explain sources.	3
I can describe perspectives.	I can describe something historically significant.	I can describe an interpretation of history.	I can place events on a timeline chronologically.	I can describe a source.	2
I can identify the perspective of a person from the past.	I can identify something historically significant.	I can identify a historical debate.	I can read a timeline.	I can identify the origin of a source.	1

Historical concepts and skills

Who were the Vikings?

The Vikings have a reputation for being violent barbarians. But is this true? Were they terrifying raiders, great inventors, astute traders, epic poets – or all of these?

The Viking terror

Towards the end of the 8th century CE, bands of fierce warriors emerged from Scandinavia in north-west Europe and began raiding the coast of England. Within a few decades, they were also raiding the coastal towns of France, Spain and Italy. Known as the Norse, the raiders continued looting and pillaging locations in Europe for 300 years. The horror of those times and the long period of continued raids created a widespread belief that remains with us today: that the Norse were cruel plundering barbarians.

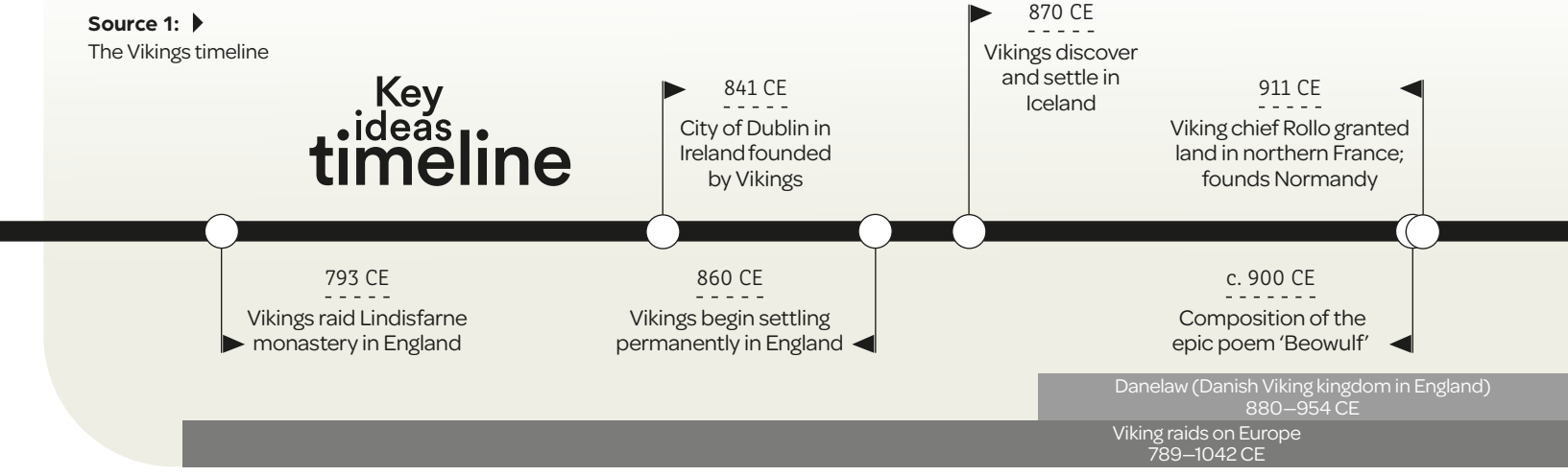
Explorers and traders

However, another story lies behind the barbaric legend. Archaeologists and historians have learned that the Vikings were also great explorers, settlers and traders. Indeed, the word 'Viking' comes from the Norse word *vikingr*, meaning explorer or traveller.

By the beginning of the 11th century CE, the Vikings dominated much of northern Europe. They had ventured deep into Russia, and opened trade routes to Persia (now Iran) and China. They had sailed over almost half the known world, travelling further north and west than Europeans had ever been before. They founded new colonies in Ireland, England, France, Iceland, Greenland, Russia and North America, and established cities including Novgorod (Russia) and Kyiv (modern-day Ukraine).

Source 2: **Beserkers** acted as shock troops for the Vikings to terrify and destroy the forward ranks of the enemy. They would howl like wild beasts, foam at the mouth and bite the rims of their shields. According to Viking legend, berserkers were immune to steel and fire.

Source 1:
The Vikings timeline

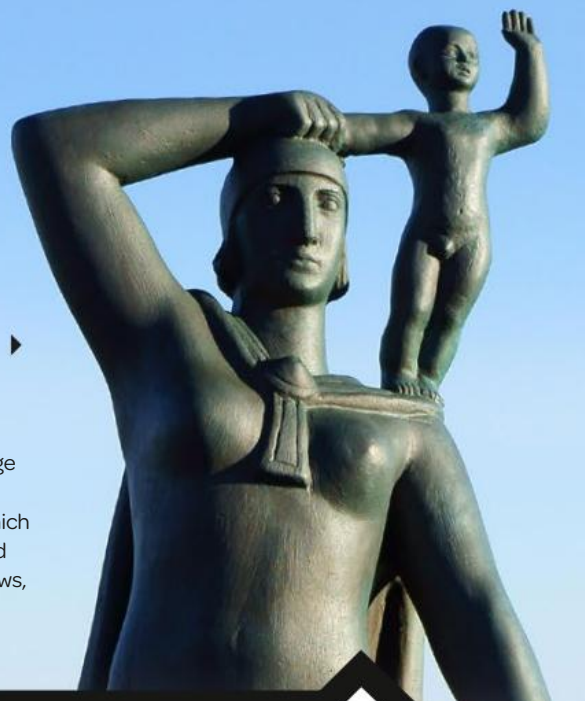


Viking innovation

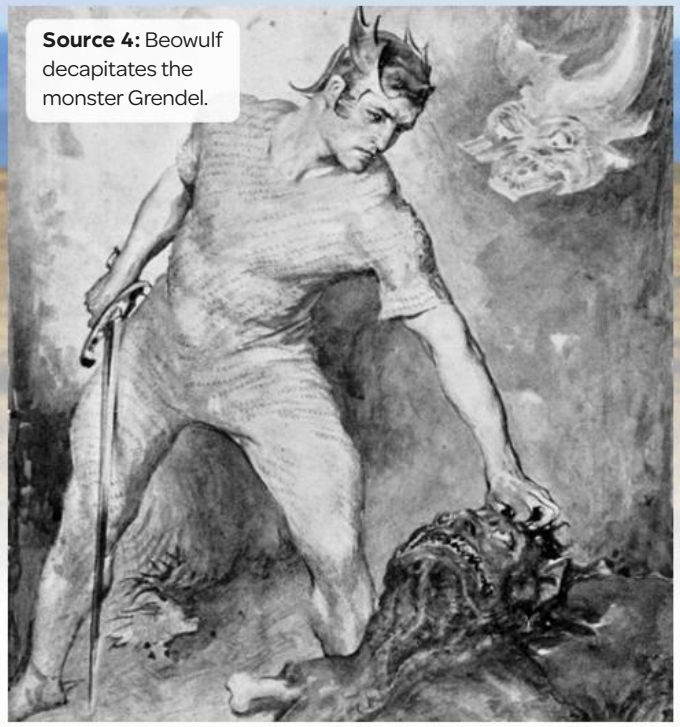
The Vikings also invented new ship and sail designs, which gave them a competitive edge when it came to transporting armies, colonists and merchandise across the Atlantic Ocean and Baltic Sea and along major rivers.

In addition to their technological innovation, the Vikings pioneered one of the earliest forms of democracy through their institution known as the ***Thing***. The Thing gave all Viking citizens a voice in how their society was run.

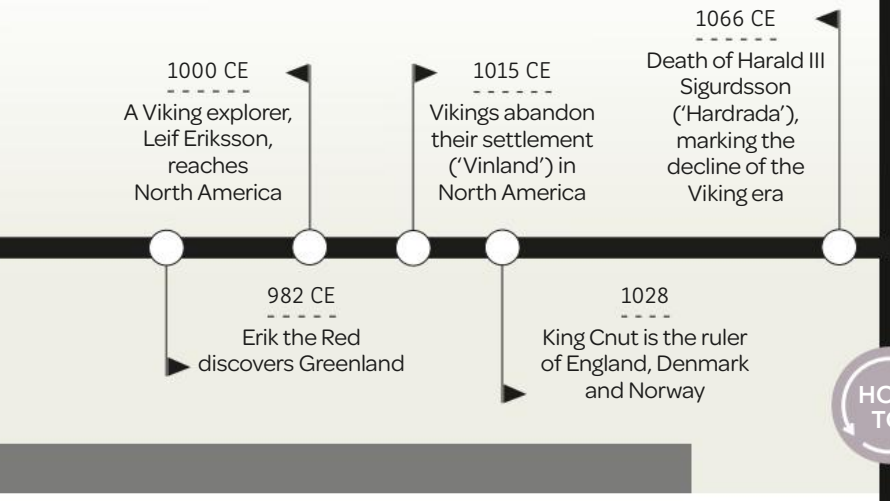
The Vikings were also epic storytellers and poets. They composed long tales (known as sagas), which were later written down by Christian missionaries. Their poems tell great mythological tales. One such poem is Beowulf, the story of a hero who defeats the monster Grendel.



Source 3: Gudrid Thorbjarnardóttir (c. 980–1019) was a Viking explorer who made a voyage to a territory she called Vinland (which may have included L'Anse aux Meadows, in Newfoundland, Canada).



Source 4: Beowulf decapitates the monster Grendel.



Learning ladder H1.1

Background and origins

1. Sources 2, 3 and 4: Identify three Viking achievements.
2. Source 2: Describe the role of Viking berserkers.
3. Explain how Vikings earned their reputation as cruel plundering barbarians.
4. Explain why the VIkings could be considered innovative and creative.
5. Analyse the Vikings' reputation. Should their violent reputation outweigh their other achievements?

Chronology

1. Source 1: How many years were there between the Viking discoveries of Greenland and North America?
2. Place the following events in chronological order:
   - 799 CE: Vikings begin to raid France
   - 795 CE: Vikings first raid Ireland
   - 789 CE: Vikings first raid England in Portland, Dorset
   - 794 CE: Vikings raid the island of Iona, Scotland.
3. Use the events in Question 2 to create a timeline.
4. Explain how the timeline demonstrates the Vikings' expansion.

HOW TO Chronology, page 198

How did geography influence Viking society?

The location and climate of Scandinavia had a significant impact on Viking society and also influenced the Vikings' eagerness to explore.

Living in Scandinavia

In Scandinavia, the winters are long, dark and cold, and the summers are mild and brief. In the northern parts of Scandinavia, the land is mountainous and covered in dense forests and snow. The southern parts of Scandinavia are flatter and the climate is mild. Scandinavia's terrain influenced where the Vikings lived and the types of work they did. Most Viking people lived in the southern coastal areas, near lakes, rivers and narrow inlets (known as **fjords**), where the soil was fertile. They were mainly farmers, living in buildings known as **longhouses**. Longhouses were up to 25 metres long and could house several generations of the one family.

The seasons dictated the rhythm of farm life. Crops would be tended during the spring and summer and then harvested in the autumn. Sheep, goats and cattle were taken to the rich mountain pastures in summer, where they grazed. At the end of autumn, the animals would be returned to the farm. The stronger, younger animals were kept inside the Vikings' longhouses during the long winter while the weaker ones were slaughtered for their meat. Since the Vikings had no refrigeration, meat had to be preserved to stop it from rotting. The meat was preserved by drying and salting, or smoking. The skins from slaughtered cattle and sheep were tanned into leather for clothing and other household goods.

Source 1: Many Viking families lived in longhouses. These had a fire in the middle of the building for light, warmth and cooking. Many also had a loom for weaving cloth.

Scandinavia (Norway, Sweden and Denmark) in north-west Europe

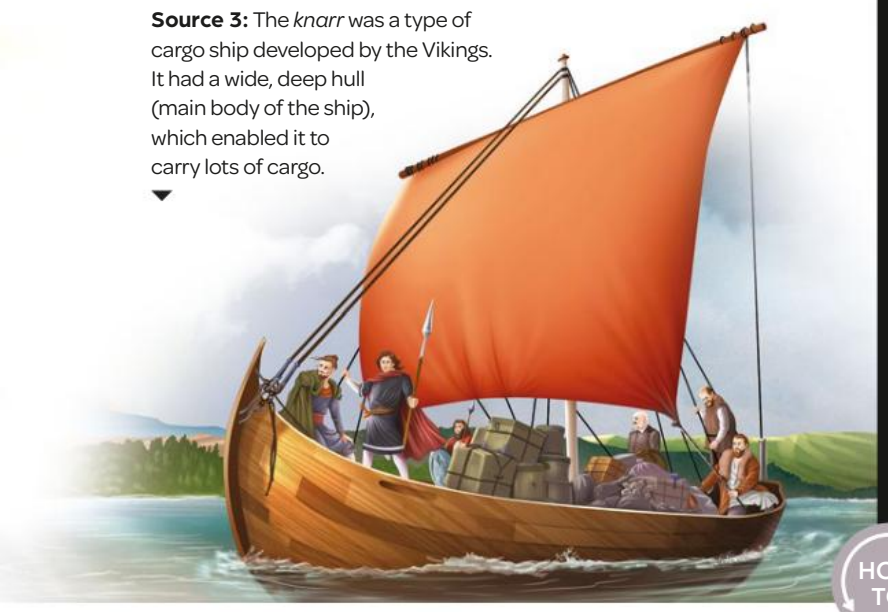
Source: Matilda Education Australia

▲ **Source 2:** Viking settlements in Scandinavia before 838 CE

Shipbuilding

As the Vikings lived close to waterways, knowledge of shipbuilding and navigation was vital to their way of life. The Vikings were widely recognised as the most skilled shipbuilders of their day. Fishing boats and canoes sailed in the waters around farms and towns. Viking merchants used wide, deep cargo ships called **knarrs**, while Viking warriors travelled in longships to raid foreign lands.

Source 3: The *knarr* was a type of cargo ship developed by the Vikings. It had a wide, deep hull (main body of the ship), which enabled it to carry lots of cargo. ▼



Viking towns and trade

While most Vikings lived in small farming communities, others, such as artisans and merchants, lived in towns. Artisans made all sorts of goods, including shoes, pots, jewellery, weapons and leather. Viking merchants brought food, walrus ivory (from walrus tusks), furs and pottery from farming communities to sell in the towns.

The cold weather and mountainous terrain meant that the types of natural resources found in Scandinavia were fairly limited – mainly timber, iron, amber, walrus tusks and furs. This meant that Viking merchants could make huge profits by purchasing exotic goods from faraway lands and selling them in local markets. Using their deep-hulled knarrs, the Viking merchants sailed across the seas and along the rivers to the great cities of Constantinople and Baghdad, west to France, Spain and the Mediterranean Sea and east to the Baltic Sea. They brought back a wide range of luxury goods, including silk, jewels, glass, precious stones, gold, wine, spices and weapons.

Learning ladder H1.2

Background and origins

1. Source 2: Identify three Viking settlements in Scandinavia.
2. Source 1: Describe Viking longhouses.
3. Explain how exotic goods were brought to Viking markets.
4. Explain why merchants were motivated to travel long distances.
5. Analyse the relationship between shipbuilding, merchants and exploration.

Causes and consequences

1. Source 3: Identify the reason why the Vikings designed the knarr with a large hull.
2. Describe the effects of the seasons on how farm animals were managed.
3. Source 3: Explain how living near waterways affected the development of Viking culture.
4. Source 2: Explain the reason why Viking settlements were located in southern coastal regions.

HOW TO

Causes and consequences, page 206

H1.3

How large was the Viking world?

The Vikings were great, fearless explorers. They made the first known voyages to Iceland, Greenland and North America and established settlements across northern Europe.

Fearless explorers

By the middle of the 9th century CE, the Vikings had established settlements in Britain and Ireland, and started to explore the north Atlantic. The Vikings had to rely on their skills as navigators and sailors to reach these lands across the Atlantic Ocean.

Many ships and their crews were lost in the icy waters of the north Atlantic, but the Vikings persevered to become the first people to create permanent ongoing settlements in Iceland. Free land was given to the new settlers, with controls on how much could be claimed. For example, a woman could claim the land she could walk a cow around in a day. By 900 CE, 50 000 Vikings lived in Iceland.

In addition to their settlements in the British Isles and Iceland, the Vikings also established settlements in Greenland, North America, France and Russia.

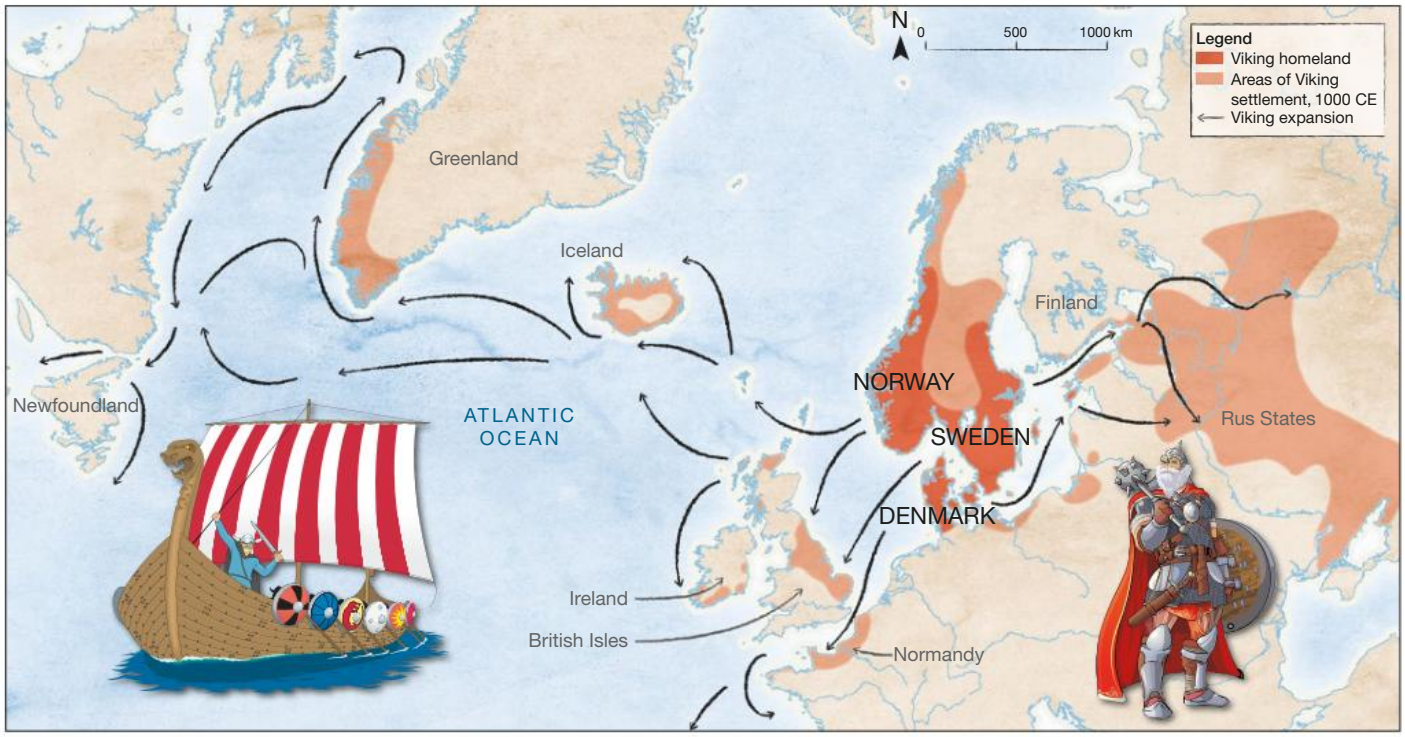
The Rus states

From the middle of the 8th century CE, the Vikings were sailing west across the Baltic Sea and into the Volga and Dnieper Rivers, where they founded the cities of Novgorod and Kyiv. The area around the cities was known as the 'Rus states' – the origin of the name of the country Russia. From the Volga River, the Vikings could sail into the Caspian Sea and travel to Baghdad, while down the Dnieper River lay the Black Sea. Across the Black Sea was Constantinople, the capital of the Byzantine Empire.

Constantinople was an enormously wealthy city situated on the Bosporus Strait. Its position made it a trading centre for goods from Europe, North Africa, Asia and the Middle East.

Source 1: This image depicts Viking explorer Leif Eriksson sighting land in North America, c. 1000 CE. [Christian Krohg (1893 CE), *Leif Eriksson Discovering America*]

Viking exploration and settlement, 8th to 11th centuries CE



Source: Matilda Education Australia

▲ **Source 2:** Between the 8th and 11th centuries CE, many Vikings left their Scandinavian homes and ventured to distant lands.

The Vikings called Constantinople *Miklagard*, which means 'the great city'. They were keen to have Constantinople for themselves and laid siege to it in 860 CE and again in 941 CE. However, the Vikings were unable to conquer Constantinople and had to content themselves with trading their honey and furs for the great city's silk and gold.

Learning ladder H1.3

Background and origins

1. Identify the Viking homelands.
2. Source 2: Describe the areas of Viking settlement.
3. Explain how the Vikings were able to reach the city of Constantinople from their homeland.
4. Explain why the Vikings could be considered fearless explorers.
5. Source 1: What legacy have the Vikings left for the world today?

Significance

1. Source 2: Identify the area of Viking settlement that became Russia.
2. Source 1: Describe the historical significance of Leif Eriksson's exploration.
3. Explain how the city of Constantinople was significant in the medieval period.
4. Explain why Viking exploration in Russia was significant.
5. Source 2: Assess the historical significance of the Viking world.

HOW TO

Significance, page 212

H1.4

Were the Vikings raiders or traders?

The Vikings earned a reputation as vicious raiders, but it was their activities as traders that supported the Viking **economy**. The Vikings' expertise in ship design gave them an advantage. They could travel vast distances to sell their wares and to import goods that were needed at home, such as silver and salt.

Raiders or traders?

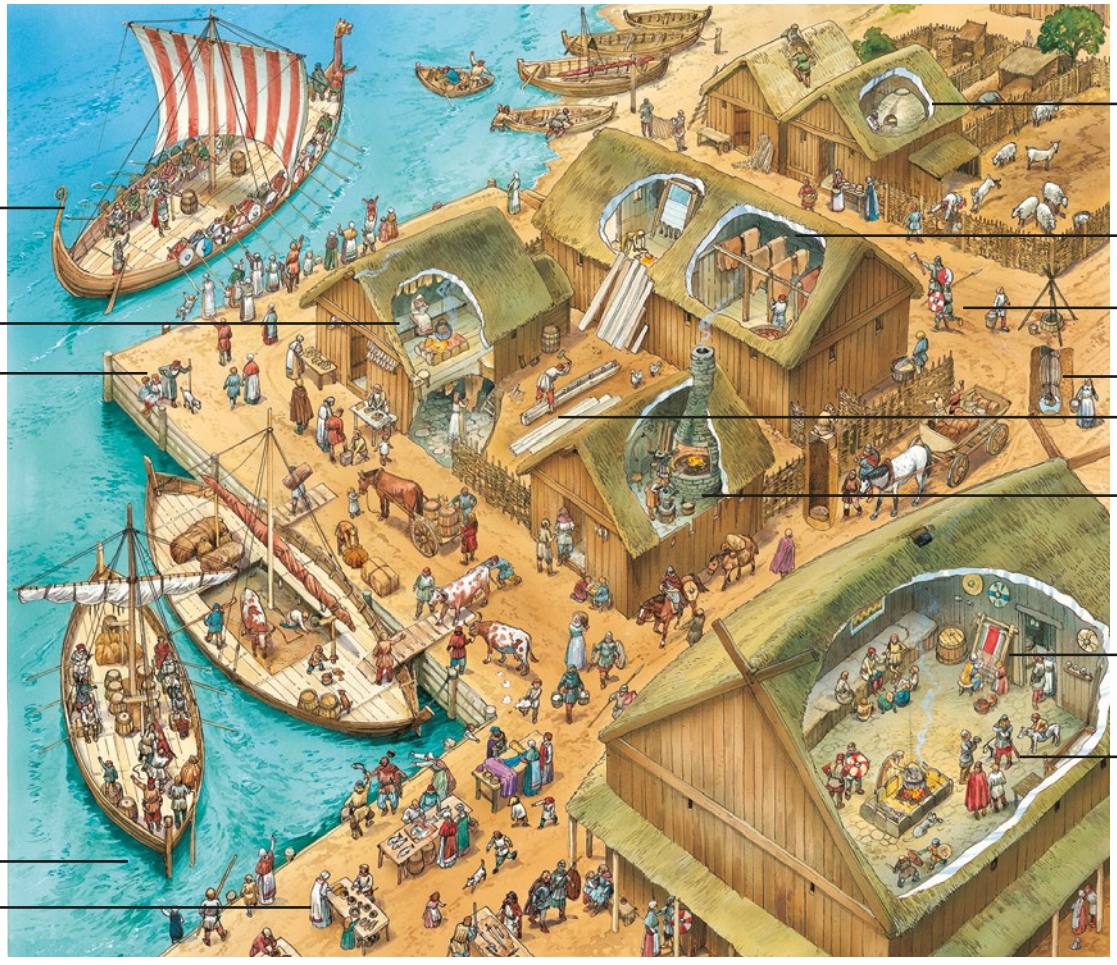
Raiding and pillaging provided a quick route to profit, but were not a long-term way to build a prosperous civilisation. The Vikings dedicated much more of their time to establishing a powerful trading network where merchants would travel far and wide to sell and buy goods.

The loot the Vikings stole on their raids did provide opportunities for trade. Viking metalworkers melted down stolen silver and gold to make jewellery or weapons that were traded overseas. People who were captured in raids were sold as slaves.

Where did they go?

The superior Viking trading ships enabled them to travel through the rough Atlantic Ocean and across the rapids of European rivers. The Viking cargo ships, or *knarrs*, could carry up to 35 tonnes of silver, timber and livestock.

Source 1: A Viking trading town



Viking trading and exploration network

Source: Matilda Education Australia

Source 2: Viking routes for trading, raiding and exploration

Trading markets appeared on the west coast of the Baltic Sea in the middle of the 8th century CE. As markets grew, trading towns such as Birka in Sweden, Kaupang in Norway and Ribe in Denmark developed. People living in these towns were either merchants or craftspeople.

Viking merchants sailed further afield in search of trading opportunities. Valuable trading networks emerged with York in England, Dublin in Ireland, Kiev in Ukraine and Novgorod in Russia. Vikings made even longer treks to Istanbul, Jerusalem and Baghdad.

What did they trade?

Vikings **exported** goods such as furs, skins, timber, smoked fish and jewellery. Alongside buying and selling agricultural and manufactured trade goods, slaves captured in Viking raids were sold in slave markets. ***Thralls*** (see page 38) were valuable, and these slaves were both bought and sold. One female thrall could be sold to buy a cow and an ox. In the 10th century CE, the Vikings established a slave market in Dublin that became one of the biggest in the world.

The Vikings **imported** items such as silver, silk, salt, wine, spices and pottery. By the 9th century CE, silver coins were the most common form of payment. Merchants weighed the coins to determine their value. Many coins were melted down and crafted into jewellery for trade.

Learning ladder H1.4

Background and origins

1. Source 1: Identify at least three things linked to Viking trading in this Viking trading town.
2. Source 2: What do the trading towns shown have in common?
3. Source 2: Who travelled the furthest: Danish, Norwegian or Swedish Vikings?
4. Why do you think Vikings had to import silver, spices and salt?
5. Source 2: Which routes shown on the map are most likely to be exploration routes rather than trading routes? What might Vikings have been searching for on these voyages of discovery?

Significance

1. How highly were thralls valued in the Viking Age?
2. How did boat technology help the Vikings' ability to trade?
3. How important was trading to Vikings?
4. Which is more important historically, Viking raids or Viking trading? Give historical evidence for your answer.

HOW TO

Significance, page 212

How was Viking society organised?

Unlike most medieval societies, the Vikings allowed people to change their social rank if they demonstrated bravery, leadership or skill. The Vikings also established a system of democracy to promote fairness and justice.

Levels of society

Viking society was hierarchical, with each level of society more influential than the one below it.

There were four social classes in Viking society:

1. The Vikings were ruled by kings. At first, there were a number of kings who ruled a series of small kingdoms, but from c. 800 CE, the smaller kingdoms were consolidated into larger realms ruled by a single king. Kings were expected to perform religious rituals and protect their people against invaders. Famous Viking kings include Harald Fairhair (860–940 CE), Ragnar Lothbrok (800–845 CE) and Harald Bluetooth (911–985 CE).
2. ***Jarls*** were the wealthy nobles who owned large areas of land. They employed a small army and owned many slaves.
3. ***Karls*** were the middle class of free men and free women and their families. Karls worked as farmers, tradespeople, craftspeople, warriors and sailors.
4. *Thralls* were slaves who had been abducted in Viking raids, been purchased overseas, or who had sold themselves into slavery to pay a debt. They had no rights and were legally owned by others. Thralls were bought and sold at slave markets.

Room to move

Unlike other medieval societies, the social hierarchy of the Vikings allowed people to move up or down in social rank.

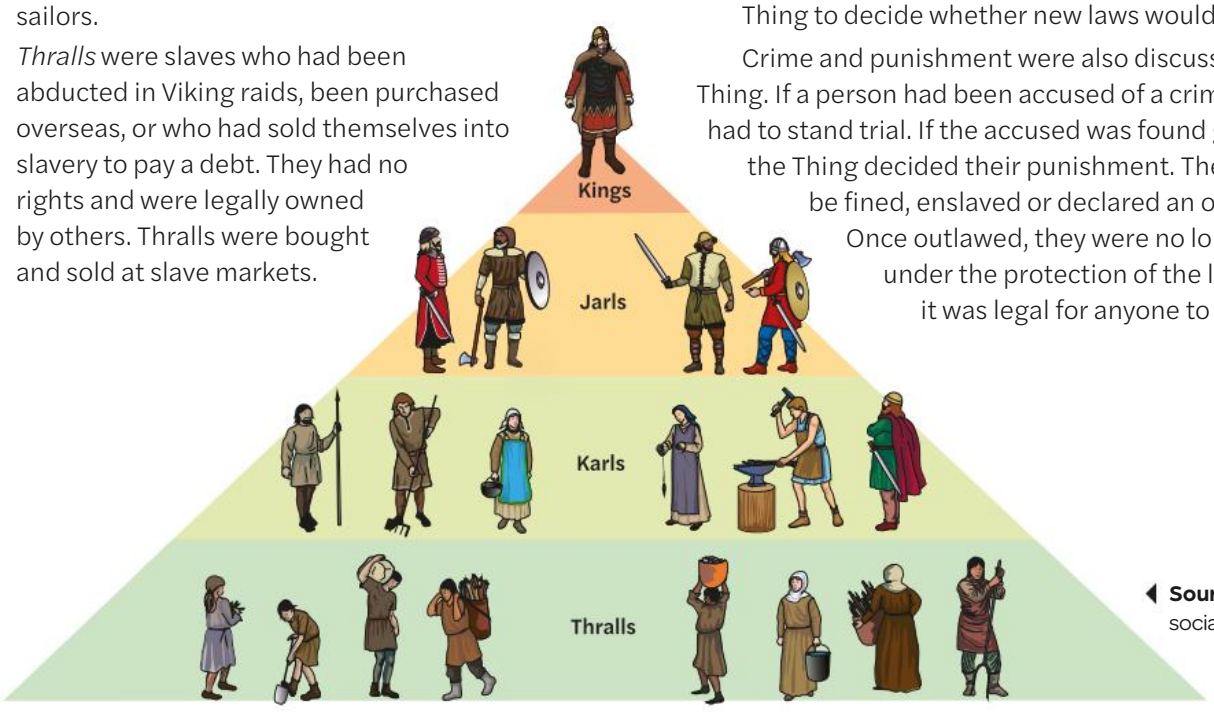
Jarls could become rich and powerful enough to become a king. Alternatively, they could lose their wealth and power and move down a social rank to become a karl. Similarly, a thrall was allowed to sell crafts they had made to earn money to buy their freedom and become a karl.

Even the son of a king was not immune to a change in his social status. Kings did not automatically inherit their titles. They had to earn their role by showing strength, bravery, wisdom and generosity.

The Viking *Thing*

A Thing was a Viking assembly of free men. At the Thing, disputes over property and matters of family honour were resolved. All free men were able to vote at the Thing to decide whether new laws would be passed.

Crime and punishment were also discussed at the Thing. If a person had been accused of a crime, they had to stand trial. If the accused was found guilty, the Thing decided their punishment. They could be fined, enslaved or declared an outlaw. Once outlawed, they were no longer under the protection of the law and it was legal for anyone to kill them.



Source 1: Viking social hierarchy

Source 2: This painting from 1897 CE shows what the artist, W.G. Collingwood, imagined an Icelandic Thing, known as the Althing, might have looked like. The Althing in Iceland continues to this day. It is the longest-running parliament in the world. [William Gersham Collingwood (1897 CE), *Althing in Session*]

The lawspeaker

The lawspeaker was responsible for making sure that the decisions made at the Thing were carried out. Even the king had to obey the decisions made at the Thing. The lawspeaker was elected from one of the jarl families.

> Then Thorgnyr the lawspeaker said, 'King Olaf of Sweden wants to have Norway for himself, which no Swedish king before him has ever desired, and as a result, brings war and distress on many a man. Now it is out, will you, King Olaf, make peace with the Norway king, Olaf the Thick? ... if you will not do as we desire, we will now attack you, and put you to death, for we will no longer suffer law and peace to be disturbed' ... Then the whole public approved, with clash of arms and shouts, the lawman's speech.

Source 3: Extract from Snorri Sturluson (c. 1230 CE), *Chronicles of the Kings of Norway*

Learning ladder H1.5

Significant people, ideas and events

1. Source 1: Identify the four social classes in Viking society.
2. Describe the role of:
   - **a** jarls
   - **b** karls.
3. Explain how the Thing ensured stability in Viking society.
4. Explain why the role of the lawspeaker was important in Viking society.
5. Source 3: Using the source and your knowledge, analyse how democratic Viking society was.

Continuity and change

1. Source 2: Identify how the Althing is an example of continuity.
2. Describe how becoming an 'outlaw' changed a person's legal rights.
3. Explain how jarls and thralls could change social class.
4. Explain why Viking kingship demonstrates the concept of continuity and change in Viking society.
5. Evaluate the benefits of class mobility for Viking society.

HOW TO
Continuity and change, page 203

Who were the Viking gods?

The Vikings worshipped a group of warrior gods and goddesses who lived in a land in the sky called Asgard. They told great tales of the gods' battles with giants and other monsters.

The Viking religion was polytheistic, meaning that it had many gods. The gods were believed to control every aspect of life. They inhabited a realm known as Asgard, while the humans lived in a separate realm known as Midgard. A rainbow bridge called Bifrost connected Asgard to Midgard, so that the gods could intervene in the lives of humans.

A giant serpent called Jörmungandr was thought to encircle Midgard, waiting for the End of the World (Ragnarok). At this time, Jörmungandr would join the forces of Chaos and fight a huge battle against the gods. The world would be destroyed in this last battle, but order would nonetheless be restored and a new world would be reborn.

The Viking gods

The gods and goddesses in Norse mythology include:

- **Odin:** The ruler of Asgard. Odin traded one of his eyes for all the wisdom in the world and became the god of knowledge. He had two ravens that sat on each of his shoulders. Each day they flew around spying on humans, monsters and gods, and returned to Odin each evening to report on what they had seen. Odin commanded winged spirits, known as the Valkyries, to take half of those who had died bravely in battle to his realm, Valhalla.
- **Freyja:** The second most important deity. She was the goddess of love, birth, death and war. As the goddess who oversaw the beginning and end of life, she played an important role in Viking religion. In addition, Freyja was entitled to take half the dead into her realm, Folkvangr. Her realm was considered the reward for women who had lived an exemplary life and for men killed in battle.

Source 1: Australian actor Chris Hemsworth portrays Thor, the god of thunder, in the Marvel superhero movies.

- **Thor:** Odin's son and the god of thunder, storms and strength. He could level mountains with his mighty hammer. Thor caused thunder and lightning as he rode across the sky. Thor was the most popular of the Norse gods, with a cult following throughout Scandinavia.
- **Loki:** Odin's adopted son. He was a mischief-maker and a shape-shifter who could turn himself into any shape (such as a fly, a horse or an old woman).
- **Heimdall:** Heimdall guarded the rainbow bridge so that no uninvited guest could enter Asgard. He could see for over 150 kilometres in the night or day and could hear grass grow.

Source 2: Freyja, the goddess of love and war, shown here wearing the Brisingamen necklace, a magical golden necklace

Source 3: The Vikings wore miniature silver hammer pendants to invoke the protection of Thor. This pendant was made in Sweden in the 10th century CE.

Day	God	Original name
Sunday	Sól, goddess of the Sun	Sól's day
Monday	Máni, goddess of the Moon	Máni's day
Tuesday	Týr, god of war	Týr's day
Wednesday	Odin, also called Woden, ruler of Asgard	Woden's day
Thursday	Thor, god of thunder, storms and strength	Thor's day
Friday	Frigg, goddess of marriage	Frigg's day
Saturday	From the ancient Roman god, Saturn	Saturn's day

Source 4: The impact of Viking mythology can be seen in the names of the days of the week, which are all named after Viking gods.

How did the Vikings worship their gods?

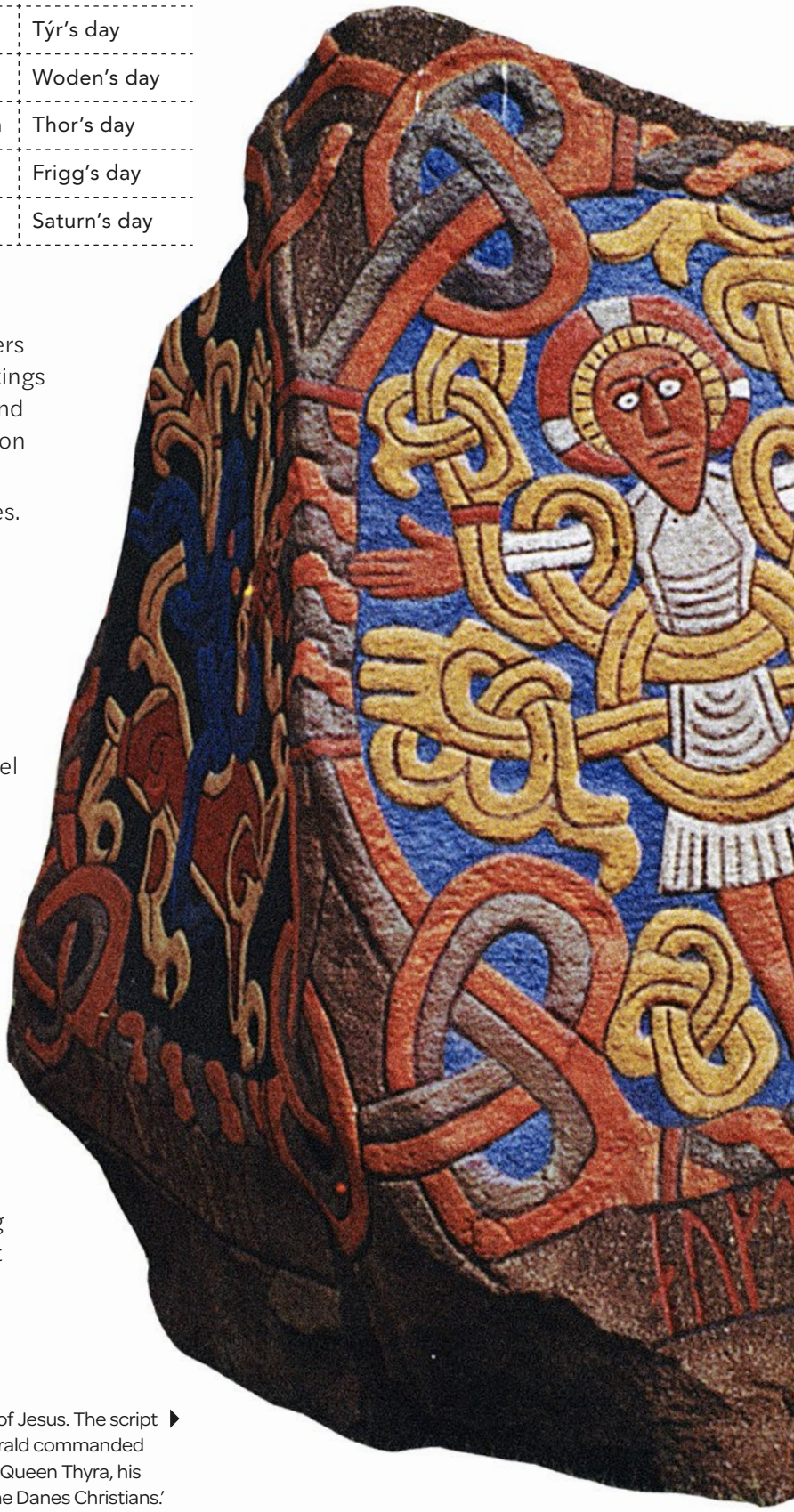
Unlike other religions, the Vikings had no religious leaders or temples. To stay on good terms with the gods, the Vikings made sacrifices to them at an event called a ***blót***. Pigs and horses were usually sacrificed. The blood was sprinkled on statues of the gods and on the participants themselves.

The Vikings also worshipped their gods in tree groves. Since Thor was considered to be strong and mighty, he was often associated with the oak tree. Worshippers of Thor would visit sacred oak groves to ask him for protection.

The arrival of Christianity

During the 900s CE, Christian missionaries from Rome, Constantinople and other cities in Europe began to travel into Northern and Eastern Europe with the aim of converting people from their ethnic religions to Christianity. Some Vikings had already converted to Christianity before this time – for example, Viking traders who had come into contact with Christians on their travels and Vikings who settled in Christian lands such as England, France and Ireland. The most important reason for the mass conversions of Vikings to Christianity, however, was because the kings wanted their kingdoms to be Christian.

The Scandinavian kings saw Christianity as a religion that would enable them to promote order in their kingdoms and create powerful alliances with other kings in Europe. In 965 CE, Harald Bluetooth, King of Denmark, converted to Christianity and declared that his entire kingdom was to be Christian. He also had his non-Christian parents' graves dug up so they could be reburied beneath the floor of a church in Jelling.



Source 5: A copy of the Jelling Stone (c. 965 CE), featuring an image of Jesus. The script on the stone is written in Viking letters, called **runes**. It reads: 'King Harald commanded that stone to be erected to commemorate King Gorm, his father, and Queen Thyra, his mother. King Harald conquered all Denmark and Norway and made the Danes Christians.'

In Norway, King Olaf Tryggvason used threats and violence to make his people convert to Christianity, forcing them to accept baptism at spear-point. He also threatened to kill any Icelander visiting Norway who was not a Christian. King Olof Skötkonung of Sweden converted to Christianity in 1008 CE. He ordered his men to cut down the sacred groves and take down the statues of Viking gods in an effort to stamp out the old religion.

However, in spite of the efforts of the Viking kings to force people to adopt Christianity, the old festivals, songs and practices of the Norse religion were hard to break away from. Missionaries despaired when they found that people who had seemingly converted to Christianity some years earlier had, in fact, gone back to their old religion and the missionaries had to start all over again.

It is customary in Uppsala [in Sweden], to hold a general feast … every nine years. All must attend this festival. Kings and people all send their offerings to Uppsala … What is more distressing is that those who have already adopted Christianity reconvert back to their [Viking] religion through these ceremonies.

The sacrifice is of this nature: of every living thing that is male, they offer nine heads to the gods … The bodies they hang in the sacred grove that adjoins the temple. Now this grove is so sacred in the eyes of the heathen that each and every tree in it is believed divine because of the death of the victims …

Source 6: Excerpt from *Description of the Northern Islands* (1075 CE), which contains descriptions of Christian missionary work in Sweden. It was written by Adam of Bremen, a Christian missionary from Germany.

Learning ladder H1.6

Significant people, ideas and events

1. Sources 1 and 2: Identify the two Viking gods shown in these images.
2. Describe the roles of Odin and Thor.
3. Source 5: Using the source and your knowledge, explain how the Viking kings promoted Christianity.
4. Explain why Freyja was a significant goddess in the Viking religion.
5. Analyse the idea that the serpent Jörmungandr was a symbol of rebirth.

Perspectives

1. Source 6: Identify the religion of the author of this source.
2. Source 3: Describe the perspective of a person who might have worn this.
3. Explain why the kings had a favourable perspective on Christianity.
4. Source 6: Compare the perspectives of the Vikings and the author towards religion.

HOW TO

Perspectives, page 210

How did the Vikings bury their dead?

The Vikings believed in life after death. They buried their dead with grave goods, trusting that the dead would need these items in the afterlife.

Viking grave goods

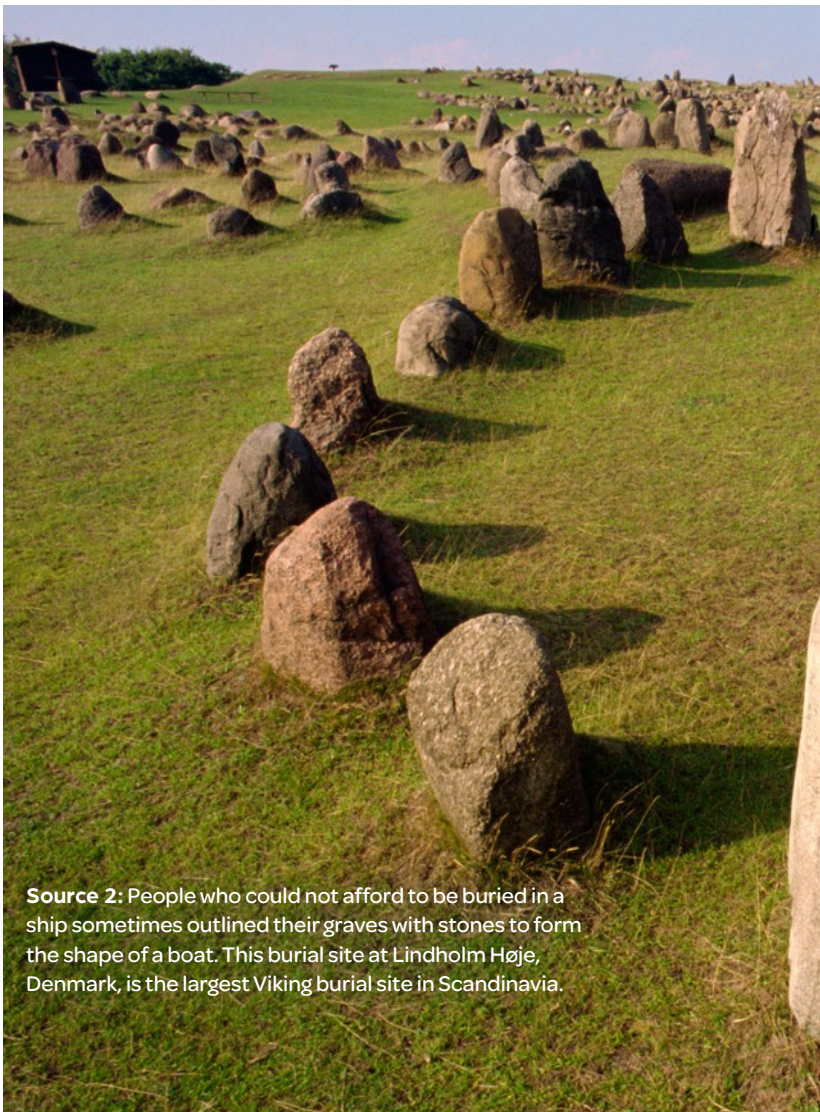
A Viking's wealth determined the types of grave goods that might be buried with them. A thrall's body was placed in a simple wooden box along with some personal items, such as a comb or sewing tools. Karls' bodies were placed in large graves lined with wood. Their tools (such as ploughs, weighing scales, hammers, nails, needles, whorls, thread and cooking pots) were buried with them, along with silver coins and weapons.

Source 1: A Viking ship in flames, demonstrating a Viking king's ship burial as part of a modern-day annual Viking festival held in Lerwick, Shetland Islands, Scotland

Dogs and horses were sometimes sacrificed and buried with their karl master. The nature of Viking burials for each social class shows not only that the Vikings believed in an afterlife, but also that they believed that a person's social status and role in life would be continued after their death.

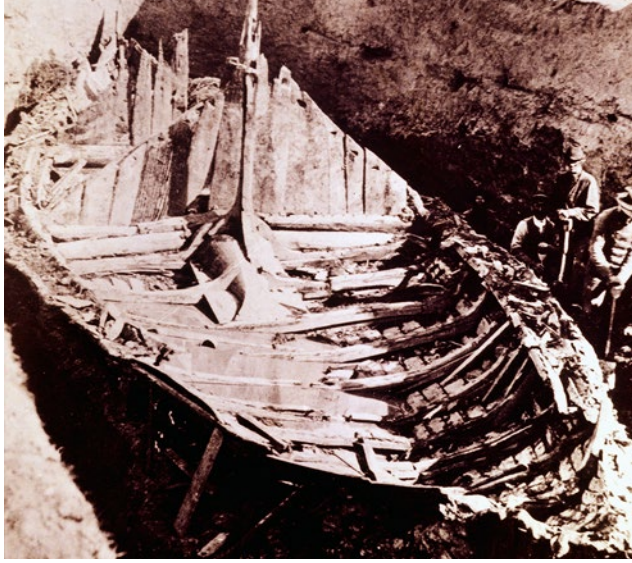
Ship burials

In Viking mythology, boats were symbols of safe passage into the afterlife, and therefore played a key role in Viking funerals and burials. For ordinary Vikings, grave mounds were often built to resemble ships, with stones used to outline the vessel's shape.



Source 2: People who could not afford to be buried in a ship sometimes outlined their graves with stones to form the shape of a boat. This burial site at Lindholm Høje, Denmark, is the largest Viking burial site in Scandinavia.

The bodies and grave goods of jarl chieftains and Viking royalty were sometimes placed in an actual longship, as if to transport them to the next world. The longship was then buried or burned. Grave goods for kings or wealthy jarls might include jewellery, chests of silver coins, furniture, sleighs, carts, tools, sacrificed horses, fine clothing, ornaments and other precious objects. Weapons were also buried with Viking leaders, so that they could continue to lead armies in Valhalla or Folkvangr. Slaves were sometimes sacrificed with their masters so that they too could accompany them to the next world.

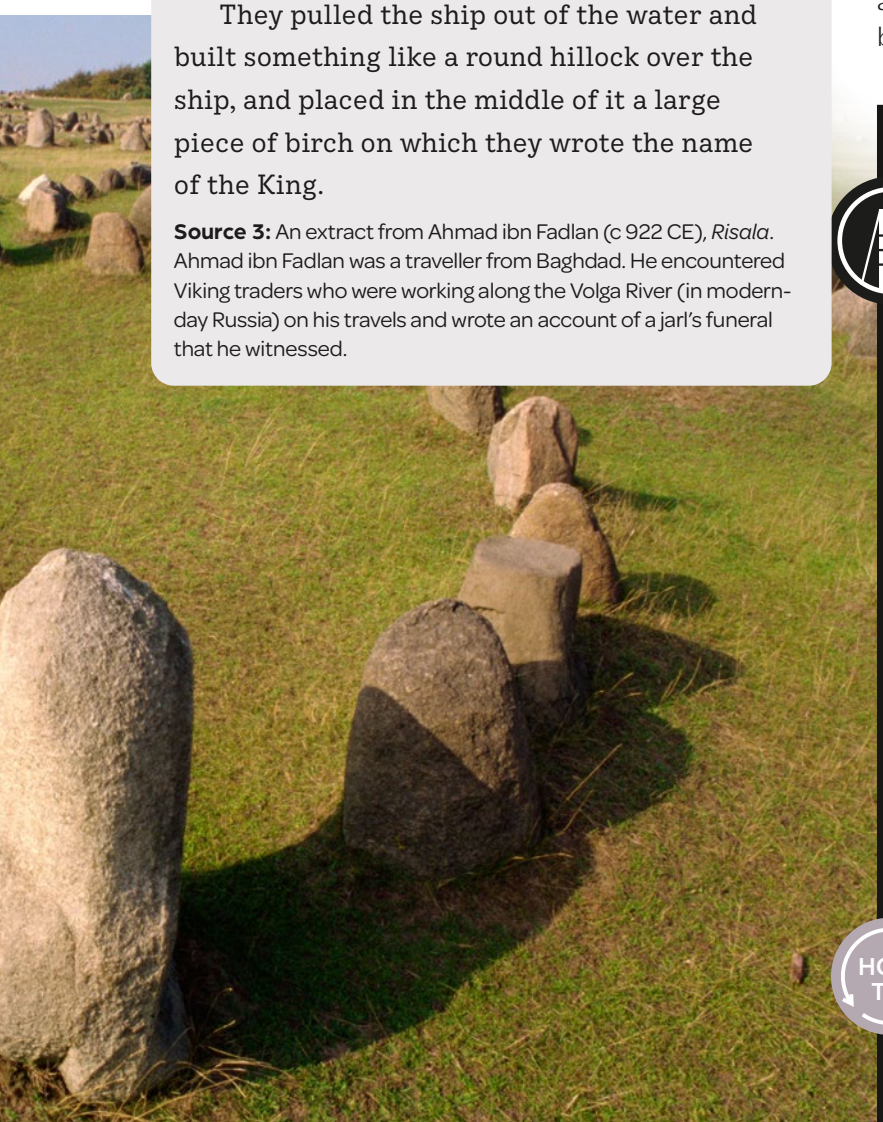


▲ **Source 4:** Excavation of the Goksted ship, 1880 CE

The deceased's next of kin approached and took hold of a piece of wood and set fire to it ... Then the people came forward with sticks and firewood. Each one carried a stick, the end of which he had set fire to and which he threw on top of the wood. The wood caught fire, and then the ship ... and all it contained. A dreadful wind arose and the flames leapt higher and blazed fiercely ... it took scarcely an hour for the ship to be burnt to a fine ash.

They pulled the ship out of the water and built something like a round hillock over the ship, and placed in the middle of it a large piece of birch on which they wrote the name of the King.

Source 3: An extract from Ahmad ibn Fadlan (c 922 CE), *Risala*. Ahmad ibn Fadlan was a traveller from Baghdad. He encountered Viking traders who were working along the Volga River (in modern-day Russia) on his travels and wrote an account of a jarl's funeral that he witnessed.



The Goksted ship

In 1880 CE, a large burial mound was excavated in Norway, revealing a huge ship burial. It contained grave goods including three small boats, a tent, a sledge and riding equipment. However, there was no gold or silver and no sword in the grave, which was very unusual. This led researchers to conclude that these goods had probably been stolen in the past. The bones of 12 horses, 6 dogs and a peacock were also found, along with the skeleton of a powerfully built man, aged about 40 years old.

Learning ladder H1.7

Significant people, ideas and events

1. Source 1: Identify the type of burial shown in the source.
2. Source 1: Describe how kings were buried.
3. Source 4: Determine the social status of the person buried at Goksted.
4. Compare the burials of thralls, karls and kings.
5. Analyse the Vikings' beliefs about the afterlife.

Sources

1. Source 3: Identify the origin of the source.
2. Source 2: Describe the burial shown in this source.
3. Source 3: Explain what happened at a jarl's funeral.
4. Source 3: Explain why Ahmad ibn Fadlan wrote about this scene.

HOW TO

Sources, page 201

H1.8

What was found in the Birka grave?

Archaeologists are currently debating the identity of the person buried in the Birka grave.

The discovery of the grave

In 1878 CE, an archaeologist named Hjalmar Stolpe uncovered a Viking grave at Birka in Sweden. He called the find Bj581. The grave contained a wooden chamber that was 3.45 metres long and 1.75 metres wide. In the chamber was a body seated on a throne, clothed in silk.

Among the many grave goods were a high-quality sword, a battleaxe, a spear, a fighting knife, arrows, two shields, a gaming board, gold coins, a comb, a bronze bowl and two horses. The gaming board was particularly interesting, as these were usually found buried with military leaders. The presence of the weapons and gaming board and the richness of the grave goods led researchers to decide that the grave must have belonged to a high-status male Viking warrior.

The examination of the bones

In 2016 CE, bioarchaeologist Anna Kjellström examined the pelvic bone and jawbone of the skeleton from Bj581. Her analysis indicated that the bones belonged to a female skeleton, due to their shape. A further study conducted in 2017 CE by Charlotte Hedenstierna-Jonson extracted DNA from a tooth and an arm bone belonging to the person buried in Bj581. The DNA analysis revealed that the skeleton had two X chromosomes. Since females have two X chromosomes and men have one X chromosome and one Y chromosome, Hedenstierna-Jonson's research proved that the skeleton was indeed that of a woman.

Source 1: Hjalmar Stolpe's sketch of the grave Bj581, published in 1889 CE

Women warriors in Viking mythology and history

Viking warrior women were not common, but they certainly existed. They were mentioned in the sagas and in early Viking histories, such as the shield-maiden Lathgertha, who appears in the history *Gesta Danorum* (Deeds of the Danes) (1186–1208 CE). The Irish chronicle *Cogadh Gaedhel re Gallaibh* (The War of the Irish with the Foreigners) (1111 CE) recorded a red-haired Viking woman leading an invading force during a war fought between 967 and 1014 CE. Byzantine historian John Skylitzes recorded that Viking women fought in a battle against Bulgarians in 971 CE.

Moreover, other female skeletons have been found buried with weapons. In 2005 CE, a grave belonging to a 20-year-old woman was found in Aunvollen in Nord Trøndelag, Norway, containing a sword, gaming pieces, scissors, a comb and a small box. An older find excavated near the Nordre Kjølen farm in Solør, Norway, in 1900 CE was re-examined in 2019 CE. The skeleton was shown to be that of a 19-year-old Viking woman. Her grave goods had included a spear, sword, battleaxe, arrows, shield and horse. The skeleton indicated that the woman had suffered a sword wound that had healed sometime before her death.

The evidence will always remain fragmentary, but these recent discoveries are causing scholars to return to finds from the Viking Age with fresh eyes. Rather than simply interpreting the evidence available to us with techniques inherited from older traditions, steeped in misconceptions, there are now new ways of looking ... This is not to say all Viking women were the shield-maidens of legend, or even that a large number were. Birka Warrior Woman might be an exception. But through the exceptional we can find inspiration, and through her story we are reminded to keep an open mind when we look at the past.

Source 2: Excerpt from Janina Ramirez (2022), *Femina: A New History of the Middle Ages, Through the Women Written Out of It*, Ebury. Janina Ramirez is a historian.

Source 3: Viking warrior woman, known in the sagas as a shield-maiden

Was the woman buried in Bj581 really a warrior?

In spite of this evidence, some researchers have been reluctant to believe that the woman in the Bj581 grave was actually a Viking warrior. They argue that it is possible that the objects in the grave actually belonged to a male family member, whose body was now missing. They also contend that since Viking warrior women were rare, a female military leader seems unlikely. Other historians argue that because we have long assumed that all warriors are male, perhaps we have misinterpreted Viking culture and the true presence of Viking women has been missed.

Source 4: The Valkyrie from Hårby, c. 800 CE. This silver figure, measuring 3.4 cm, was found in 2012 CE near the village of Hårby, Denmark. It has been interpreted as either a Valkyrie figure, a shield-maiden or the goddess Freyja.

Learning ladder H1.8

Significant people, ideas and events

1. Source 3: Identify the name given to Viking warrior women in the sagas.
2. Source 1: Describe the grave (Bj581) found in 1878 CE.
3. Explain how the skeleton was initially described.
4. Explain why the skeleton was later identified as female.
5. Analyse the significance of the Bj581 find.

Interpretations

1. Identify the debate about the body in Bj581.
2. Describe the two points made by those who think the body in Bj581 did not belong to a female Viking military leader.
3. Explain the evidence for female warriors in Viking history.
4. Source 2: Explain the author's argument about the body found in Bj581.
5. Sources 2 and 4: Why do you think there is debate about the role and status of the woman in Bj581?

HOW TO Interpretations, page 214

H1.9

How did Viking technology provide a competitive advantage?

Viking ships were bigger, lighter and faster than those of other groups, which gave the Norse a huge advantage when they were raiding, trading and settling in faraway lands.

Ship technology

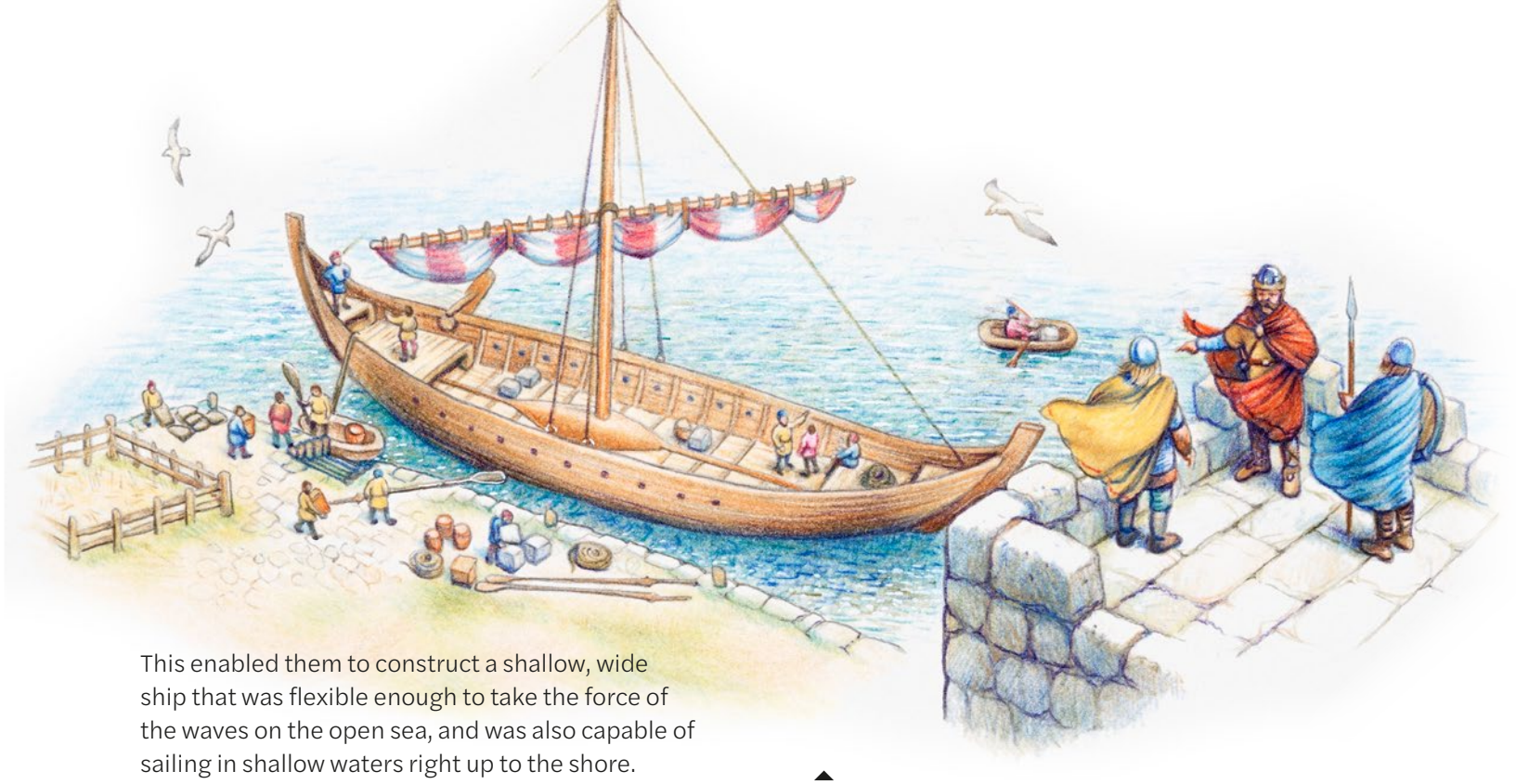
As most Vikings lived alongside waterways, they depended on their ships to fish for food and to trade and travel. The Vikings became skilled shipbuilders who designed and built different types of ships for their purposes.

Viking ships

Viking ships were built on a keel, which was a long beam of wood that ran down the length of the ship and acted as a 'backbone'. The Vikings built up the sides of the ship from the keel, using overlapping planks of wood; this is known as clinker construction.

Source 1: The Oseberg ship is one of the best-preserved artefacts from the Viking era. The ship is on display at the Viking Ship Museum in Oslo, Norway. The ship and two skeletons were excavated in 1904 CE in Oseburg. Parts of the ship have been dated to 800 CE.

The ship is a ***karve***: a broad ship with up to 16 pairs of oars that could operate in very shallow water. Karves were the smallest longships, used for warfare as well as for transporting people and cargo.



This enabled them to construct a shallow, wide ship that was flexible enough to take the force of the waves on the open sea, and was also capable of sailing in shallow waters right up to the shore.

The most famous type of Viking ship was the **longship**. This vessel was capable of sailing across oceans, on inland rivers and on shallow waterways. It was light enough to carry overland if necessary. The longship was mainly used for raiding expeditions. It was extremely useful for raiding coastal and riverside towns.

Sail technology

Sails were made of wool and coated with animal fat to keep them waterproof. The sails were fixed to a mast and could be pivoted to face the direction of the wind. If the wind was not blowing in the desired direction, the Vikings could lower the sail and row their ship instead. The combination of sail and oar power allowed the Vikings to come to shore, **loot** and plunder a town, then make a quick getaway.

The sails were woven by Viking women on a loom. It took one woman hundreds of hours to spin the wool into yarn, and then at least another three years to weave a sail. The Viking raids would have been impossible without the work done by women. Women also wove the fabric exported by Viking merchants. Wool fabric was one of the Vikings' main exports.

The dangers of sea travel

It took determination and bravery to undertake risky, long journeys across rough seas. With no cover in the longships, the sailors sheltered under wet blankets and animal skins. They ate salted meat and drank water, beer or sour milk. Many ships sank on these long journeys. When Erik the Red led an expedition to Greenland, only 14 of the original 25 ships arrived safely.

Source 2: The type of Viking ship shown in this illustration is called a knarr, which was used by Viking merchants for trade.

Learning ladder H1.9

Significant people, ideas and events

1. Source 2: Identify the purpose of knarr ships.
2. Source 1: Describe the features of the Oseberg ship.
3. Explain how Viking ships were constructed.
4. Explain why Viking raiding expeditions were dangerous.
5. Evaluate the significance of women weavers to the success of Viking society.

Causes and consequences

1. Source 1: Identify the cause of the holes made along the sides of the Oseberg ship.
2. Describe the effect of coating sails with animal fat.
3. Explain the consequences of clinker construction on Viking ship design.
4. Explain why the design of longships enabled the Vikings to conduct raids.
5. Evaluate the importance of Viking ship technology as a cause for the success of their society.

HOW TO

Causes and consequences, page 206

Were the Vikings bloodthirsty pillagers?

Vikings have a fearsome reputation as vicious killers who raided and stole from innocent people. But is this the whole story?

Viking raids

Much disagreement exists among historians as to why the Vikings began raiding communities throughout Europe. Was it because their superior, fast ships allowed them to quickly and quietly reach their destinations and then get away rapidly after raiding and pillaging villages? Were they after silver and slaves? Did they want to expand their territory? Or did they want to find a place to settle and lead a peaceful life?

For whatever reason, Viking raids increased throughout the late 8th and early 9th centuries CE. These raids took place during the summer months when the seas were calm and the winds were favourable. The Viking raiders travelled in small fleets of no more than three ships. Archaeological evidence suggests that the ships the Vikings used for raiding in this early period carried between 25 and 70 people each, so the raids would have been conducted by anywhere between 25 warriors (in the case of one small ship) and 210 warriors (in the case of three large ships).

Attacks on monasteries

The main targets for Viking raids during the late 8th and early 9th centuries CE were monasteries situated on coasts and next to rivers, such as Lindisfarne in England and Clonmacnoise in Ireland. Monasteries were poorly defended and contained precious objects such as silver coins, jewellery, and religious items made from gold and silver.

The attack on Lindisfarne

In 793 CE, Viking raiders attacked the monastery of St Cuthbert on the holy island of Lindisfarne, which is located off the north-east coast of England.

Source 1: This painting depicts the Vikings raiding the monastery of Clonmacnoise in Ireland. Images like this one stoked the **stereotypical** image of the Vikings as vicious raiders who launched furious attacks on their unsuspecting victims, killing them, **pillaging** their possessions and burning their churches and homes to the ground. [Tom Lovell (20th century CE), *Norse Marauders Wreak Mayhem at Clonmacnoise, Ireland*]

They destroyed the monastery buildings, killed the monks and other inhabitants and stole precious religious items made of gold, silver and ivory.

The first attack on Clonmacnoise came in 795 CE. Clonmacnoise would be attacked another six times by the Vikings in the decades that followed.

> Lo, it is nearly 350 years that our first missionaries have inhabited this most lovely land, and never before has such terror appeared in Britain as we have now suffered from a **pagan** race, nor was it thought that such an inroad from the sea could be made. Behold, the church of St Cuthbert spattered with the blood of the priests of God, despoiled of all its ornaments; a place more holy than all in Britain is given as a prey to pagan peoples.
>
> **Source 2:** This text is part of a letter written by a monk and scholar, Alcuin, to the King of Northumbria in 793 CE following the Viking attack on Lindisfarne.

Viking settlements

From c. 860 CE, the Viking raids began to decline. Instead, many Vikings established settlements in England, embraced Christianity and married locals.

The Vikings also established new trade networks and founded towns. In Ireland, the Vikings established the towns of Dublin and Limerick, while in England, they took over Lincoln, Stamford and Norwich, transforming them into recognisably Viking towns.

The violence of the earlier raids had been written up in lurid detail by terrified monks, who saw the Viking raids as an attack on Christianity. This greatly contributed to the idea that the Vikings were just fearsome plunderers, but it was not the whole story. Vikings were not the only ones raiding monasteries. For example, Clonmacnoise was raided over 80 times in the medieval period, but only seven of these raids were made by the Vikings; the rest were made by the English (40 raids), local Irish clans (27 raids) and others.

Britain and Ireland, c. 700 to 867 CE

▲ **Source 3:** Viking raids and settlements in Britain and Ireland (c. 700–867 CE)

Source: Matilda Education Australia

Learning ladder H1.10

Significant people, ideas and events

1. Source 1: Identify the location of this Viking attack.
2. Source 1: Describe what is shown in this source.
3. Explain how the Vikings conducted their coastal raids.
4. Explain why monasteries were targeted by the Vikings.
5. Source 3: Analyse the impact of the Vikings in England between 793 and 841 CE.

Sources

1. Source 2: Identify the origin of the source.
2. Source 2: Describe the attack on Lindisfarne.
3. Source 3: Using the source and your knowledge, explain how the Vikings established settlements in England and Ireland.
4. Source 2: Explain why the source repeatedly refers to the Vikings as 'pagans'.
5. Sources 2 and 3: Analyse the reasons why Vikings have a reputation as raiders rather than settlers.

HOW TO Sources, page 201

How did the Vikings bring change to England?

In 865 CE, a major Viking raid was undertaken by a fleet known as 'the Great Heathen Army'.

The Great Heathen Army

According to the Norse legends, the king of Northumbria, Ælla, captured the great Viking leader and Danish king, Ragnar Lothbrok (also known as 'Hairy Breeches'). According to *The Saga of Ragnar Lothbrok*, King Ælla had Ragnar thrown into a pit of poisonous snakes, where he died painfully.

While it is uncertain whether the invasion was motivated by revenge, in 865 CE a huge Viking fleet – known as the Great Heathen Army – left Denmark and headed for England. The fleet was led by Ragnar Lothbrok's three sons (Halfdan, Inwaer and Guthrum). The Viking fleet landed in East Anglia, on the east coast of England, in 865 CE.

The king of East Anglia , Æthelred II, gave the Vikings horses in return for leaving his kingdom alone. The Great Heathen Army then rode to Northumbria and began looting and murdering the people. By 874 CE, the Great Heathen Army had conquered the kingdoms of Northumbria, East Anglia and Mercia. Only the king of Wessex, known as Alfred the Great, was able to stop the Vikings.

Source 1: Illuminated manuscript from *The Life of Edmund* (c. 1130) by an unknown artist. The image shows the Great Heathen Army attacking the town of Thetford, England, in 866 CE. Viking pikemen scale the ramparts of the town (top), while swordsmen break through an archway and begin to slaughter the town's inhabitants (below).

The Danelaw

In May 878 CE, Alfred the Great's army defeated the Vikings at the Battle of Edington. The Vikings' leader Guthrum (son of Ragnar Lothbrok) then signed a peace treaty with Alfred. Under the terms of the treaty, Guthrum agreed to be baptised as a Christian and to leave Wessex with his army.

Alfred and Guthrum then signed a second treaty, known as The Treaty of Alfred and Guthrum (c. 879 CE), which established the boundaries of their two kingdoms and agreements on trade. Alfred then ruled over Wessex, while Guthrum ruled over the Danelaw.

Guthrum's Christian baptism was not simply an outcome of Alfred's victory. It ensured peaceful relations between Wessex and the Danelaw, and that Christian peoples living in the Danelaw would accept Guthrum's rule.

Having neutralised Guthrum as a threat, Alfred recaptured and rebuilt London, strengthened the defences of his kingdom and revived learning. Alfred's leadership in battle and wise rule secured relative peace for the next 20 years.

In the Danelaw, people lived as they had in Scandinavia, speaking Norse languages and following Norse laws. The Danelaw was a prosperous and flourishing kingdom, at least for a while. However, by 954 CE, the English had managed to drive out the Danelaw's ruler, King Erik I (known as Erik Bloodaxe), marking the end of the Danelaw.

England, c. 878–954 CE

Source: Matilda Education Australia

Source 3: The position of the Vikings' Danelaw territory in England

Source 2: This stained-glass window depicts Guthrum's Christian baptism; Alfred the Great is depicted in the background. [Stained-glass window, church in Blakeney, Norfolk, England]

Learning ladder H1.11

Significant people, ideas and events

1. Source 1: Identify the event shown in this source.
2. Source 1: Describe the methods used by the Vikings to attack the town of Thetford.
3. Explain how Ragnar Lothbrok died.
4. Explain why Alfred was known as 'the Great'.

Continuity and change

1. Source 2: Identify the change depicted in the source.
2. Source 3: Using the source and your knowledge, describe how control of England changed in 878 CE.
3. Explain how the Danelaw demonstrated the concept of continuity and change.
4. Source 2: Explain why Guthrum adopted Christianity.
5. Analyse the extent of change that the Danelaw brought to England.

HOW TO

Continuity and change, page 203

H1.12

How did the Vikings return to England?

The end of the Danelaw did not see the last of the Vikings. They would return and put an end to the Anglo-Saxon kings.

The Viking kings of England

Viking attacks on England did not stop with the end of the Danelaw. In 1013 CE, King Sweyn of Denmark (known as 'Sweyn Forkbeard') launched another invasion of England and conquered the entire country, becoming King of England. The reign of King Sweyn was followed by that of his son Cnut in 1016 CE, and then by Cnut's sons Harald (1035–1040 CE) and Harthacnut (1040–1042 CE). Harthacnut died without an heir, so an Anglo-Saxon prince, Edward the Confessor, was crowned king.

The Battle of Stamford Bridge

In January 1066 CE, Edward the Confessor died without an heir. Three men claimed the throne of England: the King of Norway, Harald Sigurdsson (also known as Harald Hardrada); the Anglo-Saxon Earl of Essex, Harold Godwinson; and the Duke of Normandy (France), William. The **Witan** decided to give the crown to Harold Godwinson.

Source 1: This is a photo of the *Bayeux Tapestry* (c. 1077 CE), which is a long embroidered cloth, about 70 metres long and 0.5 metres wide. This scene shows the **Normans**, on horseback, fighting the Anglo-Saxons at the Battle of Hastings. The tapestry was made by Anglo-Saxon women, on the orders of King William, to show that God had ordained his victory.

In response, Harald Hardrada tried to take the crown by force and invaded England with a fleet of 300 ships. King Harold Godwinson took the English army north to meet Hardrada, and Godwinson killed Hardrada at the Battle of Stamford Bridge on 25 September 1066 CE.

The Battle of Hastings

Meanwhile, William, Duke of Normandy, also prepared to invade and claim the English crown. William was descended from the Vikings who had raided Normandy in the late 8th century CE and established a settlement there in c. 900 CE. William claimed he had a right to the English throne because he was a distant cousin of Edward the Confessor. He also claimed that Harold Godwinson had once promised to support his claim to the throne. William therefore sailed from France to England and set up his camp at Hastings on the south coast of England.

Having defeated Hardrada, King Harold Godwinson marched his army south to Hastings to meet William. A terrible battle was fought, lasting the entire day. By sunset, Harold Godwinson was dead and William had won. William was crowned King of England on Christmas Day 1066 CE.

Source 3: A scene from the Bayeux Tapestry that shows Harold Godwinson making a sacred promise on holy relics (bones of saints) that he will ensure William becomes king of England

After William's victory, the countryside erupted in rebellion, refusing to accept the rule of their new king. William took swift action to crush this rebellion, killing around 100 000 people in the process. He also had the Bayeux Tapestry made to show the people that he had a right to be their king.

King Edward died on the eve of **Twelfth-day**; and he was buried on Twelfth-day within the newly consecrated church at Westminster. And Harold the earl succeeded to the kingdom of England, as the king had granted it to him, and men also had chosen him ...

Source 2: Entry for 1066 CE, *The Anglo-Saxon Chronicle*, c. 880–1154 CE. The chronicle was written by Anglo-Saxon monks and recorded the history of Britain from 60 BCE.

Learning ladder H1.12

Significant people, ideas and events

1. Source 1: Identify the groups shown in the source.
2. Source 1: Describe the armour and weapons used by both sides at the Battle of Hastings.
3. Explain how England fell under Viking control between 1013 and 1042 CE.
4. Explain why the death of Edward the Confessor led to the Battle of Stamford Bridge and the Battle of Hastings.
5. Evaluate the influence of the Vikings on England's history.

Perspectives

1. Source 1: Identify whose perspective of the Battle of Hastings is shown in the source.
2. Source 2: Describe the perspective of this source.
3. Sources 2 and 3: Explain how the perspectives of the two sources are different.
4. Source 3: Explain why William wanted to present this perspective of King Harold Godwinson.
5. Evaluate the perspective depicted in the Bayeux Tapestry.

HOW TO

Perspectives, page 210

H1.13

Key individual

Who was Erik the Red?

The Vikings were not only raiders and settlers. They were also great explorers. One of the most famous Viking explorers was Erik the Red.

Erik the Red

Erik Thorvaldsson (c. 950–1003 CE) is remembered in many different ways: as an explorer, a settler, a murderer and an outlaw. Known as 'Erik the Red' – probably in reference to his red hair and beard – he left his native Norway with his father, Thorvald, who had been sent to the Viking colony in Iceland as a punishment for murder.

A few years later in c. 980 CE, Erik himself was also exiled for murder. At the Thorsnes Thing, Erik and the small group of men who sided with him were banished from Iceland for three years.

The Vikings' Greenland colony

In 982 CE, Erik and his band of accomplices set sail from the west coast of Iceland to try to find a land to the west they had heard about. Almost 100 years earlier, a Norwegian settler of Iceland, Gunnbjörn Ulfsson, had claimed to have seen this land when fierce winds had driven his ship west across what today is called the Denmark Strait.

Sure enough, Erik and his men found the land that Gunnbjörn Ulfsson had seen. Erik called the country Greenland. After three years of exploring the new land, Erik returned to Iceland.

Erik wanted to set up a Viking colony in Greenland. He described the new land to people in Iceland as a 'green land', which persuaded them to follow Erik and help him build a new Viking settlement. Of the 25 ships that set off for Greenland, only 14 ships and around 400 to 500 people arrived; the rest turned back or were lost at sea.

Erik and the surviving settlers founded a colony known as the Eastern Settlement on the south-west coast. Later, another colony called the Western Settlement was founded 320 kilometres north-west of Erik's colony.

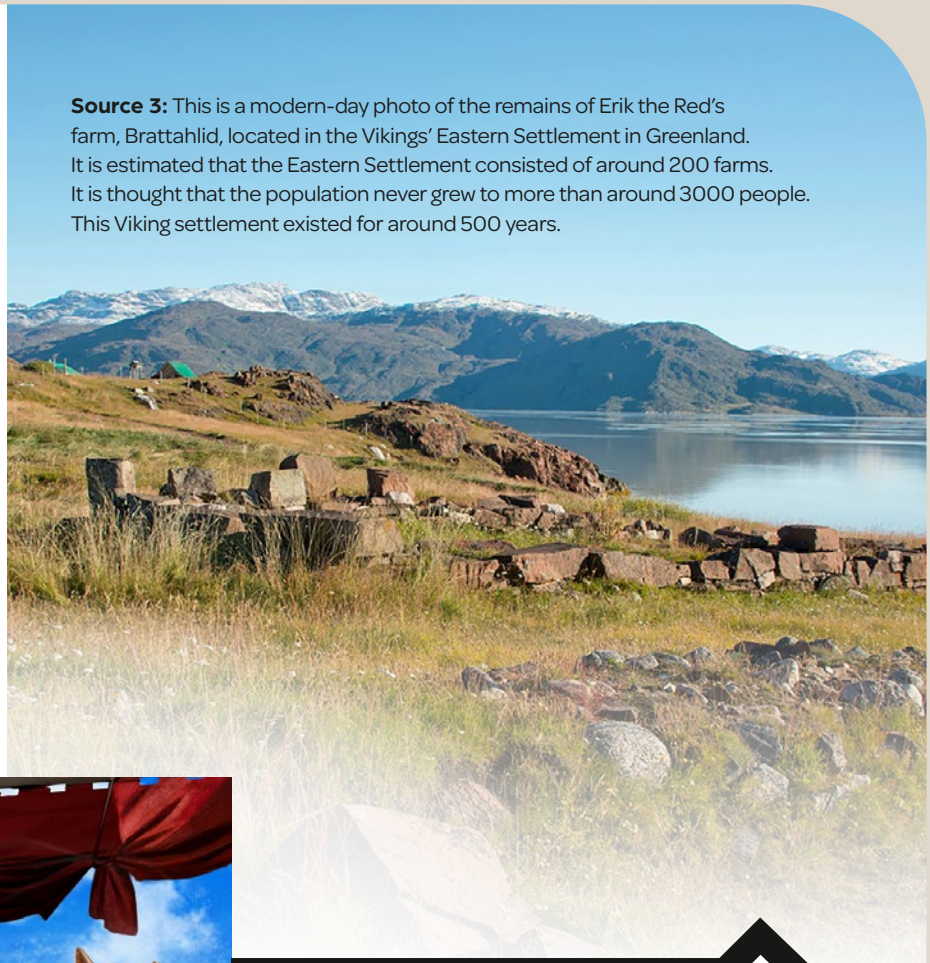
Erik was declared outlawed [from Iceland for three years] by the Thornesthing, and he then made ready his ship in Erik's creek, and when he was ready, Styr and the others followed him out past the islands. Erik told them that he intended to go in search of the land, which Ulf Krages's son Gunnbjörn saw, when he was driven out to the westward in the sea ...

Source 1: This text is from *The Saga of the Greenlanders* (c. 1250 CE). Along with *The Saga of Erik the Red*, it is one of the two main sources on the Vikings' colonisation of Greenland in 982 CE.

In spite of difficult beginnings, the settlement survived for several hundred years. Erik settled Greenland during the 'medieval warm period' (950–1250 CE), so the climate was milder than it is today. The settlers grew crops such as barley, and raised sheep and cattle. They also hunted seals, walrus and whales at sea, and polar bears and arctic foxes on land.

Erik enjoyed a position of high status in Greenland. He held the title of 'paramount jarl' and became very wealthy.

Source 3: This is a modern-day photo of the remains of Erik the Red's farm, Brattahlid, located in the Vikings' Eastern Settlement in Greenland. It is estimated that the Eastern Settlement consisted of around 200 farms. It is thought that the population never grew to more than around 3000 people. This Viking settlement existed for around 500 years.



Source 2: Erik the Red and his fleet of longships left Iceland in 982 CE to find and explore Greenland.

Learning ladder H1.13

Significant people, ideas and events

1. Source 2: Identify the land discovered by Erik the Red.
2. Describe the outcome of the Thorsnes Thing.
3. Source 1: Using the source and your knowledge, explain how Erik the Red found Greenland.
4. Explain why some Icelandic Vikings were willing to settle on Greenland.
5. Analyse Erik the Red's leadership.

Significance

1. Source 3: Identify why this site is historically significant.
2. Source 1: Describe the historical significance of this source.
3. Explain how the settlement of Greenland was a significant event.
4. Explain why Erik the Red is a significant individual in Viking history.

HOW TO

Significance, page 212

H1.14

Site study

How did the Vikings discover North America?

We know about Viking exploration from the sagas, and from archaeological finds such as at L'Anse aux Meadows.

Discovery of North America

Around 1000 CE, Leif Eriksson, son of Erik the Red, landed on the North American continent and explored a region he called Vinland. He came into contact with the inhabitants of North America, whom the Vikings referred to as the *skræling*. Leif Eriksson reached the Americas nearly 500 years before Christopher Columbus, who arrived in 1492 CE. *The Saga of the Greenlanders* relates this discovery.

Nature was so generous here that it seemed to them no cattle would need any winter fodder, but could graze outdoors. There was no frost in winter, and the grass hardly withered. The days and nights were more nearly equal than in Greenland or Iceland ... Leif told his crew, 'From now on we have two jobs on our hands. On one day we shall gather grapes, and on the next we shall cut grape vines and chop down the trees to make a cargo for my ship ...'. Leif gave this country a name to suit its resources: he called it Vinland [wine land].

Source 2: Excerpt from *The Saga of the Greenlanders* (c. 1250 CE). It describes the enthusiasm the Viking explorers had for the newly discovered land, which they named Vinland after the wild grapes that grew there.

Source 1: This is a reconstruction of the L'Anse aux Meadows site, which was uncovered by archaeologists between 1961 and 1968 CE in Newfoundland, Canada. So far, it is the only evidence of a Viking settlement in North America.

Source 3: Some historians have suggested that Leif Eriksson sailed off course on his way back to Greenland and landed on the North American continent. Others say he may have heard about the land from information passed on by an Icelandic trader. [Hans Dahl (late 1800s CE), *Leif Eriksson Discovers America*]

The search for evidence: L'Anse aux Meadows, Canada

The Viking **sagas** provide clues that **archaeologists** could use to find physical evidence of Viking settlements.

In 1960 CE, the Norwegian explorer Helge Ingstad came upon strange bumps and ridges in the land at L'Anse aux Meadows in Newfoundland, Canada. Excavation of the site revealed that these ridges were the remains of eight Viking buildings.

Hundreds of Viking **artefacts** were found at L'Anse aux Meadows, including a bronze pin used to fasten a cloak; many iron boat nails; and knitting needles and a spindle whorl used for spinning thread, showing that women lived at the settlement.

Historians think the Vikings made the buildings at this site from **sod** (soil and grass), which was built up over a wooden frame. The largest building found at L'Anse aux Meadows was a Viking **longhouse**, where families lived and kept livestock. One of the smaller buildings contained a forge for heating iron.

Carbon dating of the evidence found at L'Anse aux Meadows suggests that Vikings lived in the settlement between 990 and 1050 CE. The artefacts found at this site are the earliest evidence of Europeans living in North America.

Learning ladder H1.14

Significant people, ideas and events

1. Identify the Viking site found in North America.
2. Describe the evidence available that confirms the Vikings' exploration of North America.
3. Explain how the artefacts found at L'Anse aux Meadows influenced our understanding of Viking life in North America.
4. Explain why the L'Anse aux Meadows site is an important Viking legacy.

Sources

1. Source 2: Idenitify the origin of the source.
2. Sources 2 and 3: Describe the arrival of the Vikings in North America.
3. Source 1: Explain how historians might have built this replica site.
4. Source 2: Explain why this source is useful for historians studying Viking exploration.
5. Source 1: Evaluate the advantages and disadvantages of this replica site for historians studying the Vikings.

HOW TO

Sources, page 201

H1.15

Key individual

Who was Gudrid the Far-travelled?

In her lifetime, Gudrid went on eight sea voyages and travelled across the whole of Europe. She is believed to have been the most widely travelled woman of the medieval period.

Gudrid's early life

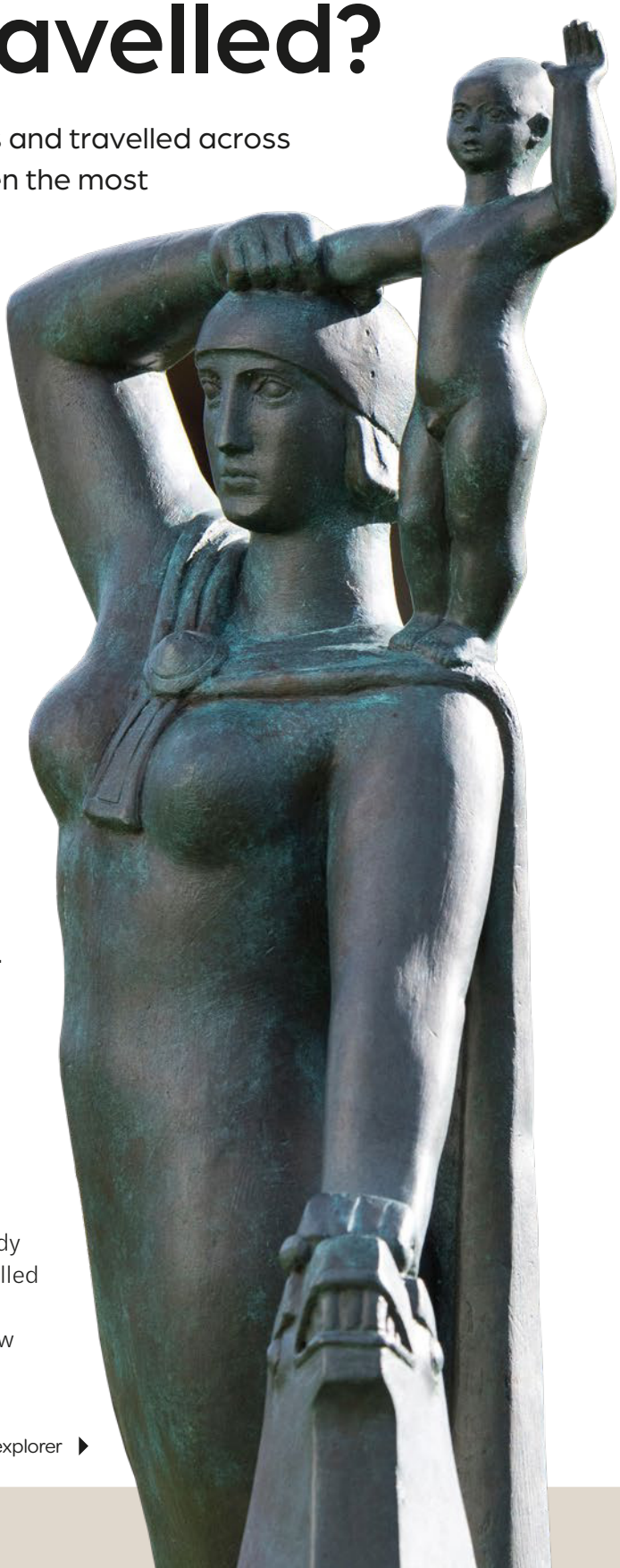
Stories of Gudrid Thorbjornardóttir appear in two Viking sagas: *The Saga of Erik the Red* and *The Saga of the Greenlanders*. She is featured prominently in *The Saga of Erik the Red* – so much so it has been suggested that the saga should be called Gudrid's Saga.

Gudrid was born in c. 985 CE at Laugarbrekka farmstead at Hellnar, Iceland. When she was almost 15 years old, Gudrid travelled from Iceland to Greenland to join Erik the Red's new settlement. At the time when Gudrid arrived with her family, Greenland was experiencing crop failures and the Viking settlers were facing the prospect of famine.

According to the sagas, a **seeress** named Thorbjörg lived in Greenland. Seeresses were revered in the Viking religion for their ability to predict the future. The Greenlanders asked her to foretell when the hardship would end, so Thorbjörg called for a woman who could sing the traditional Viking enchantments to help her. Gudrid answered that, although she knew the old songs, she would not sing them because, like many other Vikings at that time, she had recently converted to Christianity. But everyone begged her to sing the songs anyway. Gudrid finally agreed. The seeress then foretold that the famine would end the following spring. She also predicted that Gudrid would have a long line of descendants and that 'a bright ray' would shine over them.

Gudrid's journey to Vinland

Gudrid married a man named Thorsteinn, the son of Erik the Red and the brother of Leif Eriksson. In c. 1000 CE, Gudrid and Thorsteinn sailed to Vinland. Thorsteinn wanted to fetch the body of his brother Thorvaldur, who had sailed to Vinland and been killed there. But they never reached Vinland, as a storm blew them off course. Then Thorsteinn fell ill and died, and Gudrid and the crew returned to Greenland.



Source 1: Gudrid Thorbjornardóttir, Viking explorer

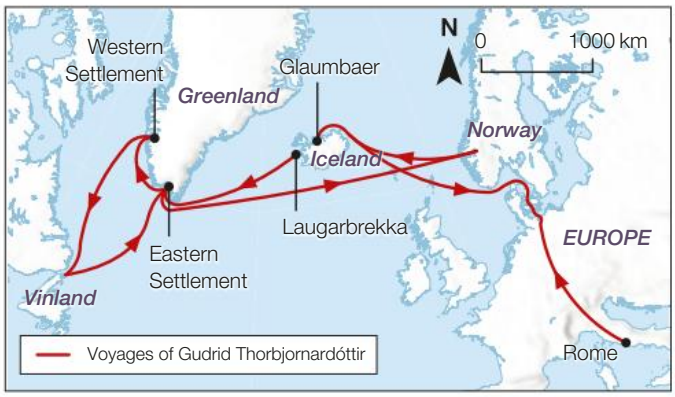
Source 2: Glaumbaer Viking settlement, Iceland. While the location of Leifsbudir remains uncertain, the place of Gudrid's birth, Laugarbrekka, and her son Snorri's house at Glaumbaer have both been found. The Glaumbaer farm site was discovered in 2002 CE. It has been reconstructed as a museum.

Gudrid was married again, this time to a merchant named Thorfinn Karlsefni. Together in c.1009 CE they sailed to Vinland with 60 men, 5 women and livestock. They set up their home in a place called Leifsbudir. According to the sagas, Leifsbudir had been built by Leif Eriksson years before. The actual location of Leifsbudir has never been found, though some archaeologists believe that it may be near L' Anse aux Meadows, if not L' Anse aux Meadows itself. If the sagas are correct, Gudrid and Thorfinn's son Snorri was born at Leifsbudir.

Return to Iceland

The Vikings at Leifsbudir had several encounters with a group of Indigenous American people, known as the Beothuk. Although at first relations between the two groups were friendly, the killing of a Beothuk man by one of the Vikings led to increasing violence.

So Gudrid and the rest of the settlers returned to Greenland. From Greenland, they sailed to Norway, where Thorfinn sold the goods they had acquired in Vinland, including furs and grapes. The sales made him relatively rich, and he and Gudrid finally settled in Iceland, where they built a farm.



Source: Matilda Education Australia

Source 3: The voyages and travels of Gudrid Thorbjornardóttir

Gudrid's pilgrimage to Rome

After the death of Thorfinn and the marriage of her son Snorri, Gudrid travelled to Rome on a pilgrimage. Rome was an important Christian site where many of the saints were buried. People in the medieval period believed that by visiting the tombs of the saints, they could be closer to God. After this journey she returned to Iceland and lived the rest of her life as a nun at Glaumbaer.

Learning ladder H1.15

Significant people, ideas and events

1. Identify why Gudrid is significant.
2. Source 3: Describe Gudrid's travels.
3. Explain how Gudrid travelled to Vinland.
4. Explain why Gudrid made a pilgrimage to Rome.
5. Sources 1, 2 and 3: Using the sources and your knowledge, evaluate Gudrid's significance to Viking history.

Continuity and change

1. Source 3: Identify the different places Gudrid lived during her lifetime.
2. Describe the changes in Gudrid's life that occurred after she returned from Vinland.
3. Explain how Gudrid's life demonstrates religious continuity and change in Viking society.
4. Explain why the context of Gudrid's life meant that she experienced great change.

HOW TO

Continuity and change, page 203

What were the impacts and legacies of the Vikings?

The Vikings certainly brought chaos and destruction, but they also expanded trade, explored new areas of the world and influenced cultural change.

What were the effects of Viking expansion?

The effects of Viking expansion changed over time.

Violence

At first, the Viking expansion across northern Europe led to conflict and violence with the peoples they encountered or invaded. For example, in Britain and Ireland, Viking raids and invasions led to thousands of deaths and ongoing violence between the Vikings and the Anglo-Saxons.

In North America too, initial contact with the local Indigenous people also involved violence. On arrival, Leif Eriksson and his crewmen attacked the Indigenous people, while violence also erupted between the Vikings and the Beothuk.

Trade

The Vikings also had a significant effect on trade. New trade networks were established between the British Isles and Scandinavia, and along the Dnieper and Volga rivers, linking northern Europe with the great cities of Baghdad and Constantinople. New goods flooded into Scandinavia, including Indian spices and animals, silver Arab coins and Chinese silks. The Vikings also established the use of weighted silver to pay for goods, rather than relying on barter. This led to new prosperity in Europe. In addition, the large Viking cargo ships (knarrs) enabled the transportation of bulk cargoes across long distances.

Another, more disturbing, effect of the Viking exploration was the expansion of the slave trade. The Vikings bought and sold tens of thousands of slaves. People were taken captive during Viking raids in Europe and were transported to Dublin, a major centre of the slave trade. From there, they were sold to slaveholders in Spain, Persia, Arabia and Scandinavia.

> Although many medieval writers followed the common view of Viking invasion … [was] that the Vikings were motivated by love of violence and greedy desire for plunder but there were also more complex stories about why Scandinavian invaders and settlers decided to come to England. In these narratives, the Vikings come not just to raid but to resolve personal feuds, to intervene in English politics, to search for adventure, or to find a safe and peaceful home. … their legacy can be traced in the landscape, in place names and in local history.
>
> **Source 1:** An extract from historian Eleanor Parker (2018 CE), *Dragon Lords: The History and Legends of Viking England*, I.B. Tauris.

Culture

The Viking expansion also led to cultural change. One of the most enduring remnants of the Viking era is the English language, spoken by 1.35 billion people in the world today. English words such as ‘sister’, ‘cake’, ‘smile’, ‘happy’, ‘law’, ‘sky’, ‘freckle’ and ‘skill’ come from the Old Norse language. Many of the place names in England and Australia also come from Old Norse. The ending ‘– by’ means town or farm in Old Norse – for example, ‘Somersby’ in New South Wales. The ending – thorpe means village – for example, ‘Millthorpe’ in New South Wales and ‘Stanthorpe’ in Queensland.

In addition, democracy was an important ideal of the Viking era, as exercised through the Thing, at which all free men could vote. Today, the word ‘Thing’ (or ‘Ting’) is present in the names of the national parliaments in Iceland (the Althing), Denmark (the Folketing) and Norway (the Storting).

Source 2: The Canberra Raiders' rugby league mascot

Source 4: *God of War: Ragnarok* (2022), a video game developed by Santa Monica Studio. The game is set in the world of Viking mythology.

Source 3: Eowyn, a shield-maiden, from J.R.R. Tolkein's *Lord of the Rings* trilogy

How has the legacy of the Vikings changed?

The image of the Vikings as brutal, violent raiders, as depicted in Anglo-Saxon manuscripts such as the *Anglo-Saxon Chronicle*, remains today. For example, the Canberra Raiders rugby league team adopted the Viking raider as their mascot and portray him as a tough, marauding warrior (incorrectly) wearing a horned helmet. Even though historians have emphasised the Vikings' expertise in shipbuilding, trade, exploration and culture since the beginning of the 20th century, the image of the barbarian remains prominent.

At the same time, the Viking sagas have had a strong influence on writers, artists, filmmakers, musicians and video game developers over the last 700 years. In recent times, J.R.R. Tolkien's *Lord of the Rings* trilogy and J.K. Rowling's *Harry Potter* series have drawn heavily on stories, images and ideas contained in the Viking sagas. Films series such as *Thor* (2011) and *The Avengers* (2012) feature the Viking gods and characters based on Heimdall, Frigg, Loki and Odin. Video games such as *God of War* (2018) also reference Viking mythology.

Learning ladder H1.16

Impacts and legacies

1. Source 2: Identify how the Vikings have been portrayed in the source.
2. Source 3: Describe the influence of the Viking sagas in this source.
3. Sources 2, 3 and 4: Using the sources and your knowledge, explain how the Vikings have influenced modern popular culture.
4. Source 1: Using the source, explain why the legacy of the Vikings is more than 'the greedy desire for plunder'.
5. Evaluate the legacy of the Vikings on modern society.

Causes and consequences

1. Identify the causes of Viking expansion.
2. Describe the initial effects of Viking expansion on the people of Britain.
3. Explain how the Vikings affected trade in the medieval period.
4. Explain why the Vikings' effects on culture have been significant.
5. Evaluate the effect of the Vikings on medieval society.

HOW TO

Causes and consequences, page 206

How do I conduct a good inquiry?

Now that you've finished the chapter, it's time to conduct your own historical inquiry on the Vikings. Throughout the chapter you have developed knowledge and understanding of the Vikings. Background knowledge is important because it helps you to make connections to new information, ask better questions and consider different perspectives. As you progressed through the chapter, you have gathered information through classroom discussion, highlighting, note taking and answering questions. Now you are ready to start planning your own historical inquiry!

A historical inquiry gives you the opportunity to be an active historian: forming questions, interrogating sources and communicating insights about the past on a topic of your choice. The chapter has covered the origins and legacies of the Vikings in addition to significant people, events, ideas and beliefs. What would you like to know more about?

- The gods that the Vikings worshipped, page 40
- The role of Viking women, page 46
- The life of Gudrid the far-travelled, page 60
- The Great Heathen Army, page 52
- Viking archaeology, pages 46, 58, 60

Return to the relevant pages in the chapter and read them again.

Next, complete the 'see, think, wonder' process to help develop ideas you might cover in your inquiry.

Jot down your answers to these questions. Your answers will help you to formulate your own research ideas.

Once you have worked through this process, you are ready to start the historical inquiry. Refer to pages 218–25 of the How-to for a step-by-step guide to this process.

See

What do you see?
Who is involved?
What are the key features?
When and where was this happening?

Think

What do you think about that?
How do you think people were affected at the time?
How is this similar to or different from today?
How do we know?

Wonder

What did different groups think about this?
Why is this important to know?
What does it make you wonder?

Level up!

Throughout the chapter, you have been working to move up the Learning ladder. An inquiry investigation is a great opportunity to expand your knowledge and attempt new skills.
When planning your inquiry, consider how the experiences and perspectives of individuals and groups shaped societies, beliefs and events in the past. Think about how the past has had an impact on the present. Use the How-to chapter to support your planning and research.

Europe and the Mediterranean world (c. 600–1750 CE)

Medieval Europe H2

WHAT DID KNIGHTS DO? 76

HOW COULD A CASTLE BE DEFEATED? 82

HOW POWERFUL WAS THE CHRISTIAN CHURCH? 88

How can I understand medieval Europe?

With the growth of cities and trade and huge advances in technology, the medieval period in Europe gave birth to the modern world. This ever-changing period saw the development of universities, banking, parliament and legal protections, such as equality before the law and trial by jury.

Learning ladder

The Learning ladder lists the knowledge and skills you will learn. Each has five levels of difficulty. Learning skills at the bottom of the ladder will help you to master the skills at the top of the ladder.

Steps in knowledge progression	Background and origins	Significant people, ideas and events	Impact and legacies	Continuity and change	Causes and consequences
5	I can evaluate the impact of the rise and fall of societies.	I can evaluate how societies were influenced by significant people and ideas.	I can evaluate the legacy of a society.	I can evaluate patterns of continuity and/or change.	I can analyse causes and consequences.
4	I can explain why a society developed.	I can explain why ideas influenced people and events.	I can explain why a society has a legacy.	I can explain patterns of continuity and/or change.	I can explain why something was caused or why it led to certain consequences.
3	I can explain how a society developed.	I can explain how ideas influenced people and events.	I can explain the impact of one society on another.	I can explain continuity and change.	I can explain how something was caused or its consequences.
2	I can describe the origins of societies.	I can describe key people, ideas and events.	I can describe the legacy of a society.	I can describe continuity and change.	I can describe causes and consequences.
1	I can identify the origins of societies.	I can identify key people, ideas and events.	I can identify the legacy of a society.	I can identify continuity and change.	I can identify a cause and a consequence.

Knowledge and understanding

Source 1: The Battle of Agincourt, 1415, from *The St. Albans Chronicle* (1497 CE)

I can evaluate historical perspectives.	I can evaluate historical significance.	I can evaluate the evidence supporting a historical interpretation.	I can explain change or causality from a timeline.	I can evaluate sources to determine their accuracy, usefulness and reliability.	5
I can compare perspectives.	I can explain why something is historically significant.	I can compare historical interpretations.	I can summarise the events on a timeline.	I can explain the historical context of a source.	4
I can explain a perspective.	I can explain something historically significant.	I can explain an interpretation of history.	I can follow timeline conventions.	I can apply historical knowledge to explain sources.	3
I can describe perspectives.	I can describe something historically significant.	I can describe an interpretation of history.	I can place events on a timeline chronologically.	I can describe a source.	2
I can identify the perspective of a person from the past.	I can identify something historically significant.	I can identify a historical debate.	I can read a timeline.	I can identify the origin of a source.	1
Perspectives	**Significance**	**Interpretations**	**Chronology**	**Sources**	Steps in skill progression

Historical concepts and skills

H2.1

Why learn about medieval Europe?

Since the medieval period spans almost 1000 years, historians have divided it into three parts: the early medieval period (c. 500–1000 CE), the high medieval period (1000–1250 CE) and the late medieval period (1250–c.1500 CE).

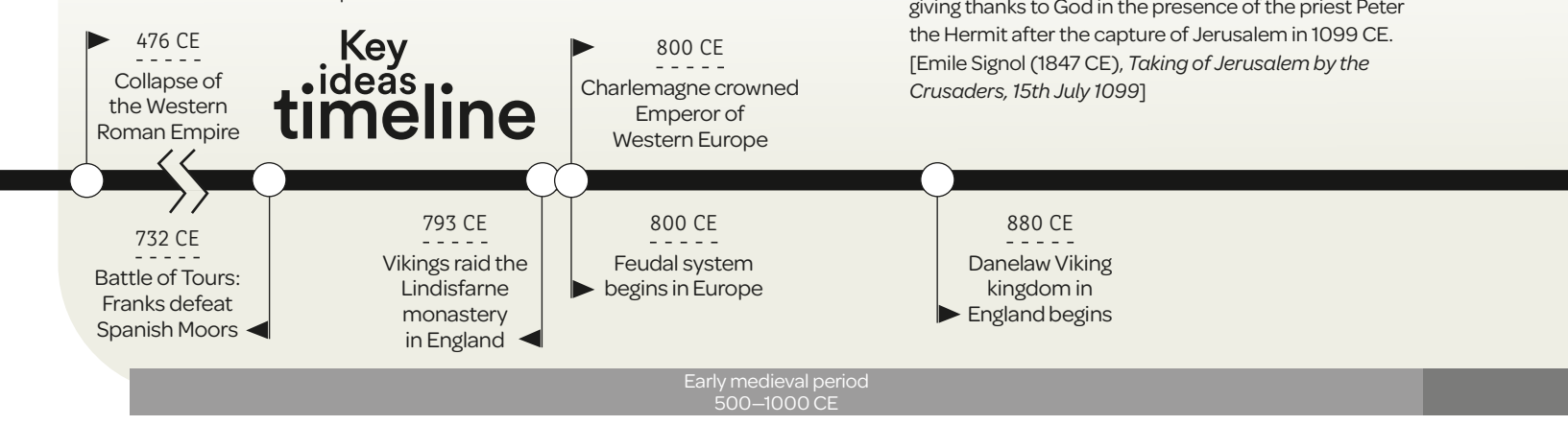
The late medieval period concluded with the invention of the printing press (1440 CE) and the fall of the Byzantine Empire (1453 CE), which ushered in the early modern period. The invention of the printing press meant that books no longer had to be copied by hand, and could be quickly and cheaply produced, enabling a range of new ideas to spread across Europe.

Noteworthy figures of the medieval period include Charlemagne (Charles the Great), William the Conquerer, Hildegard of Bingen, Marco Polo and Joan of Arc.

▼ **Source 1:** Hildegard of Bingen (c. 1098–1179 CE), a noted medieval writer, composer, philosopher, physician and scientist

▲ **Source 3:** Godfrey of Bouillon, who led the First Crusade, giving thanks to God in the presence of the priest Peter the Hermit after the capture of Jerusalem in 1099 CE. [Emile Signol (1847 CE), *Taking of Jerusalem by the Crusaders, 15th July 1099*]

▼ **Source 2:** Medieval Europe timeline



Source 4: In 1215 CE, rebel lords in England, backed by the church, called for the protection of church rights, the introduction of legal rights and reduced taxation to the king. The lords forced the unpopular King John to sign a document called the Magna Carta. The document outlined the principle that no-one was above the law, including the king. The Magna Carta was one of the first steps in the development of legal and political rights for common people and the start of modern democracy.

Learning ladder H2.1

Background and origins

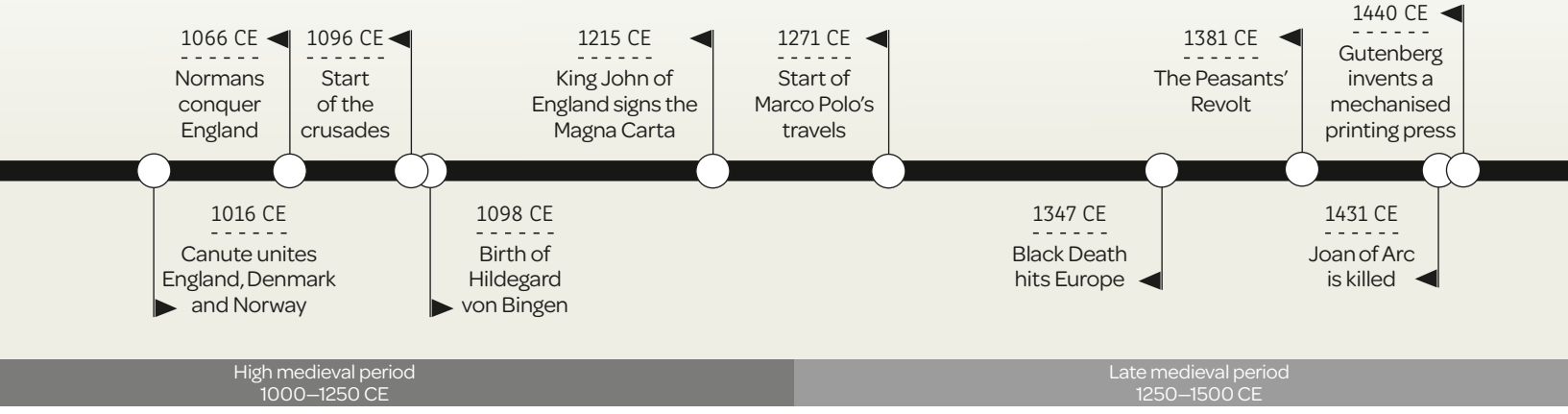
1. Identify the three periods in medieval history.
2. Source 3: Describe the scene depicted in this image.
3. Source 4: Explain how the Magna Carta led to long-term change.
4. Explain why the invention of the printing press in 1440 CE marked an important shift in history.

Chronology

1. Identify the events on the timeline that occurred during the late medieval period.
2. Place the following events in chronological order:
   - 1187 CE: Muslims take back Jerusalem
   - 1099 CE: Crusaders capture Jerusalem
   - 1050 CE: Seljuks control Jerusalem
   - 1096 CE: First Crusade leaves Constantinople.
3. Create a timeline using the events in Question 2.
4. Explain how the timeline demonstrates the continuity of kings' leadership in medieval Europe.

HOW TO

Chronology, page 198



H2.2

What were the key sites of medieval Europe?

Powerful kingdoms in medieval Europe often had significant geographical advantages, such as protective mountains, and seas and rivers for trade and travel. They also had access to a range of valuable resources, including forests, agricultural land and precious metals.

Source 1: This crown was made by Frankish artisans and was worn by the Holy Roman Emperors from c. 960 CE until 1796 CE. The crown consists of eight hinged gold plates and is decorated with pearls and 144 precious stones.

Medieval Europe, c. 1278 CE

Source 2: The boundaries of medieval Europe changed often. This map shows the boundaries in 1278 CE.

Source: Matilda Education Australia

The Viking kingdoms

During the early medieval period, the peoples of Scandinavia (also known as Vikings) became a powerful force. The Scandinavian countries contain large mountain ranges and also many lakes, rivers, fjords and flat coastal plains. Most Vikings lived close to the rivers and coasts, and developed a range of advanced ship technologies for fishing, hunting and trade. From 793 CE, their ships enabled them to raid and colonise other regions overseas to the south-west, including coastal areas in England, Scotland, Ireland and France. By around 850 CE, they had sailed across the Baltic Sea and entered the major river systems of western Russia. Viking exploration and trade extended as far as Constantinople in the Byzantine Empire and west to L'Anse aux Meadows in present-day Canada.

The Holy Roman Empire

Another key site of the early medieval period in Europe was the Holy Roman Empire. With the decline of the Western Roman Empire during the 5th century, a series of small kingdoms were established, including the Kingdom of the Ostrogoths, the Kingdom of Burgundy and the Kingdom of the Franks. In 768 CE, the Kingdom of the Franks was ruled by Charlemagne (Charles the Great). Over the next 30 years, Charlemagne significantly extended the size of his kingdom through a series of battles, to secure his empire against the invasions of Germanic tribes to the east and Muslim attacks from Spain. In 800 CE, the pope crowned Charlemagne emperor and recognised his kingdom as the Holy Roman Empire. The Holy Roman Empire would last until 1806 CE. Much of its success was due to its natural geographical features, including forests, rivers, oceans and mountains. The Alps and Pyrenees mountain ranges provided some protection from invasion, while rolling plains across the interior had fertile soils and forests, providing crops for food and wood for housing, fuel and weapons. Major river systems, such as the Rhine, provided transportation across the empire for troops and trade goods. These features enabled a wealthy and powerful empire to develop.

The Byzantine Empire

The Byzantine Empire was the eastern half of the old Roman Empire. In the 5th century CE, it covered much of the land surrounding the eastern Mediterranean Sea, including Greece and Türkiye, North Africa and the Middle East. Key to the success of the Byzantine Empire was its location between Europe and Asia and its dominant position near the Mediterranean Sea. This location made it easy for the Byzantine Empire to control trade in the region and become wealthy by charging merchants high taxes. However, the Byzantine Empire's wealth and strategic position also made it a target. It suffered continuous attacks from Arabs, Crusaders and Turks who wanted the territory for themselves. The Byzantine Empire gradually declined over a thousand-year period, finally falling to the Ottoman Turks in 1453 CE.

Viking settlements from 8th to 11th century CE

Matilda Education Australia

▲ **Source 3:** Viking exploration between the 8th and 11th centuries CE

Learning ladder H2.2

Background and origins

1. Identify the three key sites of medieval Europe.
2. Describe the natural features of the Holy Roman Empire.
3. Explain how the geography of Scandinavia led the Vikings to develop advanced ship technologies.
4. Source 2: Using this source and your knowledge, write a paragraph to explain the benefits and drawbacks of the Byzantine Empire's geographical position.

Sources

1. Source 1: Identify the origin of the source.
2. Source 3: Describe the extent of the Viking exploration between the 8th and 11th centuries CE.
3. Source 3: Explain how the Vikings were able to undertake their extensive exploration.
4. Source 2: Using the source and your knowledge, explain why the Holy Roman Empire was influential and powerful.

HOW TO

Sources, page 201

H2.3

How was feudal society organised?

In medieval Europe, society was organised in a strict hierarchy under the feudal system. All people had rights and obligations, from the king and his lords to the poorest peasants.

The origins of feudalism

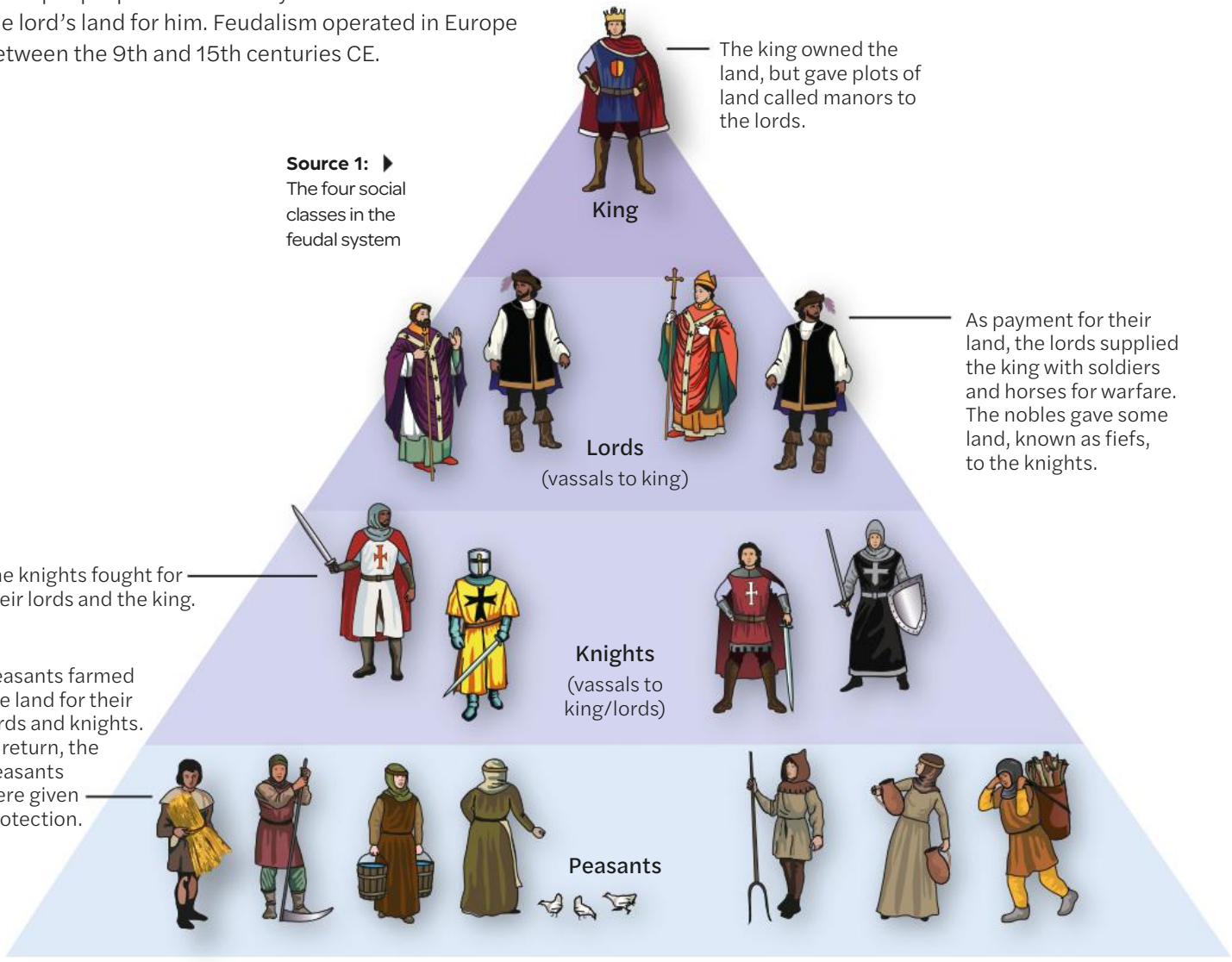
After the collapse of the Western Roman Empire, people in Western Europe no longer had the Roman army to protect them against raids from barbarians.

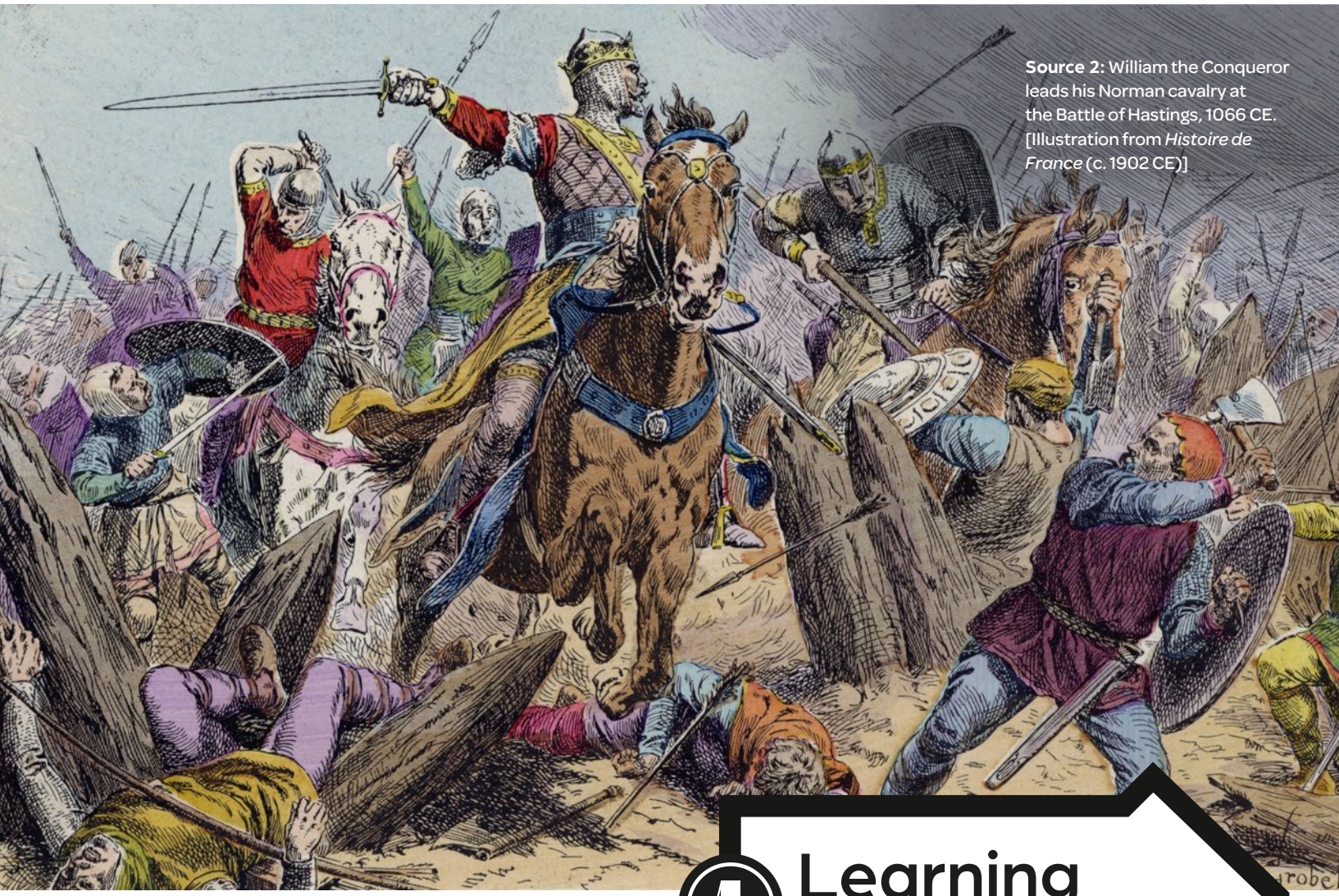
Feudalism, or the feudal system, offered a new way for people to be protected and provided for. People moved onto the land run by wealthy and powerful lords. Here they could be protected by the lord's army and take shelter in his castle during attacks. As payment, these people provided military service and worked the lord's land for him. Feudalism operated in Europe between the 9th and 15th centuries CE.

How feudalism worked

Feudalism was a system of rights and obligations throughout society. All the land in a kingdom was owned by the king. Beneath the king were lords who acted as **vassals**. A vassal was someone who received land in return for providing military service. In return for land, known as a **manor**, the lord was obliged to obey the king and provide him with soldiers for his army.

Source 1: The four social classes in the feudal system





Source 2: William the Conqueror leads his Norman cavalry at the Battle of Hastings, 1066 CE. [Illustration from *Histoire de France* (c. 1902 CE)]

In turn, the lords gave parcels of land known as **fiefs** to their vassals: the knights. The knights were obliged to fight as soldiers for the lord and demonstrate **fealty**. To show fealty, the knight would kneel before the lord and swear the Oath of Fealty: 'I promise on my faith that I will in the future be faithful to the lord, never cause him harm and will observe my homage to him completely against all persons in good faith and without deceit.'

The role of the king

In many European kingdoms, the king held the land through divine right. Divine right meant that the king's authority to rule and own the land had been given to him by God. Furthermore, it meant that a king's decisions were absolute and could not be questioned.

At the same time, the king was expected to be a great warrior and lead his troops into battle. He was also obliged to protect his people, set a good example as a Christian ruler and make fair laws in his kingdom.

Learning ladder H2.3

Significant people, ideas and events

1. Identify the four social classes in medieval Europe.
2. Source 1: Describe the role of lords in the feudal system.
3. Explain how feudalism worked.
4. Explain why peasants lived on land belonging to a lord or knight.
5. Evaluate the advantages and disadvantages of the feudal system.

Causes and consequences

1. Source 2: Identify the reason why the king in this image would be seen as a 'good king'.
2. Describe the reason a knight swore the Oath of Fealty.
3. Explain the effects of the 'divine right' of kings.
4. Explain why feudalism emerged in medieval Europe.

HOW TO

Causes and consequences, page 206

H2.4

Key individual

Who was Charlemagne?

Charlemagne was the first ruler in over three centuries to have the military power to create a stable empire in Europe. During the reign of Charlemagne from 768 to 814 CE, the Franks expanded their territory into Germany.

Charlemagne: King of the Franks

Historians believe that Charlemagne was born in 742 CE and died in 814 CE. Charlemagne became king of the Franks (a people who lived roughly in the area of modern France) in 768 CE. Charlemagne expanded the Frankish Kingdom into an empire that included much of Western and Central Europe. He united Western Europe for the first time since the Romans, and in doing so began the formation of a European identity.

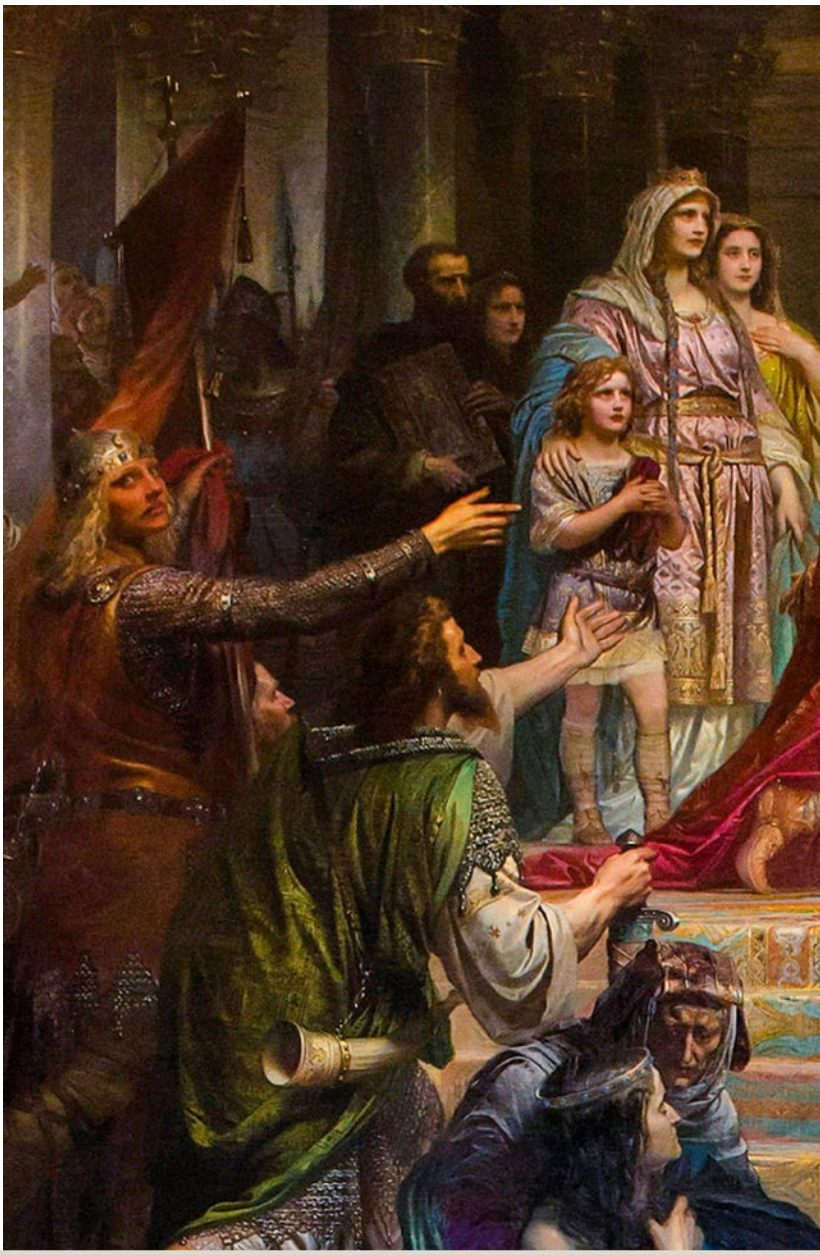
Charlemagne took over as king when he was 26 years old, after his father, Pepin the Short, died. He and his younger brother, Carloman, jointly ruled the kingdom of the Franks until 771 CE, when Carloman died and Charlemagne became sole ruler. People called Charlemagne 'Charles the Great' because he was a popular king and a good organiser, and he improved the way people were ruled. He was more than six feet tall, which was very tall for the times.

During Charlemagne's rule, Europe underwent a cultural revival. He built churches and cathedrals, made the court system fairer by introducing a jury system, encouraged Christianity, and developed commerce and manufacturing. He also promoted education, ordering the foundation of schools in every monastery, and establishing cathedral schools for the education of clergy and nobles in Chartres, Orleans, Paris, Laon, Liege, Rheims, Rouen and Utrecht.

Charlemagne becomes Holy Roman Emperor

In 799 CE, Pope Leo III was in danger. The people of Rome accused him of immorality and threatened to gouge out his eyes and cut out his tongue. In desperation, Pope Leo III fled to Charlemagne, seeking his protection. Charlemagne agreed to protect the pope. In return, Pope Leo III crowned Charlemagne 'Holy Roman Emperor' on Christmas Day, 800 CE.

Source 1: This painting depicts the crowning of Charlemagne as Holy Roman Emperor by Pope Leo III (reigned 795–816 CE) on 25 December 800 CE. [Friedrich Kaulbach (1861 CE), *The Coronation of Charlemagne*]



As Holy Roman Emperor, Charlemagne supported the Catholic Church and fought to protect both the church and the pope. He won a number of battles against armies that had been a threat to the Franks and to the Catholic Church.

A biography of Charlemagne

After Charlemagne died, a man called Einhard, who worked in Charlemagne's court, wrote a biography of Charlemagne called *Vita Karoli Magni (The Life of Charlemagne)*. Historians believe *Vita Karoli Magni* was the first example of a biography written about a European king. Einhard's biography reveals aspects of Charlemagne's life and death, his character, his leadership and the impact he had on medieval Europe.

The biography presents Charlemagne in a positive light, emphasising his good deeds and his many achievements. That said, historians have found that the biography is largely accurate and presents a reliable account of the period.

> Though he was so successful in widening the boundaries of his kingdom and subduing the foreign nations, he nevertheless put on foot many works for the decoration and convenience of his kingdom and carried some to completion. The great church dedicated to Mary, the mother of God at Aix, and the bridge, five hundred feet in length, over the great river Rhine near Mainz, may be fairly regarded as the chief of his works ...

Source 2: Extract from Einhard's *The Life of Charlemagne* (*Vita Karoli Magni*), c. 817 CE

Learning ladder H2.4

Significant people, ideas and events

1. Identify the name of Charlemagne's kingdom in 768 CE.
2. Describe how Charlemagne became the sole ruler of the Franks.
3. Source 1: Explain how Charlemagne became Holy Roman Emperor.
4. Explain why Charlemagne was known as 'the Great'.
5. Could Charlemagne be considered a good medieval king? Justify your response.

Significance

1. Source 1: Identify the historically significant event depicted in this source.
2. Source 2: Describe the significant achievements mentioned in the source.
3. Explain how Charlemagne promoted a cultural revival in Europe.
4. Explain why Einhard's biography of Charlemagne is historically significant.
5. Analyse the historical significance of Charlemagne.

HOW TO Significance, page 212

What did knights do?

At first, any skilled soldier with a horse could be a knight, but by the 12th century CE, knights increasingly came from wealthy families.

A promise to serve

The feudal system depended on sworn loyalty (fealty) in return for land and protection. For a **knight**, this meant a promise to serve and protect his lord. Knights had to provide their own horse and armour, as well as a team of fighting men if they were called on by the lord to fight. The knight became the lord's vassal or tenant and in return the knight received a parcel of land known as a fief.

A knight was expected to act in accordance with the code of chivalry. He had to stand up for what was right and had a duty to defend those in trouble. If a knight broke the code, his spurs and sword were broken and he was disgraced.

Training to be a knight

At age seven, a boy who was to undertake training as a knight was sent to another lord's family as a **page**. All the page's play and sports were used as training for physical fitness, horse riding and fighting skills. Sword skills were practised using wooden swords and shields. Pages fought on piggyback to improve their balance and prepare them for fighting on horseback. Starting with small ponies, they would hone their riding skills and care for the horses in the stables.

At the age of 14, a page became a **squire**. Squires were treated as men and their training became far more dangerous. Fighting with swords and weapons and learning to control a **lance** while on horseback led to many injuries. Training also included learning military strategy such as siege warfare.

1100s: long mail armour (hauberk), conical helmet, sword, spear and large wooden shield

1200s: mail armour with visor (basinet) helmet, sword and smaller curved triangular shield with heraldry

1300s: combination of mail and plate armour, visor (basinet) helmet, sword, war hammer and small curved triangular shield

1400s: full plate armour and full-face (barbute) helmet, sword and halberd

▲
Source 1: This image shows the evolution of a knight's armour: from chain mail in the 1100s through to full plate armour. As weapons became more powerful, armour changed to give the knight more flexibility and protection.

Source 2: Tournaments were fighting games designed to keep knights in condition for medieval warfare. Knights took part in sword fights and **jousts**, where mounted knights used a lance to try to knock their opponent off their horse.

Different knights and their families could be identified via their **coat of arms**. Creating a coat of arms is known as **heraldry**. Knights would display their family coat of arms and colours on clothing, banners and shields.

Receiving a knighthood

There were two ways a squire could become a knight:

1. *Earning the right on the battlefield*
   If a squire fought bravely during a battle, he could be awarded a **knighthood** by the king, a lord or sometimes another knight.
2. *Training to be a knight*
   He could earn the title through hard work and training as an apprentice to a knight. A knight had to be able to afford weapons, armour and a war horse. These items were expensive, so only the rich could pay for them.

A squire was eligible to become a knight when he turned 21. The official act of becoming a knight was a dubbing ceremony. Before the ceremony, a squire was required to spend the night alone in prayer. At a dubbing ceremony, the squire would kneel before a king, lord or other knight, who would tap their sword on each of the squire's shoulders to 'knight' him.

▲ **Source 3:** A dubbing ceremony, where a squire became a knight

The new knight took an oath to protect and honour both his king and the Church. He was given a sword and a pair of riding spurs to mark the occasion.

Learning ladder H2.5

Significant people, ideas and events

1. Identify the two stages of training a boy would undertake before he became a knight.
2. Source 3: Describe the dubbing ceremony.
3. Explain how a squire could become a knight.
4. Source 2: Explain why knights competed in jousting tournaments.
5. How important was the fealty of knights to the operation of the feudal system?

Continuity and change

1. Source 1: Identify how shields changed between 1100 CE and 1300 CE.
2. Describe how a boy's life changed when he became a page.
3. Source 1: Use the source to answer the following questions:
   a Explain how knights' armour and equipment changed over time.
   b Explain how knights' armour and equipment continued over time.
4. Source 1: Explain why shields changed over time.
5. From the 13th century onwards, usually only the sons of knights could become knights themselves. Explain the advantages and disadvantages of this change.

HOW TO

Continuity and change, page 203

How did peasants live?

Peasants worked a six-day week from dawn to dusk, working on the land of the lords to grow food. The poorest peasants had few rights and no protection under the law.

Who were the peasants?

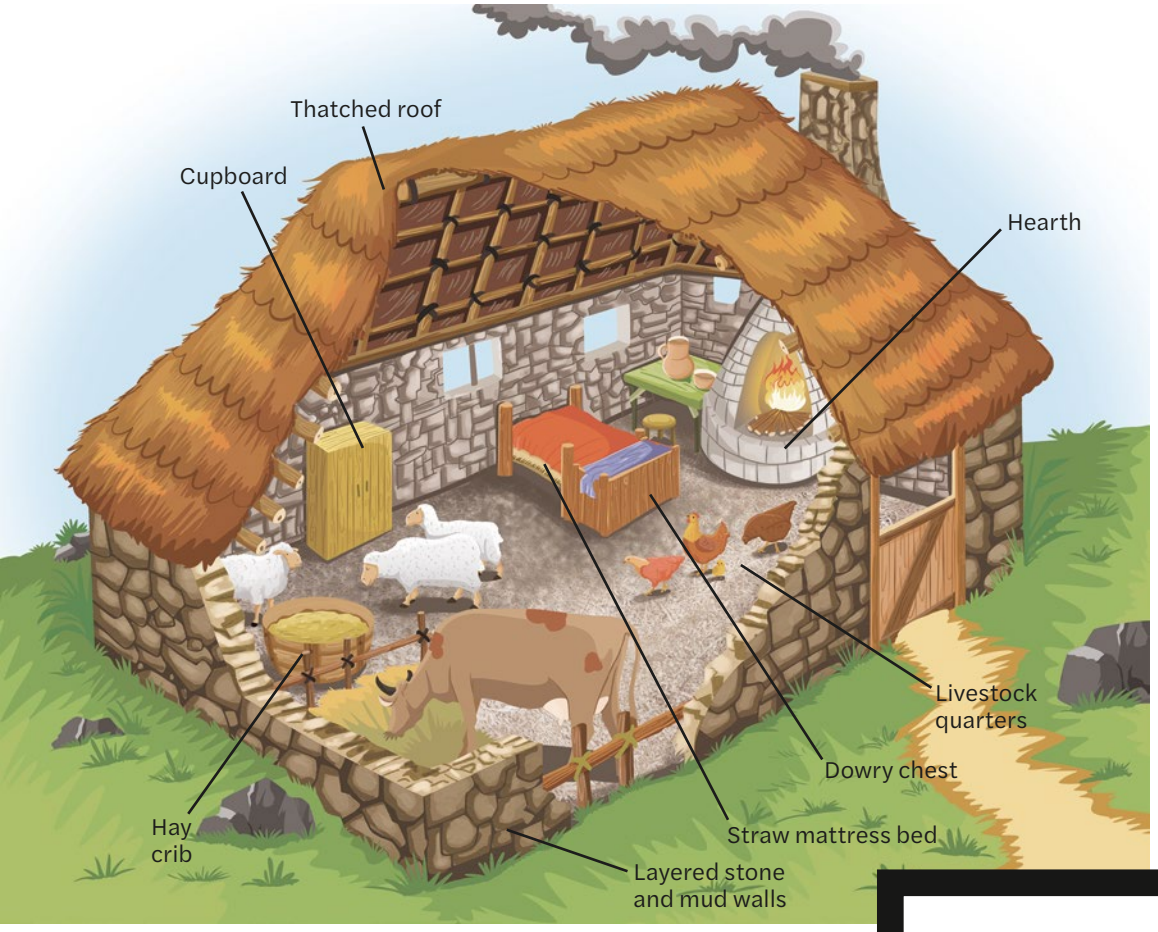
Peasants made up the majority of the population in medieval Europe and included freemen and **serfs**. Freemen (10 per cent of the peasant population) owned their own small plot of land. The poorest of the peasants were the serfs. The serfs lived on the lord's land and received his protection. They were also given a small amount of land to farm for themselves.

In return for the use of the lord's land, the serfs had to pay rent, which they usually paid in the form of food. They had to spend at least three days a week working on the lord's land, repairing fences and farm buildings, chopping wood, herding animals and planting and harvesting crops. Serfs also had to pay a tax to use the lord's flour mills, fish in nearby rivers and collect firewood from the forests of the estate. In addition, they were expected to pay for special licences to buy land, spend time away from the estate or send children to school. Serfs were even expected to contribute to the lord's daughter's marriage or to his son's knighthood ceremony.

The rights of serfs

Serfs were not able to complain about their situation and had very few rights. Serfs had to obey their lord and could not refuse to do as he asked. If they tried to oppose the lord's authority, they were harshly beaten. In addition, serfs were considered to be 'bound' to the estate and therefore part of the lord's property. If the lord sold his estate, the serfs were sold with it.

Source 1: This illustration shows peasant farmers mowing, raking and stacking hay in June. It is from a book of prayers created for the Duke of Berry, France. The Duke could see the palace and Sainte-Chapelle (shown in the background) from the windows of his manor house. [Illustration by Paul, Herman and Johan Limbourg (1416 CE), *Les Très Riches Heures (The Highly Rich Hours)*]



Source 3: Peasants lived in small cruck houses, with dirt floors and brick walls made from mud, straw and manure. The roofs were thatched with straw or other plant material. Cruck houses were cheap and easy to build, as most materials came from a nearby forest.

Cruck houses had no running water, toilets, baths or wash basins. Windows and doors were holes in the walls, sometimes covered with a curtain. Animals were brought inside at night to ensure they did not get lost, stolen or eaten by predators.

If a serf ran away, they were considered a fugitive and could be hunted down and brought back to the estate. In contrast, a freeman was protected by the common law and could apply to the king's courts if he thought he was being unfairly treated.

> Why should we be kept in servitude? We are all from one father and one mother, Adam and Eve ... The lords are clothed in velvet and silk, and we are clothed with poor cloth; they have their wines, spices and good bread, and we have only the wheat husks and drink water; they dwell in fair houses, and we have the pain and hard work, rain and wind in the fields; and whatever we produce by our labour, they keep and maintain their estates; we be called their bondmen, and unless we willingly do them service, we are beaten; and we have no sovereign to whom we may complain.

Source 2: John Ball, itinerant preacher and leader of the Peasants' Revolt of 1381 CE, cited in Jean Frossart, *Chronicles* (1395 CE)

Learning ladder H2.6

Significant people, ideas and events

1. Source 1: Identify the work being done by the peasants.
2. Source 3: Describe the peasants' housing.
3. Explain how serfs paid for the right to live on the lord's land.
4. Explain why serfs could be sold with the lord's estate.
5. There were some peasant rebellions during the medieval period, but not many. Why do you think it was difficult for peasants to rebel?

Perspectives

1. Source 1: Identify the social class of the person this source was created for.
2. Source 1: Summarise the perspective of this source. What impression does it give you about the lives of peasants?
3. Source 2: Explain the perspective of this source.
4. Sources 1 and 2: Compare the perspectives in the two sources.

HOW TO

Perspectives, page 210

How did castles change?

In the medieval period, kings and lords built large castles to impose their authority on the surrounding countryside. The design of castles changed greatly throughout the medieval period.

In the medieval period, most of Europe was divided between lords and princes, who ruled the local land and its people. To demonstrate their power over the peasants and to defend themselves against invaders, they built large castles in the middle of their land. Castles offered protection against invading armies or from raiders such as the Vikings.

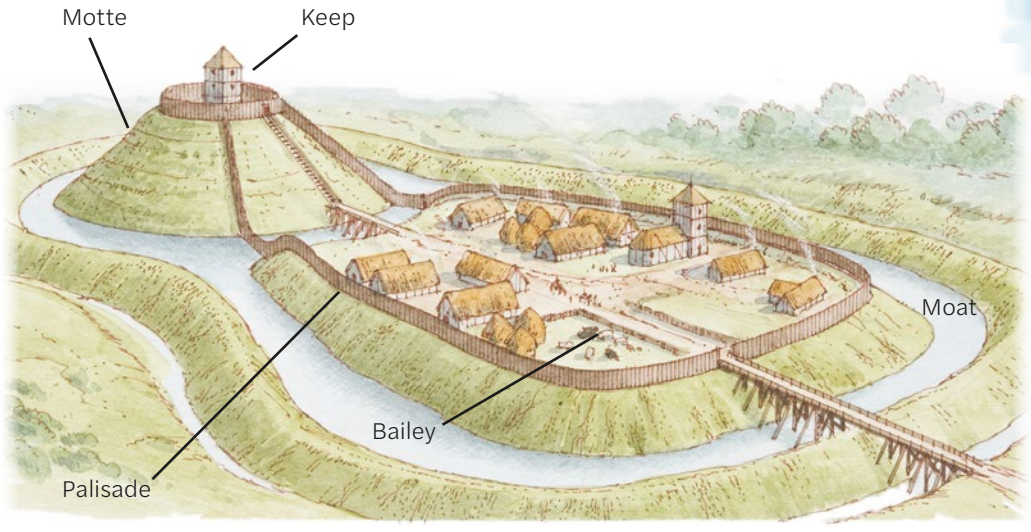
Motte-and-bailey castles

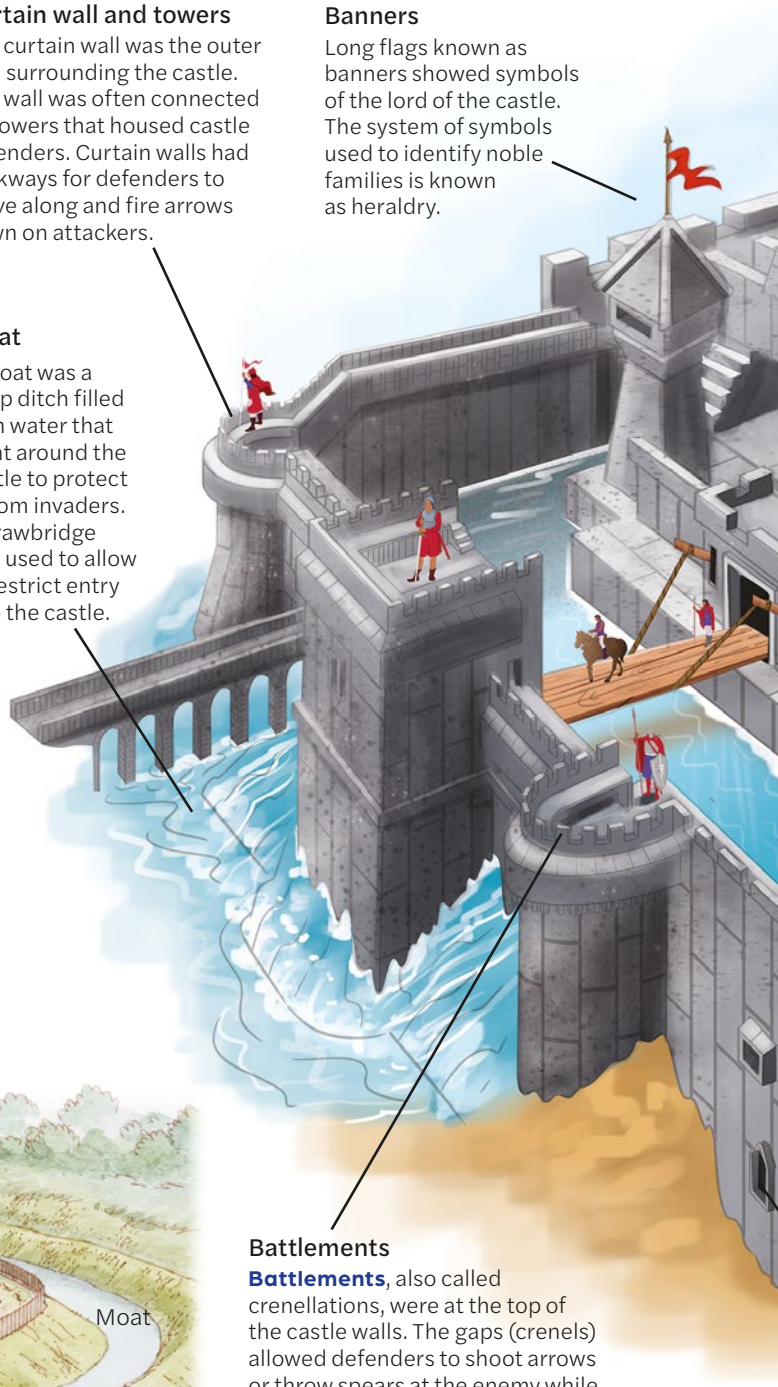
The first castles built in England in the 11th and 12th centuries CE were motte-and-bailey castles. The **motte** was a raised hill with a wooden or stone **keep** (a fortified tower) on the top. An enclosed courtyard with buildings known as the **bailey** was protected by a ditch and a wall of wooden stakes, known as a **palisade**. Motte-and-bailey castles were easy to build but were vulnerable to fire.

Stone keep castles

Motte-and-bailey castles were replaced by larger stone keep castles to provide stronger and more fire-resistant defences. Stone keep castles were often built on top of hills or next to a source of water that could be used to help with their defence. They were surrounded by a thick defensive wall.

Source 1: A motte-and-bailey castle





Curtain wall and towers
The curtain wall was the outer wall surrounding the castle. The wall was often connected by towers that housed castle defenders. Curtain walls had walkways for defenders to move along and fire arrows down on attackers.

Banners
Long flags known as banners showed symbols of the lord of the castle. The system of symbols used to identify noble families is known as heraldry.

Moat
A moat was a deep ditch filled with water that went around the castle to protect it from invaders. A drawbridge was used to allow or restrict entry into the castle.

Battlements
Battlements, also called crenellations, were at the top of the castle walls. The gaps (crenels) allowed defenders to shoot arrows or throw spears at the enemy while sheltering behind the higher parts of the wall (the merlon). Merlons often contained arrow slits to allow the archer to stay behind the wall at all times.

Concentric castles

By the end of the 12th century, some castles were being built with extra curtain walls. These castles were known as concentric castles. The extra walls provided protection from missiles and battering rams. The inner walls tended to be higher than the outer walls, so that defenders could protect the outer walls more easily.

Source 2: Cross-sectional view of a medieval stone castle and its features

Learning ladder H2.7

Significant people, ideas and events

1. Identify three different types of castle that were built during the medieval period.
2. Source 1: Describe the motte-and-bailey castle.
3. Explain how concentric castles provided more protection.
4. Source 2: Explain why castles were built during the medieval period.
5. Evaluate the advantages and disadvantages of a motte-and-bailey castle.

Causes and consequences

1. Source 2: Identify the effect of the castle moat.
2. Source 2: Describe the effect of curtain walls on castle protection.
3. Source 2: Explain how battlements affected the castle defences.
4. Sources 1 and 2: Using the sources and your knowledge, explain why castle designs changed over time.

HOW TO

Causes and consequences, page 206

H2.8

How could a castle be defeated?

To conquer a kingdom, the enemy's castle had to be captured. Attacking forces used siege tactics and siege engines to capture an enemy castle.

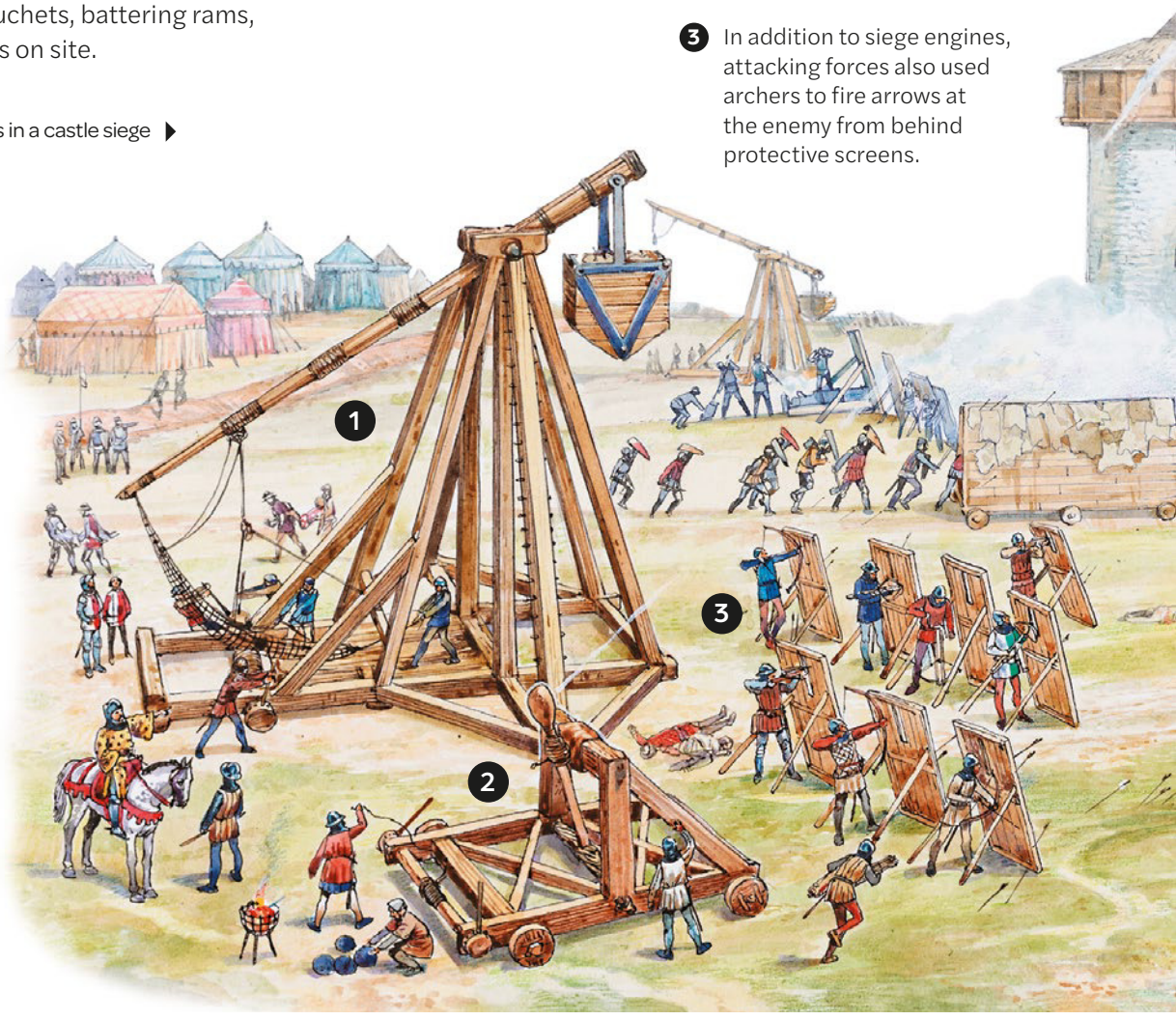
Siege tactics

To overcome castle fortifications, attacking forces used siege tactics. A **siege** is a military operation where enemy forces surround a town or building with the aim of cutting off supplies and forcing a surrender. The party conducting the siege holds a strong, stable, defensive position to stop movement in and out of the castle. Sieges can be drawn out over many months or years. The Siege of Candia in Crete lasted 21 years!

However, it was very difficult for attackers to succeed in capturing a castle. Attackers had to build **siege engines** such as trebuchets, battering rams, siege towers and mangonels on site.

Attackers also had to make sure that their own forces were kept supplied with food and weapons. This could be difficult when they were under fire from those in the castle and surrounded by enemy territory. In addition, the castle owners usually had enough supplies to last a long time. They had gardens to grow more food, farm animals, water from the moat and people who could make and repair weapons.

Source 1: The use of siege engines in a castle siege ▶



❸ In addition to siege engines, attacking forces also used archers to fire arrows at the enemy from behind protective screens.

❶ Trebuchets

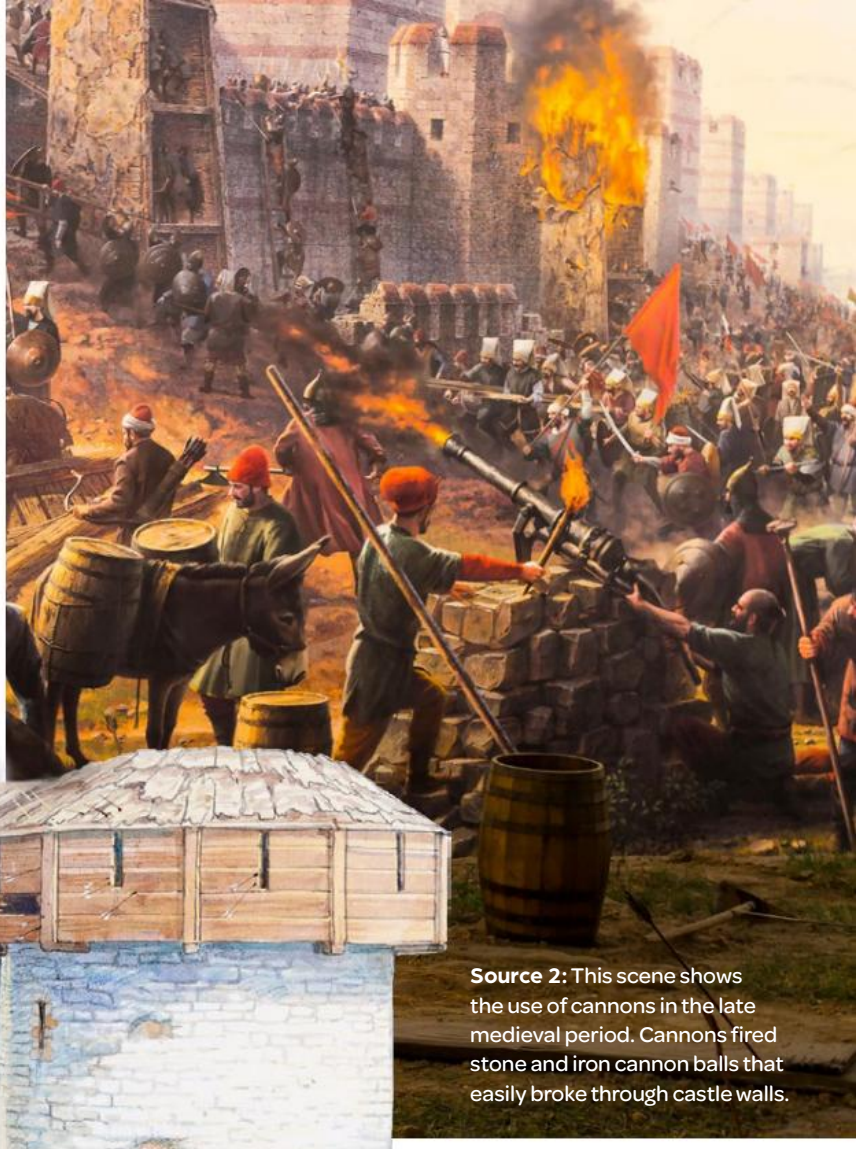
Trebuchets were tall wooden catapults, up to 30 metres high. They were invented in the 12th century and used a counterweight to hurl projectiles high in the air at targets as far as 300 metres away. Trebuchet missiles were usually large rocks weighing up to 100 kilograms.

❷ Mangonels

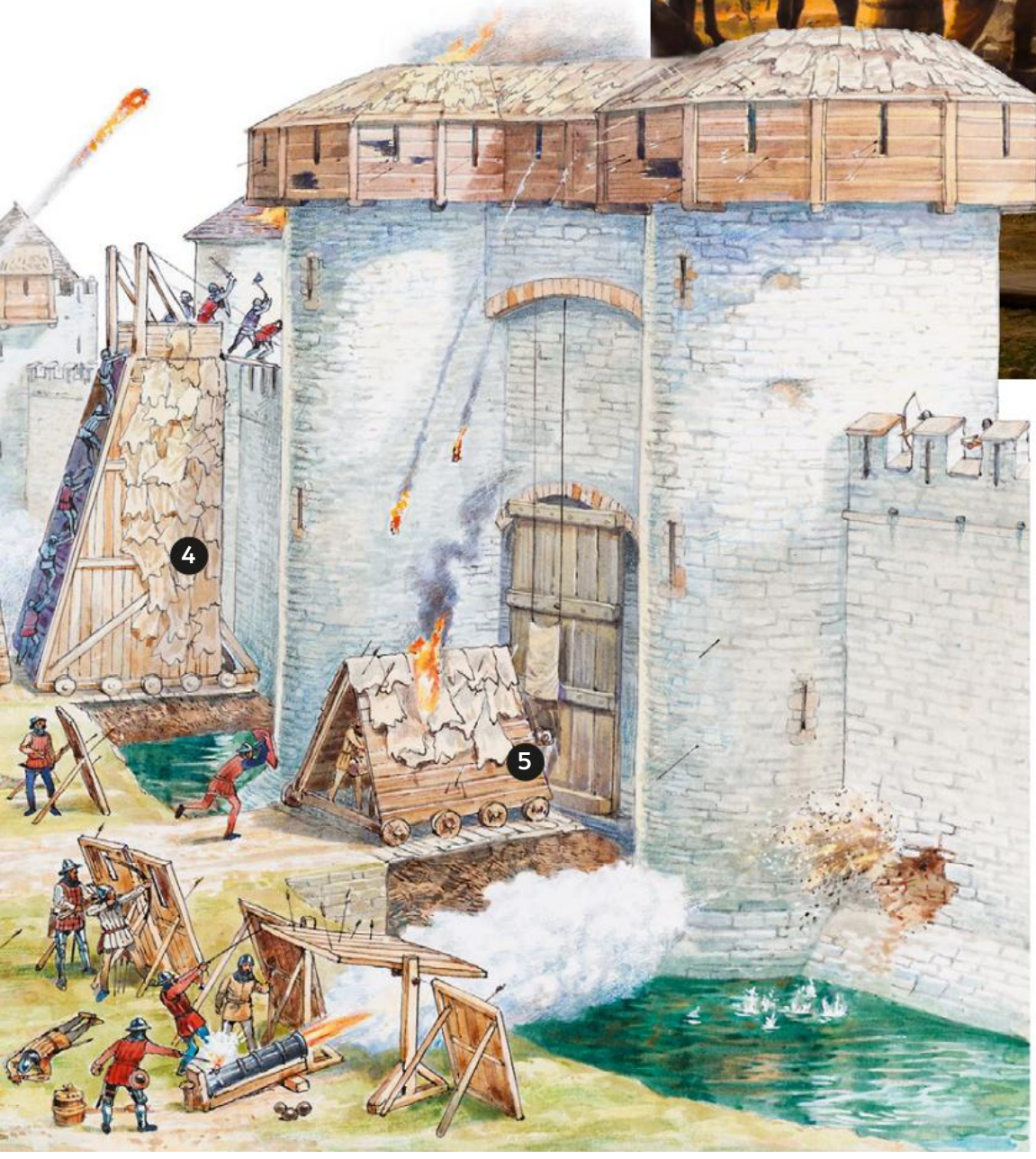
The **mangonel** was a weapon from ancient Roman times. It used the power of twisted rope to make a wooden arm spring up and hurl an object. The mangonel threw projectiles lower and faster than the trebuchet, with the intention of destroying walls.

Cannons

Wooden siege engines were replaced by cannons at the end of the medieval period. Cannons (also known as bombards) used gunpowder, which was much more effective at smashing through castle fortifications than siege engines. This led to a significant shift in castle design, with lower, thicker walls and fortifications called bastions that jutted out from the walls. Cannons were installed on the bastions to defend the castle.



Source 2: This scene shows the use of cannons in the late medieval period. Cannons fired stone and iron cannon balls that easily broke through castle walls.



4 Siege towers

Siege towers were high wooden platforms on wheels that were pushed against castle walls. Soldiers climbed the stairs and let down the gangplank on top of the wall so the attackers could climb into the castle. Siege towers were often covered in animal hides to make them less flammable.

5 Battering rams

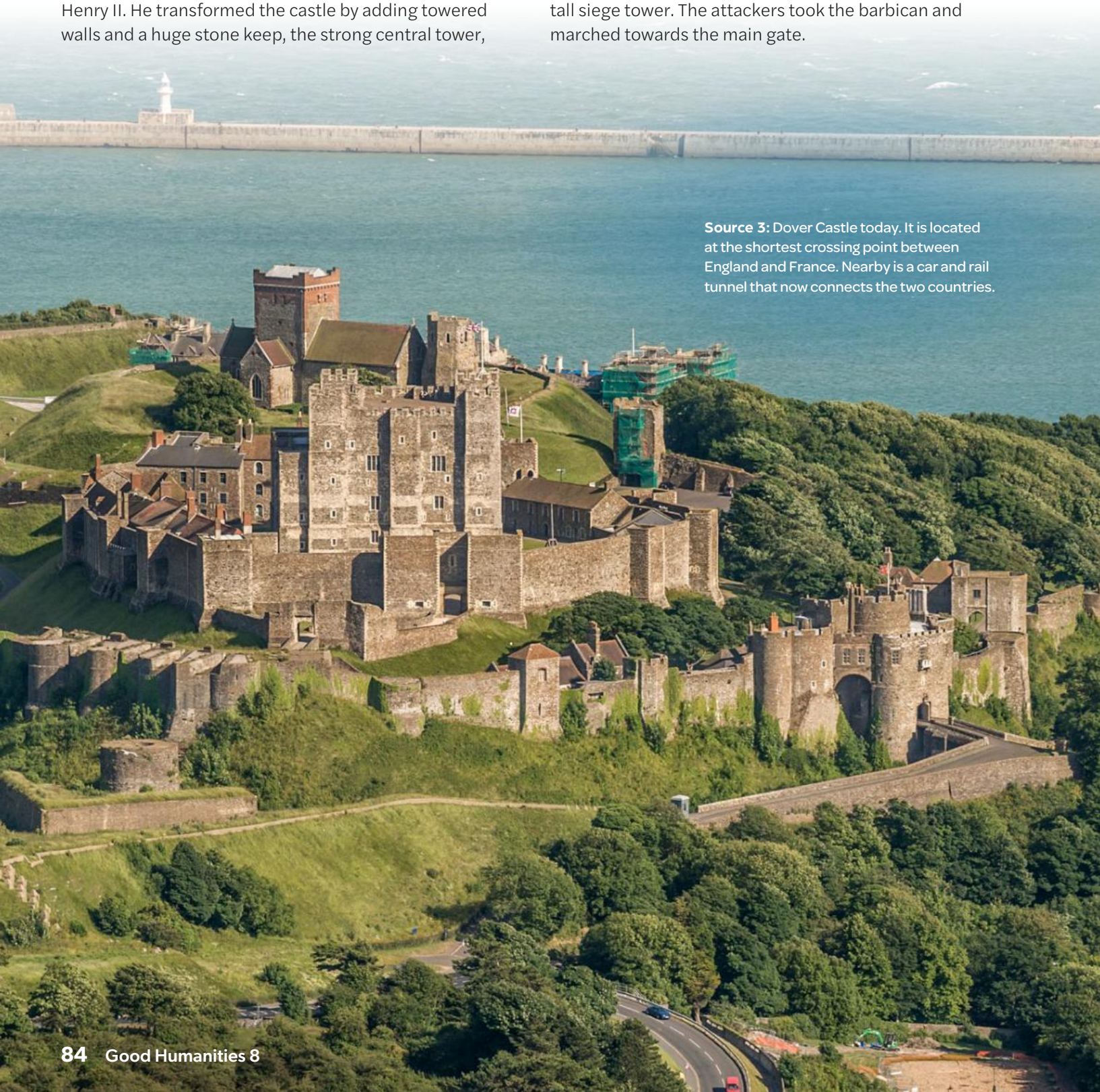
Originally, these were simply a large log used to break through doors or walls. Later versions were covered in fire- and arrow-resistant canopies and mounted on wheels. The log could be swung using ropes to create greater momentum.

Dover Castle

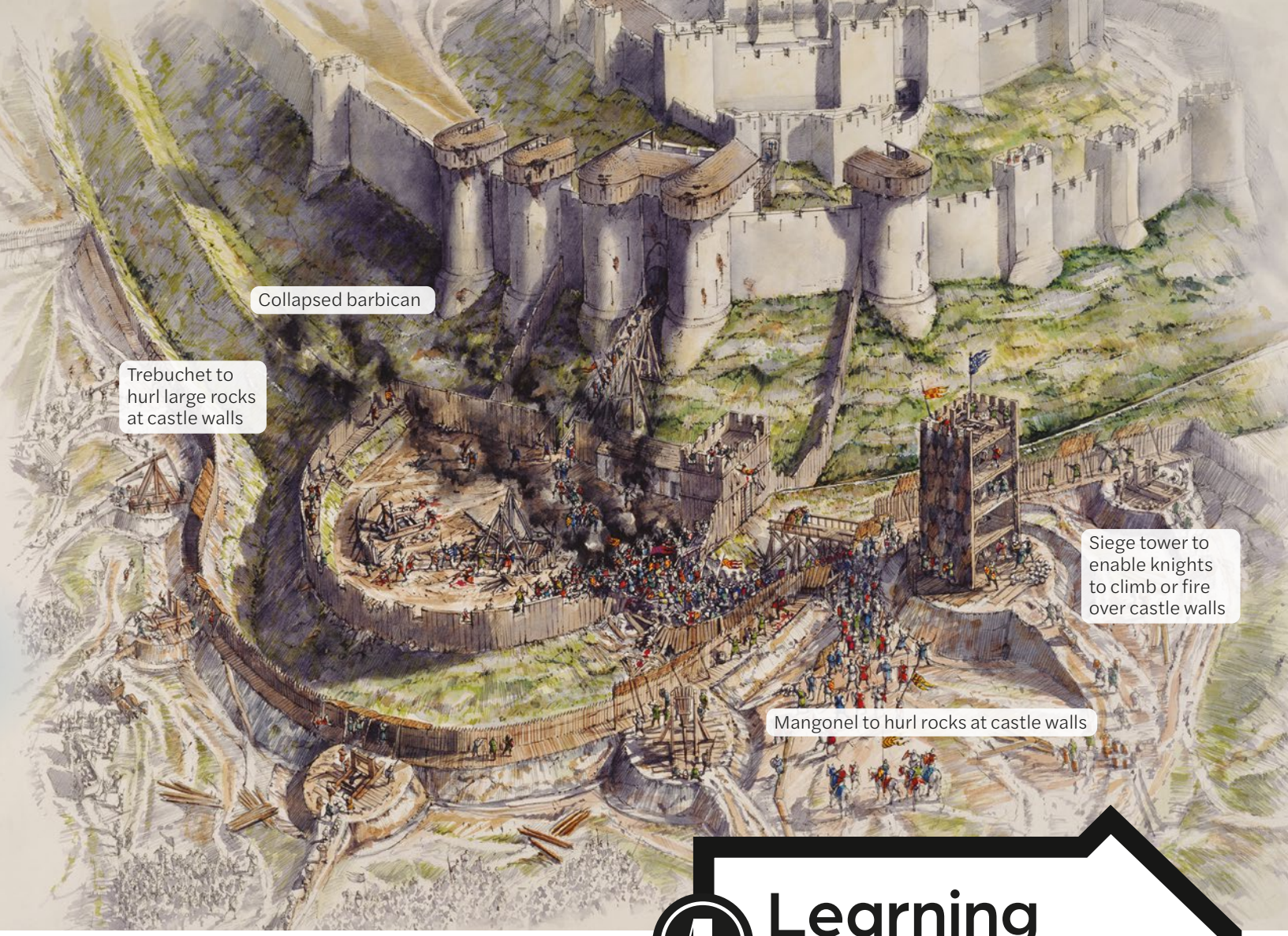
Dover Castle is on England's southern coastline; it was first built in 1066 CE by William the Conqueror to prevent anyone repeating his own invasion of England from France. The medieval castle sits atop the white cliffs of Dover, guarding the shortest crossing point between England and France.

What can be seen today is the stone castle that was rebuilt in the latter half of the 12th century CE by Henry II. He transformed the castle by adding towered walls and a huge stone keep, the strong central tower, to the bailey. The keep was surrounded by two rows of towered walls, a perimeter ditch and **barbican**, which was a towered wall that protected the main gate.

Despite its defences, the castle has been under attack many times in its history. It was besieged by Prince Louis of France in 1216. He cut off supplies to Dover from both land and sea and bombarded the main gate with rocks thrown from the mangonel siege engines. Archers shot at the castle defenders from a tall siege tower. The attackers took the barbican and marched towards the main gate.



Source 3: Dover Castle today. It is located at the shortest crossing point between England and France. Nearby is a car and rail tunnel that now connects the two countries.



Source 4: Dover Castle during the siege of 1216 CE. The French invaders have collapsed the barbican and are charging towards the northern gatehouse, only to be repelled by the strong castle defences.

Louis had miners tunnel under the huge stone gatehouse. When part of the gatehouse collapsed, the French poured into the gap only to find a further barrier of boulders and heavy wooden posts. The French attackers were driven out, suffering heavy casualties.

Castle modifications

Louis of France's forces kept trying to capture Dover Castle until 1217 CE, when they finally abandoned their attacks. To fortify the castle in case the French ever returned, the new English king, Henry III, bricked up the northern gatehouse and built two new gates: one in the west (known as Constable's Gate) and another in the east (known as the Fitzwilliam Gate). He also had the barbican rebuilt and a tunnel cut under the outer wall so that castle defenders could easily reach the barbican.

Learning ladder H2.8

Significant people, ideas and events

1. Source 1: Identify four types of siege engine.
2. Source 1: Describe how a mangonel was used.
3. Explain how siege tactics worked.
4. Explain why attacking a castle would be more difficult than defending a castle.

Sources

1. Source 4: Identify whether this is a primary or a secondary source.
2. Source 4: Describe how the French tried to attack Dover Castle.
3. Source 2: Using the source and your knowledge, explain how cannons changed medieval warfare.
4. Source 4: Using the source and your knowledge, explain why King Henry III made modifications to the castle.

HOW TO

Sources, page 201

H2.9

How did medieval armies battle?

For much of the medieval period, armies consisted of peasant foot-soldiers (infantry) and knights on horseback (cavalry).

Medieval battlegrounds

Medieval armies also fought one another on a battleground. Sometimes an army marched out to meet an invading force in an attempt to stop the invaders before they got too far. Famous battles in the medieval period include the Battle of Hastings, England (1066 CE), the Battle of Bannockburn, Scotland (1314 CE) and the Battle of Agincourt, France (1415 CE).

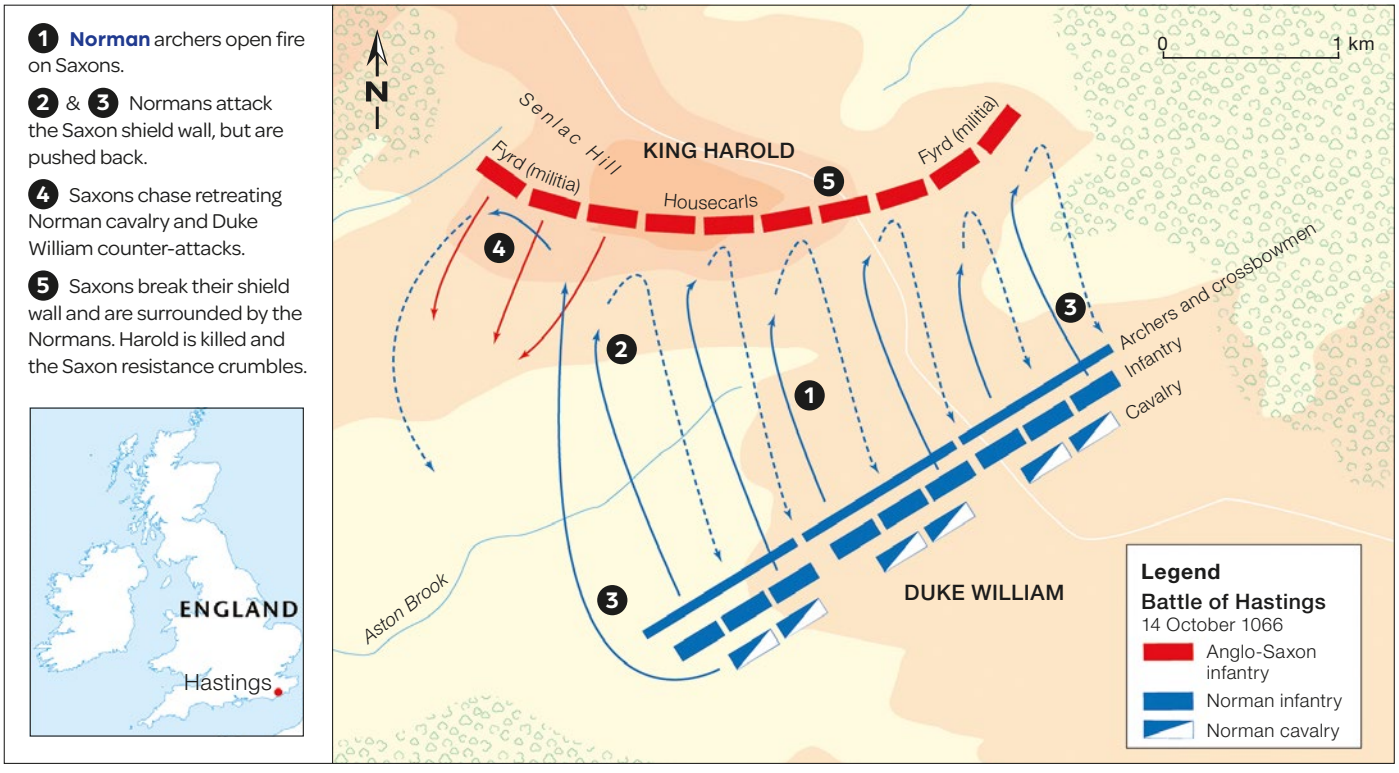
Infantry

For much of the medieval period, infantry troops consisted of peasants who owed military service to the nobles. Usually, the infantry had to bring their own weapons to the battlefield, and, for many, this meant bringing a farming tool, such as an axe or a pitchfork, to use as a weapon. By the late medieval period, however, all infantry troops were required to equip themselves with a bow and arrows. Infantry were used at the start of a battle to break open the ranks of the infantry on the opposing side, so that the cavalry could ride through. At the same time, the infantry had to stop the cavalry of the opposing side from breaking through their own lines.

One of the most effective infantry weapons was the bow and arrow. Archers would fire arrows at the opposing infantry and cavalry. At the Battle of Bannockburn, Scottish archers were positioned in front of large pits, so that they could fire at the advancing English cavalry while the cavalry was unable to reach them.

The development of the English longbow in the mid-14th century revolutionised medieval warfare. Longbows were about 1.8 metres long and fired arrows

Hastings in south-east England



Source: The Map Archive

▲ **Source 1:** The Battle of Hastings, 1066 CE

The armies were equally matched in numbers; however, William's troops were better trained and many were on horseback. Saxon soldiers held off the invading Normans who repeatedly charged them. The Normans then pretended to retreat and the Saxons broke their shield wall to chase them. The Normans quickly turned and surrounded the Saxons, cutting them down. This tactic helped the Normans to win the battle by the end of the day.

Source 2: English longbowmen (right) fire arrows at the French knights stuck in the mud (left) at the Battle of Agincourt. Muddy ground hampered the French cavalry, who were unable to ride their horses across it. The French knights resorted to walking across the muddy ground in their heavy plate armour, getting stuck in the process, and were easily cut down by the English longbowmen and other infantry.

that could penetrate most armour. The longbow was put to devastating effect at the Battle of Agincourt, where, despite being vastly outnumbered, the 6000-strong English force was able to triumph over the 25 000 French soldiers, thanks in part to the skills of the longbowmen.

Cavalry

The cavalry was made up of armed knights on horseback wearing chain mail or, by the late medieval period, plate armour. Cavalry became more prevalent after the adoption of the stirrup in Europe at the end of the early medieval period. A stirrup is part of a horse's saddlery and is a ring that holds the foot of the rider. The stirrup meant that a rider could use his feet to stay on the horse, leaving his arms free to operate weapons such as lances, crossbows and swords.

The cavalry's job was to wait until the infantry had broken the lines of the opposing side's infantry, so that they could ride through and slay the opposing side's infantry and then attack the opposing cavalry.

The Battle of Hastings

In 1066 CE, William, the Duke of Normandy, defeated the **Anglo-Saxons** at the Battle of Hastings and became King of England. William prepared his troops in France and landed at Pevensey in southern England. King Harold quickly marched his **Saxon** troops (mostly untrained farmers) to meet the invading French army near Hastings.

Learning ladder H2.9

Significant people, ideas and events

1. Identify the two types of troops in medieval armies.
2. Source 1: Describe the types of forces available to each side during the Battle of Hastings.
3. Explain how cavalry forces were used in medieval battles.
4. Explain the importance of infantry forces at the Battle of Bannockburn and the Battle of Agincourt.
5. Source 1: Using the source and your knowledge, explain which factor was the most important in the Normans' victory: troop numbers, tactics or weapons.

Continuity and change

1. Source 2: Identify the new weapon used by the English at the Battle of Agincourt.
2. Describe how infantry forces had changed by the late medieval period.
3. Source 2: Using the source and your knowledge, explain how the development of the longbow changed medieval warfare.
4. Explain why cavalry forces had become more significant by end of the medieval period.
4. How did medieval armies demonstrate the concept of continuity and change?

HOW TO

Continuity and change, page 203

How powerful was the Christian church?

The spread of Christianity during the medieval period was a lasting change that has greatly influenced the world. The Catholic Church had significant influence over people in medieval society and provided a stable system of beliefs and behaviours.

The Catholic Church

Christianity was a powerful force in Europe during the medieval period. Nearly all people in Europe were Christian and the Catholic Church's leader, the pope, was influential and powerful.

The pope was seen as God's representative on Earth. As head of the church, the pope had great influence over the kings of Europe and could dictate how people should behave. Following the pope in the Catholic Church hierarchy were cardinals, bishops, priests, monks and nuns.

The Catholic Church became very wealthy during the medieval period. The church was provided with land by the king in return for their prayers to support the king. The Church did not have to pay the king any tax for their land.

People gave the Church one-tenth of their yearly earnings in **tithes**. Tithes could be paid in money or in goods. Peasants had little money, and usually paid their tithes in grain, animals or seed.

The Church's wealth was greater than that of many kingdoms. Many high-ranking church officials became rich and powerful, and resisted any efforts from kings and nobles to reduce the Church's political influence.

Providing stability

The Roman Catholic Church helped unify a greatly divided society. All classes of people – kings, lords, knights and peasants – were greatly affected by the rulings and teachings of the church.

The local church or cathedral was the centre of town life. People attended weekly mass and were married and buried at the church. The grounds of the church were used for fairs and sporting events.

A priest represented the Church in each parish. He would run church services every Sunday in Latin (a language that most people did not understand), and listen to people's confessions and advise them on what to do. Priests often taught in parish schools and offered prayers for the sick.

Monks and nuns dedicated their lives to worshipping God. Their responsibilities included providing food for the poor, treating the sick, transcribing holy texts, taking care of orphans and helping educate children.

Source 1: An illustration from 1482 CE in a French book, of a medieval hospital where the four virtues of Prudence, Temperance, Fortitude and Justice teach nuns how to care for the ill.

Source 2: The fear of being sent to hell motivated people to follow the teachings of the church. This mosaic shows the devil in hell, devouring those who have not followed the church's teachings. [Coppo di Marcovaldo (13th century CE), *Mosaic*, the Baptistery of San Giovanni in Florence, Italy]

Faith and fear

All people, no matter their social status, were educated in the teachings of the Church. By following Church law, people believed they would be granted entry into heaven. Those who disobeyed the Church's teachings or failed to pay tithes were told they would be sent to hell, where they would face horrific torture at the hands of the devil.

The fear of being sent to hell was a powerful motivator for people to follow the teachings of the Church. Bishops had the authority to excommunicate Christians. People who had been excommunicated could not participate in church services and were guaranteed to go to hell after they died. People were also afraid they might be declared a **heretic**. Heretics were people whose beliefs did not align with those of the Catholic Church.

Child oblates

The children of nobles were often sent to monasteries or nunneries at a young age. Known as oblates, boys would study to become a monk, while girls would study to become nuns. Sending a child away to a monastery or nunnery might seem heartless to us today, but in the medieval period it showed that parents really loved their child. Parents believed that giving their child to a monastery or nunnery was the best thing they could do, since the child would live their life serving God and would then surely enter heaven when they died.

Parents also believed that God would see the sacrifice they had made as parents in giving their child to the Church, and that they too would be rewarded in heaven.

Source 3: Parents bringing their son to a monastery, from *Decret de Gratien* (c. 1150 CE), a book of Church laws.

Holy pilgrimages

During the medieval period, the church encouraged people to make spiritual journeys called pilgrimages to holy shrines. People believed if they prayed at a shrine they might have a greater chance of going to heaven or being cured of an illness.

Pilgrimages helped Christians prove their devotion to God. Europe had its own shrines, but the most sacred pilgrim shrines were in the Holy City of Jerusalem. Many pilgrims walked up to 5000 kilometres to reach Jerusalem.

The Arab conquest of the Holy Lands in 637 CE did not stop the pilgrimages, as the Arabs who first conquered the city tolerated pilgrims. Jerusalem was an important religious site for believers of both Christianity and Islam. However, when a group of Turkish Muslims, the Seljuks, took control of Jerusalem in 1050 CE, pilgrimages became more dangerous. The Turks harassed pilgrims and refused them entry into Jerusalem. On Good Friday in 1065 CE, Seljuk Turks massacred 12 000 German pilgrims, leading to calls for action.

A call to arms

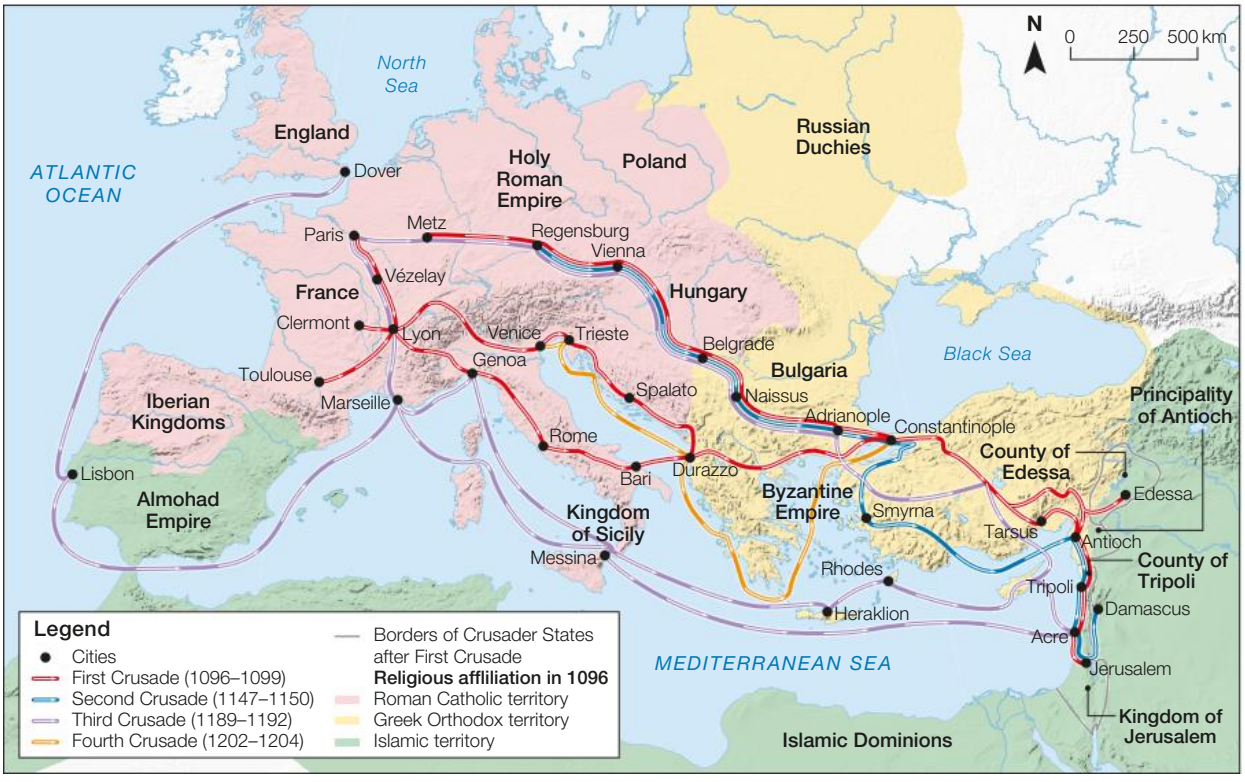
Many believed that the new Seljuk Turk Islamic regime would also move to invade Constantinople, the capital of the Byzantine Empire, which was under Christian rule. The Byzantine Emperor asked Pope Urban II for weapons, supplies and skilled troops to help defend his empire against the Turks. The pope called on Christians to defeat the Turkish invaders, and to undertake a crusade to restore the Holy Land to Christian control.

> One of our knights, named Lethold, clambered up the wall of the city, and no sooner had he ascended than the defenders fled from the walls and through the city. Our men followed, killing and slaying even in the Temple of Solomon [the Dome of the Rock], where the slaughter was so great that our men waded in blood up to their ankles ...
>
> **Source 5:** An eyewitness's account of the siege of Jerusalem during the First Crusade [*Gesta Francorum (Deeds of the Franks)* (c. 1099 CE)]

Holy Crusades

In 1096 CE, four armies of crusaders gathered in Constantinople to start the First Crusade in response to the threat to Christian holy sites in the eastern Empire. People from all levels of society joined the crusades. Many young peasants were encouraged by local parish priests to join the fight. By 1099 CE, the Crusaders had captured Jerusalem.

The crusades, 1096–1204 CE



Source 4: The crusades, 1096–1204 CE

Source: Matilda Education Australia

Source 6: Templar knights, in their distinctive white outfits with a red cross, were one of the most skilled fighting units of the crusades. They began as a group of knights who protected Christian pilgrims against attacks after the crusaders captured Jerusalem in 1099 CE during the First Crusade.

Most people joined the crusades to regain control of the Holy Land for Christians and to guarantee entry into heaven when they died. Some were also hoping for adventure, wealth and fame.

The crusades had a profound effect on Europe. The pope and the kings became more powerful, able to unite Europe and their kingdoms behind a common cause. In addition, trade between Europe and the Middle East increased, with new products such as carpets, oranges and spices entering Europe for the first time. Arabic science, art and architecture also began to have a greater influence on European thinking.

Guarded by crusader castles, Christians defended the region until around 1130 CE, when Muslim forces began gaining ground with their own ***jihad*** (holy war) against the Christians. Saladin, the Sultan of Egypt, united Muslims to take back Jerusalem in 1187 CE. After three unsuccessful crusades, the Sixth Crusade (1228–1229 CE) finally brought Jerusalem back under Christian control, only to be lost again to the Muslims in 1244 CE.

Learning ladder H2.10

Significant people, ideas and events

1. Why was the pope a significant individual?
2. Source 1 (page 88): What duties did monks and nuns undertake?
3. Source 2 (page 89): Describe what is happening in this image and why it might have encouraged people to follow the teachings of the Catholic Church.
4. Source 3 (page 89): Explain why medieval parents sent their child to join a monastery or nunnery.
5. Using the sources and your knowledge, explain why the Church was so powerful in medieval Europe.

Significance

1. What was a pilgrimage?
2. Outline the reasons why the pope called for a crusade to Jerusalem.
3. Source 5: Explain the significance of the event outlined in the source.
4. Explain why the crusades were significant to Europe.
5. Evaluate the significance of the Holy City of Jerusalem in the medieval world.

HOW TO

Significance, page 212

H2.11

Site study

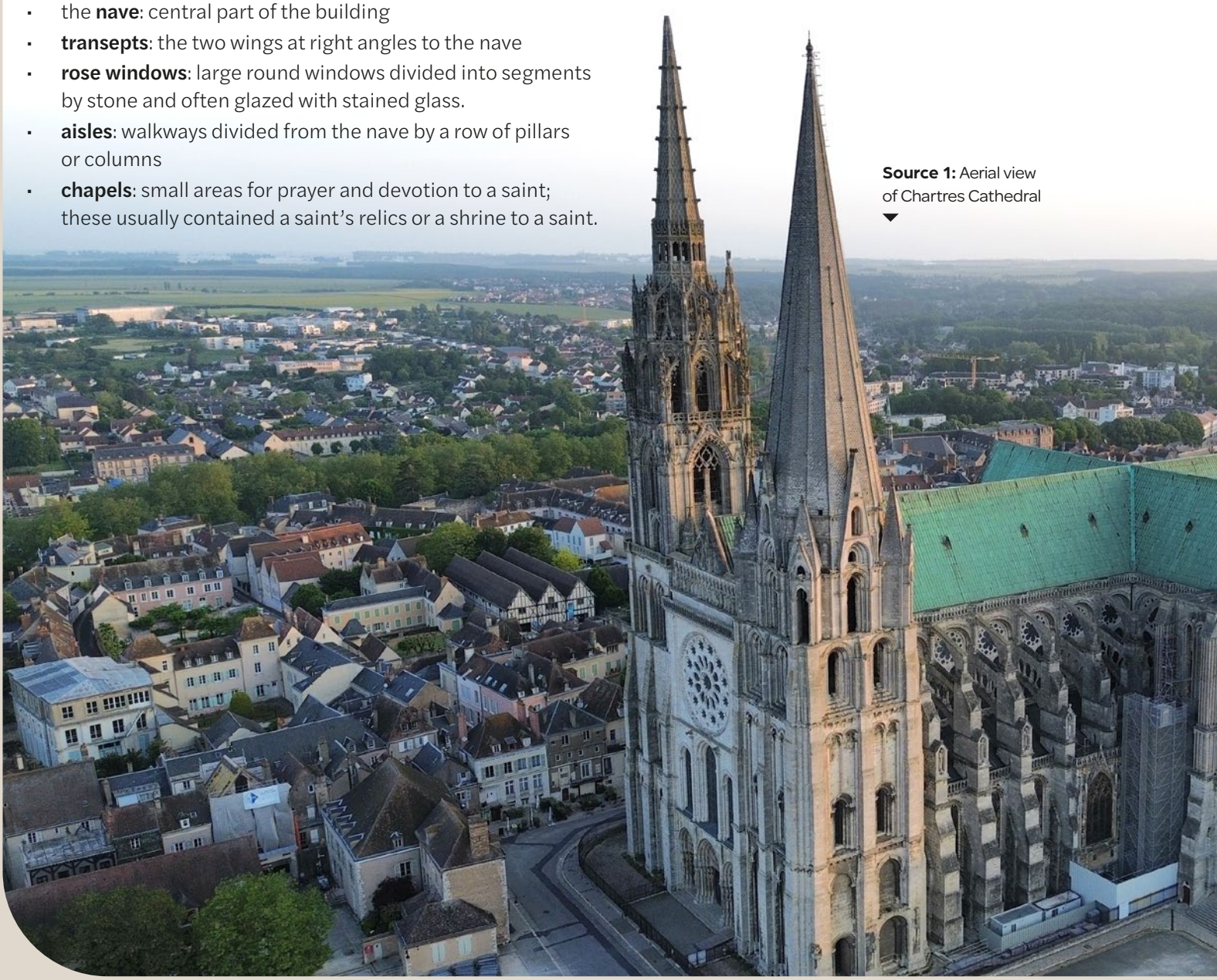
Why and how was Chartres Cathedral built?

Chartres Cathedral is a medieval Gothic Catholic cathedral built in Chartres, France (about 80 kilometres south-west of Paris) between 1194 and 1220 CE.

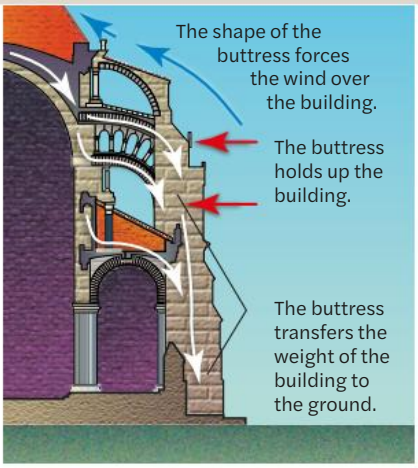
Religious architecture

Churches and cathedrals of the medieval period formed some of the most spectacular architecture of the age. Churches and cathedrals were built to a cruciform (in the shape of a cross) floorplan. The main elements of the floorplan were:

- the **nave**: central part of the building
- **transepts**: the two wings at right angles to the nave
- **rose windows**: large round windows divided into segments by stone and often glazed with stained glass.
- **aisles**: walkways divided from the nave by a row of pillars or columns
- **chapels**: small areas for prayer and devotion to a saint; these usually contained a saint's relics or a shrine to a saint.



Source 1: Aerial view of Chartres Cathedral



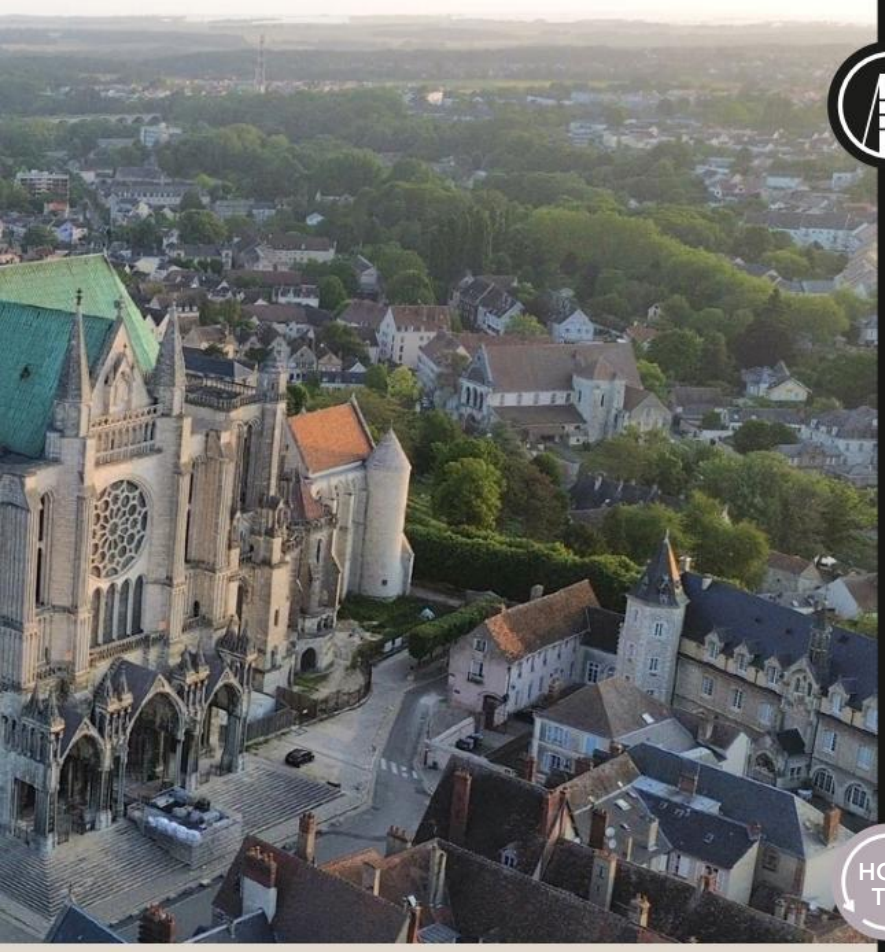
Source 2: Flying buttresses could support the weight of Gothic cathedrals' high roofs. They were introduced as a way of making buildings taller and allowing more windows by taking the weight of the roof away from the walls.

Chartres Cathedral

Chartres Cathedral in France is a splendid example of Gothic architecture. Its 12th-century-CE stone facade and its stained-glass windows (12th and 13th centuries CE) are still in excellent condition.

A cathedral is the central church of a diocese. A diocese is a region controlled by a bishop. Chartres Cathedral was built between 1194 and 1220 CE. The 26-year construction period was unusual for the medieval period as most cathedrals took over a century to be completed. The speedy construction of Chartres has left a building that shows historians the methods of craftsmanship, materials used and architectural style specifically from the late 12th century CE. Architectural historians believe that about 300 artisans and labourers worked on the cathedral.

The cathedral became an important pilgrimage site during the medieval period. It houses a famous Christian relic known as the Sancta Camisa (Holy Tunic), said to have been worn by the Virgin Mary. Today the site still attracts Christian pilgrims as well as tourists. It was listed by UNESCO as a World Heritage Site in 1979 CE.



Learning ladder H2.11

Significant people, ideas and events

1. Identify the style of architecture used in the construction of Chartres Cathedral.
2. Describe the main elements of Christian cathedrals.
3. Source 2: Explain how flying buttresses worked.
4. Explain why flying buttresses were used.

Significance

1. Identify the significant relic housed in Chartres Cathedral.
2. Describe the significance of Chartres for medieval pilgrims.
3. Source 1: Explain how the cathedral building demonstrates the significance of the Church in medieval society.
4. Explain why Chartres Cathedral is a historically significant building.

HOW TO

Significance, page 212

Key individual

Joan of Arc: Warrior, heretic or saviour?

A brave peasant girl led the French army to an improbable victory at Orléans.

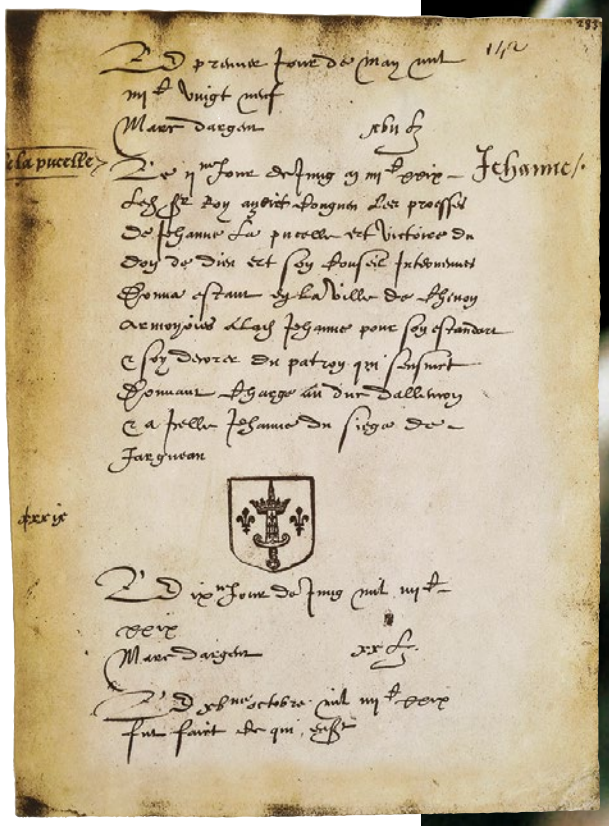
Joan of Arc was a peasant from France who believed God had selected her to lead France to victory in the Hundred Years' War against England (fought from 1337–1453 CE). With no military training, she convinced Prince Charles of Valois to allow her to lead a French army to the **besieged** city of Orléans, where she inspired a key victory over the English.

Joan's army

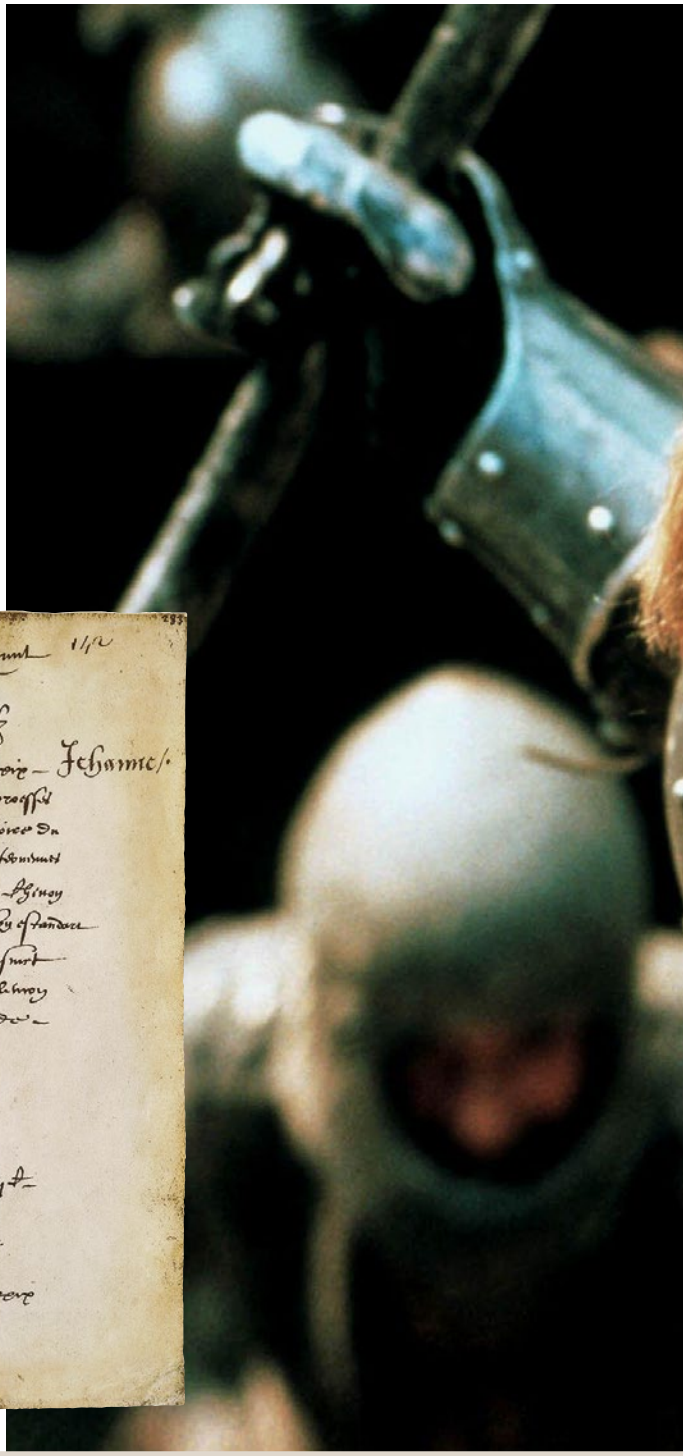
In May 1428 CE, Joan cut her hair and dressed in men's clothes to travel across enemy territory to Prince Charles's palace at Chinon.

Joan asked him to give her an army to lead to the besieged city of Orléans, which was under attack from the English. Charles acted against the advice of his generals and advisors and granted her request.

Dressed in armour and riding a white horse, Joan joined an army convoy trying to bring supplies to Orléans in March 1429 CE. Orléans had been cut off and surrounded by English troops who planned to starve the city to force a surrender. Joan sent a letter to the English commanders at the siege, ordering them in the name of God to 'Begone, or I will make you go'. The convoy reached Orléans, and the supplies, Joan and 200 soldiers were smuggled into the city under the cover of darkness.



Source 1: This letter was written by Charles VII; it is dated 2 June 1429 CE. The letter confers the title of nobility on Joan of Arc's family.



Joan's bravery inspired the citizens of Orléans to fight the English. The French army was successful in forcing the English to retreat across the Loire River.

After the great victory at Orléans, the French saw Joan of Arc as a heroine. She and her followers escorted Charles across enemy territory to Reims where he was crowned King Charles VII in July 1429 CE.

Capture and execution

A year later the king ordered Joan to protect the town of Compiégne against attack. However, she was pulled from her horse and taken captive. She was then sold to the English and put on trial to face charges of heresy (religious beliefs that were against the teachings of the Catholic Church) and dressing like a man.

On 29 May 1431 CE, Joan of Arc was sentenced to death. The next day, Joan was taken to the marketplace at Rouen and burned at the stake in front of a jeering crowd.

Source 2: Milla Jovovich plays Joan of Arc in the 1999 film *The Messenger*. ©COLUMBIA/GAUMONT

Why was Joan condemned?

Traditionally, historians have believed that Joan of Arc was condemned to die because she had claimed to hear voices from God.

However, today historians believe that Joan was condemned for political reasons. They argue that the English were determined to get rid of Joan so that they could win the Hundred Years' War. The English believed that Joan was a popular figure who might encourage more French people to fight against them.

Furthermore, some historians have argued that Joan was mainly condemned for wearing men's clothing, rather than for her beliefs. During the medieval period it was strictly prohibited for women to wear men's clothing.

Saint Joan

For the people of Orléans, Joan was a saviour. They began holding a festival in her honour and pressured King Charles VII to clear her name. Twenty years after her death, Charles VII ordered a new trial and her condemnation as a heretic was overturned.

During the 19th century CE, Joan was celebrated as a symbol of France. Then in 1920 CE, Pope Benedict XV made her a saint, which is the highest honour in the Catholic Church. She is now the patron saint of France and immortalised in statues, paintings, literature and films.

Joan of Arc was tried as a heretic not because she was a woman, though that factor played an important part, nor because she heard voices, but because she heard voices telling her to attack the English … Joan believed that God favoured the French: God was on her side … As long as she insisted … that her voices were saints telling her to attack the English, she was doomed.

Source 3: Extract from Daniel Hobbins (2005 CE), *The Trial of Joan of Arc*, Harvard University Press. Daniel Hobbins is a historian.

Source 4: Depiction of Joan of Arc in an illuminated manuscript [Antoine Dufour (c. 1505 CE), *Lives of Famous Women*]

Source 5: This scene from the 1999 CE film *The Messenger* depicts Joan riding into battle. ©COLUMBIA/GAUMONT

As the opening of the trial record noted, 'The report has now become well known in many places that this woman, utterly disregarding what is honourable in the female sex, breaking the bounds of modesty, and forgetting all female decency, has disgracefully put on the clothing of the male sex, a striking and vile monstrosity. And what is more ... she dared to do [and] say many things beyond and contrary to the Catholic faith ...'

Source 6: Extract from Helen Castor (2015 CE), *Joan of Arc: A History*, Faber. Helen Castor is a historian.

Learning ladder H2.12

Significant people, ideas and events

1. Identify the social class to which Joan belonged.
2. Source 4: Describe the image of Joan in this source.
3. Explain how Joan came to lead an army.
4. Explain why Joan was considered a heroine by the people of Orléans.
5. Analyse the reasons why Joan of Arc is celebrated in France today.

Interpretations

1. Identify the debate about the reason why Joan was condemned.
2. Describe the traditional view of Joan's condemnaton.
3. Source 6: How has this historian come to her conclusion that Joan's condemnation was based on her clothing?
4. Sources 3 and 6: Compare the modern historians' versions of Joan's condemnation with the traditional view.

HOW TO Interpretations, page 214

Why did towns and trade expand?

During the high medieval period, Europe became a more peaceful place. The Silk Road reopened and trade with Asia, the Islamic world and Africa expanded rapidly.

As new trade networks opened, medieval towns began to grow. European merchants traded with other European towns and with dealers in Asia, the Middle East and North Africa. They imported (bought) spices, ceramics and silk from Asia, ivory and gold from Africa and carpets from the Middle East. They exported (sold) wool, silver and tin. The expanded trade ensured that towns became centres of wealth.

The decline of feudalism

Another factor contributing to the growth of towns was the decline of feudalism. Huge population losses had occurred during the Black Death, such that lords struggled to find enough peasants to work their fields. This meant that peasants who survived the Black Death were in high demand and had more power. They were able to ask for higher wages.

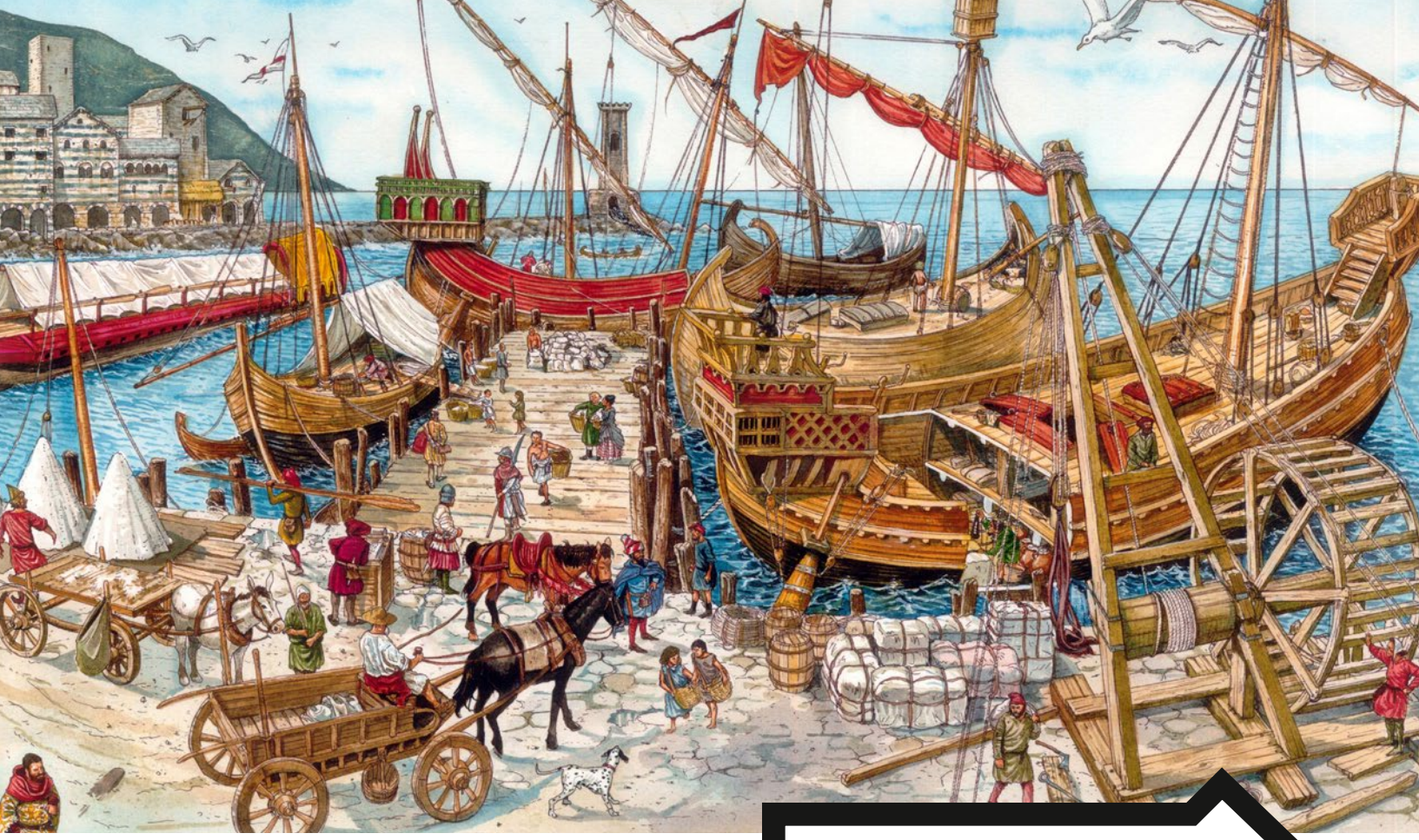
If the lord would not pay higher wages, peasants could leave their estates and move into towns. With peasants no longer dependent on the lords, the feudal system declined.

> John by the grace of God, King of England … we have granted to them that none of them shall make battle … and that all town inhabitants of Cambridge of the guild of merchants shall be [free] of toll and passage [road toll] and lastage [toll for attending a fair] and pontage [bridge toll] and stallage [fee for setting up a market stall], in fairs and without, and throughout the ports of the sea and beyond the sea … And that they may justly have their lands and pledges and be paid all debts …
>
> **Source 2:** Royal Charter of King John to the Borough of Cambridge, England (1207 CE)

Hanseatic trade routes of the late medieval period

▲ **Source 1:** The trade routes of the Hanseatic League

Source: Matilda Education Australia



▲ **Source 3:** Loading cargo ships in a medieval town in the coastal region of Liguria in Genoa, in north-west Italy, during the 14th century CE

Town charters

Towns promised independence and freedom. Sometimes a king would present the town with a charter. While the king could still collect the main taxes from the town, a charter that granted the citizens freedom from minor taxes and military service gave them a measure of self-government. Chartered towns attracted wealthy merchants who set up market stalls, which helped to boost the local economy.

By the late medieval period, the new merchant class was a powerful force in medieval society. To grow their businesses, merchants formed partnerships, which led to the development of large trading companies such as the Hanseatic League. The Hanseatic League was a federation of trade towns in Northern Europe. For a fee, it organised the safe transport of manufactured goods between towns. Trade caravans were always under threat from bandits, while merchant ships were vulnerable to pirate attack. The League made sure that cloth from England and Belgium made it safely to markets in Eastern Europe; and that raw materials from Russia and Poland (such as grain, timber, wax and charcoal) were safely transported to Germany and England. Merchants were willing to pay the League to protect their goods. Consequently, the League became very wealthy and powerful.

Learning ladder H2.13

Impact and legacies

1. Identify the goods imported by European merchants.
2. Describe the decline of feudalism.
3. Explain how the Hanseatic League operated.
4. Explain why towns expanded during the medieval period.
5. Source 1: Analyse the importance of the Hanseatic League to the wealth of merchants.

Sources

1. Source 2: Identify the origin of the source.
2. Source 1: Describe the trade routes of the Hanseatic League.
3. Source 2: Explain the privileges granted to townspeople. Use a quote from the source to support your ideas.
4. Source 2: Explain why the privileges granted to townspeople would have helped trade to develop further.
5. Source 2: Why do you think the king granted these freedoms? What was the context?

HOW TO

Sources, page 201

What were the impacts and legacies of medieval Europe?

The medieval period has often been characterised as a 'dark age', a time when people were ignorant, barbarous and cruel. Yet this is far from the truth. Indeed, some historians argue that the medieval era should in fact be seen as a 'bright age'.

Medieval science

The scientific breakthroughs of the medieval period remain some of the most underappreciated legacies of the period. Medieval science not only led to the invention of everyday items such as eyeglasses, clocks, mirrors and papermills, but also laid the foundations of our modern understanding of astronomy, medicine, biology, optics and many other scientific fields.

Medieval art

Artistic works of the medieval period continue to inspire, most notably the art of medieval painters and stained-glass workers, and the literature of writers such as Geoffrey Chaucer. Music notation was formalised in the medieval period, such that musicians today can play music created in the medieval period.

Source 1: Detail from a painting showing a canon holding a pair of spectacles [Salvino D'Armate (1284 CE), *Virgin and Child with Canon van der Paele*]

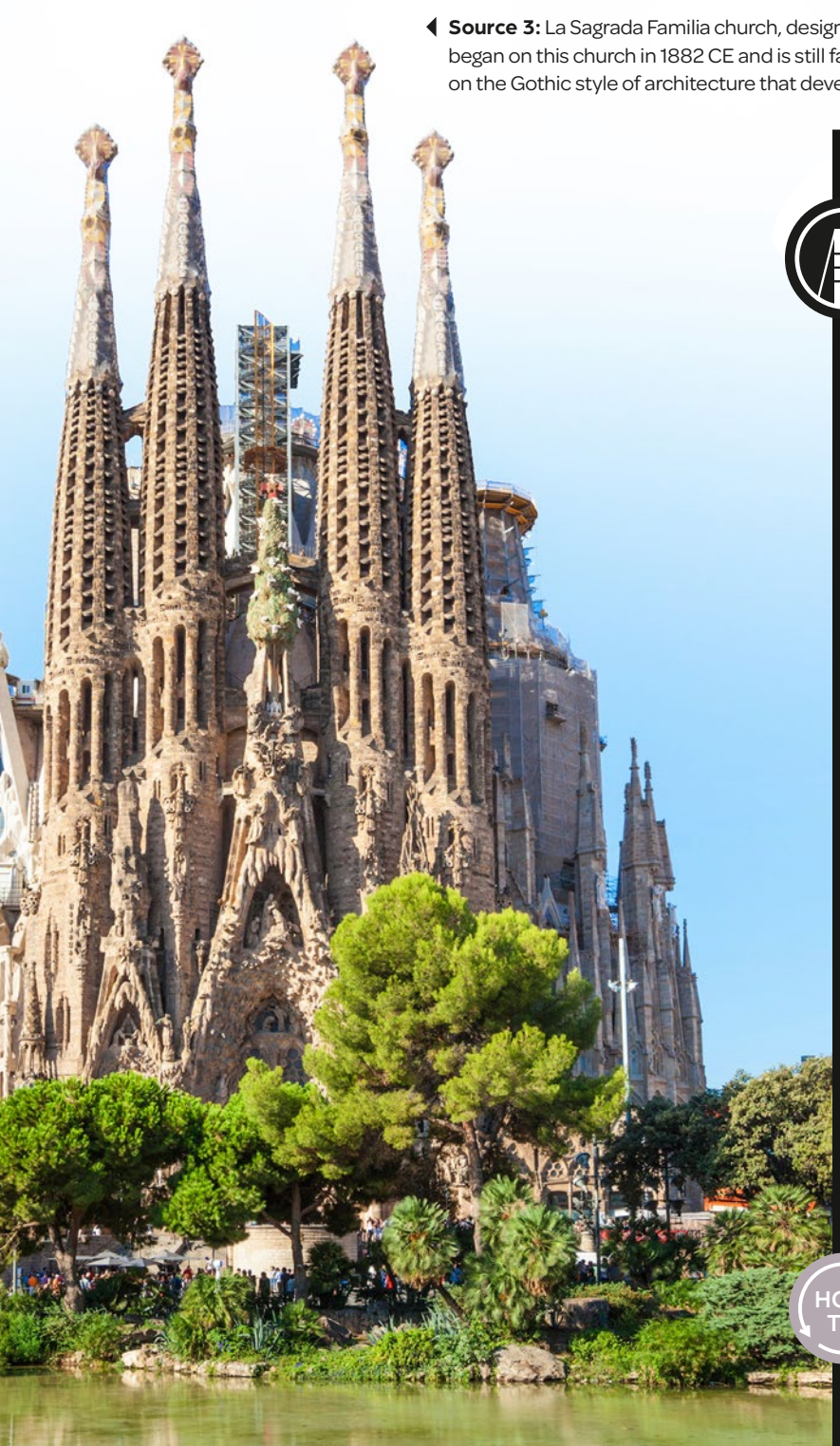
The architecture of medieval Christian cathedrals proved highly influential, with many of the major city cathedrals and public buildings in Australia and around the world built in the 'Neo-Gothic' and Romanesque styles.

Medieval reforms

The medieval period also provided some of the foundations of our modern Western society. The banking system was pioneered by the Knights Hospitallers as a way of helping pilgrims move their money safely from one city to another without having to carry all of it with them. Modern legal codes were also first developed in the medieval period, based on Roman law (used in much of Europe) or common law (used in Australia, Britain and the United States). The invention of the printing press at the end of the medieval period was one of the most revolutionary developments, because it made information and ideas available to more people and improved access to education.

The Bright Ages contain the beauty and light of stained glass in the high ceilings of the cathedral, the blood and sweat of the people who built them, the acts of charity and devotion by people of deep faith ... In these Bright Ages, scientists looked to the sky and measured the stars, built the university, laid the foundations for the European contribution to the global scientific revolution ... There were also, just as now, people who limited debate, prosecuted thought crimes, repressed freedom and killed people who were different from them. The Bright Ages stand out as a pivotal place and time in history because they contain all the multitudes of possibility inherent in humanity.

Source 2: Matthew Gabriele and David Perry (2021 CE), *The Bright Ages: A New History of Medieval Europe*, Harper Collins.



Source 3: La Sagrada Familia church, designed by Antoni Gaudi, in Barcelona, Spain. Construction began on this church in 1882 CE and is still far from being finished. La Sagrada Familia draws heavily on the Gothic style of architecture that developed in the medieval period.

Learning ladder H2.14

Impact and legacies

1. Identify three ways that the medieval period has had an impact on life in Australia today.
2. Describe the scientific legacies of the medieval period.
3. Source 3: Explain how medieval architecture influenced cathedral design in the 19th century CE.
4. Source 1: Explain why the invention of eyeglasses is significant in modern Australia today.
5. Which medieval invention do you think was the most important? Explain your choice.

Interpretations

1. Source 2: Identify the name of the book from which this extract was taken.
2. Describe the reasons why some people called the medieval period 'the dark ages'.
3. Source 2:
   - **a** What does the source refer to as the 'bright' aspects of medieval history?
   - **b** What does the source refer to as the negative aspects of medieval history?
4. Source 2: Explain why the historians have called their book *The Bright Ages*.
5. Source 2: Using the source and your knowledge, explain whether you think the medieval period should be known as the 'bright ages'.

HOW TO Interpretations, page 214

How do I conduct a good inquiry?

Now that you've finished the chapter, it's time to conduct your own historical inquiry on medieval Europe. Throughout the chapter you have developed knowledge and understanding of medieval Europe. Background knowledge is important because it helps you make connections to new information, ask better questions and consider different perspectives. As you progressed through the chapter, you have gathered information through classroom discussion, highlighting, note taking and answering questions. Now you are ready to start planning your own historical inquiry!

A historical inquiry gives you the opportunity to be an active historian: forming questions, interrogating sources and communicating insights about the past on a topic of your choice. The chapter has covered the origins and legacies of medieval Europe in addition to significant people, events, ideas and beliefs. What would you like to know more about?

- Medieval kings, page 72
- Castles, such as the Tower of London, pages 80, 82
- Reasons for victory in medieval battles, page 86
- Changes in armour and weapons, page 76

Return to the relevant pages in the chapter and read them again.

Next, complete the 'see, think, wonder' process to help develop ideas you might cover in your inquiry.

Jot down your answers to these questions. Your answers will help you to formulate your own research ideas. Once you have worked through this process, you are ready to start the historical inquiry.

Refer to pages 218–25 of the How-to chapter for a step-by-step guide to this process.

See

What do you see?
Who is involved?
What are the key features?
When and where was this happening?

Think

What do you think about that?
How do you think people were affected at the time?
How is this similar to or different from today?
How do we know?

Wonder

What did different groups think about this?
Why is this important to know?
What does it make you wonder?

Level up!

Throughout the chapter, you have been working to move up the Learning ladder. An inquiry investigation is a great opportunity to expand your knowledge and attempt new skills.
When planning your inquiry, consider how the experiences and perspectives of individuals and groups shaped societies, beliefs and events in the past. Think about how the past has had an impact on the present. Use the How-to chapter to support your planning and research.

Europe and the Mediterranean world
(c. 600–1750 CE)

The Ottoman Empire

H3

WHAT WAS THE 'SULTANATE OF WOMEN'?

HOW DID THE OTTOMANS EXPAND THEIR EMPIRE?

WHAT DID THE OTTOMANS CONTRIBUTE TO SCIENCE AND TECHNOLOGY?

How can I understand the Ottoman Empire?

The Ottoman Empire was a Muslim empire at its heart, but it encompassed people of many different faiths, languages and ethnic customs. Sources contain the perspectives of not only the different people who made up Ottoman society but also the European, Arabic and other observers who saw Ottoman life from their own point of view.

Learning ladder

The Learning ladder lists the knowledge and skills you will learn. Each has five levels of difficulty. Learning skills at the bottom of the ladder will help you to master the skills at the top of the ladder.

Steps in knowledge progression	Background and origins	Significant people, ideas and events	Impact and legacies	Continuity and change	Causes and consequences
5	I can evaluate the impact of the rise and fall of societies.	I can evaluate how societies were influenced by significant people and ideas.	I can evaluate the legacy of a society.	I can evaluate patterns of continuity and/or change.	I can analyse causes and consequences.
4	I can explain why a society developed.	I can explain why ideas influenced people and events.	I can explain why a society has a legacy.	I can explain patterns of continuity and/or change.	I can explain why something was caused or why it led to certain consequences.
3	I can explain how a society developed.	I can explain how ideas influenced people and events.	I can explain the impact of one society on another.	I can explain continuity and change.	I can explain how something was caused or its consequences.
2	I can describe the origins of societies.	I can describe key people, ideas and events.	I can describe the legacy of a society.	I can describe continuity and change.	I can describe causes and consequences.
1	I can identify the origins of societies.	I can identify key people, ideas and events.	I can identify the legacy of a society.	I can identify continuity and change.	I can identify a cause and a consequence.
	Knowledge and understanding				

Source 1: Suleymaniye Mosque in Istanbul, Türkiye, is one of the many major buildings designed by Mimar Sinan. He left his mark on the history of world architecture with his unique works as the Ottoman Empire's master architect between 1539 and 1588 CE.

Perspectives	Significance	Interpretations	Chronology	Sources	Steps in skill progression
I can evaluate historical perspectives.	I can evaluate historical significance.	I can evaluate the evidence supporting a historical interpretation.	I can explain change or causality from a timeline.	I can evaluate sources to determine their accuracy, usefulness and reliability.	5
I can compare perspectives.	I can explain why something is historically significant.	I can compare historical interpretations.	I can summarise the events on a timeline.	I can explain the historical context of a source.	4
I can explain a perspective.	I can explain something historically significant.	I can explain an interpretation of history.	I can follow timeline conventions.	I can apply historical knowledge to explain sources.	3
I can describe perspectives.	I can describe something historically significant.	I can describe an interpretation of history.	I can place events on a timeline chronologically.	I can describe a source.	2
I can identify the perspective of a person from the past.	I can identify something historically significant.	I can identify a historical debate.	I can read a timeline.	I can identify the origin of a source.	1

Historical concepts and skills

Who were the Ottomans?

The Ottoman period spanned more than 600 years from the 14th to the 20th centuries CE. The Ottoman Empire was established by Turkish warriors in Anatolia (Asia Minor) and reached the peak of its power in the 15th and 16th centuries CE.

The Turks were a nomadic people from the steppes of Central Asia. For centuries they had ridden their horses across the grasslands, looking for new pastures. But in the 13th century CE, Central Asia was in chaos. From the east, bands of Mongols were wreaking havoc. In the west, the once-mighty Byzantine Empire was crumbling, attracting hordes of mercenary warriors who sought to plunder the old regime.

In 1299 CE, a Turk leader named Osman came to power. Osman's people decided to rename their tribe 'the Osmanli', after their leader. It is from this name that we get the word 'Ottoman'. In 1302 CE, Osman led his forces to victory against the Byzantine army near the town of Nicea (now Iznik in Türkiye). This victory marked the beginning of a period of expansion. By 1451 CE, the Ottomans controlled most of Byzantium's former territory in north-west Anatolia. They conquered Constantinople, the last remnant of Byzantium, in 1453 CE. By the 1500s CE, they had established one of the largest empires in the history of the world, and controlled vast areas of Eastern Europe, North Africa and the Middle East.

The Ottoman Empire, c. 1683 CE

▲ **Source 2:** The expansion of the Ottoman Empire between 1300 and 1683 CE

Source: Matilda Education Australia

Source 1: Ottoman Empire timeline

key ideas timeline

- c. 1299 CE — Foundation of the Ottoman Empire
- 1326–1361 CE — Ottoman conquest of Bursa, Nicaea (Iznik) and Adrianople (Edirne)
- 1402 CE — Battle of Ankara; the Ottomans lose to the Mongols, which briefly checks their expansion
- 1453 CE — Fall of Constantinople
- 1459–1465 CE — Construction of the Topkapi Palace
- 1463–1520 CE — Ottoman conquest of Bosnia, the Crimea, Albania, Montenegro, Syria, Palestine, Egypt and Algeria
- 1520–1566 CE — Reign of Suleiman the Magnificent
- 1568–1574 CE — Construction of Selimiye Mosque, Edirne

▲ **Source 3:** An Ottoman depiction of the Battle of Ankara (1402 CE), showing the Ottomans (wearing turbans) fighting the Mongols (wearing helmets). [Image published in *The Book of Accomplishments* (1584–1589 CE)]

As it expanded, the Ottoman Empire came to govern people of many different cultural and religious backgrounds, making it multiracial and multireligious. While the Ottomans themselves were Muslims, they had a policy of tolerance towards the diverse subjects of their empire. The Ottomans allowed them to practise their religions and provided them with protection from invaders. However, 'tolerance' did not mean 'equality' and many Ottoman subjects endured slavery, oppression and injustice at the hands of their imperial masters.

The Ottoman Empire endured until the modern era. It was not until just after World War I that its 600-year existence came to an end. The Ottomans' legacy of ideas, art, literature and their societal organisation of a multicultural empire has much relevance for the world we live in today.

Learning ladder H3.1

Background and origins

1. Source 2: Using the source and the table below, identify the cities under Ottoman rule in each period.

Period of expansion	Cities under Ottoman rule
1300–1359 CE	
1359–1451 CE	
1451–1481 CE	
1512–1521 CE	
1520–1566 CE	
1566–1683 CE	

2. Describe the origins of the Ottoman Turks.
3. Source 2: Using the source and your knowledge, explain how the Ottomans built their empire between 1302 CE and 1500 CE.
4. Sources 1 and 3: Explain why this battle was significant in Ottoman history.

Chronology

1. Source 1: When did the Ottoman Empire end?
2. Put these events in order from the earliest to the most recent event:
   - 1453 CE: Mehmet II sacks Constantinople
   - 1683 CE: The Siege of Vienna
   - 1326 CE: Edirne is the capital city of the Ottoman Empire
   - 1523 CE: Suleiman I conquers Rhodes.
3. Create a timeline with the events from Question 2.
4. Summarise the key events in the decline of the Ottoman Empire.

HOW TO Chronology, page 198

1683 CE
Failure of the siege of Vienna marks the start of the Ottoman Empire's decline

1699 CE
Treaty of Karlowitz marks the end of Ottoman control in Central Europe

1915 CE
The British Empire invades the Ottoman Empire at Gallipoli

1922 CE
Ottoman Empire is dissolved; in 1923 CE, Türkiye becomes an independent country

How did the Ottomans expand their empire?

By the 1550s CE, the Ottoman army was the most well-equipped army in the world. It would remain at the forefront of military technology until the middle of the 17th century CE.

Osman's army

In the early years, Osman's army consisted of a loose confederation of warriors on horseback, known as *gazi*. They joined Osman's forces because they were attracted to the opportunity to raid and plunder. They used hit-and-run tactics and ambushes to attack their targets, picking off villages and small towns one by one to bring a region under control. They also captured many people whom they then forced into slavery.

As the Ottoman Empire grew larger, the descendants of Osman wanted to make sure their reign was secure from rival families. Osman's grandson, Murad I (reigned 1362–1389 CE), the third Ottoman ruler, adopted the title of 'sultan' to strengthen his claim to power. He also established a new personal army. Murad's army, called The Hearth of the Porte Servants, consisted of cavalry and infantry forces. Its members were people who had been captured by the gazi. The infantry forces were known as the *Yeni Ceri* or Janissary.

The Janissaries

Murad's son, Sultan Bayezid (reigned 1389–1402 CE), decided to expand the Janissaries and introduced a new system of recruitment. This system was called the *devşirme*. Under the devşirme, the Ottomans raided Eastern European villages and took away Christian boys aged as young as seven. The boys were forced into slavery and had to convert to Islam. As slaves of the sultan, they were not allowed to marry and were never set free. A few were educated to work in the sultan's government and could potentially rise to the position of Grand Vizier, the second-highest position in the empire. However, most became Janissary troops.

The first stage in their training as Janissaries was to serve as forced labourers for Turkish farmers in Anatolia, where they learned Turkish and studied Islam. The second stage was to work on building projects or other enterprises. After this, they were 'sent out to Porte', which meant they started military training to serve the sultan in the Janissary corps. The Janissaries were taught to regard each other as their family and the sultan as their father. Training was harsh, but effective in moulding the boys into a highly disciplined and powerful military force.

Even though they had been taken as slaves, the Janissaries were among the first military troops in the world to receive a salary, paid directly from the sultan's treasury. This ensured their fervent loyalty to the sultan, whose service they could not leave. They also lived in barracks, which was unusual for the time. This was designed to reinforce the idea that fellow Janissaries were 'family'. In addition, the Janissaries were well equipped and strongly supported during campaigns. Support corps set up tents and made food for the troops, transported their weaponry and provided medical aid, ensuring they were ready to give their best on the battlefield. With their strong discipline, loyalty to the sultan and impressive fighting skills, the Janissaries were a key factor in Ottoman expansion.

> Since Sinān, the chief of my court architects, has sent a letter saying: 'Of those who are engaged in smith's work on the noble mosque, which is being built at Edirne, seven [boys] who were working on the ironwork for the windows, have completed their service.' He has requested that they should be 'sent out to the Porte'. Their names have been noted and I have commanded that … you are to 'send out to the Porte' the seven noted in the memorandum …
>
> **Source 1:** Command to the Aġa of the Janissaries by Sultan Selim II, c. 1573. The Aġa was the commander of the Janissary corps.

Ottoman weapons and tactics

At first, the Janissaries made up only a small part of the Ottoman army, numbering only about 1000 troops. However, the skill and success of the Janissary troops saw their numbers increase dramatically. By 1609 CE, there were around 40 000 Janissary troops in the army, with further increases towards the end of the 17th century CE.

The key reason for the continual expansion of Janissary forces in the army was that their elite training and strong discipline enabled them to adapt to the changing nature of warfare from the late medieval period to the early modern period. Mobile cavalry forces armed with bows and arrows became obsolete, as new technological developments were better suited to infantry forces who could use gunpowder and siege weapons.

Source 2: Janissary forces armed with muskets at the Siege of Rhodes (1522 CE) [Fethullah Celebi Arifi (1558 CE), *Süleymanname*]

Initially, the Janissaries were skilled archers, but the introduction of gunpowder marked a turning point in Janissary weapons. The Janissaries were early adopters of hand-held firearms. They were known to be using *harquebuses* by 1465 CE and had adopted the larger musket by 1551 CE. With their firearms, the Janissaries developed a military tactic known as 'volley fire', where rows of troops fired in sequence, one after the next. They also used complex formations to make the most of their advanced weaponry. After sending in shock troops armed with conventional weapons, such as swords and daggers, they then started volley-fire tactics against the enemy.

In addition, the Ottomans used cannons and mortars in siege warfare. Often, the Ottomans employed specialist gunners from other societies to fire their cannons. The combination of skilled troops, clever tactics and innovative weapons enabled the Ottomans to become a formidable military force.

Learning ladder H3.2

Significant people, ideas and events

1. Source 2: Identify the group attacking Rhodes.
2. Describe the role of the gazi in expanding the Ottoman Empire.
3. Explain how recruits for the Janissaries were obtained.
4. Source 2: Using this source and your knowledge, explain how boys were trained to be Janissaries.
5. Evaluate the benefits and disadvantages of the sultan's formation of a personal army of slaves.

Causes and consequences

1. Identify the reason why Murad I formed the Janissaries.
2. Describe how the introduction of gunpowder affected the Janissaries.
3. Source 2: Using this source and your knowledge, explain the consequences of incorporating Janissary troops into the Ottoman army.
4. Explain why the Janissaries were given a salary and lived in barracks.

Causes and consequences, page 206

HOW TO

Why was the fall of Constantinople significant?

The Ottomans really began to expand their territory in the 15th century CE, following their conquest of Constantinople. The Ottomans' clever tactics and innovative use of cannonfire brought the old city to its knees.

The fall of Constantinople

The land of the Byzantine Empire had once stretched almost all the way around the Mediterranean Sea. By the mid-15th century CE, however, practically all that remained of the empire was the ancient city of Constantinople. Constantinople was the 1000-year-old Christian city that was the capital of the Byzantine Empire. It had been founded by Emperor Constantine in 330 CE. Due to its status as a great city of the old Roman Empire, its wealth, and its strategic location, which provided access to the Black Sea and the Mediterranean Sea, Sultan Mehmet II (1451–1481 CE) was determined to have Constantinople for the Ottoman Empire and for Islam. Mehmet II began his attack on the city on 6 April 1453 CE.

The Byzantines hoped that the strong walls around the city would hold, as they had done so many times before. However, the Ottomans had brought bronze cannons with them to blast down the walls. One of these was so large that it took 60 oxen to move it. This enormous cannon was used to fire cannonballs of up to 63 centimetres in diameter. Cannons were first invented in medieval China. They would have a profound effect on siege warfare by the end of the medieval period.

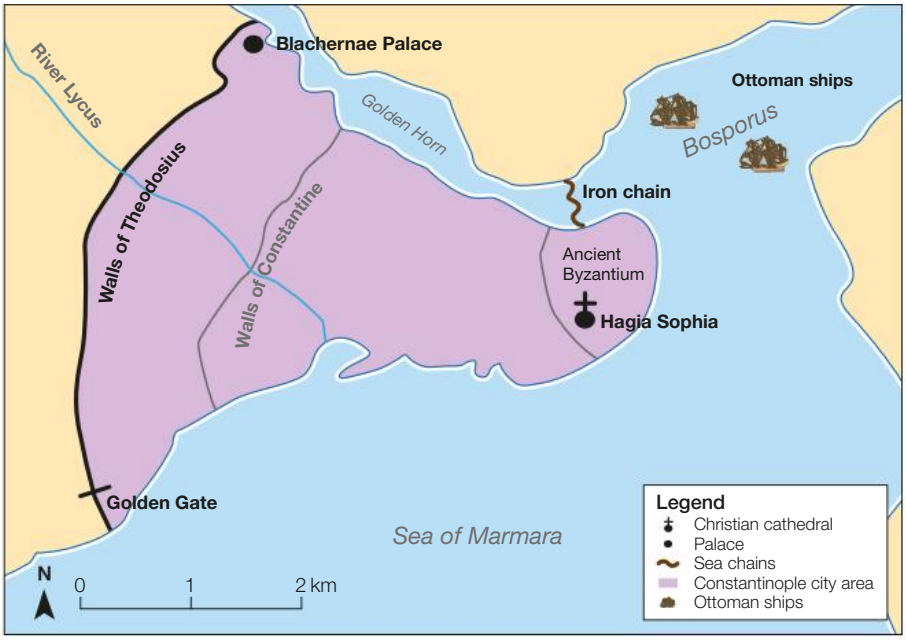
In addition to their advanced weapons, the Ottomans also used clever tactics to conquer Constantinople. When the Ottoman fleet tried to enter Constantinople's harbour from the sea, the ships were unable to get past the heavy iron chain that the Byzantines had laid across the harbour. The Ottomans instead landed in Galata, a region in western Constantinople, and constructed a 'road' of greased logs across Galata's south-eastern point. They then pulled their ships up onto the logs and rolled them across the land and into the harbour, inside the perimeter of the chain. From here the Ottoman fleet was able to stop the Byzantines and their allies bringing supplies across the Golden Horn and into the besieged city.

Source 1: After seven weeks of siege in 1453 CE, the Ottomans began their final assault on Constantinople. [*Panorama of the Final Assault and the Fall of Constantinople* (1453 CE)]

After seven weeks of siege, the Ottomans began their final assault on Constantinople. They concentrated their troops on the section of the Theodosius walls near Blachernae in the north-west of the city. The Ottomans finally managed to break through the walls and a wave of fighters charged in. The Byzantine defence collapsed. Sultan Mehmet II allowed his troops to loot the city for three days. During this time, thousands of Constantinople's citizens were massacred. Mehmet II then issued a ***firman*** (royal decree) to end the looting and violence and made Constantinople the new capital city of the Ottoman Empire.

The city of Constantinople

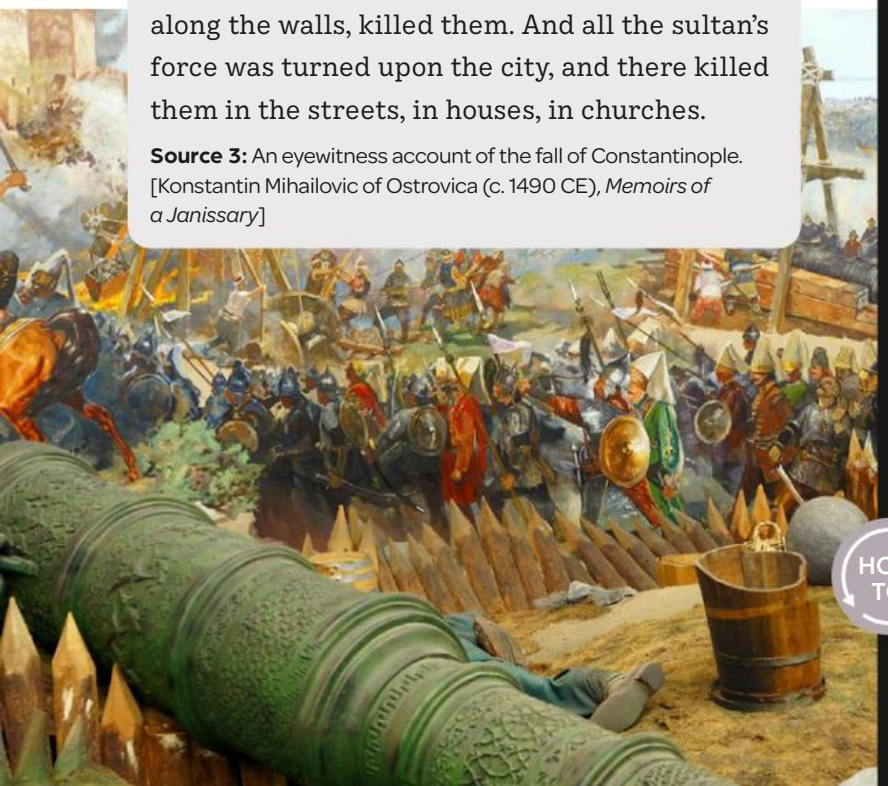
Source: Matilda Education Australia



▲ **Source 2:** The siege of Constantinople

Because of the great size of the city, the Greek emperor could not so quickly get enough men to occupy the walls as was necessary. Therefore, in that place where the wall had been breached, the sultan's Janissaries, by storming, killed the Greek officer to whom it had been entrusted. And when the leader was lost, then the others, being frightened, had to yield; and the Janissaries, having been reinforced, running along the walls, killed them. And all the sultan's force was turned upon the city, and there killed them in the streets, in houses, in churches.

Source 3: An eyewitness account of the fall of Constantinople. [Konstantin Mihailovic of Ostrovica (c. 1490 CE), *Memoirs of a Janissary*]



Learning ladder H3.3

Significant people, ideas and events

1. Identify the Ottoman sultan at the time of the siege of Constantinople.
2. Source 1: Describe the weapons used in the siege of Constantinople.
3. Source 2: Explain how the Ottomans overcame the iron chain that protected the Golden Horn.
4. Sources 1, 2 and 3: Using these sources and your knowledge, explain why the Ottomans were able to conquer Constantinople.

Significance

1. Identify the reasons why Constantinople was a significant medieval city.
2. Describe how cannons were used during the siege of Constantinople.
3. Source 3: Explain the significance of this source for historians studying the conquest of Constantinople.
4. Explain why the conquest of Constantinople was a significant event for the Ottoman Empire.

HOW TO

Significance, page 212

How was the Ottoman Empire managed?

Ottoman society was ruled by the sultan, who had political, religious, social and judicial authority. The sultan was responsible only to Allah and his law, which was known as the Seriat.

Becoming a sultan

When a **sultan** died, his named heir (the crown prince) became the new sultan. If a sultan had not named an heir, his sons fought each other for the throne. A new sultan might end any further competition for his throne by having all his brothers murdered (fratricide). The reign of Sultan Mehmet III (1595–1603 CE) began with the murder of his 19 brothers.

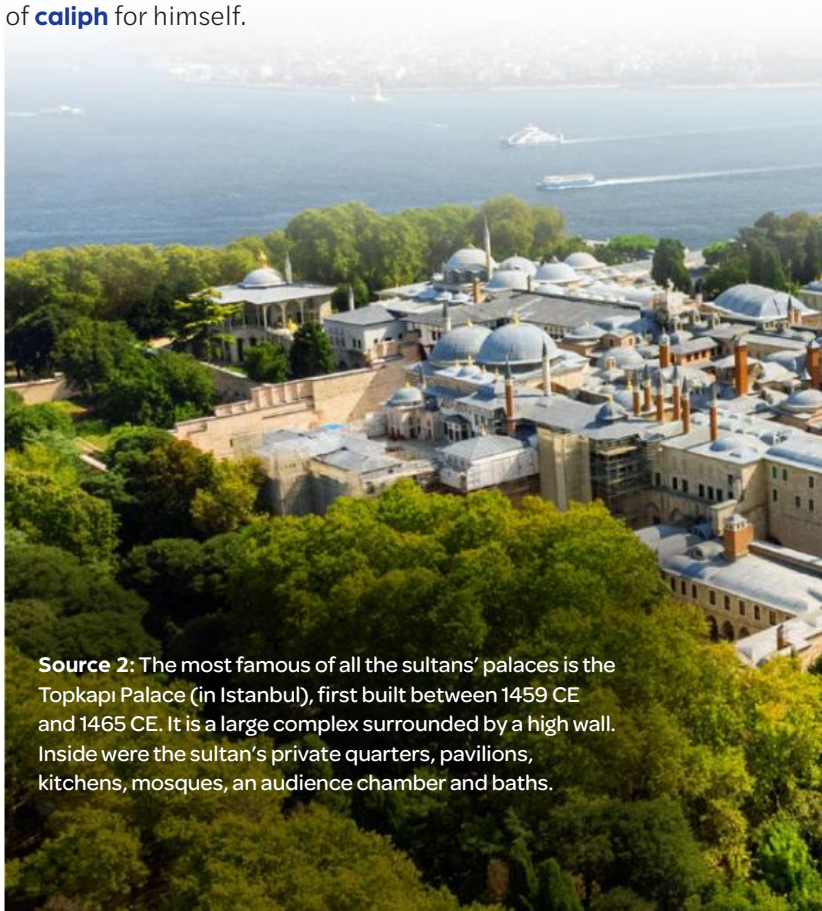
Source 1: This painting shows Mehmet II victoriously entering Constantinople on 29 May 1453 CE. [Jean-Joseph Benjamin-Constant, (1876 CE), *Entry of Mehmet II into Constantinople*]

The role of the sultan

The sultan lived in a grand palace and made the final decisions about whether or not the empire went to war, what secular laws the people had to follow and what taxes they paid. He could also decide how much money was spent on his soldiers, grand buildings, his clothes, palaces and entertainment.

At the same time, the sultan was considered to be responsible for his subjects' prosperity. He was also expected to lead his troops into battle and to show bravery and courage in warfare. In addition, as a Muslim ruler, he had to uphold Islamic law.

In 1516–1517 CE, Sultan Selim I defeated the Mamluk Sultanate of Egypt, capturing their territories in Egypt, Syria, Palestine and Arabia. The territories in Arabia included the Islamic holy cities of Mecca and Medina. Selim I subsequently adopted the title of **caliph** for himself.



Source 2: The most famous of all the sultans' palaces is the Topkapı Palace (in Istanbul), first built between 1459 CE and 1465 CE. It is a large complex surrounded by a high wall. Inside were the sultan's private quarters, pavilions, kitchens, mosques, an audience chamber and baths.

Governing the empire

The grand vizier

The **grand vizier** was the highest-ranking government official in the Ottoman Empire and was chosen from among the empire's top government officials. The grand vizier headed the sultan's divan (council), which met every four days to issue the sultan's latest laws.

The ulema

The ***ulema*** was a group made up of religious scholars, administrators and judges. If the sultan wanted to change the law, he first had to submit his new ruling to the ulema before the law could be passed. The members of the ulema made sure that the sultan's laws conformed to Islamic law. However, when Selim I became a caliph, he used his position to override the ulema's authority. This greatly extended the sultan's power over the empire.

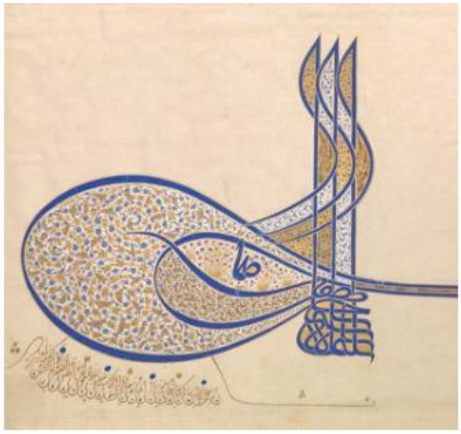
The governors

The empire became more difficult to govern as it expanded. The Ottomans did not have modern methods of communication and transport; for example, it could take several weeks for a message to reach the provinces from the capital. To solve this problem, the sultan appointed members of the Ottoman nobility as governors to rule the outer provinces of the empire on his behalf.

The role of imperial women

The mother of the reigning sultan was known as the **valide sultan**. The valide sultan was the most powerful woman in the empire. She was responsible for guiding her son, and could persuade him to change his mind if she thought he had made a bad decision.

From the late 16th century CE and throughout the 17th century CE, women of the sultan's household had a lot of power and influence in the empire. This period is known to historians as 'the sultanate of women'. Many sultans during this time came to the throne when they were very young, and their mothers, the valide sultans, ruled in their place.



Source 3: This is Sultan Suleiman I's *tughra*. A tughra is a type of signature that was used by the Ottoman sultans. It was first used by Orhan (1324–1361 CE), who was the second leader of the Ottoman Empire.

Learning ladder H3.4

Significant people, ideas and events

1. Source 1: Identify which of the sultan's responsibilities is shown in this source.
2. Describe the role of the grand vizier.
3. Explain how the valide sultans were able to rule the empire.
4. Explain why the sultan appointed governors.

Continuity and change

1. Source 3: Why is the tughra shown in this source an example of continuity in the Ottoman Empire?
2. Describe the reasons why Sultan Selim I changed his title.
3. Explain how the ulema enabled continuity and change in the Ottoman Empire.
4. Explain why the role of valide sultan enabled continuity in the Ottoman Empire.

HOW TO Continuity and change, page 203

Key individual

How did Suleiman I lead the Ottoman Empire?

Suleiman I – dubbed 'Suleiman the Magnificent' by Europeans – was the longest-reigning sultan of the Ottoman Empire. Under Suleiman's reign, the Ottoman Empire reached the height of its military and political power.

Suleiman the Magnificent

Suleiman I came to the Ottoman throne in 1520 CE, as the tenth sultan of the Ottoman Empire. He reigned for 46 years, until his death in 1566 CE.

Europeans dubbed Sultan Suleiman I 'the Magnificent' because he was not only a formidable military campaigner but also a poet and a patron of the arts. He also commissioned the construction of great buildings throughout the empire, many of which still stand today.

Kanuni

Suleiman I's father, Selim I, had greatly extended the authority of the sultan. Suleiman I continued in his father's footsteps, establishing total control over Ottoman law. For this reason, he was known to the Ottomans as *Kanuni* (the Law-giver).

Suleiman I's laws set out the duties and rights of his subjects. His laws were seen as fairer than those of past sultans. Fines replaced beatings for less serious crimes and fewer crimes carried the death penalty. Tax laws were reformed and moneylenders were not allowed to charge more than 11 per cent interest on a loan. Suleiman I's laws would remain at the core of the Ottoman Empire for the next 300 years.

Suleiman's military success

Suleiman I led 13 military campaigns during his lifetime. His most famous European campaigns include the Ottoman attack on Belgrade (in modern-day Serbia) in 1521 CE, the Siege of Rhodes (in Greece) in 1522 CE and the Battle of Mohacs (in Hungary) in 1526 CE. Following the Battle of Mohacs, the kingdom of Hungary was greatly diminished. The remains of the Hungarian army continued to resist the Ottomans for another 200 years, but the constant warfare devastated the Hungarian population.

In the east, Suleiman I fought against the Safavid Empire in Persia and captured the capital city of Baghdad in 1534 CE. By 1555 CE, Suleiman I had secured parts of the Safavid lands in Iraq, Georgia and Armenia for his empire. This gave the Ottomans access to the Persian Gulf, and greater access to the Black Sea, thereby connecting the Ottoman Empire with important sea trade routes to India and Central Asia.

The Siege of Vienna

However, Suleiman I's military campaigns were not always successful. His attempt to conquer Vienna in 1529 CE was a disastrous failure. The Ottoman advance towards Vienna had faced numerous obstacles. Heavy spring rains and flooding slowed the advance of the Ottoman troops.

Source 1: Suleiman the Magnificent. [Artist unknown, (c. 1530–1540 CE)]

The muddy roads meant that most of the Ottomans' siege weapons had to be left behind. In addition, due to inadequate food supplies, many Janissaries became sick and many died.

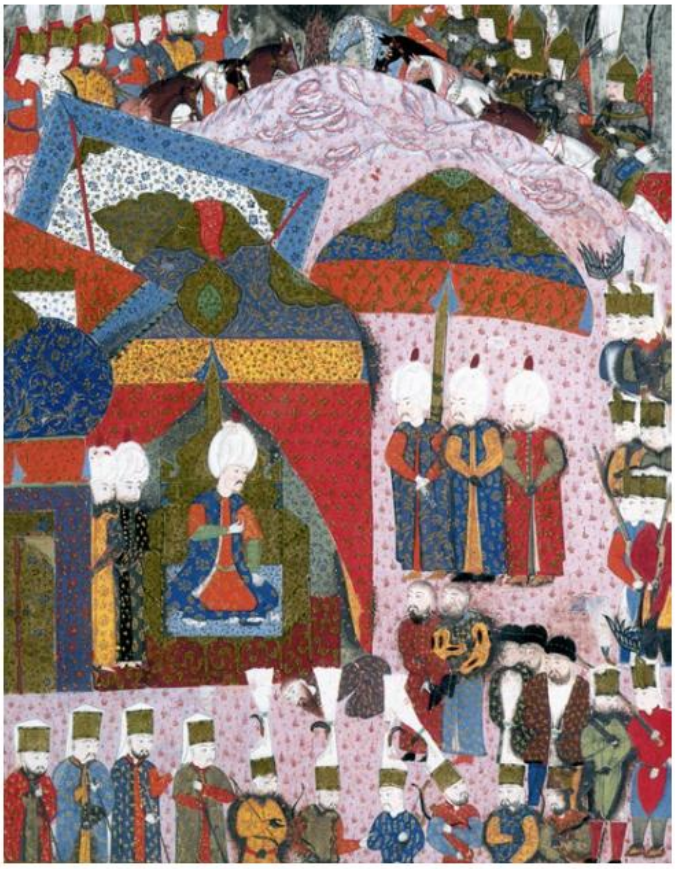
By the time the Ottoman army arrived at Vienna's city walls in the autumn, the troops were tired and unwell. The Janissaries called on Suleiman I to abandon the siege but Suleiman I was determined to press on. The attack was launched on 14 October 1529 CE but was called off the following day, with the Ottomans unable to breach the reinforced city walls or cope with the defenders' harquebus guns and pikes.

Suleiman I's failure to take Vienna marked the beginning of a bitter, long-term rivalry between the rulers of Austria (the Hapsburgs) and the Ottomans. The ongoing warfare, along with growing discontent with his rule, led Suleiman I to commission an illustrated history of his reign in 1555 CE called *Süleymanname* (1558 CE), which celebrated his earlier achievements.

The Ottoman Empire in 1566

Source: Matilda Education Australia

Source 3: The empire at the time of Suleiman's death, 1566 CE. The light-green regions are **vassal states**, which means they paid an annual tribute to the Ottoman Empire in recognition of the Ottomans' power. They also had to provide military service to the empire.



Source 2: Suleiman I receives a French delegation sent by King Francis I at Belgrade, 1532. [Image from the *Süleymanname* (1558 CE), an illustrated history of Suleiman's reign]

Learning ladder H3.5

Significant people, ideas and events

1. Identify the reasons why Suleiman I was known as 'the Magnificent'.
2. Describe Suleiman I's changes to Ottoman law.
3. Explain the significance of Suleiman I's failure to take Vienna.
4. Explain why Suleiman I was a significant individual.

Sources

1. Source 2: Identify the origin of the source.
2. Source 3: Describe the extent of Suleiman I's empire in 1566 CE.
3. Source 2: Explain how this image portrays Suleiman I as a powerful leader.
4. Source 2: Explain why Suleiman I had this source created.

HOW TO

Sources, page 201

What was the 'sultanate of women'?

From 1520 to 1683 CE, the women of the sultan's household had a lot of power and influence over the Ottoman government. This period is known to historians as the 'sultanate of women'.

The sultan's harem

The sultans of the Ottoman Empire did not marry. Instead, they had many concubines. These women were slaves who had been captured as children and sold into the sultan's harem. The main task of a sultan's concubine was to produce a son. Once she gave birth to a son, she attained high status in the harem and did not have to have any more children. However, she was expected to devote her energies to educating her son. Each mother worked hard to persuade the sultan that her son was the most worthy of becoming his heir. It was through their sons that the women could secure power as a valide sultan.

Who was Roxelana?

The most famous woman of the sultanate of women period was Roxelana. Roxelana had been captured as a slave from Ukraine and taken to Kaffa, where one of the main Ottoman slave markets was located. According to some sources, her real name was Aleksandra Lisovska, but she was called Roxelana because in those days slave girls from Ukraine were known as 'Roksolanes'. Roxelana was given to Suleiman I as a gift before he became sultan. Suleiman's mother, Valide Hafsa Sultan, brought Roxelana into the harem. In the harem, Roxelana was given the name Hürrem.

Roxelana quickly became Suleiman I's favourite. She bore six children: a daughter, Mihrimah (1524 CE) and five sons: Mehmet (1523 CE, who died in 1543 CE), Selim (1525 CE), Abdullah (1526 CE), Bayezit (1527 CE) and Jehangir (1535 CE). It was very unusual for a concubine to have five sons, as they were usually only allowed to have one son. This rule was designed to prevent a concubine from having too much influence over the sultan. But the high regard Suleiman had for Roxelana meant that she was allowed to break this rule. Roxelana and Suleiman married in 1533 CE, a testament to his great love for her. Not only did it break a 300-year tradition that sultans did not marry their concubines, but it also was the first time that a former slave had become a member of the royal household. Suleiman also gave Roxelana the title 'haseki', which means 'the sultan's favourite'.

Roxelana was not only greatly loved by Suleiman I, but also a woman of intelligence, hard work and political skill. Suleiman's trust in Roxelana was built on the good advice she gave him. She learned to read and write Turkish so she could report on events in the capital when Suleiman I was away on military campaigns.

Source 1: This painting is Roxelana, who was the first leader in the sultanate of women period. [Unknown artist (c. 1500–1558 CE), *Portrait of Roxelana*]

She managed the empire while Suleiman was away, ensuring his orders were carried out. She also commissioned the Ottoman royal architect, Sinan, to undertake a range of public works, including the Haseki Sultan complex, which included a women's medical centre, a school, a mosque and a soup kitchen to feed the poor.

> Throne of my lonely niche, my wealth, my love, my moonlight.
> My most sincere friend, my confidant, my very existence, my Sultan
> The most beautiful among the beautiful ...
> My springtime, my merry faced love, my daytime, my sweetheart, laughing leaf ...
> My plants, my sweet, my rose, the one only who does not distress me in this world ...
>
> **Source 2:** Poem written by Suleiman for Roxelana, c. 1535 CE

> Such love does Suleiman bear her that he has so astonished all his subjects that they say she has bewitched him; therefore they call her 'Ziadi', which means witch. For this reason, the Janissaries and the entire court hate her and her children, but because the sultan loves her, no one dares to speak. I have always heard everyone speak ill of her and of her children ...
>
> **Source 3:** Written by Luigi da Zara Bassano, a traveller from Zadar (Republic of Venice) in the 16th century CE. [Luigi da Zara Bassano (1545 CE), *Customs and the Particular Ways of Turkish Life*]

Moreover, Roxelana worked tirelessly to secure her children's futures. In 1544 CE, she persuaded Suleiman to have his grand vizier, Ibrahim Pasha, executed for disloyalty and her son-in-law, Rüstem Pasha, appointed as grand vizier in his place. She was also believed to have used her influence to have her sons appointed as Suleiman's heirs.

Suleiman's eldest son by another concubine was Mustafa. Mustafa was accused of plotting to overthrow Suleiman and in 1533 CE was executed for treason. Mustafa was much admired by the Janissaries and after his death, stories abounded that Roxelana had spread false rumours about Mustafa's disloyalty. However, it has never been proven that Roxelana played a role in Mustafa's death. Suleiman and Roxelana's son Mehmed was declared Suleiman's heir. After Mehmed's death from smallpox in 1543 CE, their second son, Selim, became heir. Selim would succeed to the throne in 1566 CE.

Notable valide sultans

Roxelana's leadership was followed by that of six valide sultans, whose sons were too young to rule when they took the throne. By taking care of the government until their sons came of age, these women played an important role in maintaining the stability of the empire. They were also instrumental in changing old practices. Kösem Sultan, the valide sultan for Ahmed I (1603–1617 CE), persuaded her son to spare the life of his brother, Mustafa, putting an end to the practice of fratricide in the Ottoman Empire. Other important valide sultans, including Mihirmah Sultan (Roxelana's daughter) and Turhan Sultan, used their own money to fund military expeditions to expand the empire, commission important public buildings and ensure that the empire's military strongholds were fortified.

Learning ladder H3.6

Significant people, ideas and events

1. What was the sultanate of women?
2. Describe the role of the valide sultan in the harem.
3. Explain how Roxelana came to be in Suleiman I's harem.
4. Explain why the role played by the sultanate of women was important in maintaining the empire.
5. Evaluate the role played by Roxelana during Suleiman I's rule.

Perspectives

1. Source 2: From whose perspective is this source written?
2. Source 2: Describe this source's perspective on Roxelana.
3. Source 3: Explain the perspective of this source.
4. Sources 2 and 3: Compare the perspectives of these two sources.
5. Source 3: Evaluate the perspective of this source.

HOW TO

Perspectives, page 210

H3.7

How did the Ottoman Empire become wealthy?

Source 1: Travellers resting at a caravanserai. [Richard Dadd (1845 CE), *Caravanserai at Mylasa in Asia Minor*]

The Ottoman Empire's geographical position joined east and west, and it grew wealthy from the resources of conquered lands and from controlling important trade routes.

Trade

The territory of the Ottoman Empire was vast: the empire stretched around the Mediterranean Sea, from Iran in the east to Hungary in the west. On the one hand, trade within the empire itself was significant, with a wide range of climates, cultures and resources allowing for the production of a vast array of products. Agricultural products, textiles, jewellery and ceramics were the main goods traded within the empire.

At the same time, the empire's geographical location placed it at the junction of trade routes between distant empires and societies in Africa, Asia and Europe. Spices from India, ivory from Africa, furs from Russia, silk and porcelain from China, coffee from Yemen, silver from Western Europe and slaves from the Black Sea region and sub-Saharan Africa were all brought to the Ottoman Empire's markets.

Ottoman support for trade

Trade brought in considerable wealth for the Ottoman Empire. Therefore, Ottoman rulers actively supported and protected merchants. *Caravanserei* (travellers' inns) were established all over the empire as places for merchants and their pack animals to rest. Covered **bazaars**, such as the Grand Bazaar in Constantinople, were also built to protect merchants and their goods from bad weather.

At the same time, the Ottomans were able to profit from trading activity, by requiring all merchants to obtain a licence and limiting their profits to no more than 10 per cent.

Slaves in the Ottoman Empire

Slaves were important trade goods in the Ottoman Empire. The Ottoman Empire's economy did not depend on slave labour, but the slave trade greatly contributed to the empire's wealth.

There were two main types of slaves: war captives and people captured by mercenaries.

There were hundreds of thousands of Ottoman war captives who had been taken from Eastern Europe, North Africa, Central Asia and from lands to the north of the Black Sea during the empire's expansion. During one Ottoman military campaign – an attempt to take Vienna in 1683 CE – the Ottomans seized around 80 000 people and sold them into slavery.

The hugely proftable slave trade encouraged mercenaries to raid and capture people from outside (and sometimes inside) the Ottoman Empire to be sold at the Grand Bazaar in Constantinople. Between 1468 and 1694 CE, Crimean Tartar mercenaries seized approximately 1.75 million Ukrainians, Poles and Russians. Another group, the Barbary Corsairs from North Africa, raided coastal regions around the Mediterranean Sea and took people from as far away as Iceland.

Constantinople was the centre of the slave trade. The city was ideally situated at the crossroads of empires and trade routes between Europe, the Mediterranean area and Central Asia.

It is a sight that could touch even the cruellest of hearts, when a man is separated from his wife, a mother from her daughter, without any hope of ever being reunited, in the deplorable captivity of pagan Muslims ... In the end, even the most callous of hearts would tremble among the cries and laments, tears and moans of these unfortunate Ukrainians. For while this people sings and howls in tears, these miserable folk are dispersed in different directions. Some to Constantinople, some to Crimea, others to Anatolia ... This is, in a few words, how Tatars take captive of as many as 50 thousand souls in less than two weeks ...

Source 3: This text was written by De Beauplan, who was a French engineer who worked in Poland and Ukraine between 1630 and 1647 CE. [Guillaume Le Vasseur de Beauplan (1651 CE), *Description of the Ukraine*]

Source 2: This painting depicts Ottoman women buying silk at the Grand Bazaar in Constantinople. [Amadeo Preziosi (1858 CE), *The Silk Bazaar*]

Learning ladder H3.7

Significant people, ideas and events

1. Source 1: Identify the building in this source.
2. Describe the goods that were sold at the Grand Bazaar in Constantinople.
3. Explain how merchants in the Ottoman Empire were helped by the rulers of the empire.
4. Explain why the geographical location of the Ottoman Empire was beneficial.

Sources

1. Source 3: Identify the origin of this source.
2. Source 1: Describe the function of caravanserais.
3. Source 3: Using this source and your knowledge, explain how slaves were captured for the Ottoman slave trade.
4. Sources 1, 2 and 3: Using these sources and your knowledge, explain why the Ottoman Empire became wealthy.
5. Source 3: Assess the usefulness of this source for a historian studying slavery in the Ottoman Empire.

HOW TO Sources, page 201

What were the cultural features of the Ottoman Empire?

The Ottoman Empire's diverse cultures, and its central position on important trade networks, led to the development of a rich and complex society, as demonstrated by Ottoman architecture, art and design.

Architecture in the Ottoman Empire

Building design, or architecture, in the Ottoman Empire was inspired by many different cultures, especially those of Persia and Byzantium. Important features of Ottoman architecture include domed roofs, large inner spaces, columns, an emphasis on height and the use of light and shadow.

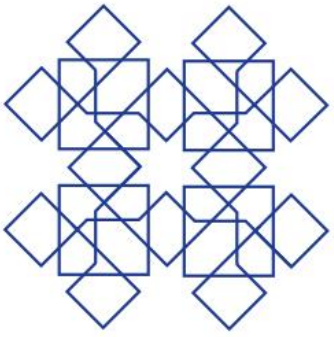
Mosques were the most important buildings. All mosques were built in a grand monumental style to emphasise their significance to the society. After they conquered Constantinople, the Ottomans began to build mosques that were similar in design to the Byzantine Hagia Sophia Church, a magnificent building with large domes and glittering mosaics inside. The Ottomans wanted to create similarly impressive buildings that demonstrated the power and glory of their Islamic empire.

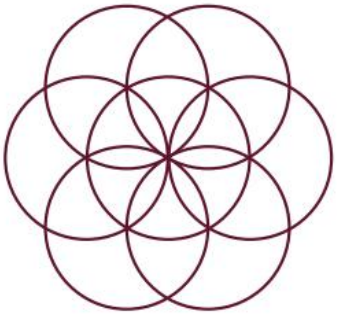
Ottoman art and design

Geometric patterns

Geometric patterns form the basis of some of the most exquisite Islamic religious art created during the Ottoman Empire. Continuous repetitive geometric patterns have a special religious meaning: they are

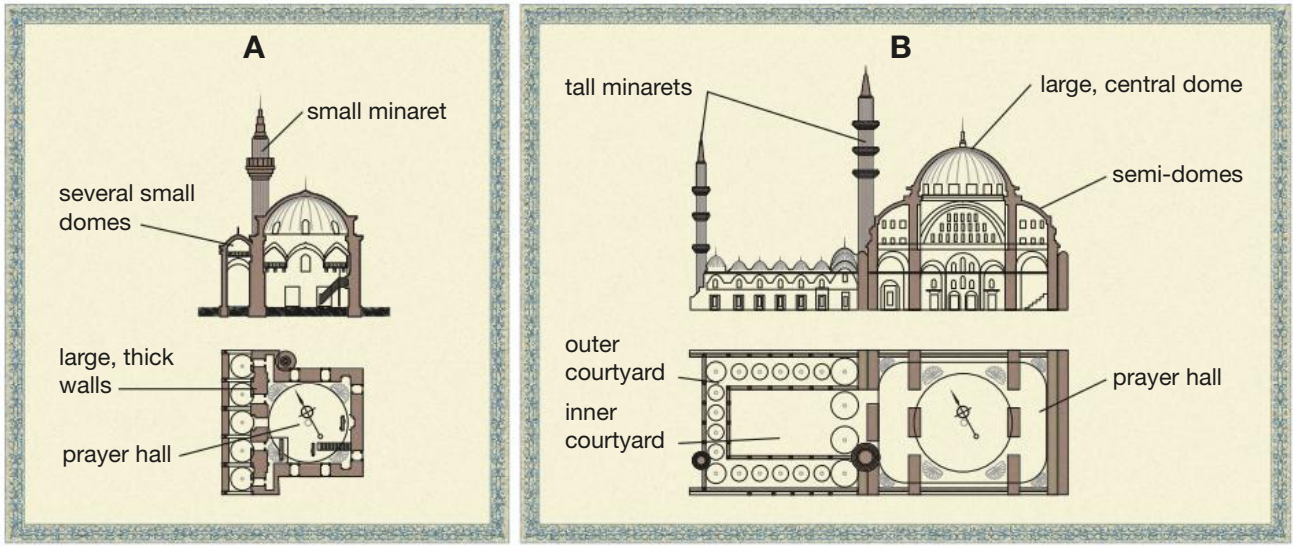
Source 2: Circle repeat units for geometric patterns

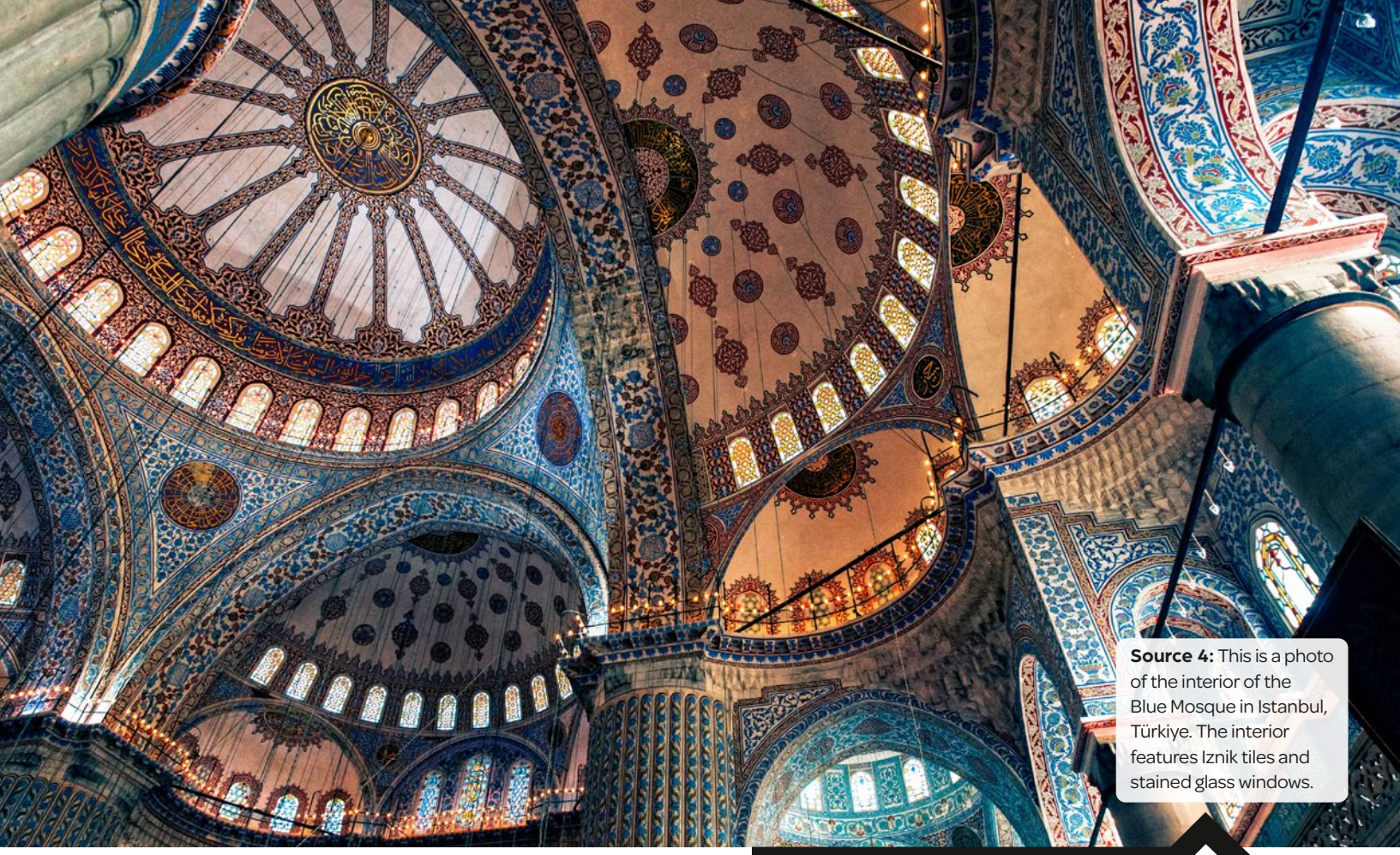




Source 3: Square and star repeat units for geometric patterns

Source 1: This drawing shows a side view and floorplan of two mosques. Mosque A is a typical plan for a mosque built in 1299–1450 CE (Bursa period). Mosque B is a typical plan for a mosque built after 1450 CE (classical Ottoman period).





Source 4: This is a photo of the interior of the Blue Mosque in Istanbul, Türkiye. The interior features Iznik tiles and stained glass windows.

meant to represent the infinite nature of God. Four basic shapes were used, known as 'repeat units'. The four repeat units are circles and intersecting circles; squares; stars (made of squares and triangles); and polygons.

Iznik tiles

Chinese blue and white porcelain was highly valued in the Islamic world. The blue glaze is thought to have originated in Mesopotamia and arrived in China via trade routes, where pottery makers developed their own unique style. The Chinese porcelain then arrived in Persia along the trade routes during the medieval period.

In the 15th century CE, the city of Iznik was a centre for ceramic production in the Ottoman Empire. Plates, bowls, pitchers, cups, vases and other household items were all produced at Iznik, as were beautifully patterned blue and white ceramic tiles. The Ottomans used huge quantities of these patterned tiles to decorate mosques, palaces and other buildings.

At first, Iznik ceramics were closely modelled on Chinese ceramics, both in colour and decorative patterns. However, by the mid-16th century CE, the potters at Iznik had developed new, vibrant colours for their tiles, including turquoise, mauve, purple, green and red. In addition to the standard geometric patterns, new motifs began to emerge, such as flowers, fruit and trees.

Learning ladder H3.8

Significant people, ideas and events

1. Source 4: Identify the mosque shown in this source.
2. Source 1: Describe the ways diagram B represents a mosque of the classical Ottoman period.
3. Explain how trade led to the development of Iznik pottery.
4. Source 2: Explain why repeat units were significant in Ottoman design.

Continuity and change

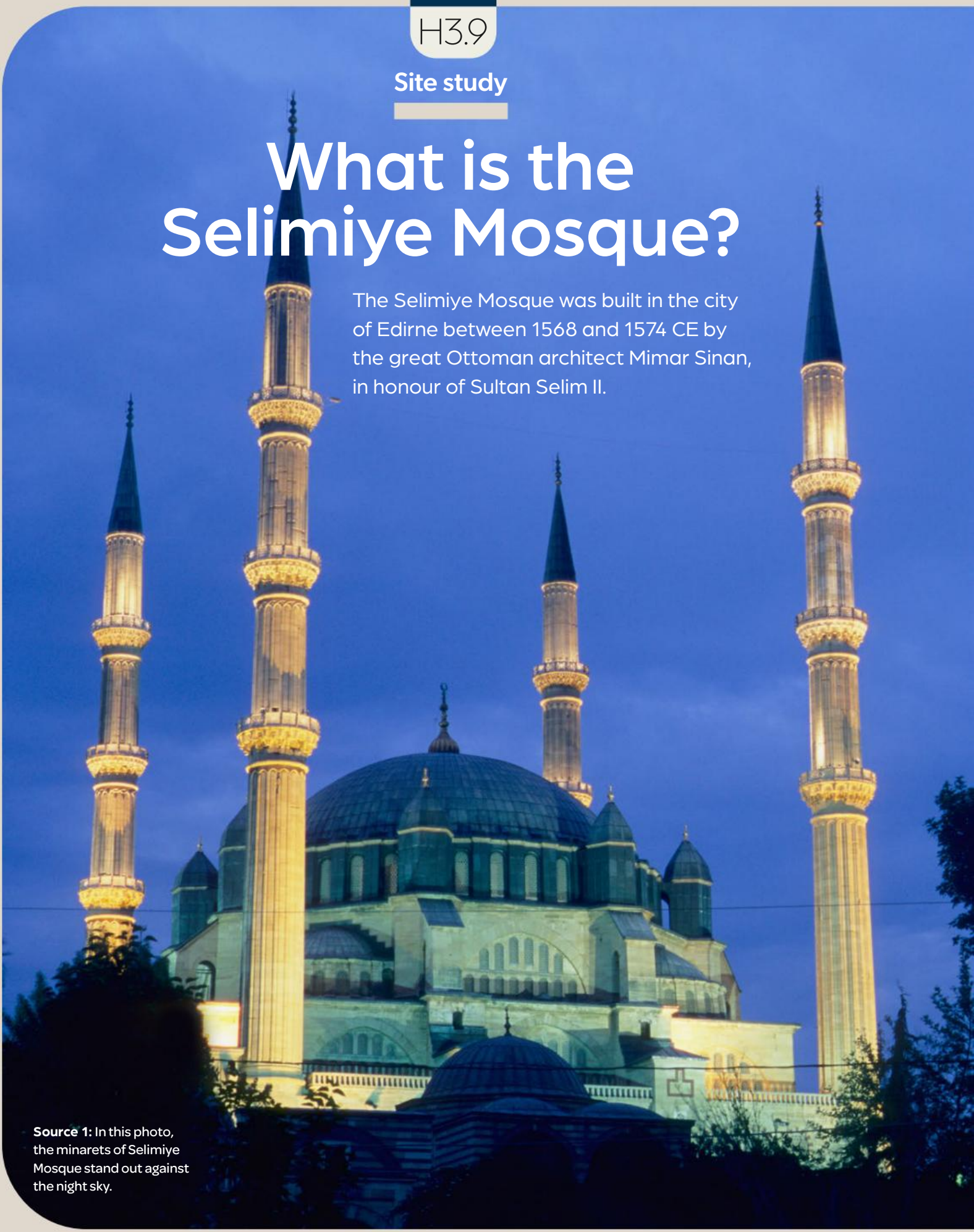
1. Identify the event that led the Ottomans to change the design of their mosques.
2. Source 1: Describe the features that changed and those that stayed the same in mosque design.
3. Explain how Iznik pottery had changed by the mid-16th century CE.
4. Sources 1 and 4: Using the sources and your knowledge, explain why Ottoman design changed over time.

HOW TO Continuity and change, page 203

Site study

What is the Selimiye Mosque?

The Selimiye Mosque was built in the city of Edirne between 1568 and 1574 CE by the great Ottoman architect Mimar Sinan, in honour of Sultan Selim II.



Source 1: In this photo, the minarets of Selimiye Mosque stand out against the night sky.

Features of the Selimiye Mosque

The most spectacular feature of the Selimiye Mosque is its large octagonal central dome, which is supported by eight columns of marble and granite. The four semi-domes surround and support the central dome, allowing for a large, airy, elegant space under the central dome. Four minarets are at the corners of the prayer hall, and these take some of the weight of the central dome. At 83 metres high, the minarets are among the tallest in the Islamic world.

The entrance to the mosque is through a large courtyard. A marble reservoir, where worshippers wash themselves before entering the mosque, is situated in the centre of the courtyard.

Inside the mosque, the walls and arches are painted a pale red colour. Glazed blue tiles cover the prayer hall. Windows at the top of the walls allow the mosque to be flooded with light, which in turn brings out the beautiful calligraphy written along the walls.

Mimar Sinan

Mimar Sinan was the most famous architect of the Ottoman Empire. Born to a Christian family, he was captured as part of the devşirme in 1512 CE and became a Janissary. He fought for the empire at the Siege of Rhodes (1522 CE) and at the Battle of Mohacs (1526 CE).

During these and other campaigns, Sinan designed and built defences, bridges and ships to aid the Ottoman attacks. His designs were so effective that, in 1539 CE, he was promoted to the position of Architect of the Empire. Sinan built over 300 structures during his career; the Selimiye Mosque is considered to be his most important work.

Source 2: This is a photo of the interior of the Selimiye Mosque dome.

Learning ladder H3.9

Significant people, ideas and events

1. Source 1: Identify the four structures that stand at the corners of the Selimiye Mosque.
2. Source 2: Describe the key internal features of the Selimiye Mosque.
3. Explain how the design of the Selimiye mosque creates an impressive, spiritual space.
4. Source 1: Explain why the Selimiye Mosque is a significant building.

Significance

1. Identify the architect of the Selimiye Mosque.
2. Describe Mimar Sinan's early life.
3. Explain how Mimar Sinan became the Architect of the Empire.
4. Explain why Sinan was a significant individual in the Ottoman Empire.

Significance, page 212

HOW TO

How did the Ottomans govern subject peoples?

The Ottoman Empire was a vast multicultural realm. Its subjects included people in Central Asia, the Middle East, North Africa and Eastern Europe. While the Ottoman rulers tolerated other peoples and their cultures, they did not treat them equally.

People of the Book

In Islamic tradition, tolerance is extended towards 'People of the Book'. People of the Book are non-Muslims who belong to a religion that has a holy book, such as Christians (the Bible) and Jews (the Torah). From the 7th century CE, People of the Book living in a Muslim empire were entitled to protection from their Muslim rulers. This protection was known as the *dhimma* and the protected people were known as the ***dhimmis***. Dhimmis were allowed to practise their own religion, keep and maintain their holy places, and choose their own religious leaders. They were also protected from persecution.

In return for this protection, dhimmis were expected to pay a special tax, known as the *jizya*. Dhimmis were also forbidden from promoting their religion.

Overall, dhimmis had significantly fewer legal and social rights than Muslim subjects of the Ottoman Empire. The dhimma was a system of tolerance, rather than equality.

Governing non-Muslims

After their conquest of Constantinople in 1453 CE, the Ottomans had a large population of Orthodox Christians in their empire. To control this population, Sultan Mehmet II appointed a leader (patriarch) for each of the Greek and Armenian Orthodox Christian communities. These two patriarchs were charged with ensuring that the jizya and other taxes were collected from their communities. They were also responsible for educating the members of their communities and administering their own courts.

Source 1: An image of a Christian procession in Constantinople. [Lambert de Vos (1574 CE), *The Costume Book*]

Even though they had status as Ottoman officials, the patriarchs were controlled by the sultan. The patriarchs had to make sure that the Christians in their communities did not rebel against the sultan and behaved in accordance with their second-class dhimmi status. Patriarchs could be removed from their position or executed if they did not obey the sultan's commands.

Other smaller religious groups in the Ottoman Empire, such as Jews and Catholics, did not have an officially recognised leader. These communities appointed their own local leaders and registered their community as a *ta'ifa* (group), which could then make use of the Ottoman courts to resolve disputes.

This method of governing non-Muslims was later known as the millet system.

Source 2: This mosaic shows Mehmet II giving Gennadius Scholarius a document in 1454 CE to appoint him as the official Patriarch of the Greek Orthodox Christian community.

Learning ladder H3.10

Significant people, ideas and events

1. Identify the People of the Book.
2. Describe how dhimmis were protected in the Ottoman Empire.
3. Source 2: Using this source and your knowledge, explain how the sultans controlled their Orthodox Christian subjects.
4. Explain why the dhimma was a system of tolerance rather than equality.
5. Evaluate the fairness of Ottoman rule over subject peoples.

HOW TO

Continuity and change, page 203

Continuity and change

1. Source 2: Identify the role being given to Gennadius Scholarius.
2. Source 2: Describe how the event shown in this source demonstrates:
   - **a** change
   - **b** continuity.
3. Explain how the appointment of official patriarchs enabled continuity for Orthodox Christian subjects of the empire.
4. Source 1: Using the source and your knowledge, explain why the Ottomans continued to allow their subjects to practise their own religion.

How did subject peoples view Ottoman rule?

While some historians argue that Ottoman rule was an impressive example of tolerance in the early modern period, other historians have shown that the empire's rule was cruel and oppressive.

Tolerance of non-Muslims

The Ottoman policy of tolerance for subject peoples gave Jewish and Christian subjects official recognition in the empire. This seems like an enlightened way of governing an empire in the early modern period. In contrast, Catholic Spain had forcibly expelled Jewish and Muslim subjects or forced them to convert to Christianity, resulting in 200 000 Jews and 3 million Muslims being driven out of Spain between 1492 and 1610 CE.

However, the policy of tolerance was not the same as equality, and the possibility of unrest and opposition to Ottoman rule was always present.

Christian opposition to Ottoman rule

There was widespread opposition to the devşirme, which was the capture of over 200 000 Christian boys between 1400 and 1650 CE, mainly from Greece, Albania and the Balkans. While it was true that some children captured in the devşirme could rise to positions of great power in the empire, this was very rare. For most, their capture led to a harsh life of servitude and lifelong separation from their families.

Parents tried desperately to hide their children from the devşirme officers and faced execution if they were discovered. Sometimes community leaders formed lobby groups and negotiated or bribed devşirme officers not to take their children. This was so common that there were written decrees warning devşirme officers not to take bribes. There were also instances of outright rebellion.

In 1540 CE, the villagers of Alexandria (Iskenderiye) in Albania attacked the devşirme officers who had come to collect their sons. The boys themselves also rebelled by escaping, and at times were rescued by members of Christian communities. In an attempt to prevent escapes, the devşirme officers dressed the boys in red clothing and a conical red hat. They also recorded their names and described their appearance in the devşirme registers.

Unfair taxes levied on subject peoples was another cause for discontent. From 1565 to 1571 CE, Christians in Albania and Greece rebelled against a significant increase in taxes for Christian subjects. It took Ottoman forces six years to put down the revolt. Ottoman forces then committed a number of massacres, in which they executed the leaders of the rebellion and killed over 30 000 people.

Persecution of non-Sunni Muslims

Like the majority of Muslims, the Ottomans were Sunni Muslims. Initially, the Ottomans were tolerant of other types of Muslims, such as the Shia, but this changed in the early 16th century due to the rise of the Safavid Empire of Persia. By 1510 CE, the Safavid Empire had conquered huge territories in Mesopotamia, Central Asia and the Caucasus to the east of the Ottoman Empire. Shah Ismail, the ruler of the Safavid Empire, had then changed the official religion of his empire from Sunni Islam to Shia Islam and encouraged a pro-Shia uprising in Ottoman Anatolia in 1511 CE.

Sultan Selim I decided that the Shia represented a significant threat to his empire. He created a list of all Shia Muslims aged 7 to 70 in Anatolia and then had his forces round up and execute all those on the list that they could find. This massacre was one of the largest in Ottoman history, with around 40 000 people killed.

> Think of the heart-rending sorrow! ... What grief these Christians experience on account of their children who are separated from them while alive and how many mothers say, 'It would have been better to see them dead and buried in our church, rather than to have them taken alive in order to become Turks ...'

Source 1: Extract from a letter written in 1585 CE by Greeks Andre Argyros and John Tholoites to Martin Crucius. Crucius was a professor at the University of Tubingen, Germany, who was sympathetic to the plight of the Greek people living under Ottoman rule.

Command to the governor of Kozan:
The *yaya-başı* [Janissary officer] Dāvūd ... took seven boys from the village of Meki and brought them to the *aġa* [Janissary commander]. After initiating them [into Islam], he took them to Istanbul [Constantinople] and changed their garments [to the red clothing]. Then some dhimmis, the relatives of those boys, stole them away and brought them back to the village of Meki ... I have commanded that when my noble command arrives, you are to investigate, and if this is all true, you are to seize these boys and the infidels who led them astray and send them all to my exalted court, taking care that they do not run away again.

Source 2: Order to the governor of Kozan, c. 1564. Kozan was an administrative region in the Christian kingdom of Armenia. Western Armenia became part of the Ottoman Empire in 1555 CE.

The best example of Ottoman tolerance can be seen in the welcome extended to Jewish immigrants, who were much less numerous than the large Orthodox populations. Fleeing expulsions and persecution in Europe, they found a haven in the large cities of the Ottoman Empire, especially in Salonica, Smyrna and Constantinople.

Source 4: Extract from Denis Lacorne (2019 CE), *The Limits of Tolerance: Enlightenment Values and Religious Fanaticism*, Columbia University Press. Denis Lacorne is a historian.

Source 3: Ottoman yaya-başı (Janissary officer) and his assistant registering captured Christian boys for the devşirme. [A painting by Ali Amir Beg (1558), *Süleymanname*]

Learning ladder H3.11

Impact and legacies

1. Source 3: What does this source show?
2. Describe the devşirme.
3. Explain how Christian people opposed the devşirme.
4. Sources 1 and 2: Explain what these sources demonstrate about the impact of the devşirme.
5. How useful was the devşirme to the Ottoman sultan as a method of control?

Interpretations

1. Identify the debate about Ottoman rule over their subject peoples.
2. Describe the evidence that subject peoples were unhappy with Ottoman rule.
3. Explain how Shia Muslims were persecuted in the Ottoman Empire.
4. Source 4: Explain why some historians argue that the Ottoman Empire was a tolerant empire.
5. Evaluate the nature of Ottoman tolerance of their subject peoples.

HOW TO Interpretations, page 214

What did the Ottomans contribute to science and technology?

As the Ottoman Empire grew, the sultans pursued a policy of promoting science and technology throughout their territory.

Ottoman medicine

The varied geographic regions of the empire, along with the wide range of medical treatments practised by Ottoman subjects, was a great advantage to the development of Ottoman medical science. Many different medical treatments could be compared and analysed for their effectiveness. This made the Ottoman Empire a world-class centre of medical knowledge. Many of the physicians in the Ottoman Empire were Jews, Greeks and Armenians, who helped develop new knowledge across the empire.

Ottoman hospitals

In 1463 CE, Sultan Mehmet II founded the Fatih Mosque complex in Constantinople. It was the first Ottoman institute of higher learning. The Fatih Mosque complex included a mosque, a library, a caravanserai, schools, public kitchens for the poor and a hospital.

Hospitals became an important feature of medical practice in the Ottoman Empire. Ottoman hospitals combined the best of Byzantine, Persian and Central Asian influences to produce an institution that aimed to heal the whole person: body, spirit and mind. This meant that a wide variety of staff were employed at Ottoman hospitals. Physicians and surgeons took care of a patient's body, while musicians took care of a patient's mind. A bathhouse and a garden were integral parts of the hospital design, to help patients relax and recover, while cooks and nursing staff were instructed to treat patients kindly.

Ottoman astronomy

Astronomy had a proud tradition in the Ottoman Empire. From the late 15th century CE, the sultans appointed a chief astronomer, who observed the night skies and noted the position of the stars and the Moon in the sky, the appearance of comets and meteors and the occurrence of eclipses. These celestial bodies were all thought to influence events on Earth. The chief astronomer advised the sultan on the best time for events, such as declaring war or launching ships. The astronomer would also cast a horoscope for the sultan's newborn son to predict the nature of his future rule. The study of astronomy to predict the future was common throughout the medieval and early modern world.

Source 1: This display in the Sultan Bayezid II Health Museum and Hospital in Edirne shows a music treatment room.

Then in the year 971 AH [1561 CE], I was faced with the problem of making a clock that would tell the times of prayer. So, I made a dial and marked it with the necessary times, which were the *temcid* [pre-dawn call to prayer], dawn, mid-fasting, morning, afternoon, evening, bedtime and midnight prayers. By means of another dial, it is possible to tell the degree of the Sun and the first day of the months in the Julian calendar.

Source 2: Extract from Taqî al Dîn (c. 1559 CE), *The Brightest Stars for the Construction of Mechanical Clocks*

Source 3: Astronomers at work in the Constantinople Observatory. Taqî al Dîn's clock is believed to be shown on the far-right side of the table. [Ala ad-Din Mansur-Shirazi (c. 1580 CE), *Sehinsename*]

Taqî al Dîn

Perhaps the most famous of all Ottoman astronomers was Taqî al Dîn. Taqî al Dîn was born in Damascus, Syria, in 1526 CE. He studied religion, mathematics and astronomy in Damascus and Egypt, gaining a reputation as a great scholar and designer. In 1570 CE, he went to Constantinople and a year later was appointed to the position of chief astronomer by Sultan Selim II.

In addition to advising the sultan, Taqî al Dîn carried out important research, not only in astronomy but also in mathematics and medicine. His mathematical research was especially significant. He invented the sine, cosine and tangents functions to measure angles. He also used decimal fractions to express these angles. This was a major advance in mathematics and astronomy. Astronomers had long used 60th fractions to record the positions of the stars and planets, but Taqî al Dîn's decimal fractions were much more accurate.

Taqî al Dîn was also a prolific inventor. Of all his inventions, the astronomical clock was the most important. Tasked with designing a clock that would show when the Islamic call to prayer was, Taqî al Dîn studied European mechanical clocks and then designed an astronomical clock that included dials that measured the different phases of the Moon and the position of the Sun.

Learning ladder H3.12

Impact and legacies

1. Source 1: Identify the form of treatment shown in this source.
2. Describe the nature of Ottoman hospitals.
3. Explain how religion affected Ottoman technology.
4. Explain why the Ottoman Empire became a world-class centre of medical knowledge.
5. Why do you think the role of astronomers has changed since the time of the Ottoman Empire?

Significance

1. Source 3: Identify the building shown in this source.
2. Describe Taqî al Dîn's two significant contributions to mathematics.
3. Explain the role of the chief astronomer in the Ottoman Empire.
4. Source 2: Using this source and your knowledge, explain why Taqî al Dîn was a significant individual.
5. Evaluate the significance of Ottoman contributions to medicine and science.

HOW TO

Significance, page 212

How do I conduct a good inquiry?

Now that you've finished the chapter, it's time to conduct your own historical inquiry on the Ottoman Empire. Throughout the chapter you have developed knowledge and understanding of the Ottoman Empire. Background knowledge is important because it helps you make connections to new information, ask better questions and consider different perspectives. As you progressed through the chapter, you have gathered information through classroom discussion, highlighting, note taking and answering questions. Now you are ready to start planning your own historical inquiry!

A historical inquiry gives you the opportunity to be an active historian: forming questions, interrogating sources and communicating insights about the past on a topic of your choice. The chapter has covered the origins and legacies of the Ottoman Empire in addition to significant people, events, ideas and beliefs. What would you like to know more about?

- The reign of Sultan Selim I, H3.4
- The Ottoman–Safavid War (1532–1555 CE), H3.5
- The leadership of Kösem Sultan, H3.6
- Ottoman architecture, H3.8
- The inventions of Taqî al Dîn, H3.12

Return to the relevant sections in the chapter and read them again.

Next, complete the 'see, think, wonder' process to help develop ideas you might cover in your inquiry.

Jot down your answers to these questions. Your answers will help you to formulate your own research ideas. Once you have worked through this process, you are ready to start the historical inquiry.

Refer to pages 218–25 of the How-to chapter for a step-by-step guide to this process.

See

What do you see?
Who is involved?
What are the key features?
When and where was this happening?

Think

What do you think about that?
How do you think people were affected at the time?
How is this similar to or different from today?
How do we know?

Wonder

What did different groups think about this?
Why is this important to know?
What does it make you wonder?

Level up!

Throughout the chapter, you have been working to move up the Learning ladder. An inquiry investigation is a great opportunity to expand your knowledge and attempt new skills.
When planning your inquiry, consider how the experiences and perspectives of individuals and groups shaped societies, beliefs and events in the past. Think about how the past has had an impact on the present. Use the How-to chapter to support your planning and research.

Europe and the Mediterranean world
(c. 600–1750 CE)

Renaissance Italy

H4

WHY WAS LEONARDO DA VINCI A 'RENAISSANCE MAN'?

HOW DID HUMANISM AFFECT THE RENAISSANCE?

WAS THERE REALLY A RENAISSANCE?

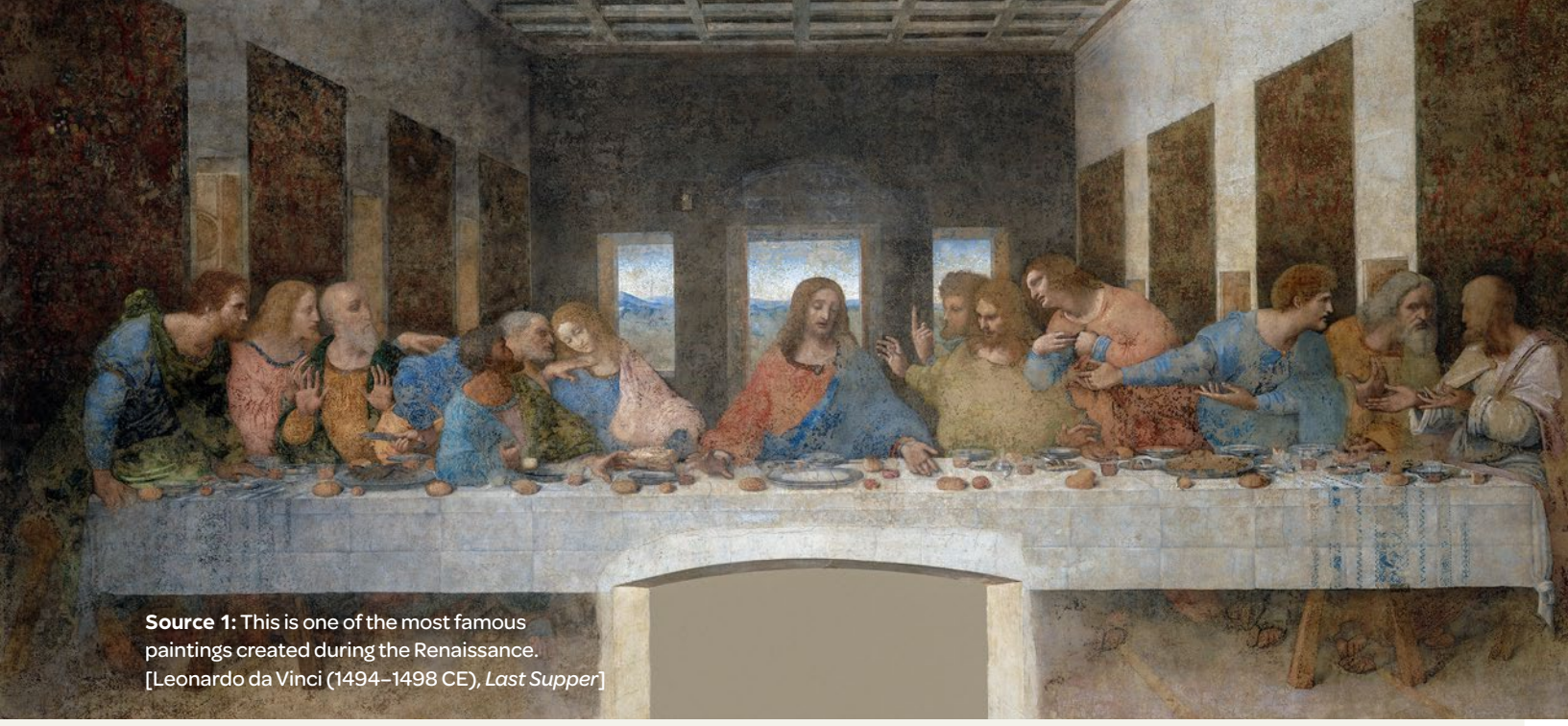
How can I understand Renaissance Italy?

The historical period known as 'the Renaissance' took place from c. 1400 to 1600 CE. The Renaissance was a period of great cultural change. Art, architecture, literature, politics and science were transformed due to the exchange in knowledge and culture between Europe, the Middle East and Asia.

Learning ladder

The Learning ladder lists the knowledge and skills you will learn. Each has five levels of difficulty. Learning skills at the bottom of the ladder will help you to master the skills at the top of the ladder.

Steps in knowledge progression	Background and origins	Significant people, ideas and events	Impact and legacies	Continuity and change	Causes and consequences
5	I can evaluate the impact of the rise and fall of societies.	I can evaluate how societies were influenced by significant people and ideas.	I can evaluate the legacy of a society.	I can evaluate patterns of continuity and/or change.	I can analyse causes and consequences.
4	I can explain why a society developed.	I can explain why ideas influenced people and events.	I can explain why a society has a legacy.	I can explain patterns of continuity and/or change.	I can explain why something was caused or why it led to certain consequences.
3	I can explain how a society developed.	I can explain how ideas influenced people and events.	I can explain the impact of one society on another.	I can explain continuity and change.	I can explain how something was caused or its consequences.
2	I can describe the origins of societies.	I can describe key people, ideas and events.	I can describe the legacy of a society.	I can describe continuity and change.	I can describe causes and consequences.
1	I can identify the origins of societies.	I can identify key people, ideas and events.	I can identify the legacy of a society.	I can identify continuity and change.	I can identify a cause and a consequence.
	Knowledge and understanding				



Source 1: This is one of the most famous paintings created during the Renaissance. [Leonardo da Vinci (1494–1498 CE), *Last Supper*]

I can evaluate historical perspectives.	I can evaluate historical significance.	I can evaluate the evidence supporting a historical interpretation.	I can explain change or causality from a timeline.	I can evaluate sources to determine their accuracy, usefulness and reliability.	5
I can compare perspectives.	I can explain why something is historically significant.	I can compare historical interpretations.	I can summarise the events on a timeline.	I can explain the historical context of a source.	4
I can explain a perspective.	I can explain something historically significant.	I can explain an interpretation of history.	I can follow timeline conventions.	I can apply historical knowledge to explain sources.	3
I can describe perspectives.	I can describe something historically significant.	I can describe an interpretation of history.	I can place events on a timeline chronologically.	I can describe a source.	2
I can identify the perspective of a person from the past.	I can identify something historically significant.	I can identify a historical debate.	I can read a timeline.	I can identify the origin of a source.	1
Perspectives	**Significance**	**Interpretations**	**Chronology**	**Sources**	Steps in skill progression

Historical concepts and skills

What was the Italian Renaissance?

The word 'renaissance' means 'rebirth'. The Italian Renaissance was an exciting time of great cultural development and advances in art, architecture, science, education and philosophy.

The impact of the Black Death

Between 1346 and 1352 CE, a terrible plague known as the **Black Death** had swept through Europe, killing between 25 and 50 million people. The deaths of so many provided significant economic opportunities for those who survived the plague. Peasants left their estates and moved into the towns, where they became merchants, artisans and professionals. The noble classes began to invest in textiles manufacture, shipping, banking, art and grand architecture.

Francisco Petrarch

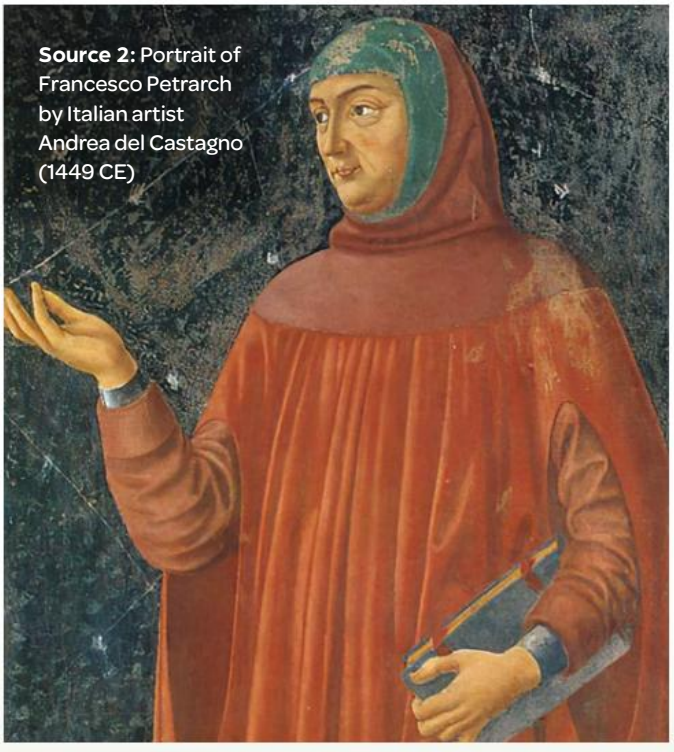
Francisco Petrarch was an Italian scholar and poet who was born in 1304 CE and survived the Black Death. Petrarch believed that his own era was a Dark Age and that a great 'rebirth' was needed. He argued that the writings of ancient Romans, such as Cicero, Seneca and Virgil, contained important moral lessons. He further argued that the lessons to be learned from the 'human thought' of the ancient Romans could be combined with the 'divine thought' of Christianity to provide guidance for humanity, so that humans could reach their potential. Petrarch's philosophy, known as 'humanism', became a significant inspiration for the Renaissance period.

The rise of the Medici family

The Medici family also survived the Black Death. The Medicis had been prominent in the wool trade and the banking industry during the 14th century.

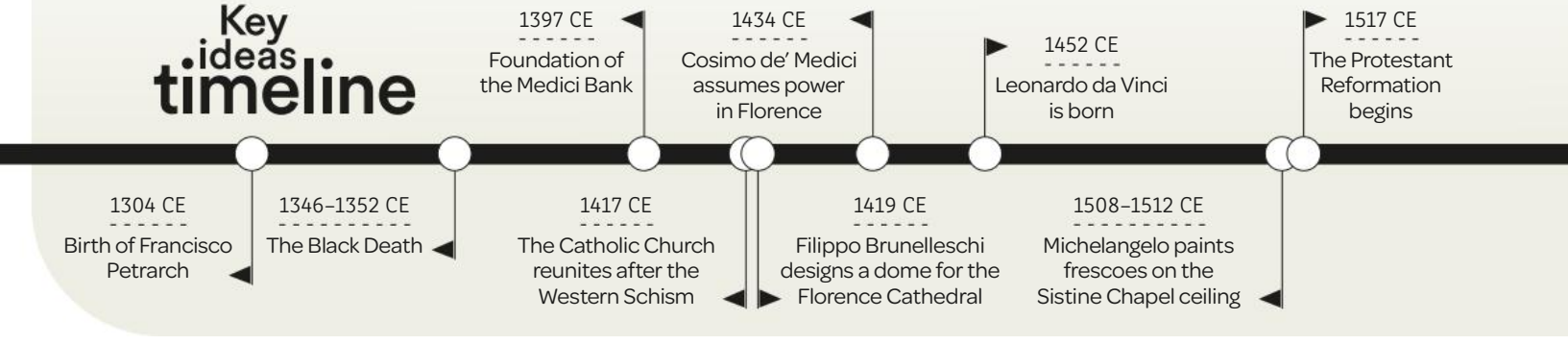
In 1397 CE Giovanni di Bicci de' Medici founded the Medici Bank in Rome and Florence, Italy.

The Medici family, in common with a number of other prominent Italian families, would become hugely wealthy during the Renaissance period. They used their wealth to wield significant political power, including over the **papacy**. They also commissioned artists and architects to produce magnificent works that promoted their power.



Source 2: Portrait of Francesco Petrarch by Italian artist Andrea del Castagno (1449 CE)

Source 1: Italian Renaissance timeline



Source 3: A section of the ceiling of the Sistine Chapel, painted by Michelangelo (1508–1512 CE)

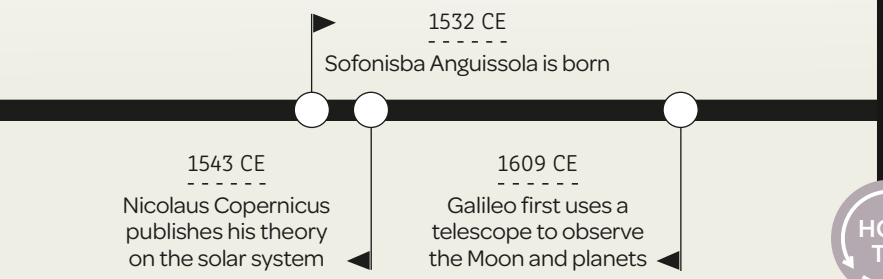
The revival of the Catholic Church

The Catholic Church, which had been plagued by crisis and division after the Black Death, finally reunited in 1417 CE. The Renaissance would see a significant development of the Church's power and the expansion of its official territories, known as the Papal States.

The Church strongly encouraged Renaissance ideas. Pope Nicholas V (reigned 1447–1455 CE) expanded the Vatican Library, called on Greek scholars to come to Rome and commissioned the translations of Greek histories into Latin.

Like the Medicis, the Church also saw the value of hiring artists and architects to produce works that would enhance their prestige. Pope Nicholas V initiated a major building program in Rome, which was continued by Pope Sixtus (reigned 1471–1484 CE). Pope Sixtus also repaired and built numerous churches, including the Sistine Chapel (1473–1481 CE). Pope Julius II (reigned 1503–1513 CE) established the Vatican Museums (which housed the art collections of the papacy) and initiated the rebuilding of St Peter's Basilica, while Pope Leo X (reigned 1513–1521 CE) sponsored the work of many artists and musicians.

The fortunes of the Church started to decline, however, following the Protestant Reformation (1517 CE), which splintered Western Christianity into Protestant and Catholic denominations.



Learning ladder H4.1

Background and origins

1. Identify the meaning of the word 'Renaissance'.
2. Describe Petrarch's idea of humanism.
3. Explain how the Medicis became powerful.
4. Explain why art and architecture flourished during the Renaissance.
5. Analyse how the Black Death contributed to the Renaissance.

Chronology

1. Source 1: Identify the dates of two key scientific events on the timeline.
2. List these events in order, from the oldest to the most recent event:
   - 1488 CE: Michelangelo begins his apprenticeship as an artist
   - 1508–1512 CE: Michelangelo paints the Sistine Chapel
   - 1564: Michelangelo dies in Rome
   - 1547: Michelangelo begins work on the dome of St. Peter's Basilica
   - 1475 CE: Michelangelo born in Caprese, near Florence
   - 1504: Michelangelo completes his statue of David.
3. Create a timeline using the events in Question 2.
4. Source 1: Select two events on the timeline to help you explain why the Renaissance period was a time of significant change.

HOW TO

Chronology, page 198

Where were the centres of the Renaissance?

The Renaissance emerged in Italy due to its geographical circumstances, especially its location to the trade hub of the Mediterranean Sea, which allowed wealthy, independent city-states to develop.

Geography

The Italian states used the physical features of the land to clearly define their borders:

- **mountain ranges**: the Alps in the north and the Apennine Mountains running down the middle of Italy provided protection from invaders.
- **seas**: the Tyrrhenian Sea to the west and the Adriatic Sea to the east provided access to the Mediterranean Sea, which was the centre of trade.

Italian city-states

Many northern Italian towns were not greatly affected by the slow decline of the Western Roman Empire in the 5th century CE. The mountainous landscape of northern Italy isolated and protected the towns, allowing each to govern itself. In contrast, people in other parts of Europe were subjected to continual invasions by foreigners and had to rely on the protection of a king who controlled a powerful army.

By the start of the 12th century CE, northern Italian towns had become very wealthy through trade and had formed themselves into larger areas known as **city-states**. They consisted of a main city and surrounding towns and territory. City-states were either **republics** governed by **oligarchies** (governed by a small group of people from prominent families) or **duchies** (ruled by noblemen called dukes from powerful families).

By the time of the Renaissance, northern Italy was made up of a number of city-states. The two most significant city-states during the period were the Republic of Florence and the Republic of Venice.

Florence

Florence was the main city in the Republic of Florence. Florence's wealth was founded on the production of high-quality wool cloth and its banking industry. Its access to the Arno River was beneficial for merchants, as was the republic's location on the Ligurian Sea. Florence is surrounded by hills dotted with farms, vineyards and orchards. The government of Florence was an oligarchy, ruled by the powerful Medici family. It was a beautiful place in the early 15th century CE, with many fascinating buildings and meeting places, as well as palaces belonging to the Medici family.

Venice

Venice was the main city in the Republic of Venice, and one of the wealthiest in Europe. Unlike Florence, it was ruled by a *doge* ('duke') who was elected to his position for life. Due to its position on the Adriatic Sea, Venice was in command of a thriving merchant empire, with territories scattered across the eastern Mediterranean Sea and trade ports within powerful Islamic states on the Black Sea and on the coast of North Africa.

Italy, c. 1490 CE

Source 1: The states of Italy during the Renaissance, c. 1490 CE

Source: Matilda Education Australia

Source 2: This painting of Florence was created in the late 15th century CE by an Italian artist. The huge Florence Cathedral, featuring the dome designed by Filippo Brunelleschi, is in the centre of the city. [Francesco di Lorenzo Rosselli (c. 1475 CE), *View of Florence*]

Learning ladder H4.2

Background and origins

1. Source 1: Identify three Italian city-states during the Renaissance period.
2. Describe the key geographic features of northern Italy.
3. Explain how the city-states of Venice and Florence were governed.
4. Source 1: Using the source and your knowledge, explain the differences between Venice and Florence.

Causes and consequences

1. Identify a cause for the emergence of the Renaissance in Italy.
2. Describe how the city-states became wealthy.
3. Explain how the geography of northern Italy enabled the development of independent city-states.
4. Source 2: Using the source and your knowledge, explain why Florence became a significant centre of the Renaissance.

HOW TO

Causes and consequences, page 206

What role did wealth play in the Renaissance?

Wealth played a substantial role in the development of banking, art and architecture. It also brought power to ruling families, whose vast wealth gave them political control over the city-states.

Wealth supports the Renaissance

The Renaissance was an era of great wealth and fortune for the upper classes. The Italian city-states were controlled by the ***grandi***, powerful families such as the Gonzaga family in Mantua and the Medici family in Florence. They competed with other wealthy families to show their power and importance by employing architects to design grand buildings in the classical style of ancient Greece and Rome and the modern styles of Damascus and Aleppo. They also employed great painters and sculptors to decorate their buildings.

Banking

Italian cities became commercial hubs through trade and that created a need for banks. Banks lent money to rulers, landowners and businessmen to fund new ventures and lavish building projects.

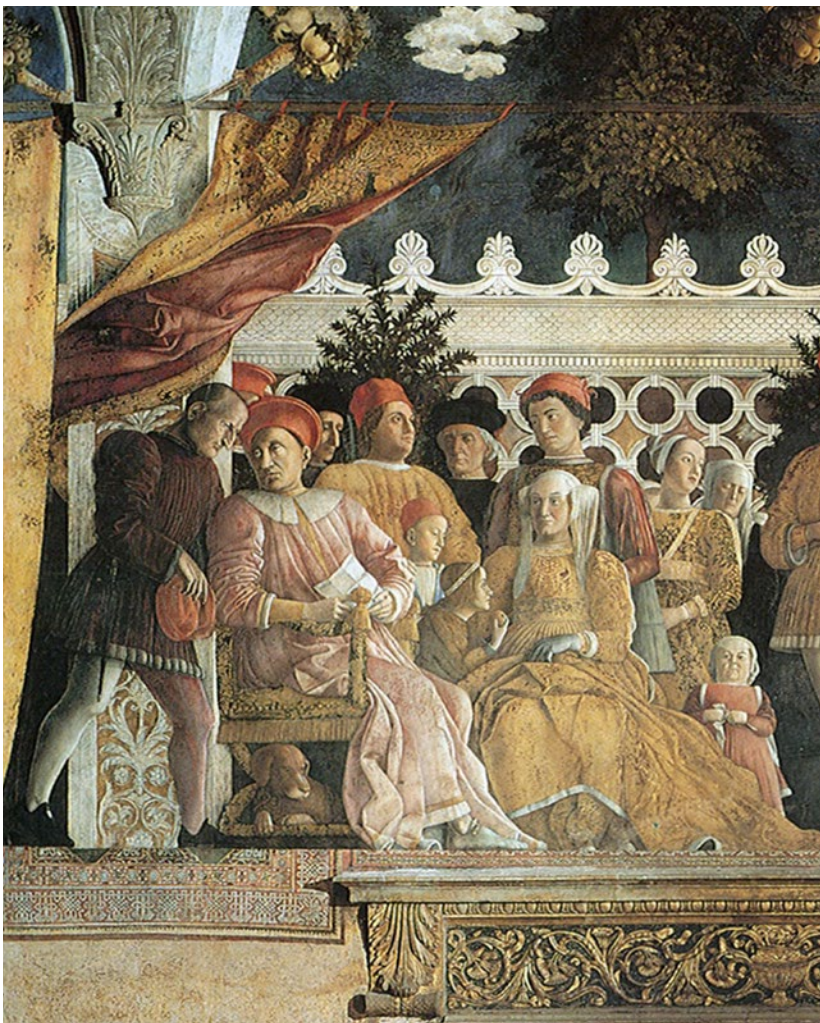
Florence had up to 80 banking companies by the late 1330s CE. Branches of key Italian banks opened in the Middle East and Europe. The largest and most successful of these was the Medici Bank, opened by the Medici family in 1397 CE. The Medici family would rule Florence for hundreds of years. They became **patrons** of icons of the Renaissance such as Leonardo da Vinci and Michelangelo Buonarroti.

Guilds

Guilds had existed in Europe for centuries. Guilds were formed to promote high standards of training and practice for professionals and artisans. They also protected the livelihoods and reputation of members.

In Florence, there had been guilds (known as Greater Guilds) for judges and lawyers, merchants, bankers, silk weavers, physicians, artists and wool manufacturers since the end of the 12th century CE. By the 13th century CE, the guild system had expanded to include 'Lesser Guilds' for artisans and small business owners such as blacksmiths, butchers, sculptors, stonemasons, shoemakers, locksmiths and innkeepers.

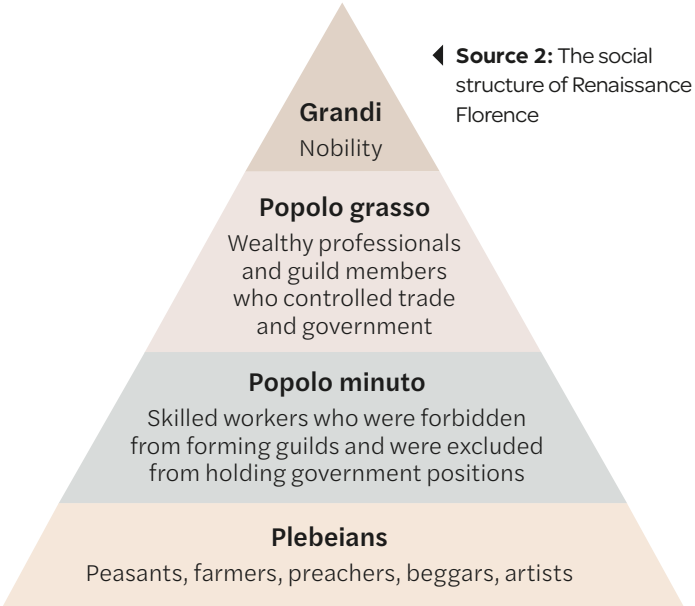
Members of these guilds were part of the wealthy middle class of society, or ***popolo grasso***, who dominated the economic and political life of the Italian city-states. They had the right to vote and to hold government positions.



Source 1: This fresco is positioned above a fireplace in an Italian palace. It portrays the wealthy and powerful Gonzaga family. The Gonzagas seized control of the Duchy of Mantua in northern Italy in 1328 CE and ruled until 1708 CE. The wealthy landowners became notable patrons of the arts during the 15th and 16th centuries CE. [Andrea Mantegna (1465–1475 CE), *Fresco*, Ducal Palace, Mantua, Italy]

The popolo minuto

The ***popolo minuto*** were skilled workers, such as weavers, spinners and dyers, from Florence's large wool industry. They were prohibited from forming guilds, even though they made up a large portion of the population of Florence. Since they were not guild members, the popolo minuto did not have the right to vote or to hold government positions.



Source 2: The social structure of Renaissance Florence

Source 3: Most weavers in Renaissance Florence were banned from forming guilds and excluded from holding government positions.

Learning ladder H4.3

Background and origins

1. Source 2: Identify the main social classes in Florence.
2. Describe the popolo grasso in Florence.
3. Source 1: Using the source and your knowledge, explain the role of the grandi in Florence.
4. Explain why members of the popolo minuto were unable to hold positions in the government of Florence.

Continuity and change

1. Source 1: Identify the name of the family that seized control of Mantua in 1328 CE.
2. Describe how banking during the Renaissance period is an example of continuity.
3. Explain how the guild system changed between the 12th and 13th centuries CE.
4. Explain why the rise of the Medici family is an example of change and continuity.

HOW TO Continuity and change, page 203

What role did ruling families play in Italy?

During the Renaissance, the Italian city-states were ruled by powerful people: the pope in Rome, the Medici family in Florence, the doge in Venice, the Sforza family in Milan and the Este family in Ferrara. Among the ruling families of these city-states there was intense rivalry.

From republic to oligarchy

From 1250 to 1434 CE, Florence had been governed by nine wealthy guild members, known as the Signoria, who were elected to their positions in the government. At first, the election scheme was controlled to make sure that the people who were elected were not all from the same family. However, from 1434 CE, one family, the Medicis, managed to manipulate the electoral system so that more of their family members were elected to the Signoria.

The Medici rulers

Having manipulated the electoral system, Cosimo de' Medici (1389–1464 CE) (known as 'Cosimo the Elder') became Gran Maestro and ruled Florence for 30 years. His son Piero (ruled 1464–1470 CE) and grandson Lorenzo (ruled 1470–1492 CE) governed after him, but opposition to Medici rule from rival banking families and Pope Sixtus IV saw the Medicis fall from power. They were exiled in 1494 CE.

The exile did not last long. By 1512 CE, the Medicis were back in power and managed to install Giovanni de' Medici, son of Lorenzo, as Pope Leo X in 1513 CE. Another Medici pope, Pope Clement VII (1523–1534 CE), made Alessandro de' Medici the Duke of Florence in 1532 CE, thus officially ending the republic and turning Florence into a duchy. Alessandro was assassinated by his cousin in 1537 CE and was succeeded by Cosimo de' Medici (known as 'Cosimo the Great') in 1539 CE. Cosimo the Great was made Grand Duke of Tuscany in 1569 CE by Pope Pius V. The Medici family ruled as dukes of Florence and Tuscany until the family died out in 1737 CE.

Patronage of the arts

At the height of the Italian Renaissance in the 15th and 16th centuries CE, members of the Medici family were the greatest art patrons of their day. Patronage is when a wealthy family or person pays artists to create major works of art and architecture. Lorenzo de' Medici, ruler of Florence from 1469 to 1489 CE, was patron to both Michelangelo Buonarroti and Leonardo da Vinci.

The Medici patronage allowed artists to focus on their work without having to worry about money. The paintings, sculptures and buildings created under patronage further enhanced the Medici family's powerful position in society.

Source 1: This heroic statue of Lorenzo de' Medici was created by Michelangelo. He is shown here wearing the armour of a Roman general.

Source 2: Sandro Botticelli was an Italian artist under the patronage of the Medici family. While this painting represents an event that occurred in the 1st century CE, the artist has drawn several members of the Medici family in the painting: Cosimo de' Medici is kneeling in front of the Virgin and the baby Jesus; his sons Piero and Giovanni are kneeling in the centre (they are the man with the red cloak and the person kneeling beside him); his grandsons Guiliano and Lorenzo are also in the painting. [Sandro Botticelli (1475 CE), *The Adoration of the Magi*]

Learning ladder H4.4

Significant people, ideas and events

1. Identify two ruling families in Renaissance Italy.
2. Describe how the Medicis supported artists during the Renaissance.
3. Explain how the Medici family changed Florence from a republic into an oligarchy.
4. Explain why the Medicis were able to regain control of Florence in 1512 CE.
5. Evaluate the political power of the Medici family from 1434 to 1737 CE.

HOW TO Perspectives, page 210

Perspectives

1. Source 1: Identify the creator of this source.
2. Source 1: Describe the perspective of Lorenzo de' Medici in this source.
3. Source 2: Explain the perspective of the Medici family in this source.
4. Sources 1 and 2: Explain why the artists of these sources have used historical and religious figures to represent members of the Medici family.
5. Sources 1 and 2: Evaluate the extent to which these sources would have helped the Medici family maintain control in Florence.

How did humanism affect the Renaissance?

Humanism was an important philosophy that emerged during the Renaissance. Humanists studied a wide range of topics – including the ideas of ancient Greece and Rome – to fully realise their potential as humans.

What was a humanist education?

As we have seen, Francisco Petrarch had pioneered humanist thought to revive Europe after the Black Death, arguing that people should look to the writings of ancient Roman authors to guide their moral development.

Petrarch and other humanists thought that people should study a wide range of topics to realise their potential. In addition to traditional areas of study – such as mathematics, astronomy and grammar – the study of history, science, Greek and poetry were also considered to be important. Today, the terms 'Renaissance man' and 'Renaissance woman' are used to describe a person who has a range of talents.

The long-term goal of humanist education was to create a new society of truly educated citizens, who could take an active part in society and encourage others to make good and moral choices.

Humanism and painting

The influence of humanist ideas can be seen in the works of Renaissance artists such as Michelangelo, Raphael and Leonardo da Vinci. These artists made innovations with the use of perspective, colour and light to depict human forms as powerful and divine.

Subject matter

In the medieval period, paintings generally showed scenes from the Bible and depicted the lives of saints. Renaissance paintings still had religious elements but artists also began to explore other themes, such as landscapes, scenes from ancient Greece and Rome, self-portraits and portraits of their wealthy patrons.

The human body

Renaissance artists sought to create a more realistic treatment of human figures. Bodies were shown with muscles and curves, wispy hair and folds of skin. In part, this reflected the widespread interest in the statues of ancient Greece and Rome. It also was a result of greater knowledge of human anatomy.

Some artists, including Leonardo da Vinci, dissected corpses to learn how muscles, bones and sinews were connected. The use of live models also became widespread during the Renaissance.

Linear perspective

During the Renaissance, artists experimented with ways to make objects painted on a flat surface look three-dimensional and more realistic (called 'linear perspective'). Renaissance artists developed techniques that are still used today, such as foreshortening (shortening lines to create the illusion of depth) and *sfumato* (blurring tones to create a three-dimensional look).

In 1435 CE, Leon Battista Alberti – an Italian artist, author and humanist – wrote a book, *De Pictura (On Painting)*, which explained how to paint a picture using linear perspective.

Sources 1 and 2:

Source 1 (on the left) is called *Madonna and Child*. It was painted by Berlinghiero during the medieval period in 1250 CE. This painting shows many of the key features of medieval painting:

- There is less depth than Source 2 (no foreground or background).
- The human figures are less realistic.
- The background is plain gold.
- The range of colours is limited.

Source 2 (on the right) is called *Madonna of the Meadow*. It was painted by Giovanni Bellini during the Renaissance in c. 1500–1505 CE. This painting shows many of the key features of Renaissance paintings influenced by humanism:

- Bellini has used perspective to make the painting look three-dimensional: there are larger features in the foreground and smaller features in the background.
- The human figures are realistic.
- There is a landscape behind the figures.
- Light and shade show depth and detail.
- Bellini has used a variety of bold colours.

Humanism and architecture

The popularity of humanist ideas resulted in Renaissance architects studying the buildings of ancient Greece and Rome. For example, the famous Renaissance architect Filippo Brunelleschi studied the ancient dome of the Pantheon in Rome to get ideas for how to construct the dome of the Cathedral of Santa Maria del Fiore in Florence.

Renaissance architects included some of the designs and decorative features of ancient Roman structures in their own buildings. For example, the symmetry, columns and arches in Renaissance buildings are all drawn from ancient Roman architecture.

Humanism and scientific inquiry

Interest in the writings of the ancient Greek philosopher Socrates led Renaissance scholars to encourage inquiry, questioning and observation.

Based on this approach, scientists such as Nicolaus Copernicus and Galileo Galilei began to notice that the long-held belief that the Sun orbited Earth did not make sense in light of their own observations and mathematical analysis.

Galileo Galilei

Galileo Galilei was a famous Italian astronomer, mathematician and philosopher. He was born in Pisa in 1564 CE and moved to Florence with his family in the 1570s. Galileo invented many mechanical instruments, including a water pump, a sector and a pendulum clock. He also developed important scientific ideas, such as the theory of motion.

One of his most famous and well-known inventions was a telescope that could magnify objects to 20 times their size, which he built in 1609 CE. With his telescope, Galileo saw that the surface of the Moon is not smooth but has craters and mountains, and that Saturn has rings. He also observed four moons revolving around Jupiter, and noticed that Venus has phases just like the Moon.

This last observation was the most important because Galileo concluded that it proved that Venus did not orbit Earth, but must orbit the Sun. Galileo subsequently supported the heliocentric theory. This theory – that the planets (including Earth) orbit the Sun and not Earth – had first been put forward by a Polish astronomer, Nicolaus Copernicus, in 1543 CE.

Source 3: The Renaissance concept of an ideal town was developed by an Italian architect, humanist and author, Leon Battista Alberti (1404–1472 CE). His books on architecture detailed the planning and building of an entire town with a building pattern ruled by perfect symmetry. [Leon Battista Alberti (c. 1450 CE), *La Città Ideale (The Ideal City)*]

Source 4: This fresco depicts Galileo and his telescope. [Giuseppe Bertini (1858 CE), *Galileo Galilei Showing the Doge of Venice How to Use the Telescope*]

Galileo published his findings in a book, *The Dialogue Concerning the Two Chief World Systems*, in 1632 CE. After the book was published, the Catholic Church immediately banned it and Galileo was summoned to Rome in 1633 CE to appear before the **Inquisition**. He was pronounced to be 'vehemently suspect of heresy' and was condemned to life imprisonment (which he served as house arrest).

The reasons for the ban and Galileo's ordeal are contested. On the one hand, the heliocentric model contradicts the teachings of the Bible, which states that Earth does not move. However, the Renaissance papacy was supportive of humanism; and Galileo and Pope Urban VIII were actually good friends. Some have suggested that Galileo was arrested and put on trial so that Pope Urban VIII could show his rivals that he was a strong pope who supported Church tradition.

Learning ladder H4.5

Significant people, ideas and events

1. Who was Galileo Galilei?
2. Describe what Galileo observed using his telescope.
3. Explain how Galileo's observation of Venus confirmed the heliocentric model.
4. Explain why the heliocentric model was a groundbreaking theory.
5. Analyse the reasons why the Catholic Church banned Galileo's book.

Continuity and change

1. Identify the way of thinking that changed art, architecture and science.
2. Describe how humanism changed the way artists painted.
3. Sources 1 and 2:
   - **a** Explain how the two paintings are different.
   - **b** Explain how the two paintings are similar.
4. Source 3: Explain how this source demonstrates humanist ideas.
5. Explain why Renaissance art and architecture demonstrate the concepts of continuity and change.

HOW TO Continuity and change, page 203

Key individual

Why was Leonardo da Vinci a 'Renaissance man'?

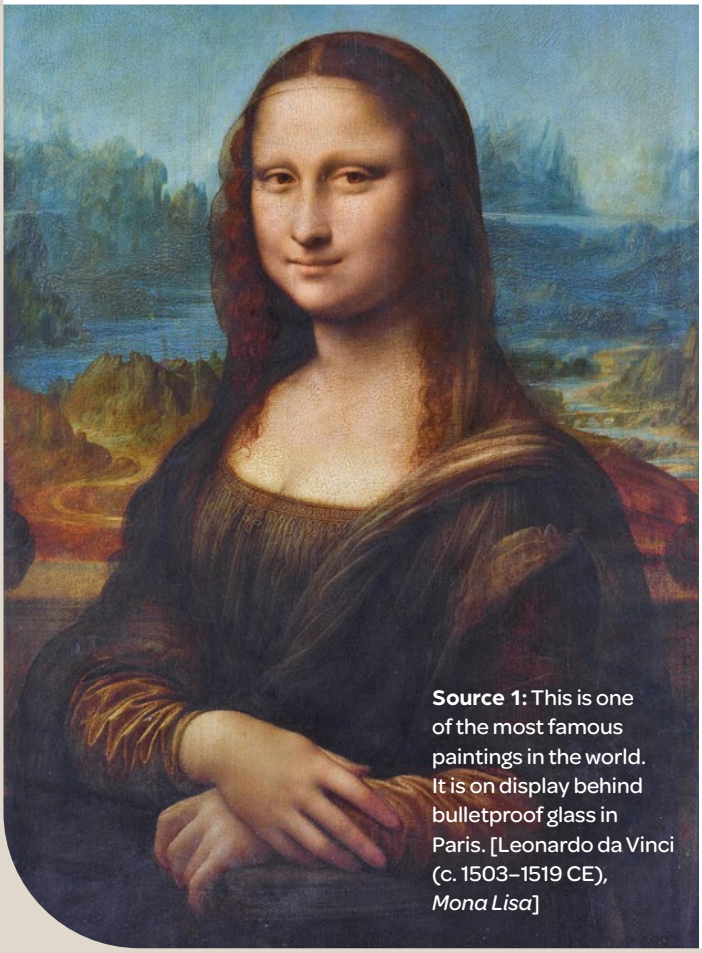
Leonardo da Vinci was one of the most important individuals who lived during the Renaissance. He was a revolutionary artist, inventor and scientist.

Leonardo the artist

Leonardo da Vinci had many talents and interests; he was one of the greatest 'Renaissance men' of his era. He was born in 1452 CE near the small town of Vinci ('da Vinci' means 'of Vinci') in the Republic of Florence.

His artistic talent was recognised at a young age and, when he was around 15 years old, Leonardo began working as an apprentice with the painter and sculptor Andrea del Verrocchio. After completing his apprenticeship in 1472 CE at the age of 20, Leonardo was accepted into the painters' guild of Florence.

Leonardo created many famous paintings, including *Mona Lisa* (c. 1503–1519 CE) and *Last Supper* (1495–1498 CE). Many people think that these paintings contain hidden meanings. However, most art historians dismiss these theories and argue that the speculation about the paintings actually reflects the mystery surrounding Leonardo himself, about whom we know relatively little. What we do know is that he had little formal education, wrote backwards in his notebooks, and possessed a mind-boggling array of talents in painting, science, mathematics, robotic machines, irrigation, biology and anatomy.



Source 1: This is one of the most famous paintings in the world. It is on display behind bulletproof glass in Paris. [Leonardo da Vinci (c. 1503–1519 CE), *Mona Lisa*]

Leonardo the scientist and inventor

There are some 5000 pages of Leonardo's notebooks, all valuable primary documents that give us an idea about his work and wide range of interests. Leonardo was left-handed, and most of his notes are written in mirror-image, from right to left.

Leonardo conducted many carefully planned experiments and created designs for multiple inventions, including irrigation schemes, hang gliders, robotics and solar power. He cut up and studied more than 30 corpses to produce advanced anatomical sketches of body parts, muscles, bones and even an unborn child in a womb.

> In the medical faculty he learned to dissect the cadavers of criminals under inhuman, disgusting conditions ... because he wanted [to examine and] to draw the different deflections and reflections of limbs and their dependence upon the nerves and the joints. This is why he paid attention to the forms of even very small organs, capillaries and hidden parts of the skeleton.

Source 2: This text was written by an Italian physician and historian, Paolo Giovio. He wrote the first biography of Leonardo da Vinci in c. 1527 CE, eight years after the artist's death.

▲ **Source 4:** This drawing is accepted by many art historians as being a self-portrait. [Leonardo da Vinci (1512 CE), *Portrait of a Man in Red Chalk*]

Source 3: This is one of Leonardo's most famous drawings. He is thought to be the first person in history to show the correct position of the human foetus in the uterus and to show the human uterus as one chamber. His drawings are considered to be the foundation of modern anatomical illustration in medical textbooks. [Leonard da Vinci (c. 1490 CE), *Notebook*]

Learning ladder H4.6

Significant people, ideas and events

1. Identify the place where Leonardo da Vinci was born.
2. Describe Leonardo's education as an artist.
3. Sources 2 and 3: Explain how Leonardo was able to paint more realistic human figures.
4. Explain why Leonardo da Vinci is considered to be a 'Renaissance man'.

Significance

1. Identify Leonardo's inventions that are in use today.
2. Source 1: Describe this image.
3. Source 3: Explain why this image is significant.
4. Sources 1, 2 and 3: Using these sources and your knowledge, write a paragraph to explain why Leonardo da Vinci could be considered to be a historically significant individual.

HOW TO Significance, page 212

Key individual

Why was Michelangelo significant?

Michelangelo was a great artist who created some of the world's most famous works, such as the sculpture *David* and the ceiling of the Sistine Chapel.

Who was Michelangelo?

Michelangelo Buonarroti (1475–1564 CE) was a famous Renaissance sculptor, painter, architect and poet. Michelangelo grew up in the Republic of Florence. Early in his career as a sculptor, he was supported by Lorenzo de' Medici, the powerful ruler of Florence. From 1505 CE, Michelangelo spent much of his life in Rome, where he worked as an artist for several popes. During his lifetime, Michelangelo was considered the greatest living artist, and he is still recognised as one of the greatest artists of all time. No other artist has had such a powerful influence on the development of Western art.

Michelangelo the sculptor

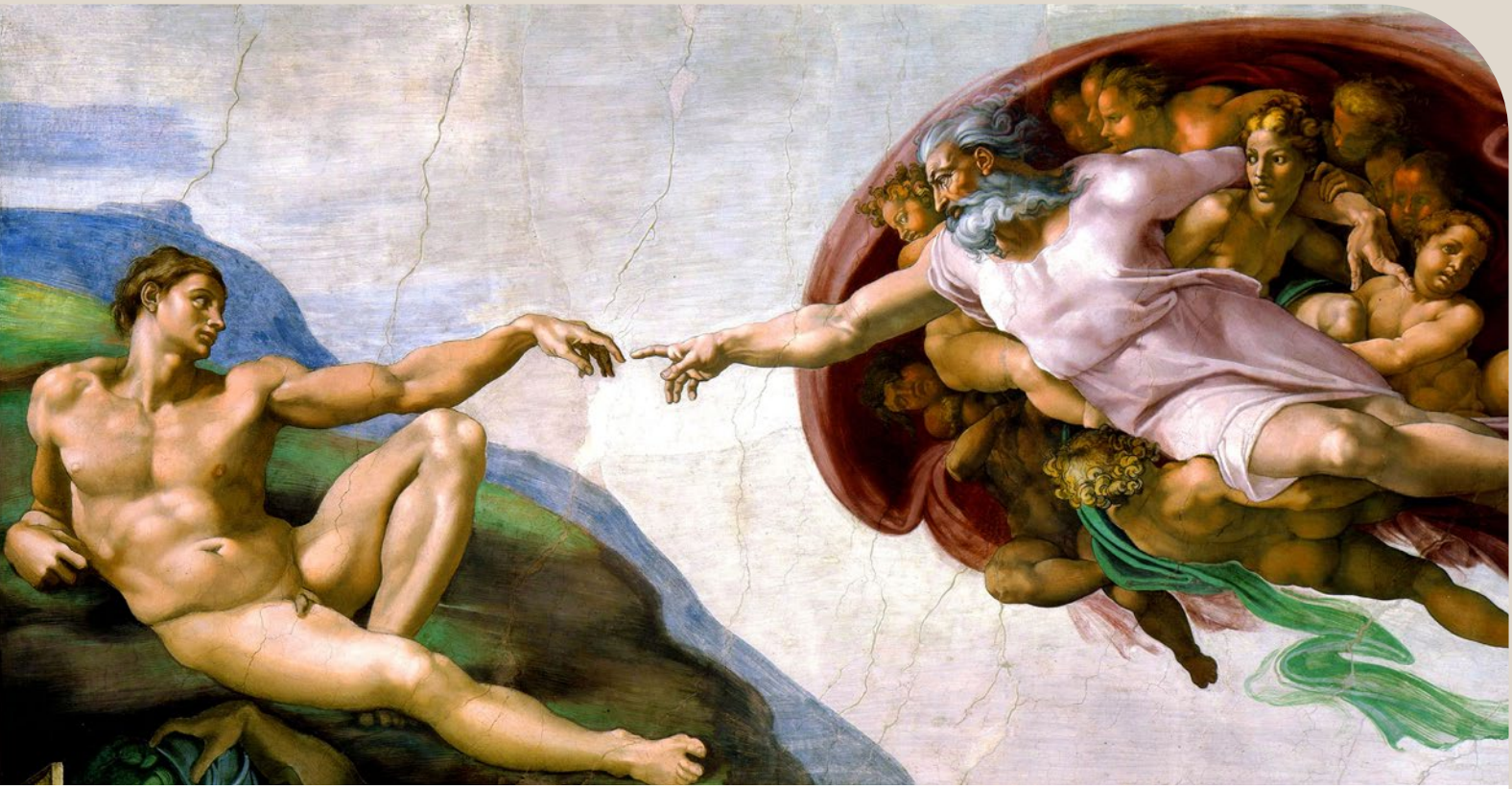
Two of Michelangelo's most famous works are the marble sculptures *Pietà* (1499 CE) and *David* (1501–1504 CE). Carving sculptures from marble – without the stone breaking – involved tremendous skill. It was also difficult because Michelangelo needed to judge, plan and imagine what the carving would look like from all angles before he began to 'free' the figure from the stone. Michelangelo drew on the methods used by ancient sculptors, using a Roman *trepano* drill to create David's hair and pupils. The physical accuracy of his sculptures encouraged other artists to incorporate realistic features into their works.

The ceiling of the Sistine Chapel

In 1508 CE, Pope Julius II asked Michelangelo to paint the ceiling of the Sistine Chapel in the Vatican City in Rome. This chapel is one of the most sacred places in the Vatican; it is used for important ceremonies, such as ordaining new popes.

At first, Michelangelo turned down the commission because he preferred sculpting to painting, but when the pope agreed to allow him to choose the scenes from the Bible that he would paint, Michelangelo agreed to undertake the work. He built a scaffold that he could climb and lean back on to paint the ceiling. Michelangelo spent four years painting frescoes on the chapel's ceiling. He painted over 300 Biblical scenes, including the creation, the Garden of Eden and the Great Flood, covering more than 460 square metres of ceiling.

Source 1: Michelangelo worked on this sculpture of David for over four years. David is a key figure in the Bible. This sculpture stands 5.17 metres tall and was the first colossus (giant statue) made since ancient times. [Michelangelo (1501–1504 CE), *David*]



Source 2: This is part of the ceiling of the Sistine Chapel. Michelangelo painted God and Adam (the first man) with similar-sized bodies to reflect the idea that God had created man in his own image. Michelangelo's style of painting influenced artists for the next three centuries. [Michelangelo (1508–1512 CE), *The Creation of Man* (panel), Sistine Chapel, Rome]

Pope Julius II was keen to see what Michelangelo was doing and kept visiting the artist while he was working, even climbing ladders so he could see the frescoes up close. The work was not quite complete when the pope told Michelangelo that he would have him thrown down the scaffolding if he did not finish the work quickly. The scaffolding was dismantled and the chapel opened for all to admire Michelangelo's work.

My beard turns up to heaven; my nape falls in,
Fixed on my spine: my breast bone visibly
Grows like a harp: a rich embroidery
Bedews my face from brush-drops thick and thin.
My loins into my paunch like levers grind:
My buttock like a crupper bears my weight;
My feet unguided wander to and fro;
In front my skin grows loose and long; behind,
By bending it becomes more taut and straight;
Crosswise I strain me like a Syrian bow ...

Source 3: This text is part of a poem written by Michelangelo during the time he was working on the ceiling of the Sistine Chapel (1509 CE).

Learning ladder H4.7

Significant people, ideas and events

1. Identify two of Michelangelo's most famous works.
2. Describe how Michelangelo created his sculptures.
3. Explain the role of Pope Julius II in Michelangelo's career.
4. Sources 1 and 2: Using these sources and your knowledge, explain why Michelangelo was significant.

Sources

1. Source 3: Identify the origin of this source.
2. Source 2: Describe the image in this source.
3. Source 2: Explain what makes this source a significant example of Renaissance art.
4. Source 3: Explain why this source is valuable for historians studying Michelangelo.
5. Sources 1 and 2: Using these sources and your knowledge, evaluate the importance of the Catholic Church to Michelangelo's work.

HOW TO

Sources, page 201

Key individual

Why was Sofonisba Anguissola significant?

Sofonisba Anguissola was a talented artist who was well known in her own time. Her works were so famous that other artists were ordered to make copies of her paintings.

Women's roles

In Renaissance Italy, women did not have political rights and they were considered to be legally subject to their fathers and husbands. Women were expected to marry in their late teens or join a convent. Once married, a woman was expected to obey her husband, manage the household, bring up the children and nurse sick members of the family.

Source 1: This painting shows three of the artist's sisters (Lucia, Europa and Minerva) playing chess. A servant watches on from the right. [Sofonisba Anguissola (1555 CE), *The Chess Game*]

Who was Sofonisba Anguissola?

Sofonisba Anguissola was part of a minority of noble Renaissance women who enjoyed more independent lives than other female members of Italian society.

Anguissola (1532–1625 CE) was born into a wealthy family in the Duchy of Milan and received an excellent education thanks to her father's humanist belief in the value of education. All the Anguissola children were encouraged to study and develop their artistic talents.

Anguissola was one of the first women to be accepted as a student of art. She was apprenticed to a local painter at age 14 and then continued her training with another artist, Bernardino Gatti.

During her early career as an artist, Anguissola painted many self-portraits and portraits of her family members. One of her paintings, *The Chess Game* (1555 CE), shows her sisters playing chess. This board game was popular during the Renaissance, as it developed skills in reasoning and logic. However, the painting was created at a time when girls were not encouraged to play games of strategy and logic.

Anguissola's talent was soon recognised. She became an art tutor to Queen Elisabeth of Spain and an official court painter to King Philip II. This was a highly advantageous position, as Philip's family (the Habsburgs) ruled most of Europe at the time. Her paintings of the Spanish royal household emphasised their attractiveness and represented them as kind and benevolent rulers. Her flattering paintings were much admired throughout Europe. Anguissola was the first female artist of the Renaissance to become internationally known in her lifetime.

Since she was a noblewoman, Anguissola did not sign her work as it was considered inappropriate for women to do so. This has led to some of her paintings being wrongly attributed to male painters, such as Titian and Leonardo da Vinci.

> She has worked with deeper study and greater grace than any woman of our times at problems of design, for not only has she learned to draw, paint, and copy from nature, and reproduce most skilfully works by other artists, but she has on her own painted some most rare and beautiful paintings ...

Source 2: This text was written by Giorgio Vasari, who was a Renaissance artist and the world's first art historian. [Giorgio Vasari (1566 CE), *Lives of the Most Eminent Painters, Sculptors, and Architects*]

Source 3: Portrait painting was popular during the Renaissance due to the influence of humanism, which valued the individual. [Sofonisba Anguissola (1556 CE), *Self-portrait at the Easel*]

Learning ladder H4.8

Significant people, ideas and events

1. Who was Sofonisba Anguissola?
2. Source 1: Describe the image in this source.
3. Explain how Anguissola's patrons helped establish her fame as an artist.
4. Sources 1 and 3: How do Anguissola's portraits demonstrate the philosophy of humanism?

Significance

1. Identify the reasons why Sofonisba Anguissola is a historically significant individual.
2. Describe the subject matter painted by Anguissola.
3. Explain how some of Anguissola's work has been wrongly attributed to other artists.
4. Source 2: Using this source and your knowledge, explain why Sofonisba Anguissola was a significant individual.

HOW TO Significance, page 212

Site study

What is Brunelleschi's dome?

Filippo Brunelleschi was an Italian architect and engineer who was one of the pioneers of a new style of architecture in the early Renaissance. He was also the genius behind a famous dome.

Who was Brunelleschi?

Filippo Brunelleschi was born in Florence in 1377 CE. Around 1402 CE, he travelled to Rome to view the ancient ruins and became interested in the way ancient architects used symmetry to construct their buildings. Brunelleschi is considered to be responsible for reviving the ancient Roman use of perspective in architecture.

Brunelleschi's dome

In 1419 CE, Brunelleschi entered an engineering competition to solve the problem of how to construct the dome for the Cathedral of Santa Maria del Fiore in Florence. Work on the cathedral was partly funded by the Medici family. The construction of the cathedral began in 1296 CE, with the intention of adding a domed roof, but, at the time, no-one knew how to construct it.

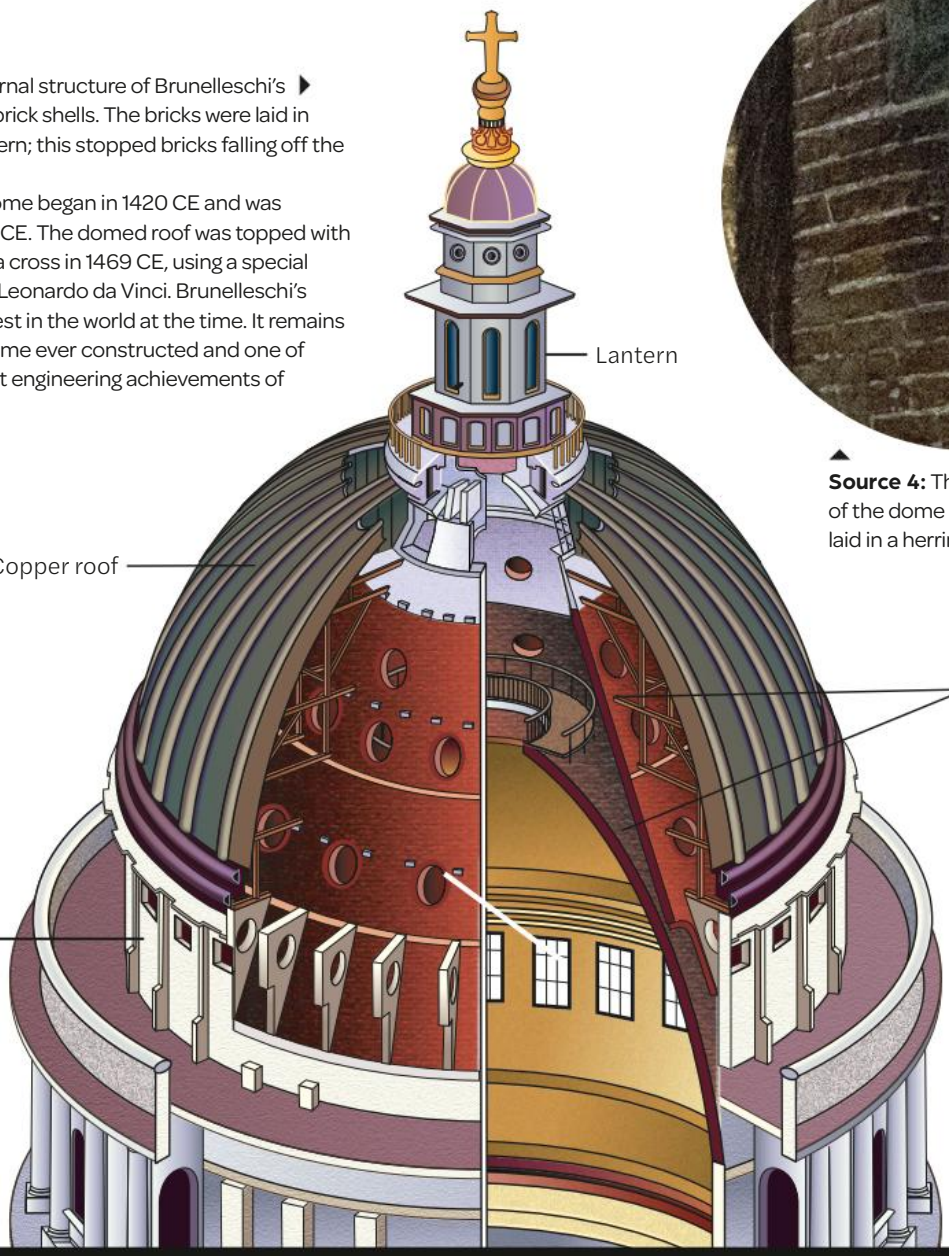
Brunelleschi worked out a method to vault the dome, invented the machinery necessary to carry it out and designed the structure's crowning lantern. The genius of Brunelleschi's design was that the structure was hidden in the double-walled shell of the dome and anchored by a 15-metre circular wall (tambour). In 1469 CE, the roof was copper-plated and a cross containing sacred relics was hoisted to the top of the dome.

Source 2: The frescoes on the ceiling inside the dome were painted by Giorgio Vasari and Federico Zuccari between 1572 and 1579 CE.

Source 1: The Cathedral of Santa Maria del Fiore in Florence at night, featuring Brunelleschi's dome. The cathedral is one of Italy's largest churches. It was consecrated in 1436 CE.

Source 3: The internal structure of Brunelleschi's dome reveals two brick shells. The bricks were laid in a herringbone pattern; this stopped bricks falling off the wall as it curved.

Work on the dome began in 1420 CE and was completed in 1436 CE. The domed roof was topped with a copper roof and a cross in 1469 CE, using a special crane designed by Leonardo da Vinci. Brunelleschi's dome was the largest in the world at the time. It remains the largest brick dome ever constructed and one of the most significant engineering achievements of the Renaissance.



Source 4: The two internal shells of the dome were made from bricks laid in a herringhone pattern.

Learning ladder H4.9

Significant people, ideas and events

1. Who was Filippo Brunelleschi?
2. Describe how Brunelleschi came to work on the dome for the Cathedral of Santa Maria del Fiore.
3. Explain how Brunelleschi drew inspiration from ancient Roman architecture.
4. Explain why Brunelleschi is an important person in the history of architecture.
5. Evaluate the importance of Brunelleschi's dome for the city of Florence and for the Medici family.

HOW TO

Sources, page 201

Sources

1. Source 3: Identify the main features of the dome.
2. Source 4: Describe how the bricks were arranged inside the dome.
3. Sources 2 and 3: Explain what these sources demonstrate about the Renaissance period.
4. Sources 3 and 4: Explain how this brick pattern was used inside the dome.
5. Sources 1, 2 and 3: Compare the usefulness of these sources in helping you to understand the importance of Brunelleshi's dome. Which source is the most useful and why?

What are the legacies of the Renaissance?

The lasting influence of the Renaissance can be seen in art, architecture, education, science and religion.

Art and architecture

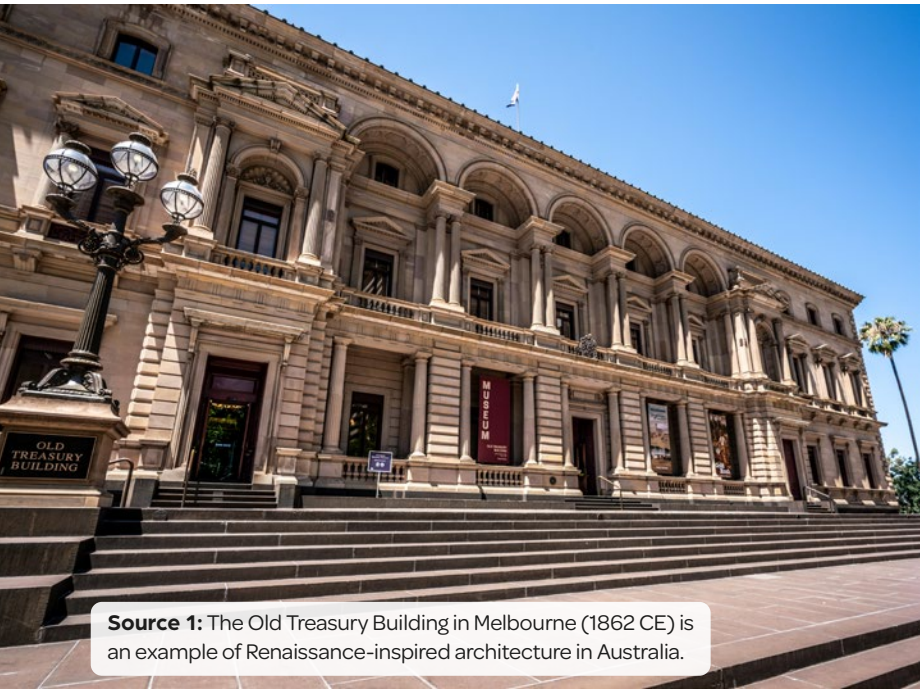
The developments in art and architecture that occurred during the Renaissance set new standards in design and realism. Some of the art movements that followed the Renaissance, such as the Baroque movement, aimed to copy the skill and techniques developed by Renaissance artists. Others drew inspiration from the Renaissance to develop entirely new ideas that deliberately rejected the Renaissance interest in perspective and proportion, such as Cubism in the early 20th century CE.

Renaissance architecture emphasised symmetry, proportion, repetition and the use of ancient Greek and Roman design elements such as columns and domes. This style of architecture has had a lasting impact on architecture. Renaissance-style buildings were popular designs for government and office buildings in the 1850s to 1940s CE, as seen in the Old Treasury building (1862 CE) in Melbourne and the Commonwealth Bank building (1913–1914 CE) in Sydney.

The influence of humanism

The humanist emphasis on classical literature and the belief that it is important to have exposure to a wide range of studies, from mathematics to art to religion, have greatly influenced education. The study of humanities, such as languages, philosophy and history, owes much to the Renaissance belief that education should help people to become ethical, knowledgeable citizens. In addition, humanism's high regard for observation, questioning and experimentation contributed to the later development of the modern scientific method.

Johannes Gutenberg's invention of the printing press in Germany in 1440 CE was essential to the growth of humanist education ideals in Europe, because it stimulated the demand for books, encouraged people to learn to read and enabled new ideas to spread quickly across Europe. By the end of the 1500s CE, printing had developed to such an extent that cities such as Venice became wealthy on the strength of their printing centres.



Source 1: The Old Treasury Building in Melbourne (1862 CE) is an example of Renaissance-inspired architecture in Australia.

Religion

During the Renaissance, people developed new ideas about religion. Many people had become critical of the Church's power and wealth. In 1517 CE, a German monk named Martin Luther nailed a document, known as the 'Ninety-five Theses', to the door of a church in Wittenberg, Germany, to protest against corrupt practices in the Catholic Church.

The printing press allowed the 'Ninety-five Theses' to be widely and quickly distributed throughout Europe. This would contribute to the establishment of a new Christian movement, known as Protestantism. Protestantism took hold in Scandinavia, England, Scotland, the Netherlands, Germany and Switzerland. The Protestant Reformation caused

Source 2: Martin Luther nails his 'Ninety-five Theses' to a church door in Wittenberg, Germany. [Ferdinand Pauwels (1872 CE), *Luther Hammers his 95 Theses to the Door*]

numerous wars across Europe. By the time of their conclusion in 1648 CE, the pope's political power was effectively ended.

At the same time, Protestant reformers began to translate the Bible into the languages of the common people. This in turn encouraged the growth of literacy, as Protestants believed it was important for all people to learn to read so that they could read the Bible for themselves.

The Renaissance beyond Italy

Other countries in Europe experienced their own 'renaissance' which contributed to the Renaissance in Italy. One of Germany's greatest artists during the early 16th century CE was Albrect Dürer. Dürer's woodblock prints were greatly admired in Italy and influenced a number of Italian Renaissance artists, including Raphael and Titian. The English Renaissance, also known as the Elizabethan era, produced many famous poets, writers, musicians, philosophers and scientists. Foremost among English Renaissance writers was William Shakespeare (1564–1616 CE), who is known as one of the greatest writers of the English language.

Source 3: Alessandro de' Medici adopted a rhinoceros as his personal emblem in 1536 CE. His emblem was based on Dürer's design. [Albrect Dürer (1515 CE), *A Rhinoceros*]

Learning ladder H4.10

Impact and legacies

1. Identify three legacies of the Renaissance.
2. Source 1: Describe how the building in this source reflects the influence of Renaissance architecture.
3. Using your school timetable, explain how the Renaissance has influenced education in Australia today.
4. Source 3: Using this source and your knowledge, explain the impact of the Renaissance beyond Italy.
5. Evaluate the legacies of the Renaissance to determine its long-term significance.

Causes and consequences

1. Source 2: Identify the effect of the event shown in this image.
2. Describe the causes of the Protestant Reformation.
3. Explain the effect of the printing press on the expansion of Renaissance ideas.
4. Evaluate the effects of the Protestant Reformation.

Causes and consequences, page 206

HOW TO

Was there really a Renaissance?

In the past, many historians thought the Renaissance was a glorious rebirth of the progressive societies of ancient Greece and Rome. Was this romanticised view of the period justified?

Conflicting views about the Renaissance

Many historians who lived during the 19th century CE thought the Renaissance was a golden age of progress that had rescued Europe from the dark ages of the medieval period and recovered the majesty of ancient Greece and Rome.

In 1855, French historian Jules Michelet first used the term 'renaissance' to describe the period between 1400 and 1600 CE. Michelet argued that the scientific ideas of Copernicus and Galileo defined the Renaissance as a 'new' era, distinct from the medieval period. Swiss historian Jacob Burckhardt agreed with Michelet and emphasised the role of artists in characterising the Renaissance as a time of individuality and freedom of the human spirit.

However, historians have questioned this view of the Renaissance, arguing that for most of the people who lived during the 15th and 16th centuries CE, it was not a golden age. Most people were peasant farmers for whom not a lot had changed since the medieval period. The impressive art and architectural achievements of the time were only important for the wealthy, educated elite. For everyone else, it was a time of wars, witch hunts, corrupt church politics and religious persecution.

The Renaissance and medieval science

Another point historians have recently made is that the Renaissance was not a 'rebirth'; rather, the achievements of the period built on medieval developments in art, science and trade. The Renaissance was not a break with the medieval past, but a continuation of it.

Source 1: Nicolaus Copernicus, shown with his theory of the heliocentric (Sun-centred) system. [Painting of Copernicus by Jan Matejko (1873 CE), *Conversations with God*]

> The Renaissance ... is a new birth ... the memory of ancient Rome was a great support to the national sentiment of Italy. Armed afresh with its culture, the Italian soon felt himself a citizen of the most advanced nation in the world.

Source 2: This text was written by a historian who lived in the 19th century CE. [Jacob Burckhardt (1860 CE), *The Civilisation of the Renaissance in Italy*, trans. in 1878 CE by S.G.C. Middlemore]

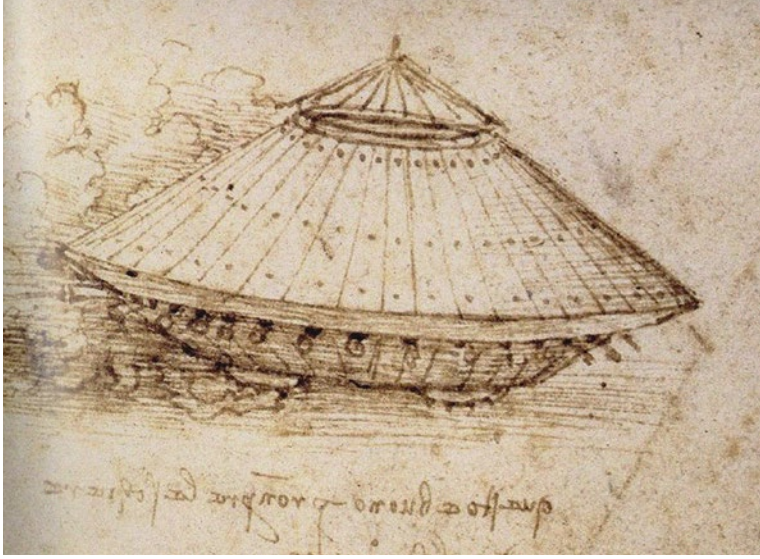
From 1494 to 1559, the Italian peninsula was the setting for a ferocious series of conflicts between the princes of Europe, known commonly as the Italian Wars: a battle between the Spanish monarchs and their great rivals at this time, the French, for supremacy in Italy ... Lives and livelihoods were destroyed ... If we know Leonardo da Vinci now for the *Mona Lisa*'s smile, his contemporaries knew him, too, as a designer of military maps, and of fortifications and weaponry ... The popular story of the Renaissance – like many versions of modern Western history – tends to focus on the genius and glory at the expense of the atrocities.

Source 3: This text was written by a modern-day historian. [Catherine Fletcher (2020 CE), *The Beauty and the Terror: The Italian Renaissance and the Rise of the West*]

Science did not take a great leap forward in the 15th and 16th centuries CE; instead, scientists further developed existing ideas from the medieval period. Nicolaus Copernicus's theories about the solar system were developed from the observations of 13th-century Persian astonomer Nasir al-Din al Tusi and 14th-century astronomers Jean Buridan of France and Ibn al-Shatir of Syria.

The Middle Ages laid the foundation for the greatest achievement of western civilisation: modern science. It is simply untrue to say that there was no science before the 'Renaissance'. Once medieval scholars got their hands on the work of the ancient Greeks, they developed systems of thought that allowed science to travel far further than it had in the ancient world. Universities, where academic freedom was guarded from royal interference, were first founded in the twelfth century ...

Source 4: This text was written by a modern-day historian. [James Hannam (2009 CE), *God's Philosophers: How the Medieval World Laid the Foundations of Modern Science*]



▲ **Source 5:** This drawing is Leonardo da Vinci's design for an armoured tank.

Art and architecture?

The new styles of art and architecture associated with the Renaissance were not only inspired by the 'rediscovery' of the art of ancient Greece and Rome, but were also based on contemporary Middle Eastern influences. The beautiful Renaissance city of Venice was strongly influenced by the grandeur of the great cities of Cairo, Damascus and Aleppo.

Learning ladder H4.11

Impact and legacies

1. Identify what historians during the 19th century CE believed about the Renaissance period.
2. Describe Michelet's role in popularising the idea that there was a 'Renaissance'.
3. Explain how most people experienced the Renaissance period.
4. Explain why Renaissance science was not a break from the past.

Interpretations

1. Identify two sources that have a different interpretation of the Renaissance.
2. Sources 3 and 4: Describe the authors' interpretations of the Renaissance.
3. Sources 2 and 3: Compare the authors' interpretations of the Renaissance.
4. Source 3: Evaluate the evidence Catherine Fletcher puts forward to support her key argument.

HOW TO

Interpretations, page 214

How do I conduct a good inquiry?

Now that you've finished the chapter, it's time to conduct your own historical inquiry on Renaissance Italy. Throughout the chapter you have developed knowledge and understanding of Renaissance Italy. Background knowledge is important because it helps you make connections to new information, ask better questions and consider different perspectives. As you progressed through the chapter, you have gathered information through classroom discussion, highlighting, note taking and answering questions. Now you are ready to start planning your own historical inquiry!

A historical inquiry gives you the opportunity to be an active historian: forming questions, interrogating sources and communicating insights about the past on a topic of your choice. The chapter has covered the origins and legacies of the Renaissance in Italy in addition to significant people, events, ideas and beliefs. What would you like to know more about?

- The life of Francisco Petrarch, H4.1
- The Republic of Venice, H4.2
- The Gonzaga family, H4.3
- The architecture of Leon Battista Alberti, H4.5
- The Renaissance beyond Italy, H4.10

Return to the relevant sections in the chapter and read them again.

Next, complete the 'see, think, wonder' process to help develop ideas you might cover in your inquiry.

Jot down your answers to these questions. Your answers will help you to formulate your own research ideas. Once you have worked through this process, you are ready to start the historical inquiry.

Refer to pages 218–25 of the How-to chapter for a step-by-step guide to this process.

See

What do you see?
Who is involved?
What are the key features?
When and where was this happening?

Think

What do you think about that?
How do you think people were affected at the time?
How is this similar to or different from today?
How do we know?

Wonder

What did different groups think about this?
Why is this important to know?
What does it make you wonder?

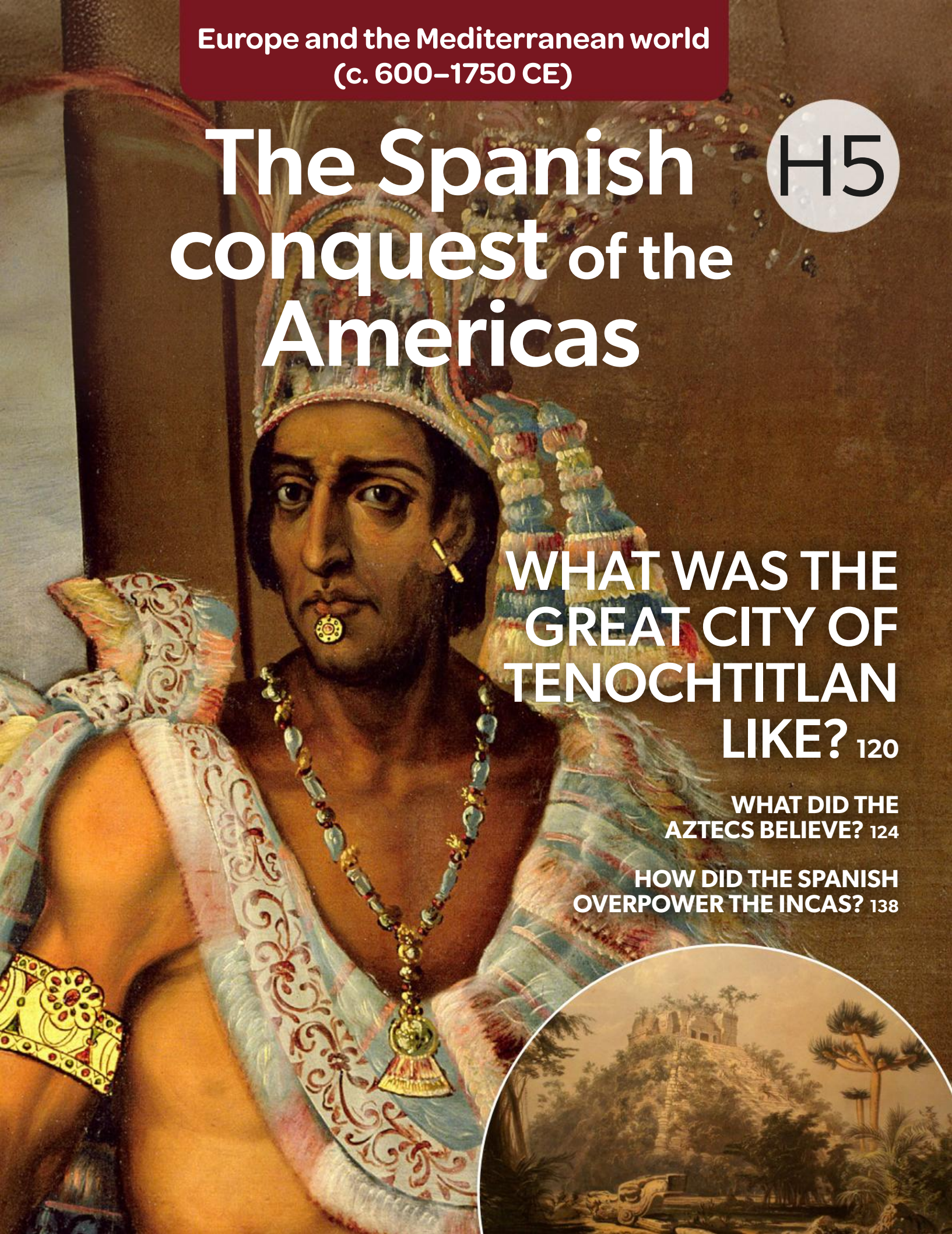
Level up!

Throughout the chapter, you have been working to move up the Learning ladder. An inquiry investigation is a great opportunity to expand your knowledge and attempt new skills.
When planning your inquiry, consider how the experiences and perspectives of individuals and groups shaped societies, beliefs and events in the past. Think about how the past has had an impact on the present. Use the How-to chapter to support your planning and research.

Europe and the Mediterranean world (c. 600–1750 CE)

The Spanish conquest of the Americas

H5



WHAT WAS THE GREAT CITY OF TENOCHTITLAN LIKE? 120

WHAT DID THE AZTECS BELIEVE? 124

HOW DID THE SPANISH OVERPOWER THE INCAS? 138

H5.0

How can I understand the Spanish conquest of the Americas?

The Spanish conquest of the Americas decimated Indigenous populations and destroyed their way of life.

Learning ladder

The Learning ladder lists the knowledge and skills you will learn. Each has five levels of difficulty. Learning skills at the bottom of the ladder will help you to master the skills at the top of the ladder.

Steps in knowledge progression	Background and origins	Significant people, ideas and events	Impact and legacies	Continuity and change	Causes and consequences
5	I can evaluate the impact of the rise and fall of societies.	I can evaluate how societies were influenced by significant people and ideas.	I can evaluate the legacy of a society.	I can evaluate patterns of continuity and/or change.	I can analyse causes and consequences.
4	I can explain why a society developed.	I can explain why ideas influenced people and events.	I can explain why a society has a legacy.	I can explain patterns of continuity and/or change.	I can explain why something was caused or why it led to certain consequences.
3	I can explain how a society developed.	I can explain how ideas influenced people and events.	I can explain the impact of one society on another.	I can explain continuity and change.	I can explain how something was caused or its consequences.
2	I can describe the origins of societies.	I can describe key people, ideas and events.	I can describe the legacy of a society.	I can describe continuity and change.	I can describe causes and consequences.
1	I can identify the origins of societies.	I can identify key people, ideas and events.	I can identify the legacy of a society.	I can identify continuity and change.	I can identify a cause and a consequence.

Knowledge and understanding

Source 1: An illustration of the first meeting of Cortés and King Moctezuma II

Perspectives	Significance	Interpretations	Chronology	Sources	Steps in skill progression
I can evaluate historical perspectives.	I can evaluate historical significance.	I can evaluate the evidence supporting a historical interpretation.	I can explain change or causality from a timeline.	I can evaluate sources to determine their accuracy, usefulness and reliability.	5
I can compare perspectives.	I can explain why something is historically significant.	I can compare historical interpretations.	I can summarise the events on a timeline.	I can explain the historical context of a source.	4
I can explain a perspective.	I can explain something historically significant.	I can explain an interpretation of history.	I can follow timeline conventions.	I can apply historical knowledge to explain sources.	3
I can describe perspectives.	I can describe something historically significant.	I can describe an interpretation of history.	I can place events on a timeline chronologically.	I can describe a source.	2
I can identify the perspective of a person from the past.	I can identify something historically significant.	I can identify a historical debate.	I can read a timeline.	I can identify the origin of a source.	1

Historical concepts and skills

Where were the Mesoamerican and South American societies located?

Humans first crossed into the Americas from Asia via a land bridge during the Ice Ages, between 35 000 and 15 000 years ago. Early peoples settled right through the Americas, from the Great Plains of the north, all the way down to Central America and South America.

Mesoamerica

The region between modern-day Mexico and Costa Rica is known to archaeologists as Mesoamerica. Mesoamerica was home to three of the world's great societies: the Olmecs (1200–300 BCE), the Mayans (250–950 CE) and the Aztecs (1250–1521 CE). The Olmecs were known for their impressive monuments, massive stone sculptures and drinking cocoa. The Mayans built magnificent cities and stone pyramids. They are also known for their knowledge of astronomy, mathematics and architecture.

The Aztecs inherited much from the older Mesoamerican societies, including corn farming and floating gardens, known as ***chinampas***. The Aztecs were militaristic and they used their power to establish a vast empire.

The Andean region

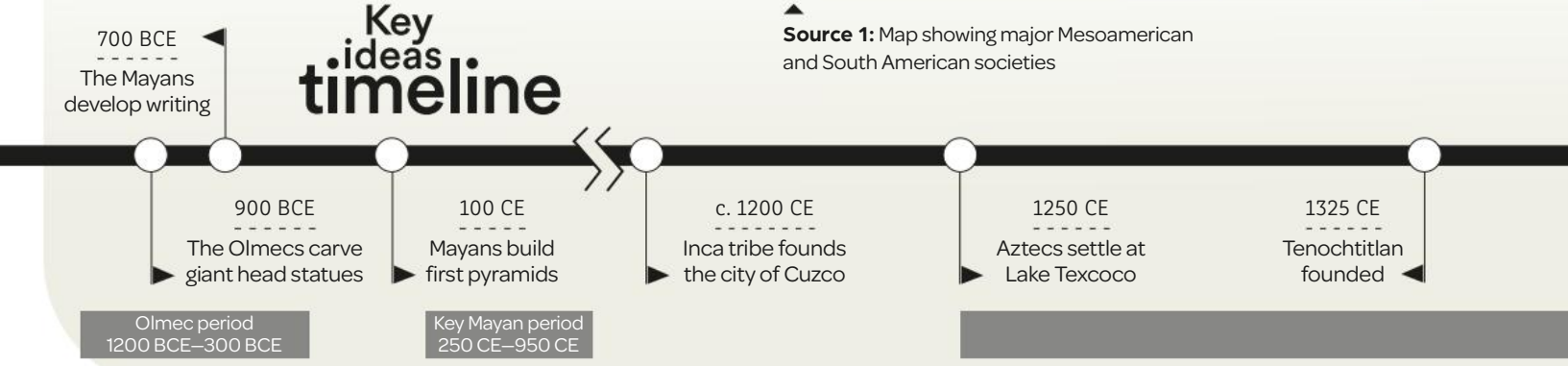
Another important society was located further south in the Andes mountains of South America. The Inca (1438–1533 CE) also established a large empire, with a sophisticated network of roads, huge monuments and terraced agriculture.

Mesoamercian and Andean societies

Source: Matilda Education Australia

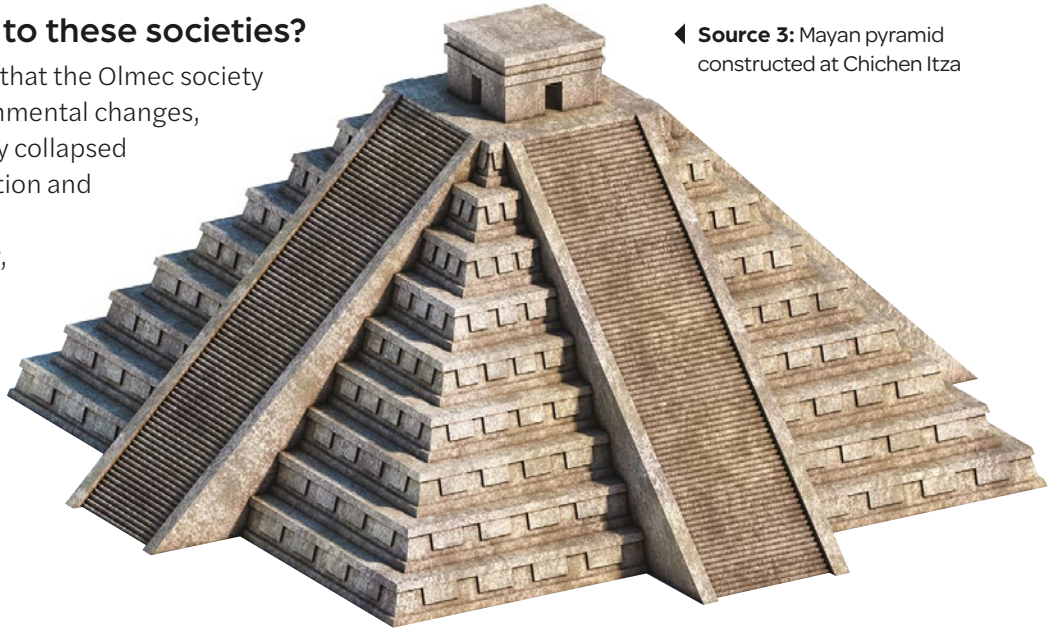
Source 1: Map showing major Mesoamerican and South American societies

Source 2: Americas timeline



What happened to these societies?

Archaeologists believe that the Olmec society declined due to environmental changes, while the Mayan society collapsed because of overpopulation and warfare. The Aztec and Inca societies, however, fell due to invasion and conquest by Spanish conquistadors.



Source 3: Mayan pyramid constructed at Chichen Itza

Learning ladder H5.1

Background and origins

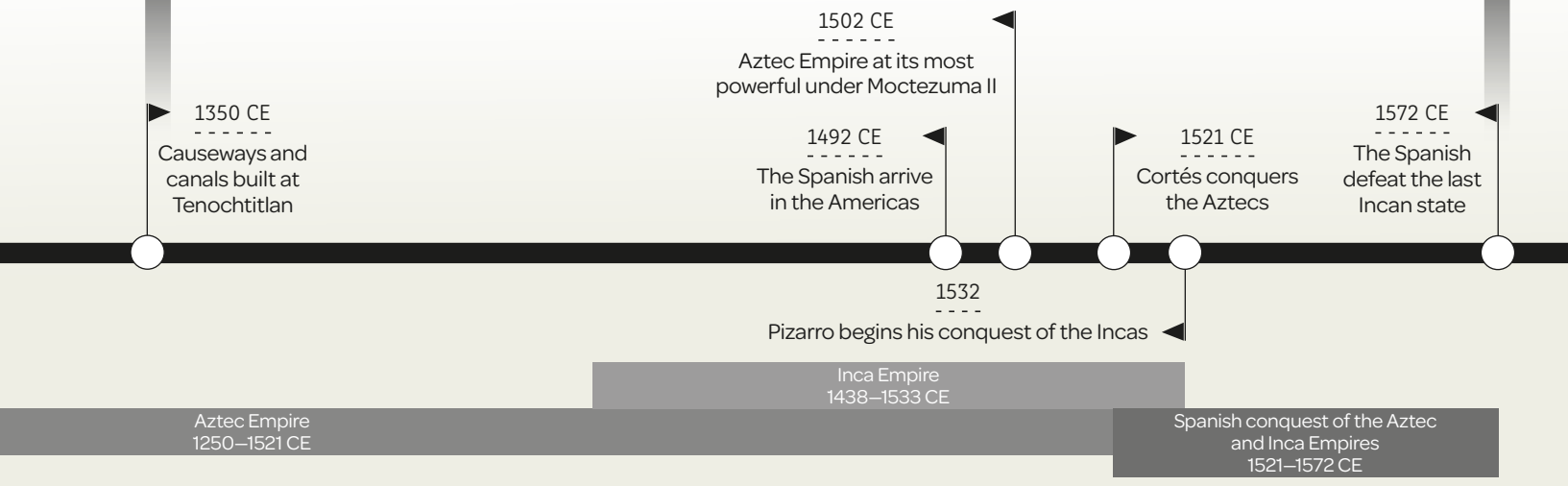
1. Source 1: Identify three major societies of the Americas.
2. Describe the characteristics of the Mayan society.
3. Explain how the Aztec society was different to the Mayan and Olmec societies.
4. Explain why the Mesoamerican and Andean societies fell.

HOW TO

Chronology, page 198

Chronology

1. Sources 2 and 3: Identify the date when these types of structures were first built.
2. Put these events in order from earliest to most recent:
   - May 1523: Hernán Cortés becomes the governor of the colony of New Spain (Mexico)
   - June 1520 CE: Death of the Aztecs' king, Moctezuma II
   - August 1521 CE: The Aztec capital, Tenochtitlan, falls to the Spanish
   - November 1519 CE: Spanish leader Hernán Cortés meets Moctezuma II
   - March 1519 CE: Hernán Cortés's ships arrive on the coast of Mexico.
3. Construct a timeline using the events in Question 2.
4. Using the timeline you created in Question 3, summarise the events leading up to the collapse of the Aztec Empire.



H5.2

What was life like in the ancient Americas?

The Olmecs established the first great civilisation in Mexico and in Central America. Their culture greatly influenced the later cultures of the Mayans and the Aztecs.

Olmecs

The **Olmecs** were the first major civilisation from the Americas, in existence from around 1200 BCE until 300 BCE. They built villages and cities on the swampy land near the Gulf of Mexico.

People came together to trade in cities and take part in religious ceremonies at the stepped-pyramid temples built for their gods, which were later adopted by the Maya (see pages 110–13) and the **Aztecs** (see pages 116–19).

Not a lot is known about the Olmec people, but we do know they created beautiful jewellery and realistic sculptures of people and animals. These craftworks were made from basalt, clay, jade, obsidian and greenstone. Many of these resources were found at some distance from Olmec centres, suggesting that they had a large trading network.

Source 1: Olmec necklace made of jade, rock crystal, pyrite and shell. [From Gulf Coast, Mexico, c. 1200–300 BCE]

Civilisations of Mesoamerica

▲ **Source 2:** Civilisations of Mesoamerica

Source: Matilda Education Australia

Source 3: A replica of an Olmec head from the Chankanaab National Park, in Mexico. The statues are thought to represent Olmec rulers, and vary in size from 6 to 50 tonnes.

The mystery of the giant Olmec heads

The Olmecs are best known for the giant heads they carved from stone. So far, 17 heads have been found with each of them wearing a helmet, perhaps like those worn in the ball game ***ulama***. Each giant head looks similar, but they have different facial features, leading historians to suggest that the sculptures are of Olmec rulers.

The giant heads were carved from basalt around 900 BCE. One of the giant heads at San Lorenzo has traces of red paint, suggesting that the statues may once have been painted. The statues weigh between 6 and 50 tonnes and measure up to 3.4 metres high.

Archaeologists are puzzled by how the Olmecs moved the huge stones needed and how they created the statues. Basalt quarries were located in the Tuxtla Mountains (Sierra de los Tuxtlas), around 70 kilometres away from Olmec settlements. In the city of San Lorenzo, a giant head was lifted to the top of a 45-metre-high plateau.

The Olmec did not have cattle to pull the load and did not have wheeled vehicles. Some historians suggest that they floated the heavy stones on rafts or dragged them over wooden rollers.

Learning ladder H5.2

Significant people, ideas and events

1. For roughly how long did the Olmec civilisation last?
2. Source 2: Write a detailed description of the location of the Aztec and Mayan civilisations.
3. Why did people come together at pyramid temples?
4. Source 3: What do you think might be one way the Olmecs were able to move the stone for their head statues such long distances?
5. With a partner, discuss why you think not a lot is known about Olmec people.

Significance

1. Which of the following is the most historically significant?
   - **a** People came to the Americas via a land bridge 35 000 to 15 000 years ago.
   - **b** The Olmecs built pyramids.
   - **c** The Olmecs carved giant heads out of rock.
   - **d** The Olmecs lived on swampy land.
   - **e** The Olmecs made beautiful jewellery.
2. Why was it important that the Olmec people came together at pyramids?
3. What evidence is there that Olmec cities were important to the people at the time?
4. How relevant is the Olmec civilisation today? How important was it to other Mesoamerican cultures?

HOW TO Significance, page 212

H5.3

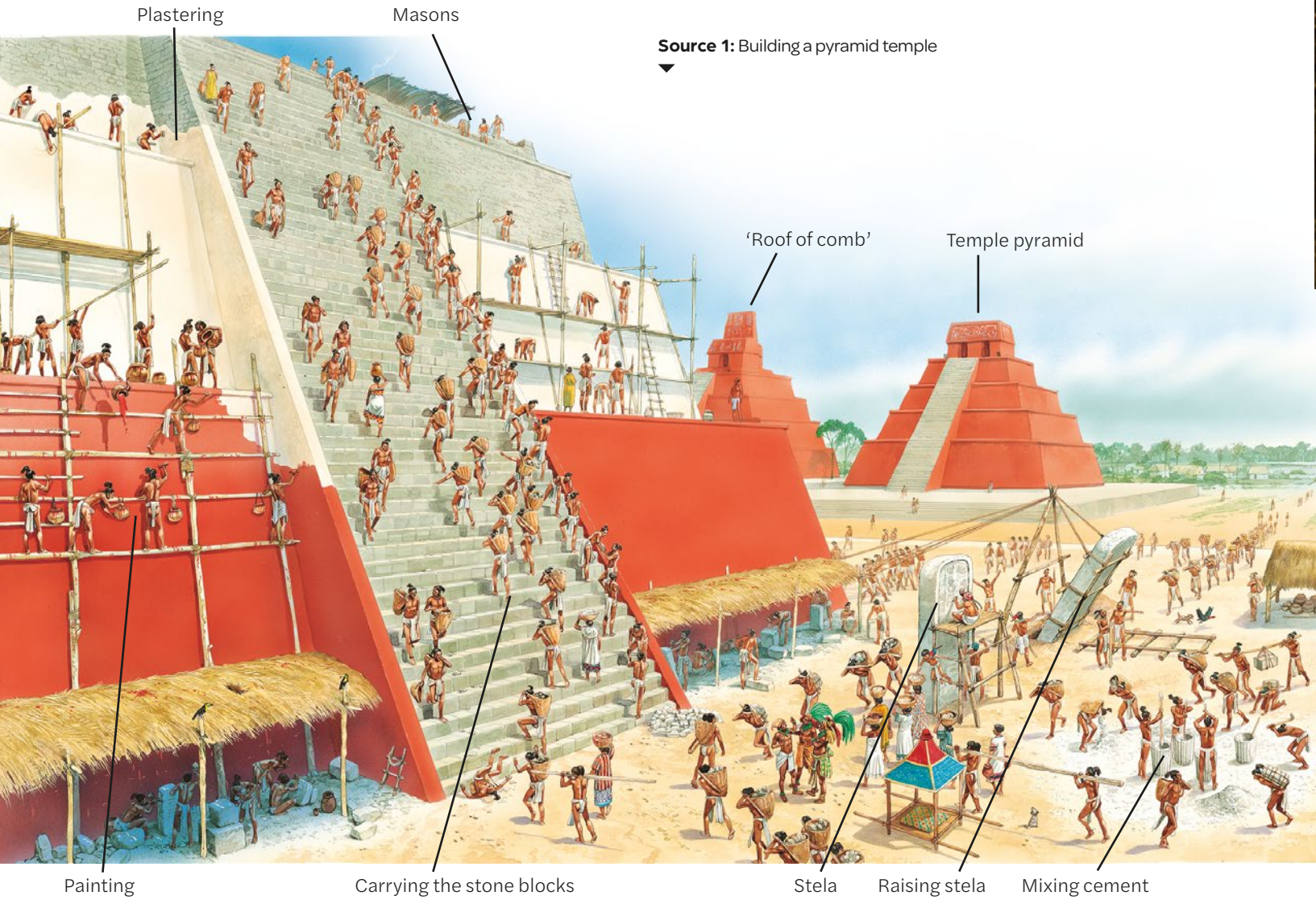
How did the Maya build a civilisation in the jungle?

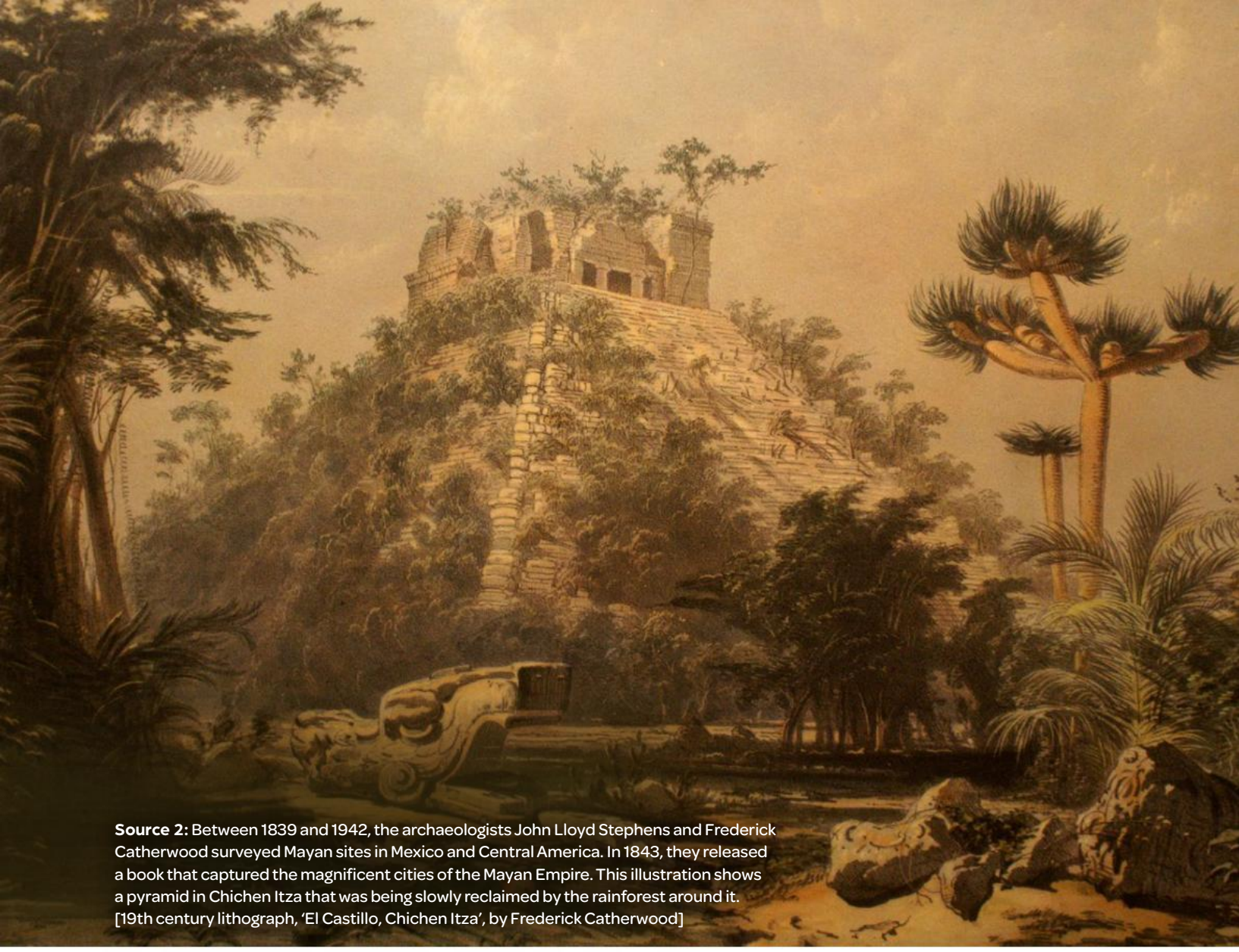
The Mayans, or Maya, developed sophisticated cities in the dense jungles of Central America. They lived in separate city-states with grand palaces and pyramid temples. Around 950 CE, the cities were abandoned and reclaimed by the rainforest.

Life in the rainforest

Between 250 and 900 CE, the Mayans built elaborate cities with pyramid temples and palaces in the thick jungles of Central America. The Maya took full advantage of the rainforest's resources. Forest animals such as deer, puma, jaguar and crocodiles were hunted for their meat and hides. Limestone was mined for buildings, obsidian was used for weapons and tools, and jade was used for sculpture and jewellery. The long green tail feathers of the male quetzal bird were so valuable that it was forbidden to kill the bird. Quetzal and other forest bird feathers were used to make elaborate costumes and headdresses for nobles.

Source 1: Building a pyramid temple





Source 2: Between 1839 and 1942, the archaeologists John Lloyd Stephens and Frederick Catherwood surveyed Mayan sites in Mexico and Central America. In 1843, they released a book that captured the magnificent cities of the Mayan Empire. This illustration shows a pyramid in Chichen Itza that was being slowly reclaimed by the rainforest around it. [19th century lithograph, 'El Castillo, Chichen Itza', by Frederick Catherwood]

Maya city-states

Areas of rainforests were cleared and swamps were drained to build Mayan cities. Early cities were constructed about 300 BC. Archaeologists have uncovered large Mayan cities with pyramid temples, palaces, open plazas and courts for the ball game ulama.

Unlike the civilisations that would follow – the Aztecs (see pages 116–19) and the **Inca** (see pages 184–85) – the Maya were never one unified empire ruled from a capital city. The Maya Empire was a series of independent **city-states** linked by language, trade and culture.

Each city-state controlled the area around their city and sometimes other smaller cities nearby. City-states would compete for power and resources with other city-states in the **empire**.

Tikal (see page 114) was the largest city of the Maya civilisation with a population of 100 000 people. Chichen Itza was another large Mayan city with massive pyramids, large temples and the largest ulama court found. Chichen Itza is now protected as a World Heritage Site and 1.4 million people visit each year.

Pyramids for the gods

Great stepped-pyramid temples were built in Mayan cities. The temples were used for religious ceremonies, including human sacrifices to the gods.

Each city-state was controlled by a ruler who was thought to be descended from the gods. When a ruler died, his body, along with food and precious goods, was buried within a pyramid temple. The new ruler had hundreds of workmen build another pyramid temple over the top of the old one. There were no wheeled vehicles or cattle, so large stone blocks had to be moved by hand.

Farming in the forest

Away from the cities, most Mayans were farmers. They cleared fields in the rainforest called ***milpas*** where they planted corn, beans and squash. Corn was used to make a flat bread called **tortilla**. Because of the poor-quality rainforest soils, the Maya rested each milpa after the harvest to let the soil regenerate. The same practice is used in Central America today.

The Mayans discovered how to use cocoa pods to make an unsweetened hot-chocolate drink enjoyed by all social classes. Cocoa was often consumed in religious ceremonies and other celebrations.

Markets and trading

Stalls were set up in the city plaza for traders to sell their goods. The Mayans used cocoa beans as currency – the same beans they used to make their drinking chocolate.

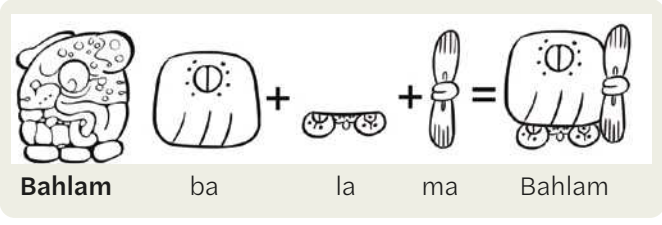
Key market traders

- Farmers from nearby villages sold fruit, vegetables and tobacco.
- Hunters sold deer, puma, jaguar and other skins along with caged birds and monkeys.
- Fishers sold live turtles and shellfish along with dried fish.
- **Artisans** sold goods such as woven fabrics, toys, tools, candles and musical instruments.

Trading routes connected the city-states of the Maya Empire with other peoples in Central America. People cut tracks through the rainforest to transport goods overland by foot. Canoes connected cities around the Yucatan Peninsula.

Maya writing system

The Maya were the only early people of Mesoamerica to have a complete writing system. **Scribes** used around 1000 different symbols to write messages. Their writing has survived in stone carvings, plaster, wood, pottery and in paper books such as the Dresden Codex (Source 4).



▲ **Source 3:** The Mayan word for 'jaguar' was *bahlam*. Using the Maya writing system, 'jaguar' could be written as a pictorial symbol that looks like a jaguar's head. It could also be written as a cluster of three syllables: ba-la-m(a).

The Mayan writing system combined symbols representing whole words with symbols that represented syllables. The **hieroglyphics** were translated in the 20th century and now most of the writing can be understood.

Science

The Maya were very advanced in astronomy and mathematics. Astronomers plotted the position of the Sun, the moon and Venus. The Maya created their own solar calendar that divided the 365 days of the year into 17 months of 20 days each, plus the extra month of Wayeb, with five extra unlucky days.

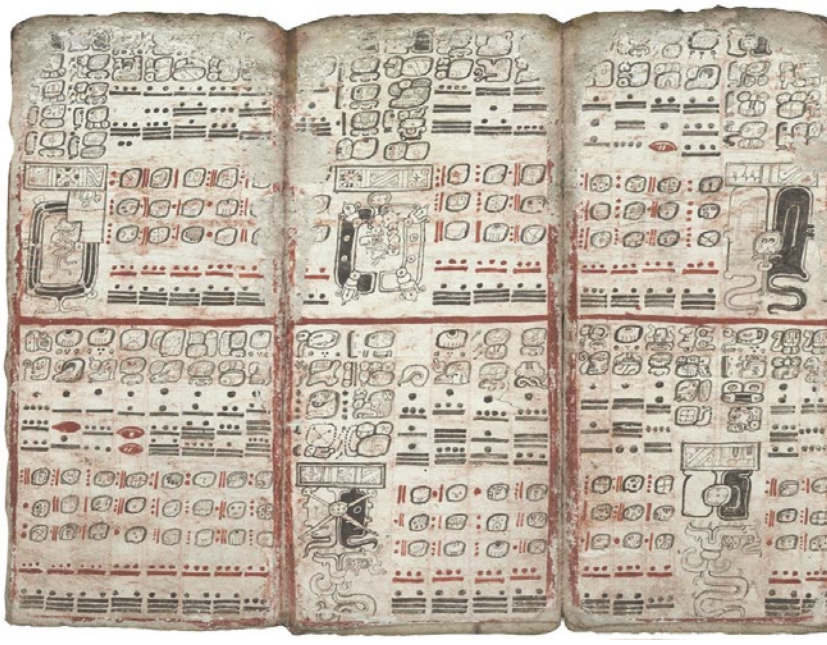
The mysterious end of the Maya civilisation

The Maya Empire ended quite suddenly around 950 CE, but historians cannot agree why. Something forced the Maya people to leave their city-states. One by one they were abandoned and left for the jungle to reclaim.

Some of the theories that have been suggested are:

- they exhausted all the resources and could no longer support their growing population
- continual warfare between competing city-states may have forced cities to be abandoned
- a major catastrophe such as a drought could have forced people to leave.

By the time the Spanish invaders arrived in the 1500s, most Maya were living in agricultural villages and their amazing cities had been reclaimed by the rainforest, until they were excavated by archaeologists several centuries later.



Source 5: This jade funerary mask was made around 683 CE for Pakal, king of the city-state of Palenque. Mayans fashioned funerary masks from jade stone to look like the deceased person. Funerary masks covered the face of dead royalty to stamp them as a god and give them eternal life. [*Funerary Mask of Jade and Funerary Offerings of Pakal King of Palenque* (c. 683 CE)]

Source 4: The Dresden Codex is the oldest and best preserved of only four Mayan books that still exist today. The codex includes hieroglyphs from the Mayan writing system, which contain religious rituals and movements of the Sun, Moon and Venus. [The Dresden Codex (c. 1200–1250), Saxon State Library, Dresden, Germany.]

Learning ladder H5.3

Significant people, ideas and events

1. What natural resources did the Maya get from the rainforest?
2. What were pyramids for and how were they built?
3. What caused the Mayan city-states to be in conflict with each other?
4. Explain why the Mayan writing system helps us understand more about the Mayan people than other early Mesoamerican societies.
5. Source 4: What kinds of things might it tell us about the Maya? What things do you think it cannot tell us?

Causes and consequences

1. Which of these caused the Maya to mine limestone?
   - **a** They needed material to build with.
   - **b** There was lots of limestone around.
   - **c** There was no other stone around.
   - **d** They lived in a jungle.
2. What were the consequences of Mayans farming in the forest?
3. Explain how the rainforest affected farming in Mayan society.
4. How do you think it would have been different if the Maya were one unified civilisation, rather than a collection of individual city-states? What benefits and disadvantages would there be?
5. Evaluate the suggestions about why the Mayan cities were abandoned. Which do you think is most believable? Give evidence for your response.

HOW TO Causes and consequences, page 206

H5.4

Site study

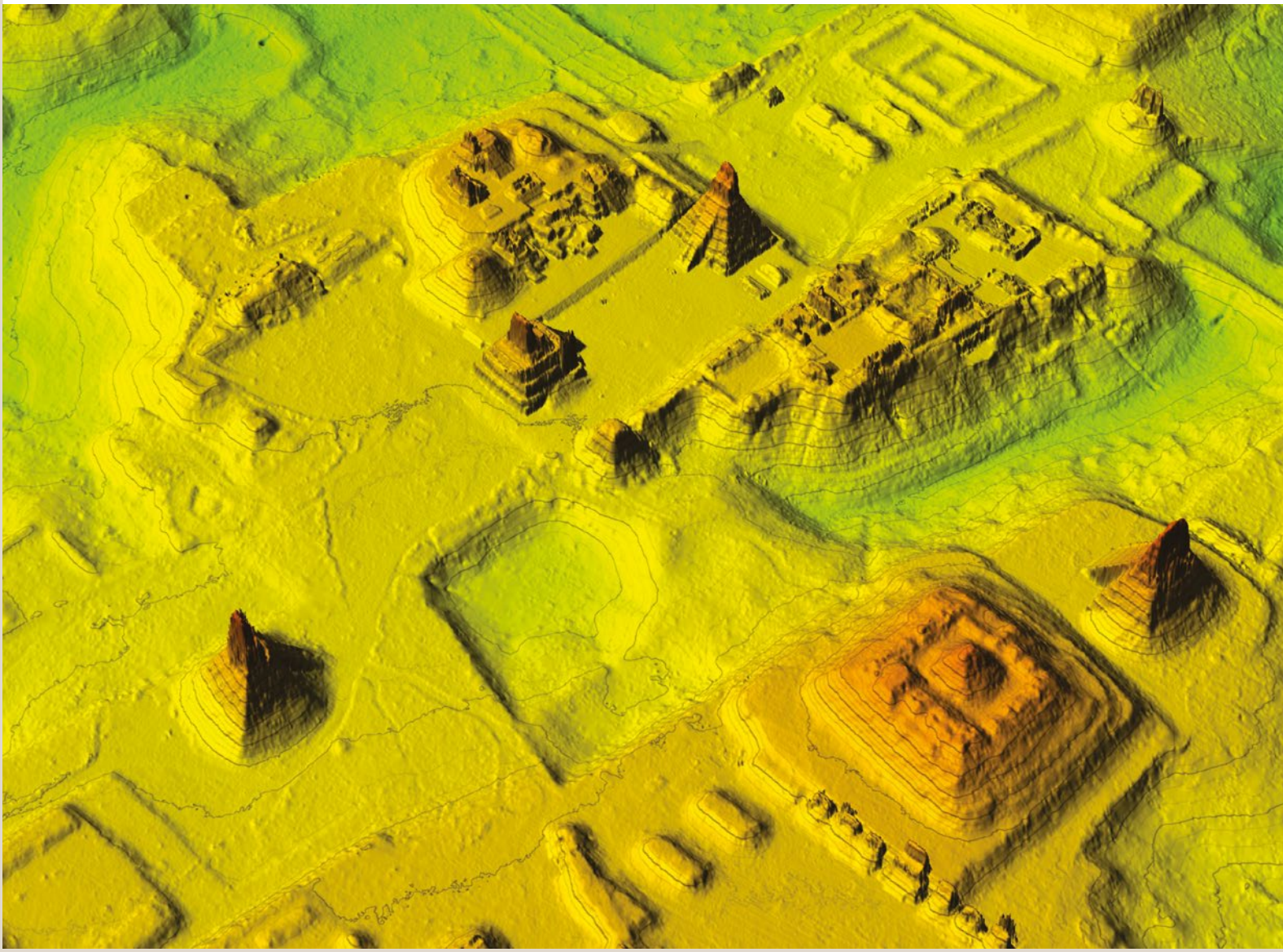
How did lidar technology uncover the city of Tikal?

New lidar laser technology is producing images of Mayan cities hidden beneath the thick jungles of Central America. Lidar stands for Light Detection and Ranging.

Uncovering Mayan cities

Archaeologists are using advanced technology called lidar to uncover hidden Mayan cities in the jungles of Central America. Lidar illuminates an area with laser light and then measures the differences in laser return times to make a 3D image of the area.

Source 1: Using lidar laser technology, a huge network of buildings and structures at Tikal is revealed, producing a map for archaeologists to explore on the ground.



Source: NCALM and the Pacunam Lidar Initiative (PLI)

Source 2: To the naked eye, dense rainforest covers the Mayan city of Tikal in Guatemala.

In the thick jungles of Guatemala in Central America, lidar imagery is saving archaeologists years of searching. The new technology looks through the thick forest to reveal the structures built underneath.

New information provided by lidar technology is causing archaeologists to rethink the size of the Mayan population and how their cities were organised. At its peak about 1500 years ago, the Maya civilisation was estimated to have a population of 5 million people. The new data provided by lidar imagery suggests the population might have been double or triple this.

Archaeologists have been surprised by features such as walls, fortresses and moats that showed Mayans did more to defend themselves than was previously thought. Raised wide highways linking all of the cities in the area have also been revealed. These might have allowed travel and trade even during the rainy season.

Learning ladder H5.4

Significant people, ideas and events

1. What is lidar and how does it work?
2. How does laser technology save archaeologists time and effort?
3. How might Mayans have travelled during rainy periods?
4. Explain how lidar technology has caused archaeologists to recalculate the population of the Maya population.
5. Source 1: What kinds of things might it tell us about the Maya? What things do you think it cannot tell us?

Sources

1. How was the image in Source 1 made?
2. Source 1: Describe in detail the features shown in the lidar image.
3. What have archaeologists deduced about Mayan life from using lidar technology?
4. What does the discovery of walls, fortresses and moats suggest about life for Mayan people in Central America?
5. Do you think lidar would be useful for all historical work? Explain your answer.

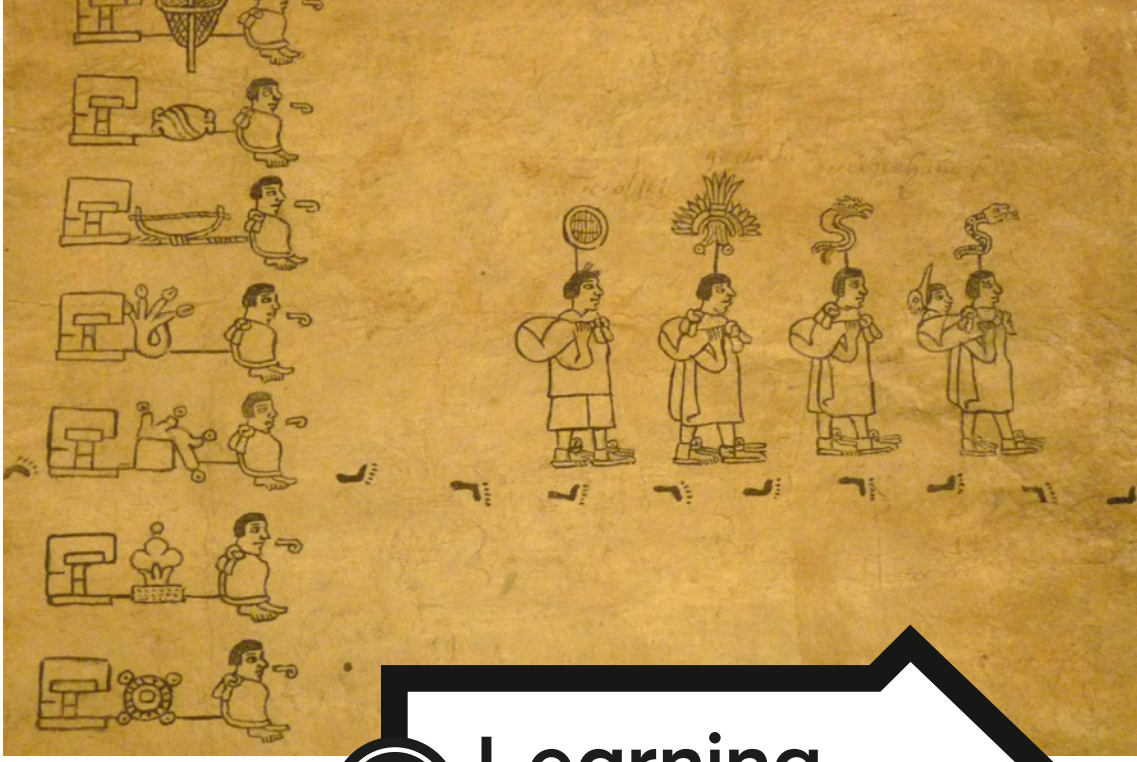
HOW TO

Sources, page 201

Who were the Aztecs?

The Aztecs were originally called Mexicas. According to Aztec mythology, they came from a place known as Aztlan.

▲ **Source 1:** Map showing the Aztec Empire, its main resources and the tributes paid to the city of Tenochtitlan



Source 2: The Aztecs travelling to Lake Texcoco led by the Teomama (god-bearers), who carry the gods on their backs. Tezcacoatl leads the procession, carrying the figure of Huitzilopochtli. From the *Boturini Codex* (1530–1541 CE). This source was created 10 years after the Spanish conquest of Tenochtitlan.

Aztec origins

According to Aztec legend, the Aztecs left Aztlan and spent 200 years travelling south to the Mexico Basin. When they arrived, there were already several established city-states under the control of other societies, including the Colhuacan and the Azcapotzalco.

The Aztecs were then led further south by their god of war, Huitzilopochtli. When the Aztecs arrived at Lake Texcoco, they saw a small island in the centre of the lake. On the island was an eagle perched on a cactus, holding a snake in its talons. This vision inspired them to build their city of Tenochtitlan on the site.

The foundation of the Aztec Empire

At first, the Aztec state was small and weak. In return for protection, the Aztecs supplied the larger state of Azcapotzalco with warriors.

Over time, the Aztecs built alliances with other small states, including the Texcoco state and the Tepanac state. In 1428 CE, the Triple Alliance of the Aztec, Texcoco and Tlacopan states besieged and conquered Azcapotzalco. Through this victory, the Aztecs became the dominant state in the Mexico Basin. The Aztecs then forced their conquered territories to pay taxes and **tributes** to them.

The Tlaxcalan enemies

While the Aztecs were able to subdue most of the other states, they were never able to conquer Yopitzinco, Totopec, Teotitlan and Tlaxcala. Of these, the Tlaxcalans posed the biggest nuisance to the Aztec Empire. The Tlaxcalan and Aztec states were constantly at war with one another. The complete encirclement of Tlaxcala by the Aztec Empire made it very difficult for Tlaxcala to trade with other regions. The Tlaxcalans bitterly resented the Aztecs and remained their sworn enemies.

Learning ladder H5.5

Significant people, ideas and events

1. Identify the mythical place where the Aztecs originated.
2. Describe how the Aztecs found the site for their capital city.
3. Explain how the Aztec state became the dominant state in the Mexico Basin.
4. Source 1: Using this source and your knowledge, explain why the Tlaxcalans were the sworn enemies of the Aztecs.
5. Analyse the problem the Tlaxcalans posed to the Aztecs.

Sources

1. Source 2: Identify the origin of this source.
2. Source 1: Describe the different types of goods paid as tribute to the Aztecs.
3. Source 1: Using the table below, group the Aztecs' resources that are shown in the source.

Food	Animal products	Precious metals and stones	Building resources	Other

4. Source 1: Using this source, explain the key advantage held by the states of Teotitlan, Yopitzinco and Totopec that was not held by Tlaxcala.
5. Source 2: Analyse the value of this source for a historian studying the Aztecs.

HOW TO

Sources, page 201

H5.6

What was Aztec society like?

Around 15 million people lived in the Aztec Empire. Aztec society was hierarchical, with power and status for those at the top and slavery for those at the bottom.

The ruling class

The ruling class consisted of two people:

- ***Tlatoani***: The tlatoani was the king. He was the commander-in-chief of all armies and had complete control over the society. The king was chosen as the most able person among the relatives of the previous king. He was elected by important officials, priests and warriors. Acamapichtli is considered to have been the first king of the Aztecs, and he ruled from 1372 to 1391 CE.
- ***Cihacoatl***: The cihacoatl was the 'snake woman' who was actually a man! Aztec religion stated that the world was created with both male and female principles and, as such, the Aztecs believed that they should have a 'male' leader and 'female' deputy. The reason that the cihacoatl was not a woman probably reflected the fact that women in Aztec society were not appointed as high government officials. The cihacoatl was an advisor to the king and he dealt with the everyday running of the empire. He was the head of the high court and acted as ruler when the king was absent.

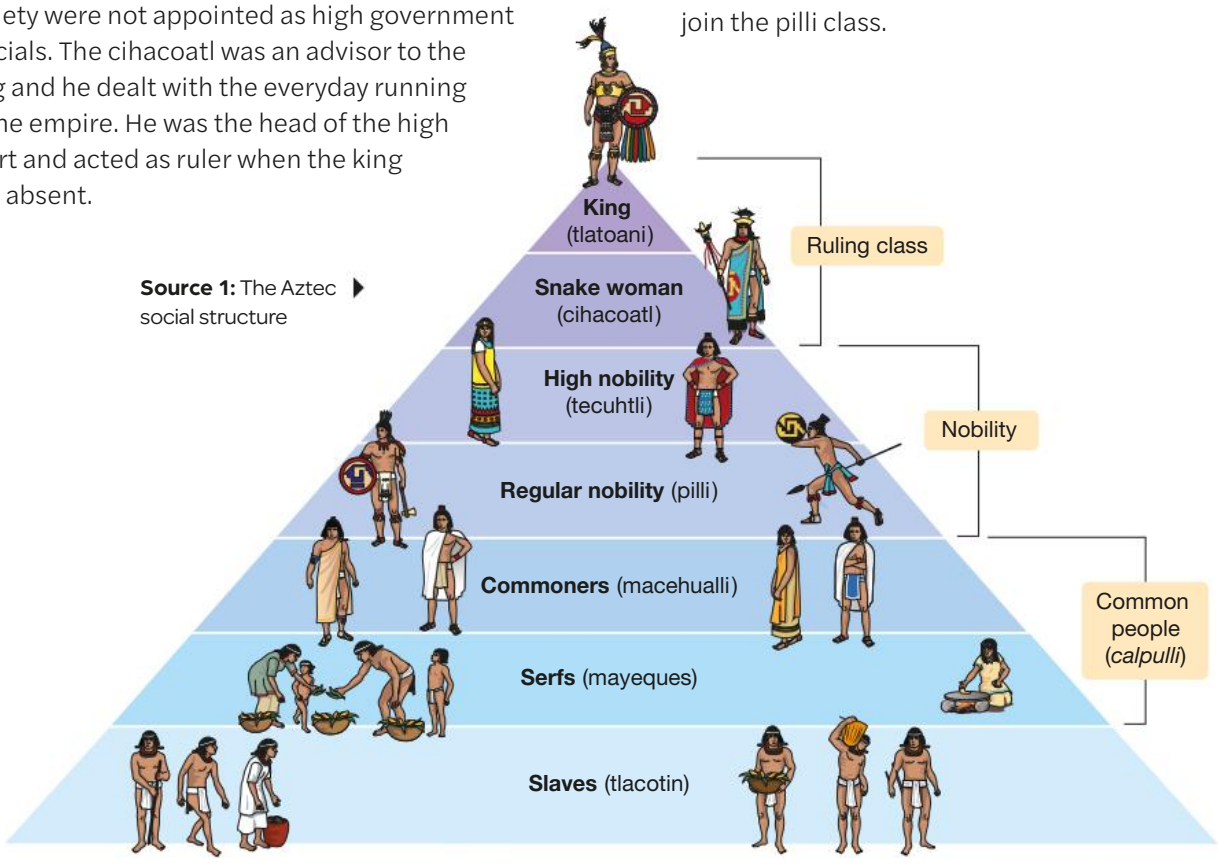
The nobles

The nobility made up 5 per cent of the total population. They wore richly coloured cloaks, *cactli* (sandals) and elaborate jewellery made of gold, shells, feathers and precious stones.

There were two types of nobles in Aztec society:

- ***Tecuhtli***: The tecuhtli were the high nobility, a group made up of heads of the civil service, judges, high priests and rulers of conquered cities. They owned large areas of land and had serfs (*mayeques*) to work their land. The tecuhtli were given land and serfs by the king and were expected to provide him with an army if required.
- ***Pilli***: The pilli were regular nobles who were just under the high nobles in status. They served the king and the high nobles. Famous warriors from the commoner class were sometimes invited to join the pilli class.

Source 1: The Aztec social structure



The commoners

Commoners were called ***calpulli***. Most men of this class wore a *maxtlatl* (loin cloth) and a plain white *tilmahtli* (cloak), while the women wore a *huipilli* (blouse) and a *cueitl* (skirt).

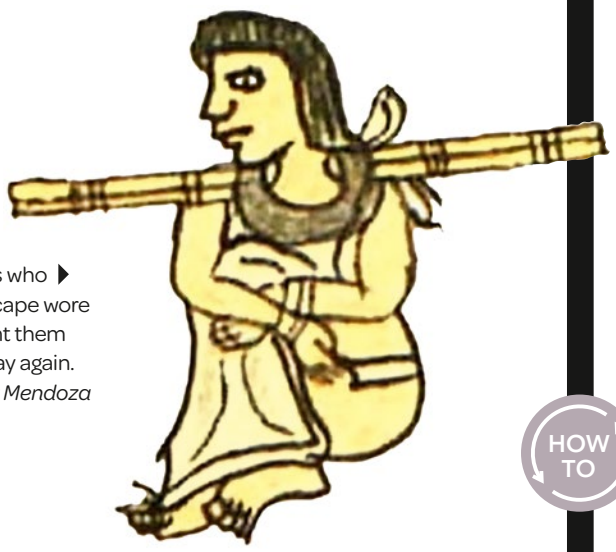
There were two types of calpulli in Aztec society:

- *Macehualli*: The macehualli lived near one another in towns governed by a single high noble lord. Warriors were usually from the macehualli class.
- *Mayeques*: The mayeques were serfs who worked the nobles' lands. They were given a small plot of land to grow their own food. They also paid most of the taxes in the empire. Sometimes, mayeques sold themselves into slavery to pay off debts.

Source 2: Aztec judges discussing how to punish two prisoners. [From Fr Bernadino de Sahagún (1590 CE), *The General History of the Things of New Spain*]

Slaves

The slaves were known as the *tlacotin*. They were usually captured from local tribes that had been subdued or defeated. Native Aztec people could not be born into slavery, but could sell themselves into slavery if they needed to pay off debts. Slaves were generally owned by the nobility but, in some cases, slaves could own other slaves. Slave owners had to feed, clothe and shelter their slaves and would set them to work in their household or else have them undertake work for the community, such as in the cacao groves or moving equipment for the army. Apart from attending to their work, slaves were free to marry, have children and even own property. However, slaves could also be used for human sacrifice if they were badly behaved. If a slave's master died and the slave was considered to have been a faithful servant, the slave was freed.



Source 3: Slaves who kept trying to escape wore a collar to prevent them from running away again. [From the *Codex Mendoza* (c. 1541 CE)]

Learning ladder H5.6

Significant people, ideas and events

1. Source 1: Identify the main social groups in Aztec society.
2. Describe the role of the tlatoani (king).
3. Explain the role of the mayeques (serfs) in Aztec society.
4. Explain why a man was chosen to perform the role of the 'snake woman'.
5. Evaluate the advantages and disadvantages of being a macehualli.

Causes and consequences

1. Source 3: Identify the reason why the slave is wearing the collar shown in the image.
2. Describe the reason why a slave might be set free.
3. Explain how a person might become a slave in Aztec society.
4. Explain the consequences for Aztec society of being able to choose their next tlatoani (king).
5. Evaluate the causes of slave compliance in Aztec society.

HOW TO

Causes and consequences, page 206

H5.7

Site study

What was the great city of Tenochtitlan like?

The Aztecs built the city of Tenochtitlan in the middle of Lake Texcoco in accordance with the wishes of their gods. Tenochtitlan was one of the grandest cities in the world.

Building Tenochtitlan

The Aztec capital city of Tenochtitlan was built on two small islands in the middle of Lake Tetzcoco in 1325 CE, in the area known today as Mexico City. Initially, two separate cities, Tlatelolco and Tenochtitlan, were built on each island. However, as the Aztec Empire grew, the islands were enlarged so that eventually they formed one large island and the cities were merged to form one city of Tenochtitlan. The Aztecs used reclaimed land and canal systems to merge the islands. This was an amazing engineering achievement in the 14th century CE.

The city was divided into four zones and each zone was divided into 20 districts, with several causeways that led to the mainland. The districts were linked by canals that were used for transportation, with wooden bridges that were removed at night. Lake Texcoco provided good protection from attack, but its water was too salty to drink. Aztec engineers built a canal system to divert water from freshwater springs to the city. Further canals were built to supply all areas of the city with fresh water.

Source 1: The centre of Tenochtitlan, the capital city of the Aztec Empire

Source 2: A model of the floating gardens known as *chinampas* on Lake Texcoco in Tenochtitlan

This great city of Tenochtitlan is built on the salt lake ... There are four artificial causeways leading to it and each is as wide as two cavalry lances. The city is as big as Seville or Cordoba. The main streets are very wide and very straight; some of these are on the land, but the smaller ones are half on land, half canals where they paddle their canoes ...

The city has many squares where trading is done and markets are held continuously. There is also one square twice as big as that of Salamanca, with arcades all around, where more than 60 000 come each day to buy and sell, and where every kind of merchandise produced in these lands is found; provisions as well as ornaments of gold and silver, lead, brass, copper, tin, stones, shells, bones and feathers.

Source 3: This text was written by Hernán Cortés, a Spanish coloniser. [Quoted in Mary Wiesner-Hanks (2005 CE), *An Age of Voyages: 1350–1600*, Oxford University Press]

Life in Tenochtitlan

Tenochtitlan was a hub of activity: traders, ambassadors, porters and scribes all lived and worked there. Some historians believe the population of the city may have been around 50 000 to 100 000 people in 1500 CE, which made Tenochtitlan one of the largest cities in the world at that time.

At the centre of Tenochtitlan was the sacred precinct, which contained a large pyramid-style temple (Templo Mayor) and other temples. Next to the sacred precinct were the palaces of the current and previous kings. The king in 1500 CE was Moctezuma II, who lived in a magnificent palace that was said to have had more than 100 rooms, a botanical garden, an aquarium and two zoos.

Every Aztec district had its own marketplace, and markets were usually held every five or so days. At the markets, the Aztecs purchased everything they needed for everyday life, including food, animals, artwork, pottery and textiles. The markets were also a social opportunity to meet friends and share local news. Specific markets within the empire were famous for certain goods; for example, Azcapotzalco market was famous for its birds and slaves, and Texcoco was famous for textiles and painted goods. The largest and best-known market was the Tlatelolco market, located in the area of Tenochtitlan once known as Tlatelolco.

The floating gardens of Tenochtitlan

There was little land around Tenochtitlan to farm, so the Aztecs built floating gardens called chinampas. These artificial islands were built by weaving reed platforms under the water to support layers of soil and vegetation until the top layer of soil was above the surface of the lake. Chinampas were used to grow crops of corn, beans, squash, tomatoes and chilli peppers.

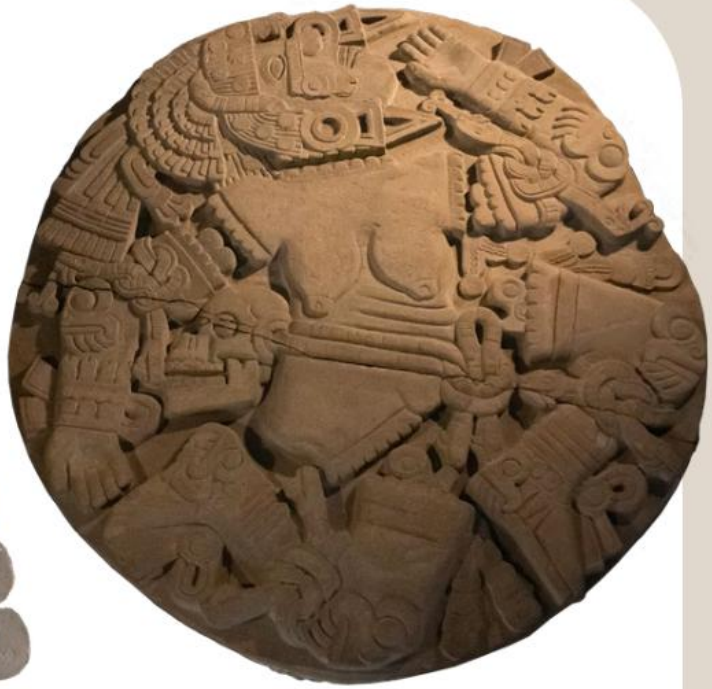
The Templo Mayor

The Aztecs began building the Templo Mayor (known to the Aztecs as Coatepec) shortly after 1325 CE. It was a large stone pyramid with wide staircases, a symbolic recreation of the 'Hill of the Serpent', a sacred place in Aztec mythology. The temple was rebuilt seven times during the Aztec period, with the sixth completed in 1487 CE and the last built in c. 1500 CE.

When the Spanish arrived in 1519 CE, it was the seventh version of the temple they saw. They destroyed the Templo Mayor in 1521 CE and used its stones to construct a church on the site. The location of the Templo Mayor was subsequently lost until 1978 CE, when a stone disk carved with an image of the Aztec goddess Coyolxauhqui (sister of Huitzilopochtli) was found during rebuilding after major earthquakes in Mexico City. An archaeological excavation was begun, which is still being carried out today. Archaeologists have unearthed thousands of Aztec artefacts at the site, including statues, carvings, masks and fossils of plants and animals native to the area. These are now on display in the Templo Mayor Museum, which stands next to the site.

Source 4: Archaeologists working on the Templo Mayor site, 2010 CE

Source 5: Eagle warrior statue (c. 1480 CE) made of clay by an unknown Aztec artisan. This figure was found in the House of Eagles structure, built as part of the fourth version of the Templo Mayor. The fourth version is richly decorated and contains most of the sculptures found so far.



Source 6: The Coyolxauhqui disk found in the fourth version of the Templo Mayor in 1978 CE. This artefact first led archaeologists to the location of the Templo Mayor.

Learning ladder H5.7

Significant people, ideas and events

1. Source 1: Identify the important sites in Tenochtitlan.
2. Sources 1 and 3: Describe the city of Tenochtitlan.
3. Source 2: Explain how the Aztecs farmed on Lake Texcoco.
4. Source 3: Using the source and your knowledge, explain why the marketplace was important.
5. Evaluate the significance of Tenochtitlan in 1500 CE.

Significance

1. Source 6: Identify this historically significant artefact.
2. Source 5: Describe this artefact.
3. Explain the significance of the pyramid shape of the Templo Mayor.
4. Sources 5 and 6: Explain why the fourth version of the Templo Mayor is of archaeological significance.
5. Evaluate the importance of religion in Aztec culture.

HOW TO

Significance, page 212

H5.8

What did the Aztecs believe?

Religion played a central role in Aztec society and affected everything a person did. The Aztecs worshipped more than 200 different gods. Each god had an important function in Aztec society

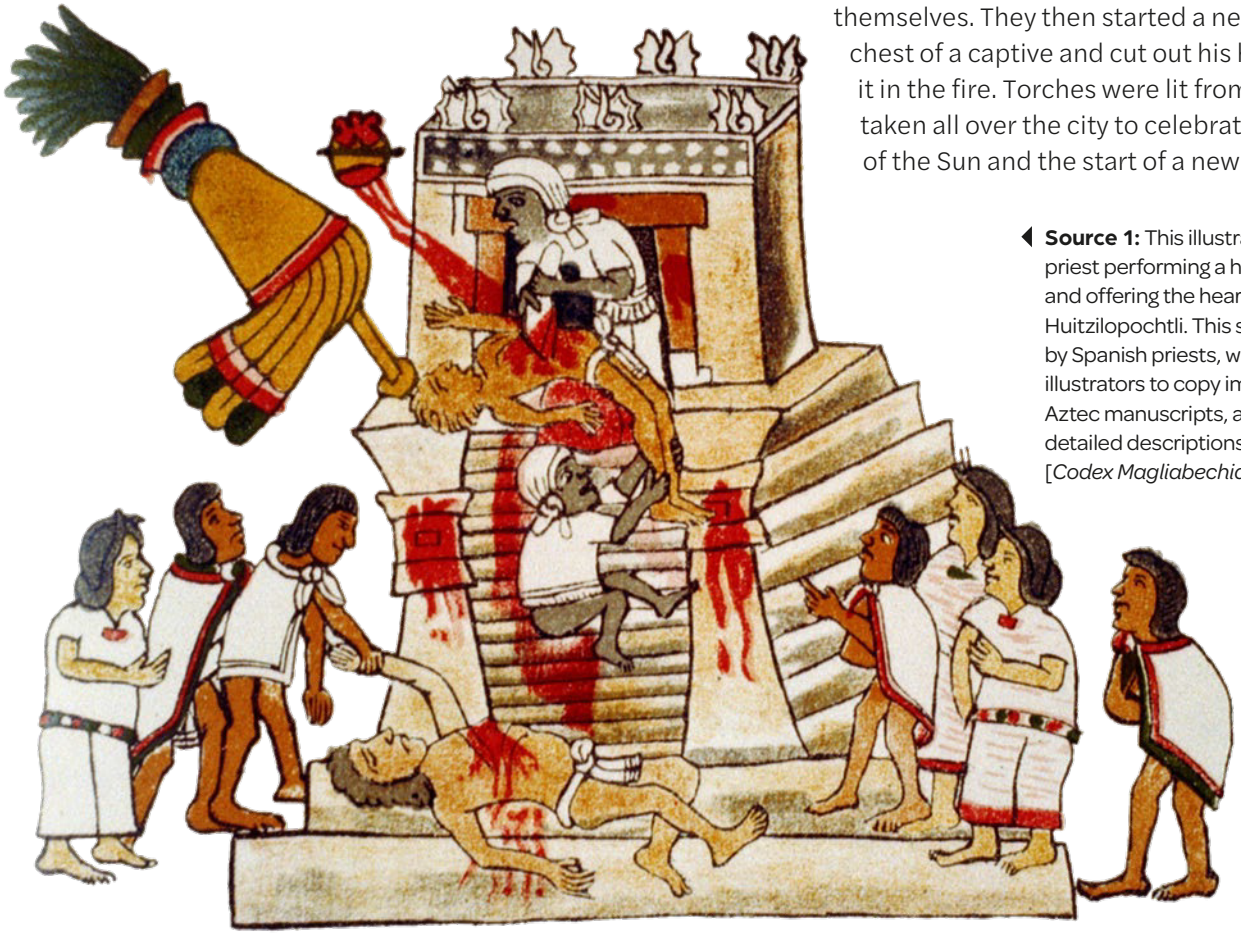
The Aztec gods

The Aztecs viewed their gods as spirits that could take on many forms. They were believed to play a role in Aztec life, controlling the outcomes of war, farming and childbirth. Many gods also had special roles as patron gods of a particular group in society.

The Aztec religious calendars

The Aztecs used three types of calendars:

- **The ritual calendar**: This calendar lasted for 260 days and was used for the purpose of tracking rituals and determining which days were lucky or unlucky for particular events.
- **The solar calendar**: This calendar lasted for 365 days. It was arranged into 18 months, each of which had 20 days. The Aztecs used this calendar for agricultural purposes, and each 20-day period marked the beginning of a new festival. Five additional unnamed days occurred at the end of each year, called the 'hollow days', which were considered to be unlucky.
- **The 52-year calendar**: This was a combination of the ritual and solar calendars. Every 52 years, the solar calendar ended at the same time as the ritual calendar. This marked the beginning of a new era, celebrated with a 'new fire ceremony'. During the new fire ceremony, the Aztecs put out all fires and threw away the hearth stones in order to purify themselves. They then started a new fire on the chest of a captive and cut out his heart and placed it in the fire. Torches were lit from this fire and taken all over the city to celebrate the return of the Sun and the start of a new era.



Source 1: This illustration shows a priest performing a human sacrifice and offering the heart to the war god Huitzilopochtli. This source was created by Spanish priests, who employed Aztec illustrators to copy images from earlier Aztec manuscripts, and then wrote detailed descriptions of the rituals. [*Codex Magliabechiano* (c. 1540 CE)]

Human sacrifice

In many Aztec myths and stories, the gods sacrificed themselves to create the Aztec world and make it a better place. In one myth, the gods spilt their blood to create people; in another myth, they threw themselves into a large fire to create the Sun. These stories were the basis of the rituals the Aztecs performed to appease their gods. The most common ritual that was used to demonstrate gratitude to the gods was human sacrifice.

Human sacrifice usually took place at the top of Templo Mayor, the largest temple in Tenochtitlan. The individual to be sacrificed would be held on a stone tablet by four priests. A fifth priest would slice the person's abdomen with a ceremonial knife. The cut was made in the abdomen but often went through the diaphragm. The fifth priest would then grab the heart and pull it out, still beating. The heart would be placed in a special bowl and the body thrown down the temple's stairs.

It is thought that the Aztecs sacrificed between 10 000 and 50 000 people each year to please their gods. While rebellious slaves and children were sometimes sacrificed, the majority of victims were enemy soldiers captured in battle.

Another story tells how Quetzalcoatl created humans ... First, he stole corn from the ants to provide food for the new race of beings. Then, to create this race, he journeyed to the underworld. Against the wishes of the underworld ruler, Mictlantecuhtli, Quetzalcoatl took the bones of the dead and returned to the upper world. He then pierced himself and used his blood to turn the bones into humans.

Source 2: This text was written by a modern-day historian, Scott Littleton. [C. Scott Littleton (ed.) (2005 CE), *Gods, Goddesses and Mythology*]

Source 3: Some of the Aztec gods and their roles

God	Meaning of god's name	Role(s) or theme(s)
Ometeotl	Two-god	Original creator of the gods
Tezcatlipoca	Smoking mirror	Omnipotent power; patron of kings
Xiuhtecuhtli	Turquoise lord	God of fire
Centeotl	Maize god	God of maize (corn)
Ometochtli	Two rabbits	God of fertility
Teteoinnan	Mother of gods	God of Earth; patron of doctors
Xipe Totec	Our lord with the flayed skin	God of agriculture; patron of goldsmiths
Huitzilopochtli	Hummingbird of the south	God of war and sacrifice; patron of the Mexica
Mixcoatl	Cloud-serpent	God of war, sacrifice and hunting
Quetzalcoatl	Quetzal-feathered serpent	Creator god; patron of priests

Learning ladder H5.8

Significant people, ideas and events

1. Source 3: Identify the patron gods of the Aztecs.
2. Source 3: Describe the role of two of the gods.
3. Explain the difference between the ritual and solar calendars.
4. Explain why the new fire ceremony was important.

Sources

1. Source 2: Identify the origin of the source.
2. Source 1: Using the source and your knowledge, describe how the Aztecs sacrificed people.
3. Source 2: How does this source explain the gods' sacrifices for the Aztec people?
4. Source 2: Using the source and your knowledge, explain why the Aztecs sacrificed people to their gods.
5. Source 1: Evaluate the usefulness of this source for a historian studying Aztec religion.

Sources, page 201

HOW TO

How did the Spanish find the Americas?

During the 15th century CE, Portuguese and Spanish seafarers went in search of new trade routes to Asia.

Accidental finding of the Americas

Spices from South-East Asia – such as pepper, cinnamon and nutmeg – were highly prized in Europe, North Africa and the Middle East. Merchants who braved the long sea voyages to travel to Asia and purchase the spices became very wealthy.

During the 14th century CE, most of the spice trade routes were controlled by Muslim, Genoese or Venetian merchants. The leaders of Spain and Portugal wanted to find new trade routes across the Atlantic Ocean to the Indies (southern Asia), which would allow them to have a stake in the lucrative spice trade.

To this end, King Ferdinand and Queen Isabella of Spain financed the Italian explorer Christopher Columbus to find a new route to the Indies. In 1492 CE, Columbus and his fleet arrived in the Caribbean Islands off the coast of America. During four separate trips between 1492 and 1504 CE, Columbus explored various Caribbean Islands.

Columbus believed that he had landed in Asia, but in 1501 Italian seafarer Amerigo Vespucci travelled along the coast of South America and noted that it was a separate continent, which he called 'the New World'. In 1507 CE, a mapmaker labelled the new continent 'America' in Amerigo Vespucci's honour.

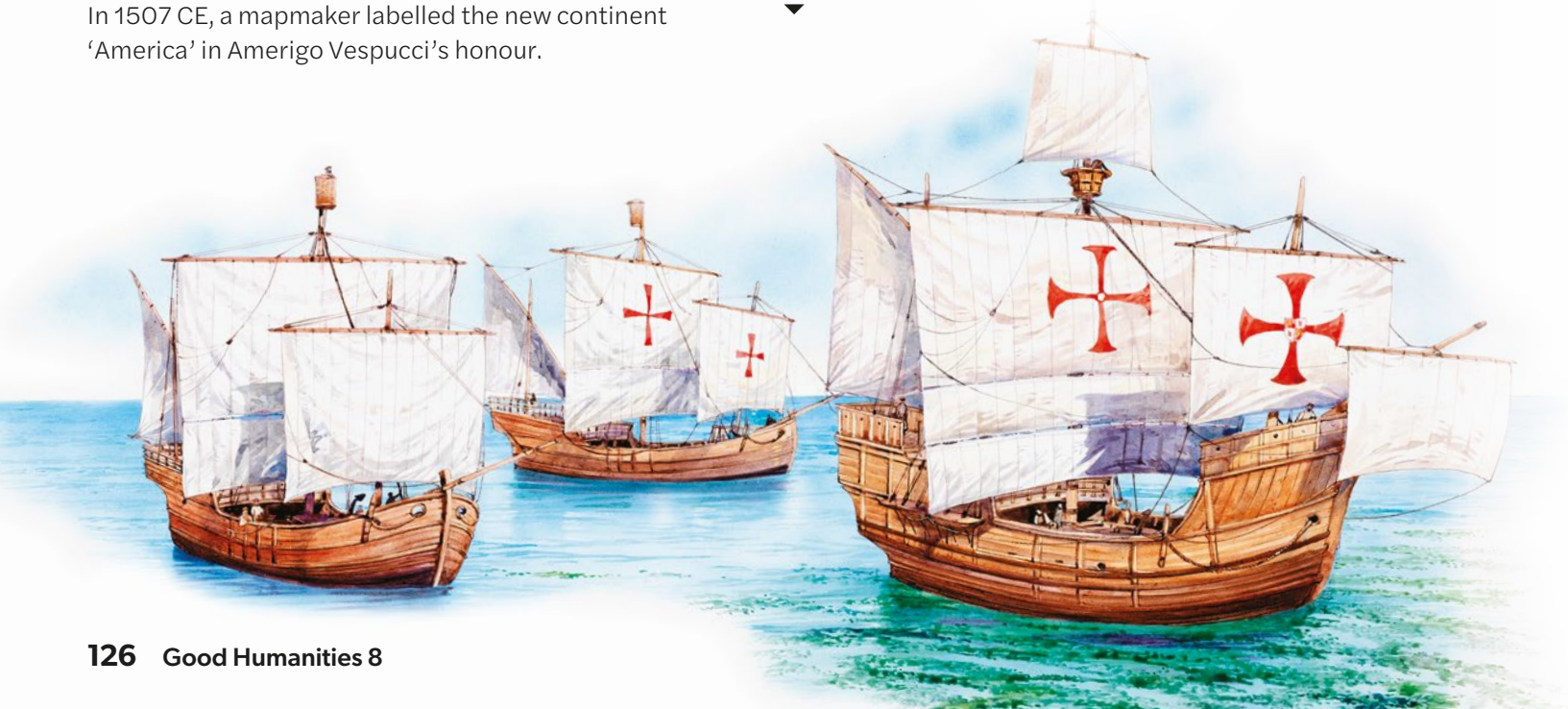
Magellan's voyage

The Spanish monarchs also funded the expedition of a Portuguese seafarer named Ferdinand Magellan. He navigated a route from the Atlantic Ocean to the Pacific Ocean, circumnavigating the globe between 1519 and 1522 CE. This feat paved the way to further expeditions across the Pacific and Indian Oceans, which led to the exploration of Australia, New Zealand and Antarctica.

Conquistadors

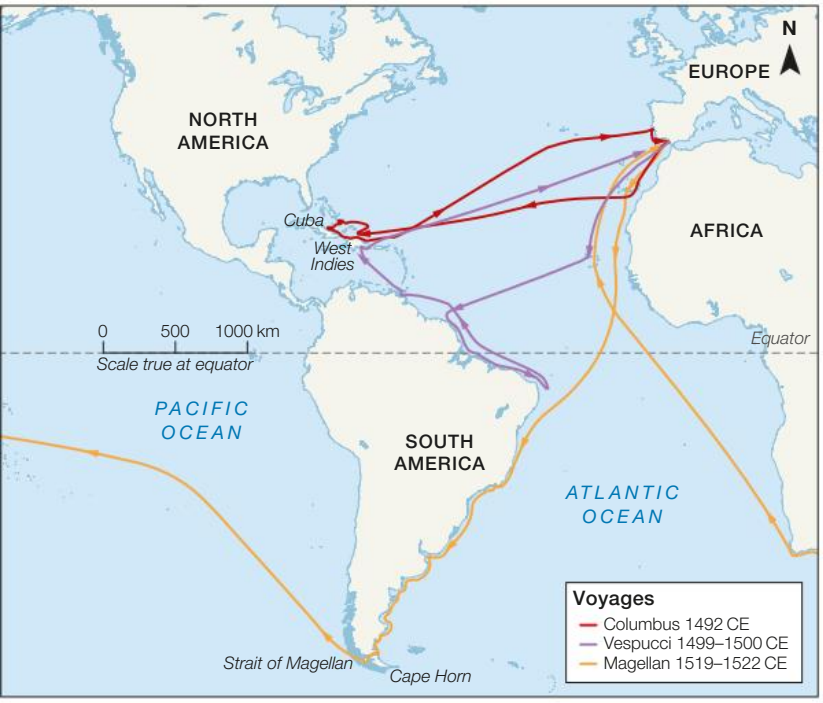
The voyages of Columbus and Magellan were followed by the establishment of the Spanish Empire. To ensure they had control over the resources of the new world, the rulers of Spain appointed ***conquistadors*** to help set up the overseas empire. Many young men willingly became conquistadors to advance themselves or to escape poverty. The conquistador who became infamous to the Aztecs was Hernán Cortes. Born in 1485 CE, Cortés set out to explore the new world and make his fortune when he was 19 years old.

Source 1: Christopher Columbus's ships, named the *Niña, Pinta* and *Santa Maria,* set sail from the Spanish port of Palos in 1492 CE in search of a trade passage to the Indies (southern Asia).



Source 2: Christopher Columbus sets foot on what he thought, based on his readings of Marco Polo, was the island of Cipango (Japan). In fact, it was Cuba, in the Caribbean.

The Americas, Africa and western Europe



Source: Matilda Education Australia

Source 3: Voyages to find new trade routes

Learning ladder H5.9

Background and origins

1. Source 2: Where did Christopher Columbus think he had landed?
2. Source 3: Describe the voyages shown in this source.
3. Explain how Spain and Portugal secured their new territories.
4. Explain why Spain and Portugal funded sea expeditions across the Atlantic Ocean.

Significance

1. Source 2: Identify the significant event in this source.
2. Describe the significance of Amerigo Vespucci.
3. Explain the significance of the spice trade in the 15th century CE.
4. Source 3: Explain why each of the voyages shown in this source is historically significant.

HOW TO

Significance, page 212

H5.10

Key individual

Who was Malinche?

Without Malinche, the Spanish would never have found the Aztec kingdom. Was she a traitor? Or a hero protecting the Tlaxcalan people?

The Spanish meet Malinche

In 1519 CE, the conquistador Hernán Cortés landed at the port of Veracruz with 11 ships and 450 soldiers. He set off to find the kingdom of the Aztecs, believed to be full of gold and riches.

Early in Cortés's expedition, he was attacked by the Maya at Potonchan. Cortés was able to subdue the Mayan attack and, as a peace offering, the Maya presented Cortés with food, gold and 20 slaves. One of these slaves was a woman known as Malinche. Malinche was a noblewoman from Olutla who spoke the Aztecs' Nahuatl language.

Malinche's role as a translator

Malinche's father had died when she was 10 years old and she had been captured and sold into slavery. While in captivity, she had learned to speak the Chontal Mayan and Yucatec Mayan languages of her slave owners.

After Malinche was given to Cortés, the Spanish expedition was met by a messenger of the Aztec king, Moctezuma II. The messenger spoke Nahuatl, which the Spanish could not understand. The only person who spoke a Mesoamerican language in Cortés's group was a Catholic missionary priest named Jeronimo de Aguilar, but he spoke Yucatec Mayan. Cortés realised that Malinche could understand Moctezuma's messenger. She could translate the Nahuatl message into Yucatec Mayan for Aguilar, who could then translate it into Spanish for Cortés. The ability of the Spaniards to communicate with the Mesoamericans was immensely valuable to Cortés's expedition.

Alliances with Aztec enemies

Thanks to Malinche, Cortés was able to form an alliance with the Nahautl-speaking Totonacas people. The Totonacas were a subject people of the Aztecs and wanted to free themselves from Aztec rule. They recognised Malinche as a noblewoman and saw her as an effective leader who could help them. Following a meeting in the city of Cempoala, the Totonacus agreed to lead the Spanish inland to Tenochtitlan and to provide Cortés with 1300 warriors. This alliance with the Totonacas was of great benefit to the Spanish as it gave them an ally in the region who was familiar with the mountainous terrain and with the Aztecs.

The Totonacas soon guided the Spanish towards the lands of the Tlaxcala. When Cortés arrived at Tlaxcala, he and his men were attacked by a Tlaxcalan force of 30 000 warriors. Despite the Spanish having swords, guns, horses and cannons, it took the Spanish a considerable time to win the battle. Once the Tlaxcalans were defeated, they agreed to negotiate an alliance through Malinche with the Spanish. The Tlaxcalans trusted Malinche's advice and provided the Spanish with 6000 warriors.

Source 1: Malinche translating negotiations between the Tlaxcalans and Cortés. [From a mural at the Palacio de Gobierno, Tlaxcala, Mexico by Desiderio Hernandez Xochitiotzin, 1995 CE]

Cortés's expedition in Mexico, 1519–1521 CE

Source: Matilda Education Australia

▲ **Source 2:** Cortés and his small army arrived on the Mexican coast in February 1519 CE. By November 1519 CE, Cortés had fought his way inland to the Aztec capital, Tenochtitlan.

▲ **Source 3:** Spanish and Tlaxcalan forces attack enemy Cholulan forces on their way to Tenochtitlan. Malinche is shown on the far right directing the attack, while Cortés is shown on his horse. [From the *Lienzo de Tlaxcala*, a Tlaxcalan manuscript created in c. 1550 CE]

Different views of Malinche

Accounts written after Mexico gained its independence from Spain in 1821 CE argued that Malinche's cooperation with the Spanish made her a traitor. Indeed, in Mexico today, being called a 'malinchista' is an insult meaning 'traitor'. On the other hand, as a woman who had been given to the Spanish as a slave, Malinche's cooperation may be seen as her attempt to survive in a hostile world. Tlaxcalan accounts, meanwhile, paint Malinche as a hero, maintaining that her leadership and negotiating skills saved them from the Aztecs.

Learning ladder H5.10

Background and origins

1. Source 1: Identify the role of Malinche shown in this source.
2. Source 2: Describe the route of the Spanish expedition to Tenochtitlan.
3. Explain how Malinche enabled the Spanish to communicate with the Mesoamerican peoples.
4. Explain why the alliances with Aztec enemies enabled Cortés to proceed inland.
5. Evaluate the importance of Malinche to the Spanish expedition.

Interpretations

1. Identify the historical debate about Malinche.
2. Source 3: Describe how Malinche is depicted in this source.
3. Source 3: Explain why Malinche has been depicted this way.
4. Sources 1, 2 and 3: Using these sources and your knowledge, compare the arguments that Malinche was:
   - **a** a traitor to the Indigenous peoples of Mesoamerica
   - **b** a victim of circumstances beyond her control
   - **c** a powerful figure with her own agenda.
5. Evaluate the arguments in Question 4.

HOW TO

Interpretations, page 214

What happened when the Spanish arrived in Tenochtitlan?

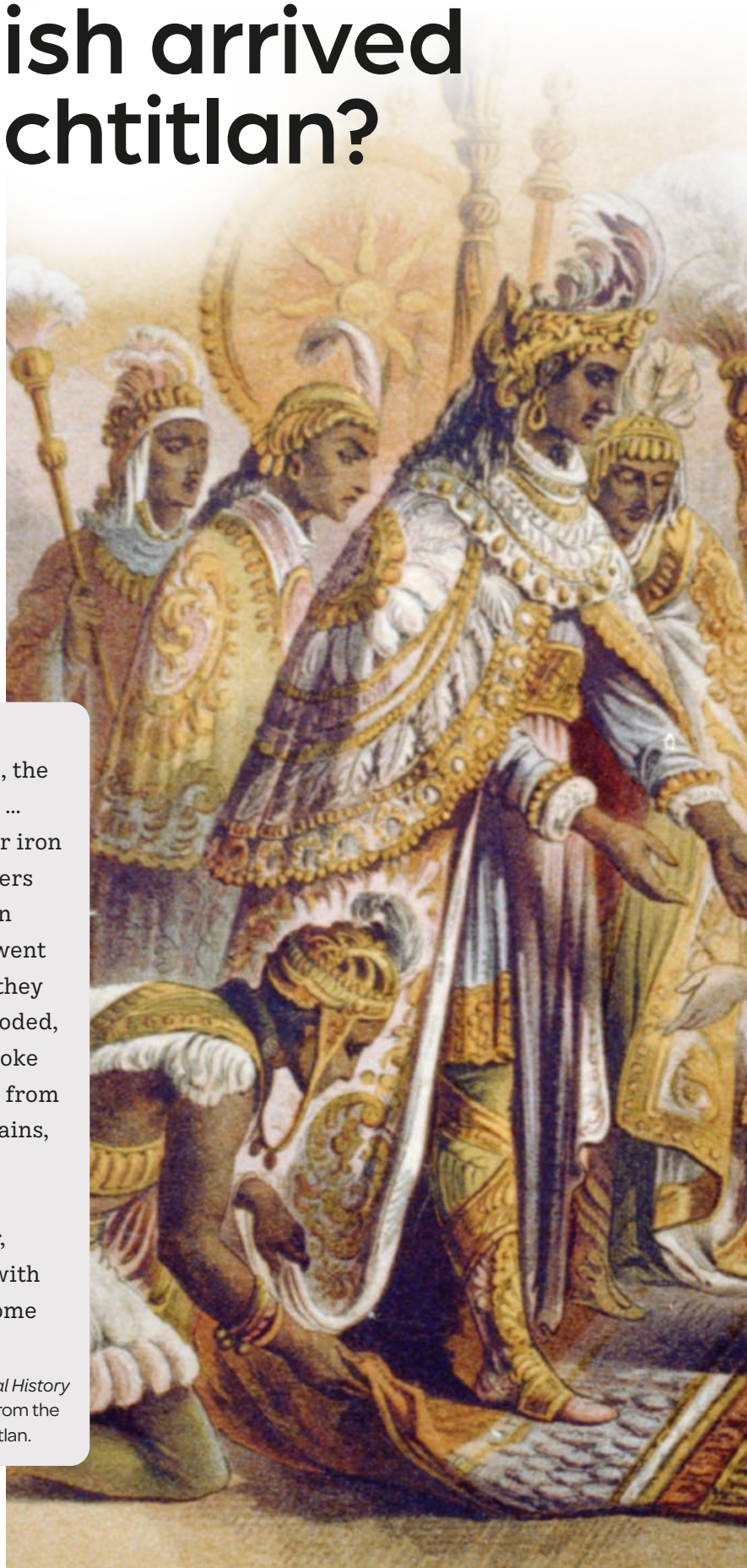
The arrival of the Spanish in the Aztec city of Tenochtitlan led to further mistrust on both sides.

The first meeting

On 8 November 1519 CE, the Spanish entered the Basin of Mexico and saw the Aztec's capital city of Tenochtitlan. As Hernán Cortés arrived at the great causeway that led to the city, he was greeted by a long ceremonial welcome, as each Aztec nobleman saluted him and bowed. While thousands of Aztec commoners gathered to watch from the causeway, the rooftops and their canoes, Malinche patiently translated the greetings of the noblemen.

Four horsemen came ahead going first ... By himself came marching ahead, all alone, the one who bore the standard on his shoulder ... Following him came those with iron swords. Their iron swords came bare and gleaming. On their shoulders they bore their shields, of wood or leather ... [then came] those with **harquebuses** ... And when they went into the great palace, the residence of the ruler, they repeatedly shot off their harquebuses. They exploded, sputtered, discharged, thundered, disgorged. Smoke spread, it grew dark with smoke ... Then all those from the various states on the other side of the mountains, the Tlaxcalans, the people of Tliliuhquitepec, of Huexotzinco, came following behind. They came outfitted for war with their cotton upper armour, shields, and bows, their quivers full and packed with feathered arrows, some barbed, some blunted, some with **obsidian** points.

Source 1: Extract from Fr Bernadino de Sahagun (1590 CE), *General History of the Things of New Spain* (1590 CE). Fr Bernadino wrote this text from the perspective of the Aztecs, almost 70 years after the fall of Tenochtitlan.

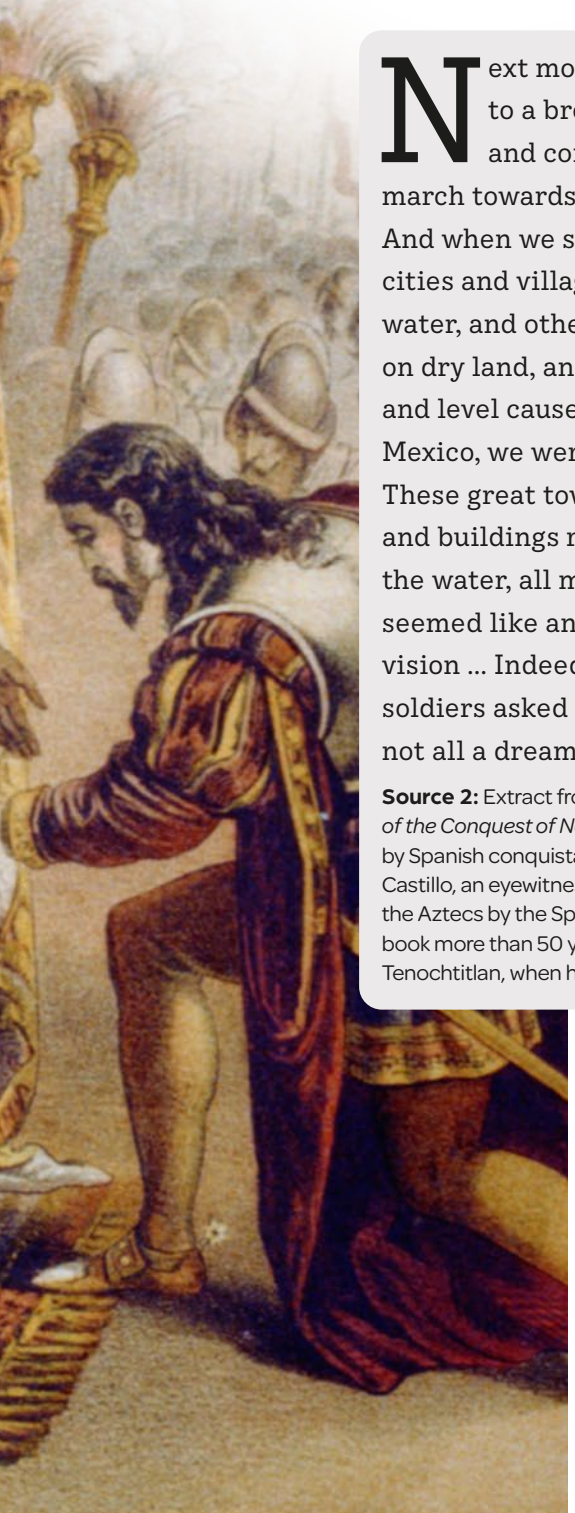


Then the Aztec king, Moctezuma II, appeared, carried on a grand litter decorated with green feathers, gold and jewels. He and Cortés honoured each other in their first meeting, and Moctezuma II permitted Cortés and his group to enter the city. While Moctezuma II gave the Spanish gold as a welcoming gift and allowed them into the city, he was actually hoping to learn more about their weapons and military tactics, so that he could crush them later.

Cortés was pleased with his welcome, but he did not trust the Aztecs. After learning that several Spaniards on the coast had been killed by Aztecs, he decided to imprison Moctezuma II and other high-ranking Aztec officials in the palace. Cortés believed he could use Moctezuma II to control the Aztec people.

> Next morning we came to a broad causeway and continued our march towards Tenochtitlan. And when we saw all those cities and villages built in the water, and other great towns on dry land, and that straight and level causeway leading to Mexico, we were astounded. These great towns and temples and buildings rising from the water, all made of stone seemed like an enchanted vision ... Indeed, some of our soldiers asked whether it was not all a dream.

Source 2: Extract from *The True History of the Conquest of New Spain* (1576 CE) by Spanish conquistador Bernal Diaz del Castillo, an eyewitness to the conquest of the Aztecs by the Spaniards. He wrote the book more than 50 years after the fall of Tenochtitlan, when he was 84 years old.



Source 3: Hernán Cortés kneels before Moctezuma II, leader of the Aztecs in 1519 CE. [Unknown artist (1878 CE), *Reception of Hernando Cortez by the Emporer Montezuma*]

The arrival of the Spanish army

Back in Spain, Cortés's conduct in the Americas caused outcry. This outcry was not fuelled by moral outrage at Cortés's acts of violence against the peoples of Mesoamerica. Rather, the governor of Spanish Cuba, Diego Velázquez, was outraged that Cortés had taken control of Mexico without his authority. In April 1520 CE, Velázquez convinced King Charles V of Spain to send a Spanish army to Veracruz to arrest Cortés and return him to Spain.

When Cortés heard of this, he left his trusted captain, Pedro de Alvarado, and 100 soldiers in charge of Moctezuma II. He set off back to Veracruz with the rest of the army. Cortés not only managed to defeat the Spanish army but also won the Spanish soldiers over to his side by telling them stories of gold and riches to be found in Tenochtitlan. He then began his return to Tenochtitlan.

Learning ladder H5.11

Significant people, ideas and events

1. Source 3: Identify the event depicted in this source.
2. Describe how Moctezuma II welcomed Cortés.
3. Explain how Cortés gained control of the Aztec people.
4. Explain why the Spanish army was sent to Veracruz.

Perspectives

1. Sources 1 and 2: Identify the perspective of each of these sources.
2. Sources 1 and 2: Describe each author's perspective of the Spanish entry into Tenochtitlan.
3. Sources 1 and 2: Compare these two sources. How are they different?
4. Sources 1 and 2: Explain why the perspectives of these two sources are different.
5. Sources 1 and 2: How is the context of each of these sources significant?

HOW TO

Perspectives, page 210

How did Moctezuma die?

The death of the Aztec king Moctezuma II remains a mystery, even with three different eyewitness accounts of his death.

The massacre at the temple

While Hernán Cortés was in Veracruz dealing with the army sent to arrest him, his deputy, Pedro de Alvarado, was having serious problems in Tenochtitlan.

Moctezuma II had given permission for the annual religious festival of Toxcatl in honour of their god Tezcatlipoca. The purpose of the festival was to ask for rains, which would water the Aztec crops for another year. The festival involved dancing and human sacrifices. At the height of the celebration, the bravest warriors performed a ritual known as the 'dance of the serpent', wearing ceremonial battle dress.

Alvarado, however, was convinced that the Aztec warriors were planning to attack the Spanish, so he ordered the Spanish to strike first. The Spanish consequently massacred the Aztec worshippers at the festival. This slaughter outraged the Aztecs, who began to attack the Spanish at the palace. Moctezuma II called off the attacks and his Aztec soldiers obeyed. By this time, Cortés had returned from Veracruz with new Spanish troops, and made his way into the palace.

The death of Moctezuma II

Cortés had not understood the nature of Aztec kingship. Unlike European kings, who held their position by divine right, Aztec kings were elected to their position by the nobles. A *tlatoani* could be easily replaced by another noble if he failed to rule with strength. At any sign of weakness, Aztec nobles could rebel against his kingship. While Cortés had believed that capturing Moctezuma would ensure the Spanish could control the Aztecs, Moctezuma's capture and willingness to do what Cortés told him resulted in his people withdrawing their support for his rule.

On Cortés's orders, Moctezuma had stood on the battlements and called on the Aztecs to stop fighting. Much uncertainty exists among historians about what happened next, with conflicting versions given by different eyewitnesses, Spanish and Aztec:

- *The True History of the Conquest of New Spain* (1576 CE), written by Spanish conquistador Bernal Diaz del Castillo, claimed that the Aztecs were angry that Moctezuma II had failed to protect them from the Spanish. They had attacked him, and he had been hit by an arrow and three stones from a sling, which had led to his death shortly afterwards.
- Cortés, in his Second Letter to Charles V, reported that Moctezuma had been struck on the head with a stone, which led to his death three days later.

Source 1: On 22 May 1520 the celebration of the Feast of Toxcatl was taking place at the Templo Mayor. The conquistadors attacked the unarmed Aztecs, killing all those celebrating in the temple. [Emanuel Leutze (1849 CE), *The Conquest of the Teocalli Temple by Cortés and his Troops*]

> I had him taken to the parapet on the top of the fort, intending to speak to the people who were fighting there, one of his own subjects struck him on the head with a stone, with such force that within three days he died. I then had him taken out, dead as he was, by two of the Indian prisoners, who bore him away to his people; but I do not know what they did with him ...
>
> **Source 2:** Hernán Cortés (1520), 'Second Letter to Charles V'

- The main Aztec source, *General History of the Things of New Spain* (1590 CE) by Fr Bernadino de Sahagún, claimed that the Aztecs had 'started giving war cries and shooting arrows and darts' at Moctezuma, but that the Spanish soldiers had covered him with their shields and he was not harmed. Fighting between the Aztecs and the Spanish had resumed and four days later, the Spanish had strangled Moctezuma and thrown his body into the lake.

Cortés flees Tenochtitlan

Cortés was determined to continue fighting the Aztecs, but his troops met with fierce Aztec resistance, leading to the death of nearly 100 Spanish soldiers and several thousand Mesoamerican troops. Cortés had underestimated the fighting skills of the Aztecs. On 30 June 1520 CE, he decided to withdraw his forces back to Tlaxcala. The flight from Tenochtitlan was a crushing setback for Cortés and was known among the Spanish as 'La Noche Triste' (The Night of Sorrows.)

Several of our men had covered Moctezuma with their shields while he was addressing the enemy [Aztecs] … [but] before it could be prevented he was struck by an arrow, and three stones from a sling, by which he was wounded in the arm, leg, and in his head; so that the unhappy monarch was forced to be carried back to his apartment … we soon heard that he had died. Upon this we handed over the corpse of Moctezuma to six other Mexican chiefs … All these men had been present when the monarch died, and they informed Cuitlahuatzin faithfully of every circumstance connected with it; how the Mexicans themselves had caused his death by the shot of an arrow and three stones from a sling.

Source 3: Bernal Diaz del Castillo (1576 CE), *The True History of the Conquest of New Spain*

Learning ladder H5.12

Significant people, ideas and events

1. Source 1: Identify the event shown in this source.
2. Describe what happened at the festival of Toxcatl.
3. Explain the difference between European kingship and Aztec kingship.
4. Explain why the Spanish attacked the Aztecs at the festival of Toxcatl.
5. Evaluate the role of Cortés following the massacre at the festival of Toxcatl.

Interpretations

1. Identify the three different versions of Moctezuma II's death.
2. Describe what happened to Moctezuma II's body, according to the Aztecs.
3. Sources 2 and 3: Compare the similarities and differences between these two sources.
4. What evidence would a historian need to prove any of the different versions?
5. Sources 2 and 3: Using these sources and your knowledge, suggest reasons why there are three different eyewitness accounts of the same event.

HOW TO Interpretations, page 214

H5.13

How did Tenochtitlan fall?

The Aztecs celebrated their defeat of the Spanish and returned to their lives. Cortés, however, was not easily deterred and decided to renew his attack.

Cortés makes plans

Hernán Cortés made it back to Tlaxcala and began making new plans for the conquest of Tenochtitlan. He realised that control of the lake was essential and ordered his men to build 13 small ships (brigantines). He also decided that he needed more troops to defeat the Aztec forces. Cortés sent his forces to wage war on the armies of small Aztec tributary states, who subsequently agreed to form an alliance with the Spanish. He made alliances with the larger Mesoamerican states, promising them power, territory and wealth if they helped him defeat the Aztecs.

Smallpox

Meanwhile, the Aztecs, believing that the Spanish were gone for good, returned to their lives, electing a new king, Cuitláhuac. However, by late October 1520 CE, a new problem had emerged: **smallpox**. Smallpox is a disease that can cause a terrible rash, blindness and death. While smallpox was relatively common in Europe, Asia and the Middle East, it was unknown in the Americas and the Aztecs had no immunity to it. An infected member of the Spanish forces had likely brought the disease to Tenochtitlan in June. By early December, smallpox had killed almost 50 per cent of the Aztec population, including the new king Cuitláhuac, and left others too weak to tend and harvest the crops.

The siege of Tenochtitlan

On 26 May 1521 CE, the Spanish were ready to resume their attack on Tenochtitlan. Cortés set out with 700 Spanish soldiers and 70 000 Mesoamerican allies, carrying their brigantines over the mountains from Tlaxcala. They set their brigantines on Lake Texcoco and defeated the Aztec canoes. They also took command of the causeways and blocked supplies of food and fresh water from going into the city. Both sides experienced large numbers of casualties during the siege, but it was not long before the Aztecs were running out of food and had no fresh water.

The siege lasted until 13 August 1521 CE, when the Aztecs surrendered. The days of the Aztec Empire and the Aztec way of life were over.

Source 1: Unknown artist (c.1650), *The Conquest of Tenochtitlan*, from the book *The Conquistadors* by Hammond Innes

Source 2: Image of the Aztecs suffering from smallpox. [From Fr Bernadino de Sahagún (1590 CE), *General History of the Things of New Spain*]

Learning ladder H5.13

Significant people, ideas and events

1. Source 1: Identify the event shown in this source.
2. Describe Cortés's new plans to defeat the Aztecs.
3. Source 2: Using this source and your knowledge, explain the impact of smallpox on the Aztecs.
4. Source 1: Using this source and your knowledge, explain why Cortés defeated the Aztecs.
5. Evaluate the reasons for Cortés's success over the Aztec Empire.

Chronology

1. Identify the date on which Tenochtitlan fell.
2. Put the following events in order:
   - October 1520: The Aztecs contract smallpox
   - 13 August 1521: The fall of Tenochtitlan
   - 29 June 1520: The death of Moctezuma
   - 30 June 1520: The Night of Sorrows
   - 8 November 1519: Arrival of Cortés in Tenochtitlan
   - 22 May 1520: Massacre at the Festival of Toxcatl
   - 26 May 1521: The Spanish resume their attack on Tenochtitlan.
3. Create a timeline using the events in Question 2.
4. Using the timeline you have created, explain how the events demonstrate the concept of cause and effect.

HOW TO Chronology, page 198

What happened to the Aztecs?

Although the Aztecs had surrendered to the Spanish in the siege of Tenochtitlan in 1521 CE, the real struggle was yet to come.

Following the conquest of Tenochtitlan, the Aztec Empire was proclaimed to be part of 'New Spain' by Charles V in 1522 CE. Hernán Cortés, back in favour with the Spanish king, was named governor and began to build a new city on top of Tenochtitlan, which became Mexico City. The values, traditions and culture of the Aztecs had no place in the new society of the Spanish. The Spanish not only replaced the laws that governed the people, but also took away the freedom of the people and wiped out the Aztec religion.

Dispossession of land

In the aftermath of the Spanish conquest, the Aztecs' land was taken from them and distributed to Spanish settlers. This was done through a system known as the ***encomienda*** system. Under the encomienda system, a Spanish settler was granted land and an Indigenous slave workforce that he could use for labour. In return, the Spanish settlers were supposed to provide the Aztecs with instruction in the Christian religion and protection.

Slavery

Slavery was not only taking place through the encomienda system but also occurring in the cities of New Spain. Indigenous people were rounded up to work in mines, build roads and rebuild cities. Slaves were often subjected to dreadful conditions and, as a result, many died. Thousands of Indigenous people all over New Spain were enslaved by the Spanish and put to work.

Population

The smallpox virus was only the first of many diseases that swept through New Spain, having a devastating impact on the Aztec people. The Indigenous peoples of the Americas did not have a resistance to European diseases. Historians believe that the population around Tenochtitlan in the Valley of Mexico was reduced from 1.6 million to 900 000 in 1521 CE as a result of smallpox alone. By 1600 CE, more than 15 European disease epidemics had swept throughout the Americas, killing an estimated 50 million people.

Religion

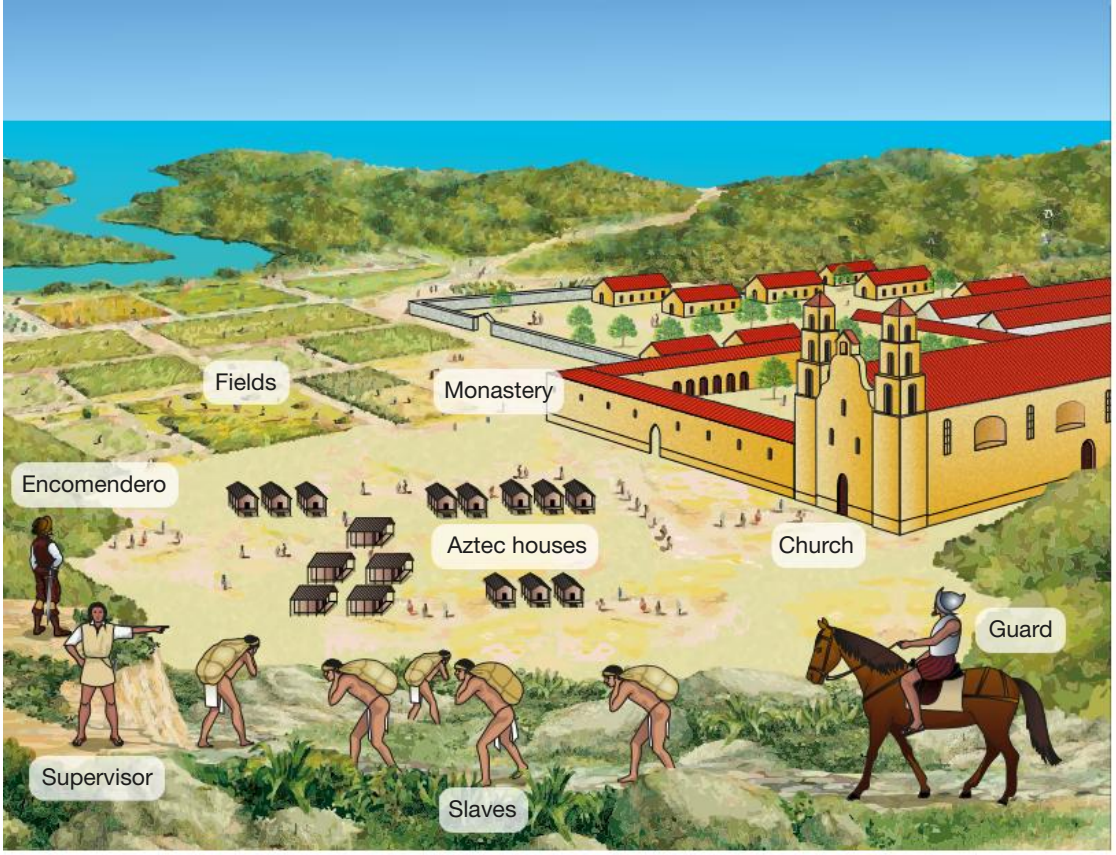
The Spanish abolished human sacrifice, smashed the statues of the Aztec gods and destroyed the temples, including the Templo Mayor. Christian churches were built in their place. However, it was the arrival of Franciscan monks in 1524 CE that accelerated the process of Christianisation. The monks developed a form of Christianity that made use of Aztec festivals, songs, dances and stories. For example, the Christian festival of the Day of the Dead, still celebrated in Mexico today, is based on an older Aztec festival. When an Aztec peasant reported that he had witnessed several visions of the Virgin Mary in 1531 CE, the Aztecs began to worship the Virgin Mary as Our Lady of Guadalupe, along with other Christian saints, in the same way that they had worshipped their own gods.

Further conquests

The Tlaxcalan alliance with the Spanish brought them great privileges after the conquest. Unlike other Indigenous Mesoamericans, they were allowed to carry guns, ride horses, rule their lands and hold noble titles. They remained loyal to Spain for the coming centuries, even during the Mexican War of Independence (1810–1821 CE), which finally won Mexico independence from Spanish rule. The Tlaxcalans also helped the Spanish defeat the peoples of Guatemala and the nomadic tribes of northern Mexico.

Long-term effects of colonisation of the Americas

After their conquests in the Americas, the Spaniards sent a fortune back to Spain in the form of vast amounts of gold and silver. The country became very wealthy. In addition, the new foods and crops grown in Mesoamerica, such as maize, beans, potatoes, tobacco and chocolate, were extracted and traded around Europe. This trade in new foods from the Americas, known as the Colombian Exchange, led to greater availability of food in Europe and significantly improved the health of Europeans. European populations doubled, leading some governments to encourage settlers to move to the Americas.



Source 1: A Spanish *encomendero* (owner) and his *encomienda*

Spanish culture also triumphed. Today, Mexico has the second-largest Catholic community in the world, and Spanish remains the recognised national language of Mexico and one of the most widely spoken languages in the world.

After we took that great and strong city of Tenochtitlan ... it was then proposed that in [the place of] the great temple we should build a church to our patron and guide Señor Santiago [St James] ... and when they opened the foundations in order to strengthen them, they found much gold and silver and jade and pearls and seed pearls and other stones ... and the officers of His Majesty's treasury demanded them, saying that they belonged by right to His Majesty ... they sought information from the Caciques [Chiefs] and Chieftains of Mexico ... and they said that it was true that all the inhabitants of Mexico at that time cast into the foundations those jewels and all the rest of the things ... from this cause those riches were preserved for the building of the holy church of Santiago.

Source 2: This text was written by a Spanish conquistador named Bernal Diaz del Castillo. [Bernal Diaz del Castillo (1576 CE), *The True History of the Conquest of New Spain*]

Learning ladder H5.14

Impact and legacies

1. List four outcomes for the Aztecs following the fall of Tenochtitlan.
2. Source 1: Describe the scene in this source.
3. Source 1: Using this source and your knowledge, explain how the encomienda system worked.
4. Explain why European diseases took such a terrible toll on the Aztecs.
5. Evaluate the impact of the Spanish conquest on the Aztecs.

Continuity and change

1. Identify three new foods available in Spain following the conquest.
2. Describe the changes for the Tlaxcalans following the Spanish conquest.
3. Source 2: Using this source and your knowledge, explain how Aztec religion changed after the Spanish conquest.
4. Explain why the practice of Christianity in Mexico demonstrates the concept of continuity and change.

HOW TO

Continuity and change, page 203

H5.15

How did the Spanish overpower the Incas?

European diseases and a civil war between brothers weakened the Inca Empire just as Spanish conquistadors arrived on a mission to conquer the empire.

The Incan Empire

By 1493, the Incas commanded the largest empire of its time. Even though they lacked horses, wheeled vehicles, steel tools and weapons, and a written language, they had created cities, roads, **aqueducts** and terraced farms in the steep Andes Mountains of South America. The Inca **emperor** ruled over 10 million people in an **empire** that stretched for 4000 kilometres from Quito in Ecuador to Santiago in Chile.

Incan society was ruled by the emperor and noble class. To run such a large empire efficiently, all common people had to work directly for the empire. In return, the government paid the people with food, clothes and other goods.

The Spanish attack

Following Cortés's success in conquering the Aztecs (see pages 134–7), the Spanish king sent more expeditions to explore and conquer lands in the Americas. After a number of explorations in 1524, Francisco Pizarro and a small army of conquistadors set out in 1529 to conquer the Inca Empire and their wealthy land, rumoured to be rich in silver and gold.

Pizarro's task seemed impossible. He was leading a small army of just 177 conquistadors to meet Inca emperor Atahualpa and his army of 80 000 men in Cajamarca. However, many things went Pizarro's way:

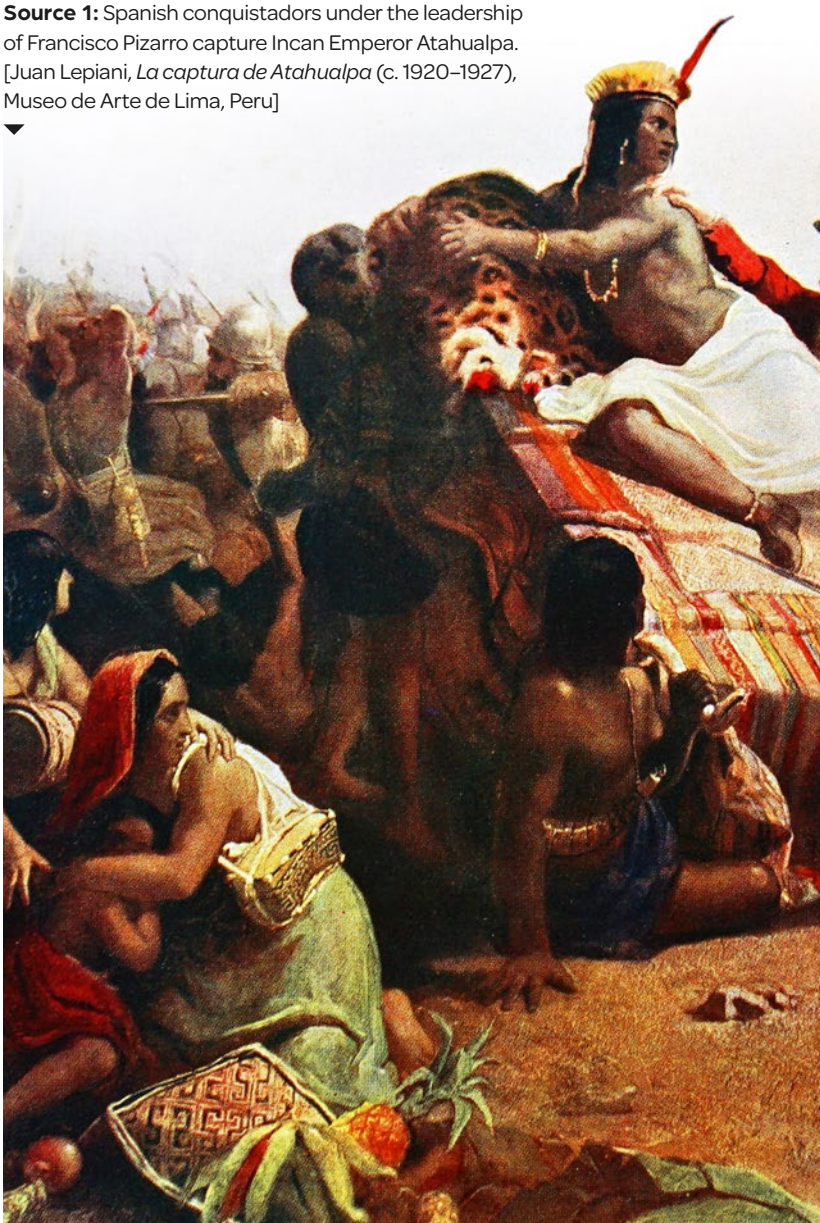
- An epidemic of smallpox swept through the Inca, killing large numbers of people.
- The Incan emperor died from smallpox and two brothers fought for control.
- There was unrest among the Inca people after years of paying tributes to Inca nobles.
- The Inca army had never seen the horses or superior weapons of the Spanish soldiers.

The Battle of Cajamarca

In November 1532, Pizarro arranged for an audience with Emperor Atahualpa in Cajamarca's town square. Pizarro positioned cannons on a rooftop and hid soldiers in buildings nearby.

The town square was quickly filled with Pizarro's hidden army and the sound of cannon fire. The Inca weapons were no match for the Spanish, and hundreds

Source 1: Spanish conquistadors under the leadership of Francisco Pizarro capture Incan Emperor Atahualpa. [Juan Lepiani, *La captura de Atahualpa* (c. 1920–1927), Museo de Arte de Lima, Peru]



Pizarro's exploration and conquest of the Inca Empire

Source: Matilda Education Australia

▲ **Source 2:** Pizarro's exploration and conquest of the Inca Empire

of Incas were killed. Emperor Atahualpa was taken hostage and had to offer to fill a large room with gold and two large rooms with silver for his freedom. The Spanish also demanded that Atahualpa be baptised as Catholic.

The Incans believed their emperor was a living god and did not attack the Spanish while he was their prisoner. With Atahualpa captured there was no leader to challenge the invaders. This allowed the Spanish time to call for more reinforcements.

In 1533, Emperor Atahualpa was killed and the Spanish installed a **puppet emperor** on the throne. The better-armed conquistador army attacked and took the important cities of Cuzco and Quito. The Spanish eventually took control of the empire.

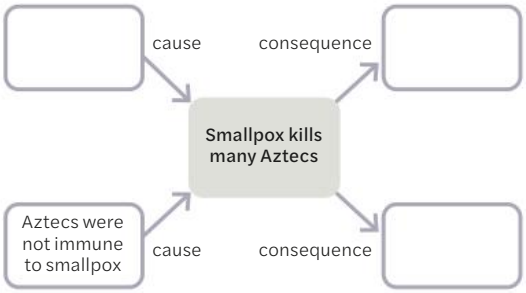
Learning ladder H5.15

Significant people, ideas and events

1. How was Incan society run?
2. What things went in Pizarro's favour when he tried to conquer the Incas?
3. Source 1: Describe what is happening in this scene.
4. What mistakes did the Inca make before and during the battle of Cajamarca?

Causes and consequences

1. How would horses have helped the Spanish conquer the Incas?
2. Copy and complete the diagram below:



3. What played a bigger part in the conquest of the Incas, luck or good strategy? Back up your answer with historical evidence.

HOW TO Causes and consequences, page 206

How have interpretations of the Aztec legacy changed over time?

The history of the Aztec legacy has shifted greatly over time. Were the Aztecs savages who 'deserved' to lose? Were the Spanish just too powerful? Or were the Aztecs in fact conquered by Indigenous peoples?

Spain's 'glorious conquest' of the Aztecs

At first, many of the histories written about the fall of Tenochtitlan were written by the Spanish. These histories typically focused on the 'heroism' of Cortés and the brave conquistadors, who were vastly outnumbered and fighting against a 'savage' enemy. These early histories also celebrate the Christianisation of the Aztecs, which involved the Aztecs turning away from their 'primitive' religion based on human sacrifice.

Spain's inglorious destruction of the Aztecs

In 1821 CE, Mexico won a war of independence from Spain and became an independent state. In order to demonstrate their distinctiveness from Spain, Mexicans began to celebrate the Aztec past as the ancient history of their new nation. The Aztecs themselves were now seen as the founders of the nation, while Cortés became an 'antihero' and the destroyer of a great culture. Since then, attempts to build new monuments and statues of Cortés in Mexico have been repeatedly opposed and vandalised. In 2019 CE, the newly elected President of Mexico, Andrés Manuel López Obrador, sent a letter to the Spanish king Felipe VI and Pope Francis demanding an apology for the atrocities committed during the Spanish conquest 500 years earlier.

Source 1: Statue of Hernán Cortés, (1890 CE). ▶
The statue was erected in Cortés's birthplace of Medellin, Spain, and shows him wearing armour, stepping on an Aztec god while raising the banner of Christianity.

Source 2: Image of the Tenochtitlan battle from the *Lienzo de Tlaxcala* (1550 CE). The centre panel shows Malinche directing the Spanish and Tlaxcalan forces to fight the Aztec warriors. A Spanish brigantine is shown in the panel above and Aztec canoes in the lower panel.

Was there a Spanish conquest at all?

Most accounts of the fall of Tenochtitlan are in agreement that Spanish forces were victorious because of their superior weaponry, technology and tactics. In addition, the impact of smallpox, introduced by the Spanish, allowed Cortés to overcome a 'biologically weaker' enemy. Western civilisation, therefore, had triumphed.

However, a closer reading of Aztec sources reveals a more complex story. What Spanish accounts portrayed as a glorious conquest was, in fact, a more complicated process of alliances and negotiations in which Indigenous groups, such as the Tlaxcalans, and Indigenous people, such as Malinche, played a significant role.

Some historians have argued that the role played by Indigenous groups means that there was no 'Spanish conquest'; instead, the fall of the Aztecs was mainly the result of an Indigenous uprising against their Aztec oppressors. However, although the Indigenous peoples may have played a significant role in the fall of Tenochtitlan, it was the Spanish who reaped the rewards of the conquest.

> I have sent a letter to the Spanish king and another letter to the Pope so that the abuses can be acknowledged and an apology can be made to the Indigenous peoples for the violations of what we now call human rights. There were massacres ... The so-called conquest was done with the sword and the cross. They raised churches on top of temples.
>
> **Source 3:** Interview with Andrés Manuel López Obrador, BBC, 26 March 2019

Learning ladder H5.16

Impact and legacies

1. Identify the key interpretations of the Aztec legacy.
2. Describe the traditional view of the fall of Tenochtitlan as a 'Spanish conquest'.
3. Source 3: Using the source, explain how the modern state of Mexico views the fall of Tenochtitlan.
4. Source 2: Using the source, explain why some historians argue that the fall of Tenochtitlan was not a Spanish conquest.

Perspectives

1. Source 1: Identify the perspective of Cortés shown in this source.
2. Source 3: Describe the perspective of Andrés Manuel López Obrador.
3. Source 2: Explain the perspective of this source on reasons for the fall of Tenochtitlan.
4. Sources 1 and 2: Explain why the perspectives of the two sources are different.
5. Evaluate the different perspectives on the fall of Tenochtitlan.

HOW TO Perspectives, page 210

H5.17

How do I conduct a good inquiry?

Now that you've finished the chapter, it's time to conduct your own historical inquiry on the Spanish conquest of the Americas. Throughout the chapter you have developed knowledge and understanding of the Spanish conquest of the Americas. Background knowledge is important because it helps you make connections to new information, ask better questions and consider different perspectives. As you progressed through the chapter, you have gathered information through classroom discussion, highlighting, note taking and answering questions. Now you are ready to start planning your own historical inquiry!

A historical inquiry gives you the opportunity to be an active historian: forming questions, interrogating sources and communicating insights about the past on a topic of your choice. The chapter has covered the origins and legacies of the Spanish conquest of the Americas in addition to significant people, events, ideas and beliefs. What would you like to know more about?

- The Aztec gods, page 124
- The Tlaxcalans, page 117
- The conquistadors, page 126
- Aztec warfare, page 132
- Other Mesoamerican and Andean societies, pages 108, 110, 112

Return to the relevant pages in the chapter and read them again.

Next, complete the 'see, think, wonder' process to help develop ideas you might cover in your inquiry.

Jot down your answers to these questions. Your answers will help you to formulate your own research ideas. Once you have worked through this process, you are ready to start the historical inquiry.

Refer to pages 218–25 of the How-to chapter for a step-by-step guide to this process.

See

What do you see?
Who is involved?
What are the key features?
When and where was this happening?

Think

What do you think about that?
How do you think people were affected at the time?
How is this similar to or different from today?
How do we know?

Wonder

What did different groups think about this?
Why is this important to know?
What does it make you wonder?

Level up!

Throughout the chapter, you have been working to move up the Learning ladder. An inquiry investigation is a great opportunity to expand your knowledge and attempt new skills.
When planning your inquiry, consider how the experiences and perspectives of individuals and groups shaped societies, beliefs and events in the past. Think about how the past has had an impact on the present. Use the How-to chapter to support your planning and research.

Europe and the Mediterranean world (c. 600–1750 CE)

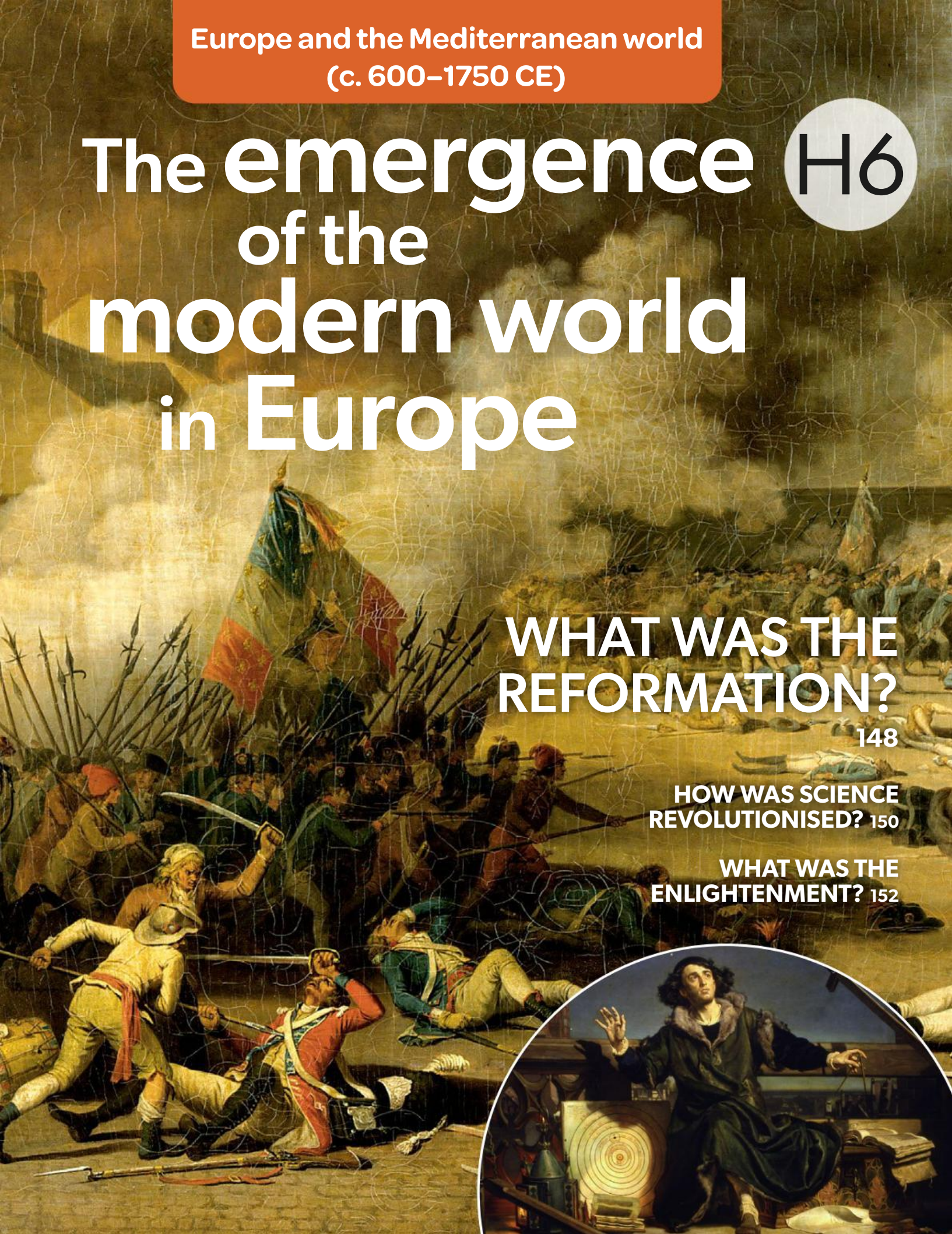
The emergence of the modern world in Europe

H6

WHAT WAS THE REFORMATION? 148

HOW WAS SCIENCE REVOLUTIONISED? 150

WHAT WAS THE ENLIGHTENMENT? 152



How can I understand the emergence of the modern world in Europe?

As feudal societies were ravaged by the Black Death, the power dynamics began to change. Religion, once held as an irrefutable truth, was now increasingly being questioned, and advances in science and technology, transportation and political thought heralded the beginning of a new era: the early modern world.

Learning ladder

The Learning ladder lists the knowledge and skills you will learn. Each has five levels of difficulty. Learning skills at the bottom of the ladder will help you to master the skills at the top of the ladder.

Steps in knowledge progression	Background and origins	Significant people, ideas and events	Impact and legacies	Continuity and change	Causes and consequences
5	I can evaluate the impact of the rise and fall of societies.	I can evaluate how societies were influenced by significant people and ideas.	I can evaluate the legacy of a society.	I can evaluate patterns of continuity and/or change.	I can analyse causes and consequences.
4	I can explain why a society developed.	I can explain why ideas influenced people and events.	I can explain why a society has a legacy.	I can explain patterns of continuity and/or change.	I can explain why something was caused or why it led to certain consequences.
3	I can explain how a society developed.	I can explain how ideas influenced people and events.	I can explain the impact of one society on another.	I can explain continuity and change.	I can explain how something was caused or its consequences.
2	I can describe the origins of societies.	I can describe key people, ideas and events.	I can describe the legacy of a society.	I can describe continuity and change.	I can describe causes and consequences.
1	I can identify the origins of societies.	I can identify key people, ideas and events.	I can identify the legacy of a society.	I can identify continuity and change.	I can identify a cause and a consequence.
	Knowledge and understanding				

Source 1: The Early Modern period was marked by the rise of trading empires and the exchange of new ideas and movements; the British grew wealthy through their trading efforts in India and beyond. [Francis Hayman (1757), *Robert Clive and Mir Jafar after the Battle of Plassey*]

Perspectives	Significance	Interpretations	Chronology	Sources	Steps in skill progression
I can evaluate historical perspectives.	I can evaluate historical significance.	I can evaluate the evidence supporting a historical interpretation.	I can explain change or causality from a timeline.	I can evaluate sources to determine their accuracy, usefulness and reliability.	5
I can compare perspectives.	I can explain why something is historically significant.	I can compare historical interpretations.	I can summarise the events on a timeline.	I can explain the historical context of a source.	4
I can explain a perspective.	I can explain something historically significant.	I can explain an interpretation of history.	I can follow timeline conventions.	I can apply historical knowledge to explain sources.	3
I can describe perspectives.	I can describe something historically significant.	I can describe an interpretation of history.	I can place events on a timeline chronologically.	I can describe a source.	2
I can identify the perspective of a person from the past.	I can identify something historically significant.	I can identify a historical debate.	I can read a timeline.	I can identify the origin of a source.	1

Historical concepts and skills

H6.1

Why learn about the emergence of the modern world?

The Renaissance is often seen as the great awakening of Europe following the medieval period and the plague, but the period that follows it is truly the beginning of the world we live in today.

The period from the 16th to the 19th centuries CE laid the foundations for philosophy, religious thought, art and democracy. As the world became interconnected, ideas travelled and flourished, leading to changes that have continued to shape human societies ever since.

Challenging the religious status quo

The Catholic Church had held power and influence over much of Europe for centuries, but individuals such as Martin Luther brought about the Reformation, empowering communities to accept and explore the word of God in their own languages, rather than in the language of the church – Latin. This in turn led to a rise in literacy and new ways of thinking.

New ideas and thoughts

The religious dogma that had once played a key role in public life, education, governance and the arts was now loosening. A new 'Age of Enlightenment' began: philosophers, scientists and artists flourished, exploring the human body and the natural world in ways that had previously been considered heresy.

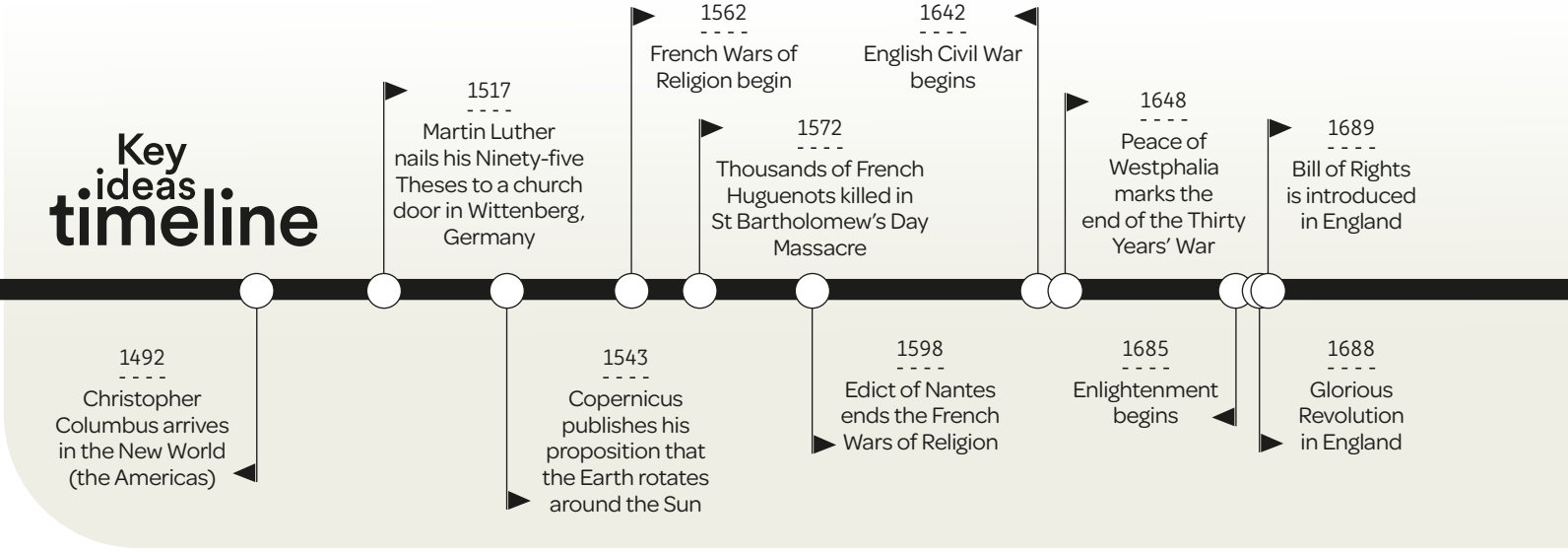
The movement of people

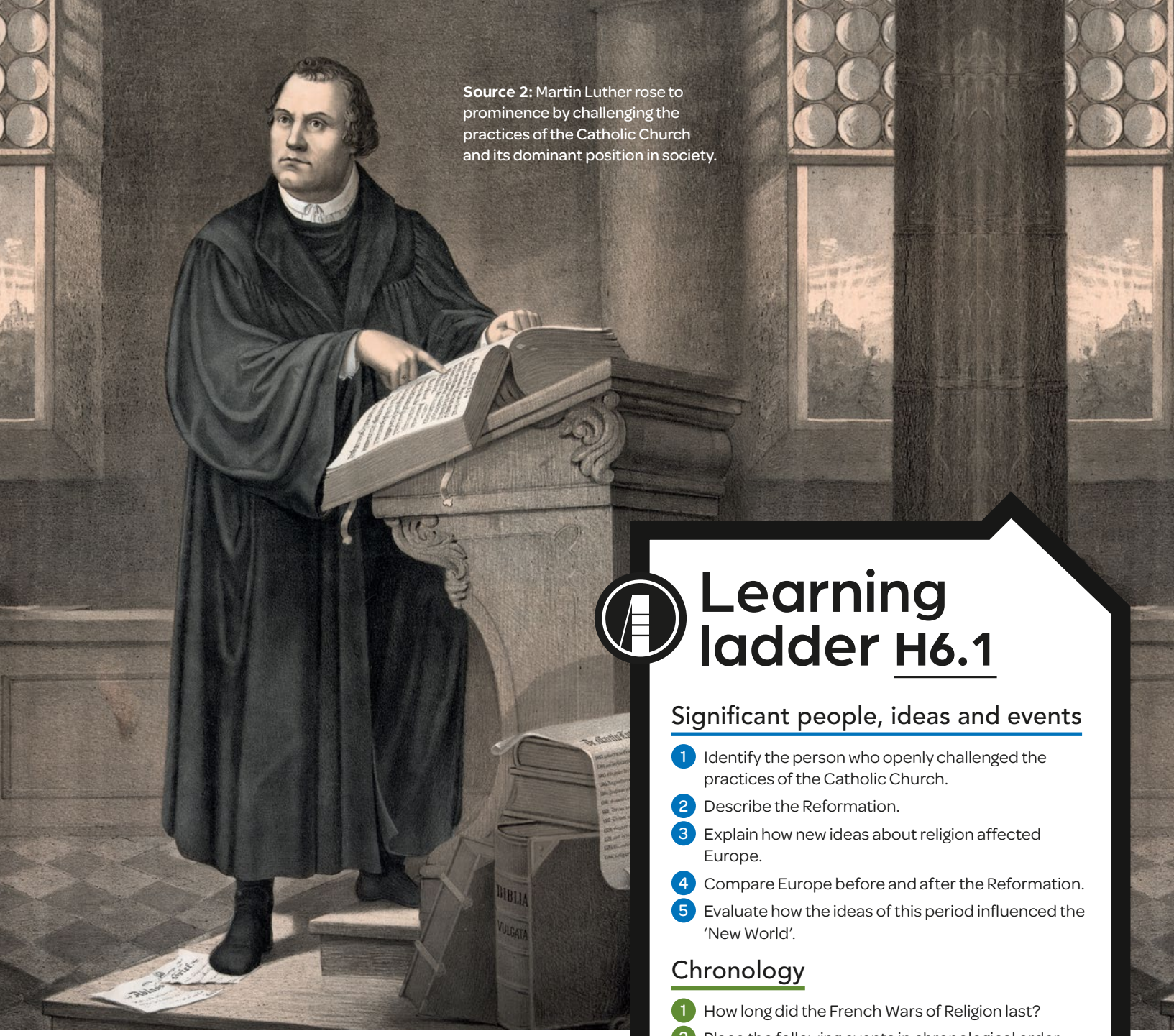
New ways of thinking were responded to with both support and opposition. Some governments – such as France – persecuted religious minorities, such as the Huguenots. As the Age of Exploration gained pace, many of the reformist Christians sought to establish themselves and their ideal societies in the 'New World' (America and beyond), while European governments increasingly sought to capitalise on rapidly changing world maps.

Change through revolution

The new ideas of the era increasingly challenged long-standing traditions and practices, leading to wars of religion and violent revolutions in France, America and Haiti, along with significant political change in Britain and other nation-states.

Source 1: Emergence of the modern world timeline





Source 2: Martin Luther rose to prominence by challenging the practices of the Catholic Church and its dominant position in society.

Learning ladder H6.1

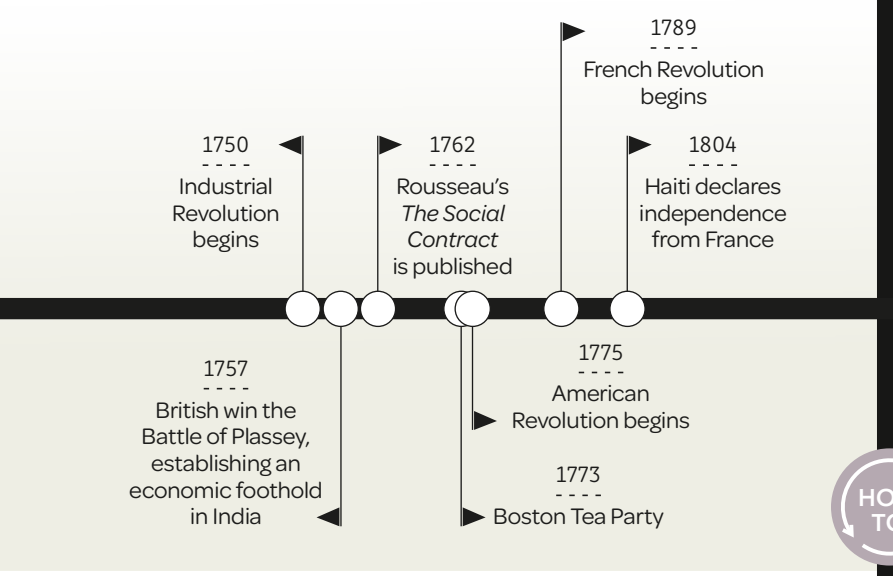
Significant people, ideas and events

1. Identify the person who openly challenged the practices of the Catholic Church.
2. Describe the Reformation.
3. Explain how new ideas about religion affected Europe.
4. Compare Europe before and after the Reformation.
5. Evaluate how the ideas of this period influenced the 'New World'.

Chronology

1. How long did the French Wars of Religion last?
2. Place the following events in chronological order: Haitian Revolution, American Revolution and the French Revolution.
3. Put these events in order from the earliest to the most recent:
   - 1750 The Industrial Revolution begins
   - 1804 Haiti declares independence from France
   - 1492 Christopher Columbus arrives in the New World
   - 1517 Martin Luther nails his Ninety-five Theses to the church door
   - 1685 The Enlightenment begins.
4. Using the events from Question 3, create a timeline.
5. Using examples from the timeline and Source 1, explain why the Wars of Religion began in Europe.

HOW TO Chronology, page 198



What was the Reformation?

Since the fall of the Western Roman Empire, the Catholic Church had risen to become the core faith of Europe, gaining widespread power, influence and wealth. Yet, in the period following the Black Death, survivors began to question its authority: Was the Church still true to its origins?

The **Reformation** was a 16th-century religious movement that aimed to reform the Catholic Church and which led to the establishment of **Protestantism**. Sparked by figures such as Martin Luther, this movement emphasised faith and scripture over tradition. A growing trend in Europe at the time was the practice of indulgences: Catholics could pay to reduce or eliminate punishment for their sins. Although this practice would later be outlawed by Pope Pius V in 1567, it was widely seen as open to corruption and reinforced the gap between rich and poor that had largely defined the medieval period.

53. They are the enemies of Christ and the pope who forbid altogether the preaching of the Word of God in some churches in order that indulgences may be preached in others.
54. Injury is done to the Word of God when, in the same sermon, an equal or larger amount of time is devoted to indulgences than to the Word.

Source 1: Theses 53 and 54. Martin Luther's 'Ninety-five Theses' is considered one of the most transformative documents in Western civilisation. He openly challenged the traditions and habits of the church that were distracting from the true purpose of Christianity.

Martin Luther

Luther, a German Catholic priest and theologian, wrote a document that criticised the practices of the church and called for a return to the roots of Christianity. In 1517, Luther nailed the document, known as the 'Ninety-five Theses', to a church door in Wittenberg, Germany, igniting widespread debate. Key church reformers, such as French theologian John Calvin and Swiss priest Huldrych Zwingli, further shaped Protestant beliefs. The Reformation resulted in the fragmentation of Christianity and the formation of different denominations. It also led to significant social, political and cultural changes across Europe.

Source 2: The St Bartholomew's Day Massacre in 1572 was an explosion of violence against French Huguenots by Catholics. [François Dubois (c. 1572–1584), *The St Bartholomew's Day Massacre*]

Source 3: The New World attracted many Protestant migrants, each keen to establish new settlements and societies built on their values. Groups such as the Pilgrims became famous for witch-hunts and conservative practices, but would go on to play pivotal roles in creating a new national identity in North America. [George Henry Boughton (1867), *Pilgrims Going to Church*]

The Huguenots

The fragmentation of Christianity led to increasing tension and religious division in some parts of Europe, notably in traditionally Catholic France. The French Wars of Religion were a series of conflicts between Catholics and Protestants that occurred between 1562 and 1598.

One of the most violent events of this period occurred in August 1572. The triggering event was the assassination of Admiral Gaspard de Coligny, a nobleman who had been a prominent leader among French Protestants. French protestants, known as **Huguenots**, were targeted and over the next few days between 5000 and 30 000 people were killed across France. This event is known as the St Bartholomew's Day Massacre.

The Edict of Nantes (1598) ended the conflict by granting Huguenots the right to practise their religion and participate in civil and economic life in France. However, this would later be revoked by King Louis XIV in 1685, making Protestantism illegal. As persecution grew again, the Huguenots fled France. More than 200 000 Huguenot refugees migrated to England, the Dutch Republic (the Netherlands), the American colonies and Prussia.

The Reformation would have further ramifications for the world:

- Literacy increased as more people sought to understand the Bible in their own languages, rather than Latin.The power and authority of the Catholic Church was increasingly questioned as Protestants engaged directly with their faith, challenging the long-held dominance of the priesthood as the only way to connect with God.
- Christianity increasingly branched into new forms, including Lutheranism and Calvinism. In England, Henry VIII broke away from the Catholic Church to establish the Church of England, placing control over faith in the hands of a monarch rather than the Pope. Many Protestants sought out new lands and opportunities in the New World (the Americas), migrating to colonies in North America and the Caribbean. These groups would play significant roles in shaping new societies and values.
- Ongoing tensions between the Christian denominations continued as national rivalries took on a religious dimension. Catholic Spain and Portugal competed against Protestant England and the Netherlands for colonies in the New World.

Learning ladder H6.2

Background and origins

1. Who were the Huguenots?
2. Describe what 'indulgences' were.
3. Explain how the Reformation would go on to change the world.
4. Explain why the Catholic leaders may have been against Martin Luther and his ideas.

Sources

1. Source 1: Identify who wrote the 'Ninety-five Theses'.
2. Source 1: Describe the problem outlined in the source.
3. Source 2: Why were French Huguenots targeted in 1572?
4. Source 3: Who are the people pictured? Explain why they went to the New World.

HOW TO Sources, page 201

H6.3

How was science revolutionised?

One of the key developments of the early modern period was the rise in literacy and shift away from belief in religious **dogma**. Literacy fostered inquiry, and universities became centres of scientific discovery and debate.

New thinking

Scientists in Europe were inspired by the achievements of the great scientists and mathematicians of the Arab world during the 'golden age' of Islam (between the 8th and 14th centuries CE). During this period, scholars such as Al-Khwarizimi and Ibn al-Haytham advanced understanding in mathematics, physics and astronomy.

The long-held belief that the Earth was the centre of the universe was challenged by Nicolaus Copernicus in 1543. His heliocentric (sun-centred) theory laid the foundations for Galileo Galilei and Johannes Kepler to explore telescopes and planetary motion. Although their work drew criticism from the Catholic Church, it garnered widespread acclaim and inspired others to make new scientific discoveries.

Isaac Newton's discoveries in the late 17th century further revolutionised knowledge of the natural world; his laws of motion and universal gravitation provided a framework that explained both terrestrial and celestial phenomena, unifying physics and astronomy. Newton also developed the mathematical system of calculus. Such was the pace of scientific discovery in Europe that Gottfried Wilhelm Leibniz, a German **polymath**, developed calculus independently of Isaac Newton.

These advancements laid the groundwork for modern science, influencing fields such as physics, engineering and even philosophy. The intellectual climate transformed, propelling society towards the **Enlightenment** and the development of the modern world.

Source 1: William Blake (1795, detail), *Newton*. Isaac Newton is depicted critically as a 'divine geometer'.

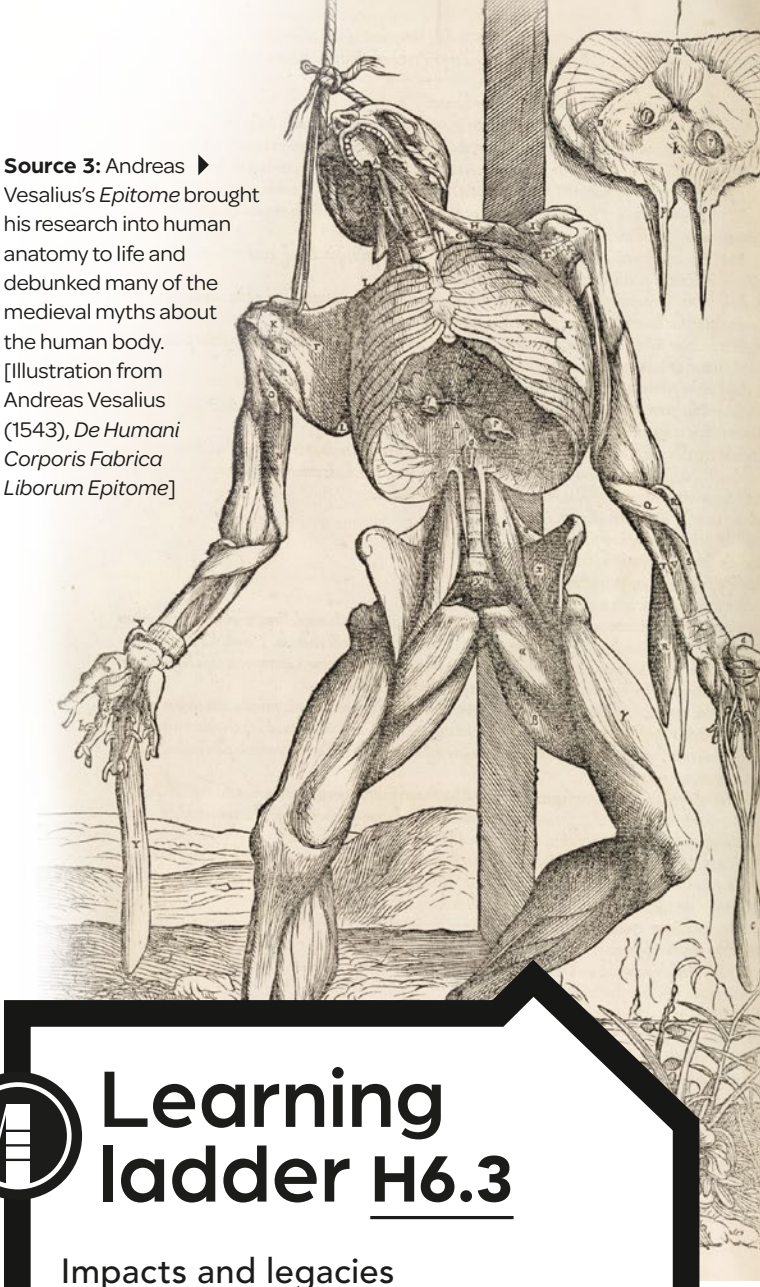
Significant advancements were also made in **natural sciences** during this period. Maria Sibylla Merian was a German naturalist and artist who made major contributions to entomology (the study of insects) and botany through her work in Suriname, where she documented the flora and fauna.

Source 2: Maria Sibylla Merian's incredible talent and eye for detail uncovered vast numbers of previously unknown species in Suriname that shed new light on the life cycles of plants and insects. [Maria Sibylla Merian (1705), illuminated copper engraving from *Metamorphosis Insectorum Surinamensium*]

The human body

Advances in knowledge about the natural world also extended to human biology and medicine. Anatomists such as Andreas Vesalius transformed knowledge of human anatomy by challenging established views through meticulous dissection and observation. Vesalius produced *De Humani Corporis Fabrica Librorum Epitome*, a work that was groundbreaking for its accurate descriptions and illustrations of human anatomy.

Medical knowledge was further transformed by William Harvey's discovery of how the heart pumps blood throughout the body. These groundbreaking insights not only advanced the fields of biology and medicine but also encouraged a more empirical approach to science. Together, these anatomists paved the way for modern medical practices and a deeper understanding of the human body.



Source 3: Andreas Vesalius's *Epitome* brought his research into human anatomy to life and debunked many of the medieval myths about the human body. [Illustration from Andreas Vesalius (1543), *De Humani Corporis Fabrica Liborum Epitome*]

Learning ladder H6.3

Impacts and legacies

1. What was the legacy of the 'golden age' of Islam for the early modern period?
2. Describe how knowledge of the human body changed during the early modern period.
3. Explain how new knowledge of the natural world might have led people to challenge traditional beliefs.
4. Explain the impact of scientists such as Newton and Merian on the modern world.

Significance

1. Identify three individuals who were influential in changing scientific thinking during the early modern period.
2. Describe the achievements of Maria Sibylla Merian.
3. Explain how understanding of the human body evolved during the 16th century.
4. Evaluate the significance of Newton's contributions to science.

HOW TO

Significance, page 212

H6.4

What was the Enlightenment?

The Enlightenment was an intellectual and cultural movement of the 17th and 18th centuries that emphasised reason, individualism and a critical approach to traditional ideas about authority. For too long, the church and powerful monarchies had held absolute power over their populations; a wave of change was gaining rapid momentum.

Freedom of thought

Philosophers such as John Locke, Thomas Hobbes and Jean-Jacques Rousseau began to advocate for **natural rights** and the idea of the **social contract**. These ideas significantly influenced the development of democratic ideals: that every person deserved to have their own voice, their own freedoms and rights. Voltaire championed freedom of speech and religious tolerance, while Montesquieu introduced the concept of the separation of powers in government. These ideas laid the groundwork for modern democratic systems – the age of monarchs' absolute power was coming to an end.

The Enlightenment was also marked by further scientific advancements, which had begun in the 16th century. Scientists such as Isaac Newton and René Descartes promoted empirical methods and rational inquiry, which helped shift the focus from superstition to the use of observable evidence to understand the natural world. Increasing numbers of people turned away from blind faith; they needed proof.

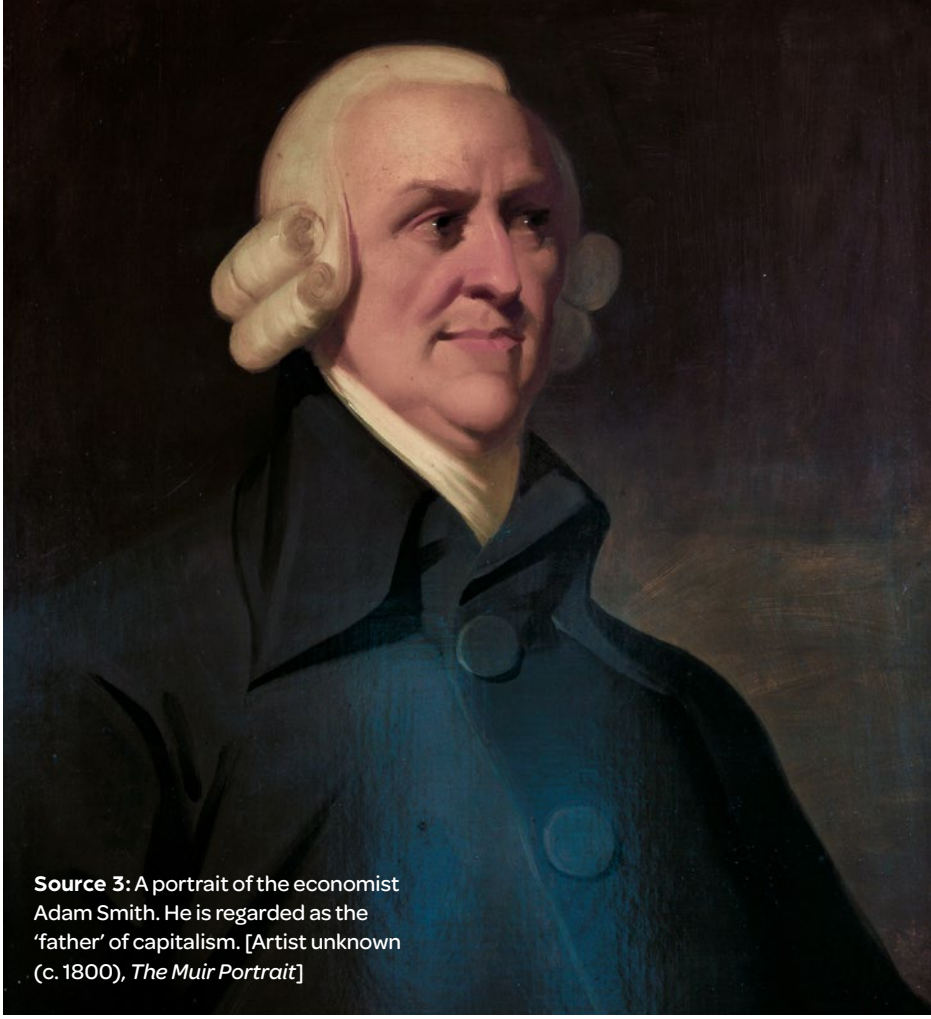
A crucial yet often overlooked figure of the Enlightenment was Olympe de Gouges, a pioneering feminist and advocate for women's rights. Her influential work *Declaration of the Rights of Woman and of the Female Citizen* was published in 1791. She directly challenged the exclusion of women from the political rights fought for during the French Revolution, such as the right to vote and hold public office. De Gouges argued that women should be granted the same rights as men, highlighting the limitations of Enlightenment ideas in relation to gender.

Source 1: 'If there is something you know, communicate it. ▶ If there is something you don't know, search for it.' This image is an engraving from the 1772 edition of the French *Encyclopédie*; 'Truth', at the top, is surrounded by light and is being unveiled by the figures to the right: 'Philosophy' and 'Reason'.

A growing influence

Other notable Enlightenment thinkers included the Scottish economist Adam Smith, whose economic theories in *The Wealth of Nations* laid the foundations for modern capitalism. Immanuel Kant explored ideas of morality and ethics, urging individuals to think for themselves.

The Enlightenment's impact extended beyond philosophy and science; it influenced art, literature and education. It inspired revolutions, notably the American and French Revolutions, as people sought to implement Enlightenment principles in governance. Its influence could be found well beyond Western Europe. For example, the *Haskalah* was an intellectual movement among Jews living in Central and Eastern Europe that was influenced by the Enlightenment.



Source 3: A portrait of the economist Adam Smith. He is regarded as the 'father' of capitalism. [Artist unknown (c. 1800), *The Muir Portrait*]

Source 2: Olympe de Gouges was a strong advocate for women's rights in a time of significant social and political change. [Alexander Kucharsky (1741–1819), *Olympe de Gouges*]

Learning ladder H6.4

Significant people, ideas and events

1. What was the Enlightenment?
2. Describe the main ideas of Voltaire and Montesquieu.
3. Explain how these new ideas changed the balance of power in Europe.
4. Compare the period of Enlightenment with medieval Europe. How do they differ?

Continuity and change

1. Which groups in society do you think had the greatest access to the Enlightenment? Who didn't?
2. Source 1: Describe how people's attitude to learning was changing by 1772.
3. Source 2: Explain what changes Olympe de Gouges wanted and why.
4. Explain how the ideas of Kant, de Gouges and Voltaire were similar yet so different from medieval ideas.

HOW TO

Continuity and change, page 203

How did global trade change?

The Age of Exploration, which spanned the 15th to the 17th centuries, was a transformative period marked by extensive voyages by European nations seeking new trade routes, lands and resources.This era was fuelled by advancements in navigation technology, economic interests and a desire for territorial expansion. As the ability of ships to travel greater distances grew, traditional land trading routes such as the Silk Road were abandoned in favour of sea trading routes.

Maritime empires

This period led to the rise of powerful maritime empires, including Spain, Portugal, England, France and the Dutch Republic (the Netherlands). The impact on Indigenous peoples around the world, including the First Nations peoples of Australia and the Māori of Aotearoa (New Zealand), would be profound.

European explorers such as Christopher Columbus, Vasco da Gama and Ferdinand Magellan embarked on journeys that would reshape global trade. Columbus's 1492 voyage opened the New World to European exploration and colonisation, with profoundly negative consequences for the Indigenous populations. The Taíno people of the Caribbean faced devastating impacts, including violence and disease, leading to their significant decline. Similarly, the Aztec and Inca Empires lost sovereignty and cultures as the Spanish imposed colonial rule. The Treaty of Tordesillas (1494) divided the rights to newly discovered lands between Spain and Portugal, but was largely ignored by other imperial powers.

Source 1: The *Victoria* was the first known ship to circumnavigate the globe. It left the Spanish port of Seville in 1519 as part of a fleet of five ships and returned alone in 1522. [Detail from Abraham Ortelius (1589), *Descriptio Maris Pacifici*]

Source 2: The British economy flourished on the back of global trade. [Roma Spiridone (1778), *The East Offering its Riches to Britannia*]

The thirst for resources

The Columbian Exchange also occurred during this period. This was the exchange of plants, animals and diseases between the **Old World** and New World. While crops such as potatoes and maize from the Americas enriched European diets, diseases such as smallpox decimated Indigenous populations, including millions of Native Americans in North America.

As commodities flowed from the New World back to Europe, the thirst for resources from the new colonies grew stronger. In Asia, the Portuguese established firm footholds in Goa, Malacca and Macau, where they spread **Catholicism** and found lucrative trading opportunities.

Global trading empires, such as the British East India Company, also grew during this period. The East India Company was founded in 1600 to facilitate trade with East Asia, particularly in spices, tea and textiles. It established trading posts in India, China and South-East Asia. In India, it played a key role in regional governance, especially after its victory at the Battle of Plassey in 1757. Although the East India Company contributed to global trade and infrastructure development, its exploitative economic practices and connection to the 1770 famine in Bengal sparked resentment among Indian people. The company was dissolved in 1874 after the British government took control of the East India territories in 1858.

Learning ladder H6.5

Impacts and legacies

1. Identify the significant event that occurred in 1492.
2. Describe how European nations competed during the Age of Exploration.
3. Explain how the Taíno people suffered as a result of global exploration.
4. Source 1: Explain why ships such as the *Victoria* were able to circumnavigate the globe.

Causes and consequences

1. Identify the factors that contributed to the Age of Exploration.
2. Describe how the Indigenous peoples of the Americas and the Asia-Pacific were affected by the rise of global trade in the short- and long-term.
3. Using examples, explain the consequences of global trade for Europe.
4. Source 2: Explain why the world might have 'offered up' its riches for nations such as Britain.

HOW TO Causes and consequences, page 206

H6.6

What political changes took place?

Societies in medieval Europe were ruled by royal families and were strongly influenced by religion. At the start of the early modern period, Europe was undergoing a period of social and political change.The Black Death of the mid-14th century killed roughly 25 million people – about a third of the population of Western Europe. This created a shortage of workers and altered the balance of feudal societies: the workers had more power than they had ever had before. As literacy spread, the voices of the people grew louder.

Royalists or Parliamentarians?

In England, conflict emerged in the 17th century over how the country should be ruled and who should hold power. The longstanding tradition of an **absolute monarchy** was supported by people known as **Royalists**, who believed that King Charles I should control the country. They were challenged by **Parliamentarians**, led by Oliver Cromwell, who felt that elected representatives should guide the nation. This sparked the English Civil War (1642–1651).

Following a series of conflicts, the Parliamentarians emerged victorious and King Charles was executed in 1649. The Parliamentarians formed the Commonwealth of England, which was a republic: a government without a monarch. Although the monarchy would later be restored, the English Civil War fundamentally reshaped English politics, society and government, laying the groundwork for the later establishment of a constitutional monarchy.

The Glorious Revolution

In 1688, England was again rocked by change with the peaceful overthrow of King James II. King James, a Catholic, lost the throne to his Protestant daughter Mary II and her husband, William of Orange. Originally from the Dutch Republic (the Netherlands), William was invited to invade England by key political leaders who feared that Catholicism was establishing deep roots within the monarchy. To avoid bloodshed, King James II fled to France, and William and Mary were

The Civil War was a class war, in which the despotism of Charles I was defended by the reactionary forces of the established Church and conservative landlords. Parliament beat the King because it could appeal to the enthusiastic support of the trading and industrial classes in town and countryside, to the yeomen and progressive gentry, and to wider masses of the population whenever they were able by free discussion to understand what the struggle was really about.

Source 1: Historian Christopher Hill reflecting on the nature of the English Civil War [Christopher Hill (1940), *The English Revolution 1640*, Lawrence and Wishart]

Source 2: An 1803 **allegory** of the Bill of Rights, which shows Britannia presenting the Bill to William of Orange and Mary II. [An engraving from David Hume (1803), *The History of England*, J. Wallis]

crowned joint monarchs.The Glorious Revolution – so named as it was a revolution without violence – led to the establishment of the Bill of Rights in 1689, which limited royal power and affirmed parliamentary supremacy. It marked the transition from an absolute monarchy to a constitutional monarchy. The Bill of Rights would later prove an inspiration for American democracy and political movements around the world.

Source 4: Nikolay Sauerweid (1859), *Peter I of Russia Pacifies his Marauding Troops after Retaking Narva in 1704*. Narva is a city in modern-day Estonia.

Absolutism persists in Europe

Despite the changes in England, elsewhere **absolutism**, where rulers held an almost divine right to power and state control remained centralised, persisted. In France, King Louis XIV (1643–1715), declared '*L'État, c'est moi*' (I am the state). He reigned for more than seven decades from his extravagant palace at Versailles. Under his rule, the arts (especially ballet) flourished, but he was an absolute ruler. He revoked the Edict of Nantes in 1685, which led to large numbers of Protestant Huguenots leaving France. His consolidation of power made France the dominant political and cultural power in Europe.

> … an irresistible combination of marriage market, employment agency and entertainment capital of aristocratic Europe, boasting the best theatre, opera, music, gambling … and (most important) hunting.
>
> **Source 3:** Historian Philip Mansel describing how the Palace of Versailles had changed under King Louis XIV [Philip Mansel (2020), *King of the World: The Life of Louis XIV*, Penguin]

Another absolute monarch was the Tsar of Russia, Peter I (also known as the Great) (1672–1725), who sought to modernise the country and transform it into a major power. He introduced sweeping reforms, which included the modernisation of the military, the promotion of education and industry, and the creation of a new capital in St Petersburg.

In 1722 he introduced The Table of Ranks, a system by which nobles would no longer inherit titles, but needed to earn them through military or civil service. The Tsar also reformed the Russian Orthodox Church. Both of these changes centralised power under his rule and away from the church and aristocracy. He also expanded the Russian Empire. **Subjugated** peoples in these lands, such as Ukrainians and Estonians, were expected to adopt Russian values and customs.

Learning ladder H6.6

Background and origins

1. What was the Glorious Revolution?
2. Describe the system of government in place in Europe during the medieval period.
3. Explain why the Bill of Rights was so influential.
4. Evaluate the legacy of either King Louis XIV or Tsar Peter the Great. Were they great leaders?

Perspectives

1. Source 3: Identify the author's perspective on the Palace of Versailles.
2. Source 4: Describe how the painter has portrayed Peter the Great.
3. Source 2: Explain how the artist sees the Bill of Rights.
4. Source 1: Explain why historian Christopher Hill described the English Civil War as 'a class war'.

HOW TO Perspectives, page 210

H6.7

How did wars and revolutions affect societies?

During the early modern period, Enlightenment ideas led many to question the right of traditional rulers to have absolute control over their lives. Religious differences led to protracted, bloody conflicts and the reshaping of the world order. Centuries-old systems of government were brought down during this period of dramatic change.

The Thirty Years' War

The Thirty Years' War (1618–1648) was a devastating conflict in Central Europe that began as a religious struggle between Protestant and Catholic states and soon evolved into a broader political and territorial war. The war devastated much of Germany, with widespread destruction and significant loss of life. It ended with the Peace of Westphalia in 1648, which redrew the map of Europe, established religious tolerance and marked the decline of Spanish power and the rise of France's influence in Europe.

Revolution in America

The American War of Independence (1775–1783) was a conflict between the 13 North American colonies and Britain. Since 1607, the British had established a permanent presence in North America, but over time the colonies developed their own distinct identity and yearned for self-governance. Tensions grew over taxation, the colonists' lack of political rights and the presence of the British Army in the colonies. This led to acts of rebellion, such as the Boston Tea Party (1773), when American colonists dumped tea into Boston Harbor as a protest against British taxes.

Battles occurred at Lexington and Concord, Saratoga and Yorktown. The Continental Army, led by George Washington, secured critical victories with French support, tipping the balance against Britain. In 1781, the British General, Charles Cornwallis, surrendered. The Treaty of Paris (1783) officially ended the war and recognised American independence.

Revolution in France

The French Revolution (1789–1799) was a period of radical political and social upheaval in France. Under a system known as the *Ancien régime* (old order), France was divided into three social classes – the First Estate (the clergy), the Second Estate (the nobility) and the Third Estate (commoners) – under the rule of the King.

Source 1: This painting famously portrays George Washington, the American revolutionary leader, during the American War of Independence. [Emanuel Leutze (1851), *Washington Crossing the Delaware*]

Source 2: The words read 'Here's hoping this game's over soon'. This is a caricature of the Third Estate (peasants) carrying the First Estate (the clergy) and the Second Estate (the nobility). Simmering resentment and anger soon boiled over into revolution.

In the wake of food shortages, the Third Estate grew increasingly unhappy with the economic and social inequality, and anger soon turned to action. In June 1789, representatives of the Third Estate declared they should govern without clergy and the nobility. Then, on 14 July 1789, the first shots were fired when a mob stormed the Bastille, a prison in Paris that symbolised the **tyranny** of the government. The revolution led to the overthrow of the monarchy, including the execution of King Louis XVI in 1793 and the establishment of the French Republic.

Revolution in Haiti

The Haitian Revolution (1791–1804) was sparked by the harsh conditions faced by enslaved Africans on the French sugar plantations in Saint-Domingue and simmering social tensions between rich and poor. Led by figures such as Toussaint Louverture, Jean-Jacques Dessalines and Henri Christophe, the revolt overcame both French forces and internal divisions.

After defeating French, Spanish and British troops, Haiti declared its independence in 1804, becoming the first country to be founded by former slaves. This revolution had profound global impacts, inspiring slave uprisings and anti-colonial movements while challenging European colonial power structures. However, Haiti faced significant economic hardship and international isolation after independence, particularly from France, which demanded reparations for lost property.

Whites, mulattos and blacks loathed each other. The poor whites couldn't stand the rich whites, the rich whites despised the poor whites, the middle-class whites were jealous of the aristocratic whites, the whites born in France looked down upon the locally born whites, mulattos envied the whites, despised the blacks and were despised by the whites; free Negroes brutalised those who were still slaves, Haitian born blacks regarded those from Africa as savages. Everyone – quite rightly – lived in terror of everyone else. Haiti was hell, but Haiti was rich.'

Source 3: French historian Paul Fregosi describes conditions in Haiti before the revolution. [cited in James Perry (2005), *Arrogant Armies: Great Military Disasters and the Generals Behind Them*, Edison, pp. 61– 62]

Learning ladder H6.7

Significant people, ideas and events

1. What was the Thirty Years' War?
2. Describe the three estates in the Ancien régime.
3. Explain how ideas from Europe may have influenced the revolution in Haiti.
4. Explain why the French Revolution was driven by new ways of thinking.

Perspectives

1. Source 1: Identify the painter's perspective on George Washington.
2. Source 2: Describe the perspective of the artist.
3. Source 3: Explain why Paul Frigosi says that tensions were 'simmering' in Haiti.
4. Compare the perspectives of the First and Third Estates in France.

HOW TO

Perspectives, page 210

How do I conduct a good inquiry?

Now that you've finished the chapter, it's time to conduct your own historical inquiry on the emergence of the modern world in Europe. Throughout the chapter you have developed knowledge and understanding of the emergence of the modern world in Europe. Background knowledge is important because it helps you make connections to new information, ask better questions and consider different perspectives.
As you progressed through the chapter, you have gathered information through classroom discussion, highlighting, note taking and answering questions. Now you are ready to start planning your own historical inquiry!

A historical inquiry gives you the opportunity to be an active historian: forming questions, interrogating sources and communicating insights about the past on a topic of your choice. The chapter has covered the origins and legacies of the medieval world in addition to significant people, events, ideas and beliefs. What would you like to know more about?

- The Reformation, page 148
- The scientific revolution, page 150
- The influence of Olympe de Gouges, page 152
- The Columbian exchange, page 154
- The Thirty Years' War, page 158

Return to the relevant pages in the chapter and read them again.

Next, complete the 'see, think, wonder' process to help develop ideas you might cover in your inquiry.

Jot down your answers to these questions. Your answers will help you formulate your own research ideas. Once you have worked through this process, you are ready to start the historical inquiry.

Refer to pages 218–25 of the How-to chapter for a step-by-step guide to this process.

See

What do you see?
Who is involved?
What are the key features?
When and where was this happening?

Think

What do you think about that?
How do you think people were affected at the time?
How is this similar to or different from today?
How do we know?

Wonder

What did different groups think about this?
Why is this important to know?
What does it make you wonder?

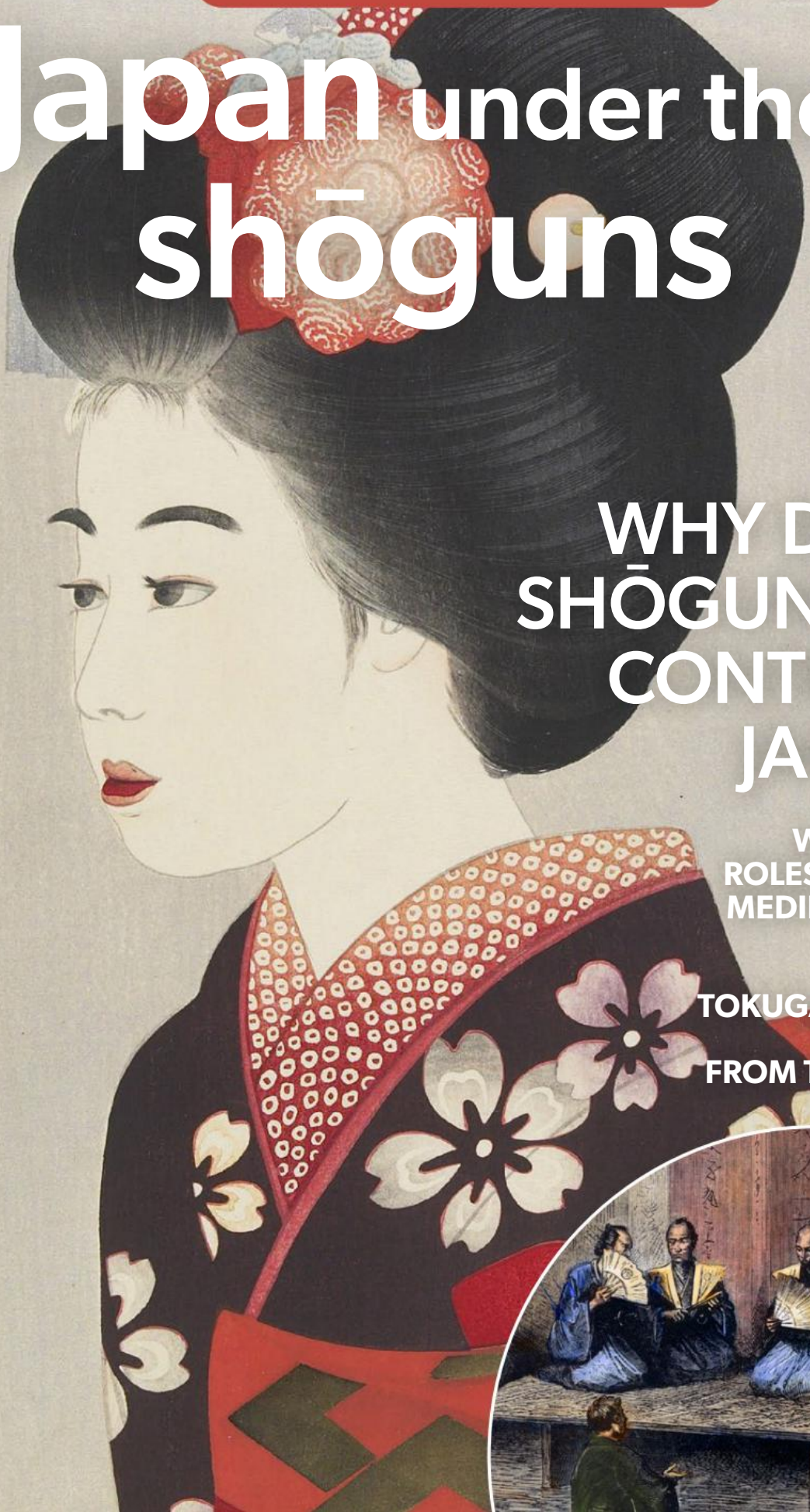
Level up!

Throughout the chapter, you have been working to move up the Learning ladder. An inquiry investigation is a great opportunity to expand your knowledge and attempt new skills.
When planning your inquiry, consider how the experiences and perspectives of individuals and groups shaped societies, beliefs and events in the past. Think about how the past has had an impact on the present. Use the How-to chapter to support your planning and research.

Asia and the Pacific region
(c. 600–1750 CE)

Japan under the shōguns

H7



WHY DID THE SHŌGUNS TAKE CONTROL OF JAPAN? 168

WHAT WERE THE ROLES OF WOMEN IN MEDIEVAL JAPAN? 172

WHY DID THE TOKUGAWA SHŌGUNS ISOLATE JAPAN FROM THE WORLD? 188

How can I understand Japan under the shōguns?

At the beginning of the medieval period, Japan was ruled by an emperor. From the end of the 12th century CE, however, warlords known as shōguns ruled Japan. The shōguns controlled Japan for the next 650 years.

Learning ladder

The Learning ladder lists the knowledge and skills you will learn. Each has five levels of difficulty. Learning skills at the bottom of the ladder will help you to master the skills at the top of the ladder.

Steps in knowledge progression	Background and origins	Significant people, ideas and events	Impact and legacies	Continuity and change	Causes and consequences
5	I can evaluate the impact of the rise and fall of societies.	I can evaluate how societies were influenced by significant people and ideas.	I can evaluate the legacy of a society.	I can evaluate patterns of continuity and/or change.	I can analyse causes and consequences.
4	I can explain why a society developed.	I can explain why ideas influenced people and events.	I can explain why a society has a legacy.	I can explain patterns of continuity and/or change.	I can explain why something was caused or why it led to certain consequences.
3	I can explain how a society developed.	I can explain how ideas influenced people and events.	I can explain the impact of one society on another.	I can explain continuity and change.	I can explain how something was caused or its consequences.
2	I can describe the origins of societies.	I can describe key people, ideas and events.	I can describe the legacy of a society.	I can describe continuity and change.	I can describe causes and consequences.
1	I can identify the origins of societies.	I can identify key people, ideas and events.	I can identify the legacy of a society.	I can identify continuity and change.	I can identify a cause and a consequence.
	Knowledge and understanding				

Source 1: This is a hanging scroll painting of Mt Fuji in Japan. [Gan Rei (c. 1840–1883 CE), *Mt Fuji from Miho no Matsubar*]

Perspectives	Significance	Interpretations	Chronology	Sources	Steps in skill progression
I can evaluate historical perspectives.	I can evaluate historical significance.	I can evaluate the evidence supporting a historical interpretation.	I can explain change or causality from a timeline.	I can evaluate sources to determine their accuracy, usefulness and reliability.	5
I can compare perspectives.	I can explain why something is historically significant.	I can compare historical interpretations.	I can summarise the events on a timeline.	I can explain the historical context of a source.	4
I can explain a perspective.	I can explain something historically significant.	I can explain an interpretation of history.	I can follow timeline conventions.	I can apply historical knowledge to explain sources.	3
I can describe perspectives.	I can describe something historically significant.	I can describe an interpretation of history.	I can place events on a timeline chronologically.	I can describe a source.	2
I can identify the perspective of a person from the past.	I can identify something historically significant.	I can identify a historical debate.	I can read a timeline.	I can identify the origin of a source.	1

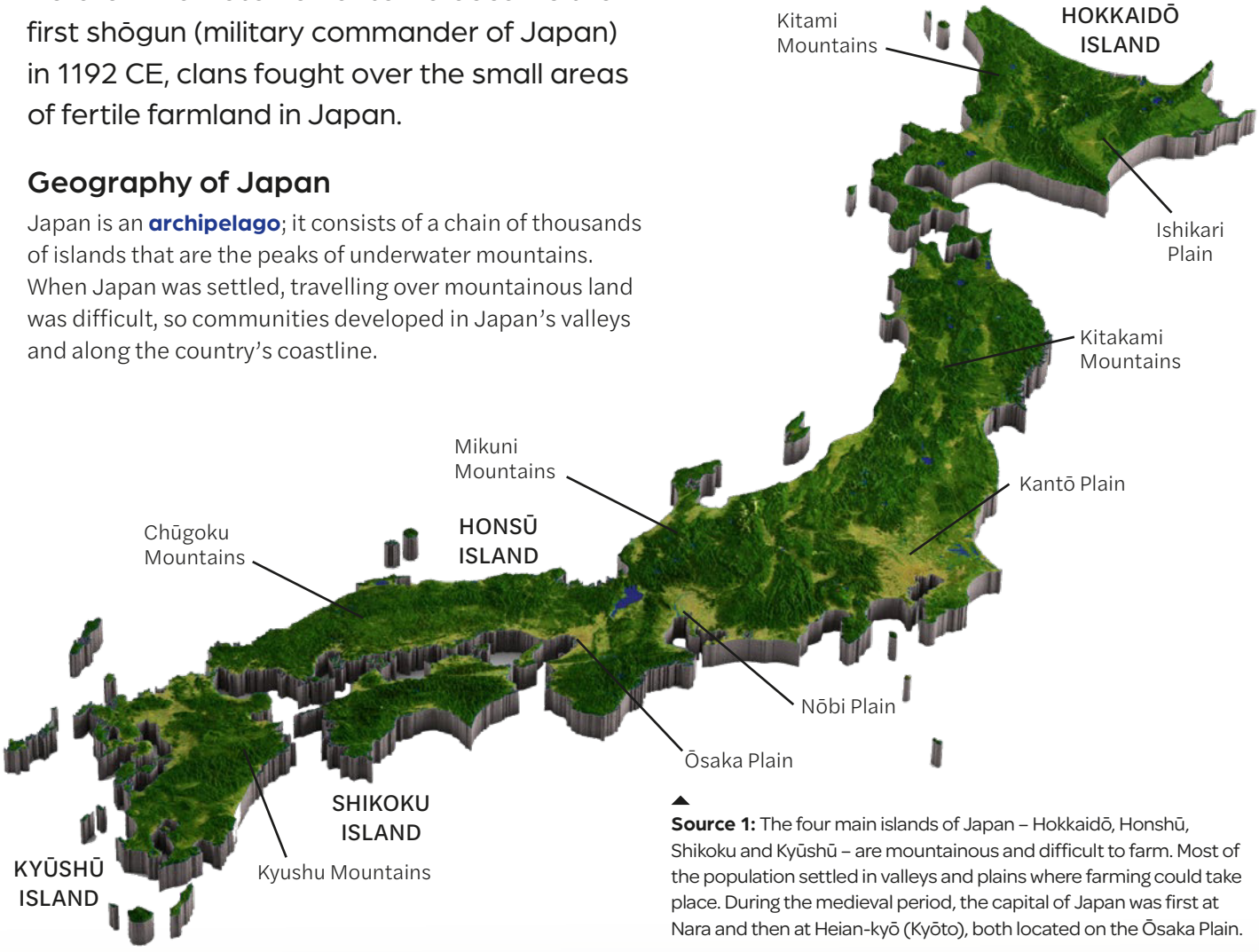
Historical concepts and skills

What was life like in Japan before the shōguns?

Before Minamoto no Yoritomo became the first shōgun (military commander of Japan) in 1192 CE, clans fought over the small areas of fertile farmland in Japan.

Geography of Japan

Japan is an **archipelago**; it consists of a chain of thousands of islands that are the peaks of underwater mountains. When Japan was settled, travelling over mountainous land was difficult, so communities developed in Japan's valleys and along the country's coastline.



Source 1: The four main islands of Japan – Hokkaidō, Honshū, Shikoku and Kyūshū – are mountainous and difficult to farm. Most of the population settled in valleys and plains where farming could take place. During the medieval period, the capital of Japan was first at Nara and then at Heian-kyō (Kyōto), both located on the Ōsaka Plain.

Key ideas timeline

Source 2: Japan under the shōguns timeline

- 525 CE – Buddhism arrives in Japan
- c. 1010 CE – The world's first novel was written (*The Tale of Genji*)
- 1192 CE – Minamoto no Yoritomo becomes the first shōgun
- 1274 CE – First failed Mongol invasion of Japan
- 1281 CE – Second failed Mongol invasion of Japan

Nara period: Establishment of the capital 710–794 CE

Heian period: flourishing of art and literature 794–1185 CE

Kamakura period: Japan under military control 1192 CE–1333 CE

Japanese clans

From the 4th century CE, there were small, isolated, separate communities scattered across Japan. These were made up of different ***uji***. An uji was a group of people related by blood or by marriage. Each uji was led by a chief who provided protection. Wars between rival uji broke out regularly over access to Japan's scarce farmland.

Around 400 CE, the powerful Yamato clan controlled the Ōsaka Plain, which is one of the few large agricultural areas in Japan. As the Yamato's military strength grew, other clan leaders promised loyalty to the Yamato chief and recognised him as their supreme leader. The Yamato chiefs had solidified their power by the 6th century, and from 539 CE were recognised as emperors. An emperor or empress continued to rule Japan until the 8th century.

The Nara period (710–794 CE)

By the beginning of the 8th century CE, Japan was becoming a more centralised, complex state. The capital of Japan was established at Nara by Empress Genmei (707–715 CE). Modelled on the famous city of Chang'an (now X'ian) in China, Nara soon boasted a population of 200 000 people.

The Heian period (794 to 1185 CE)

In 794 CE, Emperor Kammu moved the official capital city of Japan from Nara to Heian-kyō (renamed Kyōto in the 11th century CE). This marked the start of the Heian period, which lasted for nearly 400 years.

Empresses no longer reigned in Japan. From this point, only emperors were allowed to rule. The Heian period also saw the rise of the military class, which grew steadily more powerfui.

Learning ladder H7.1

Background and origins

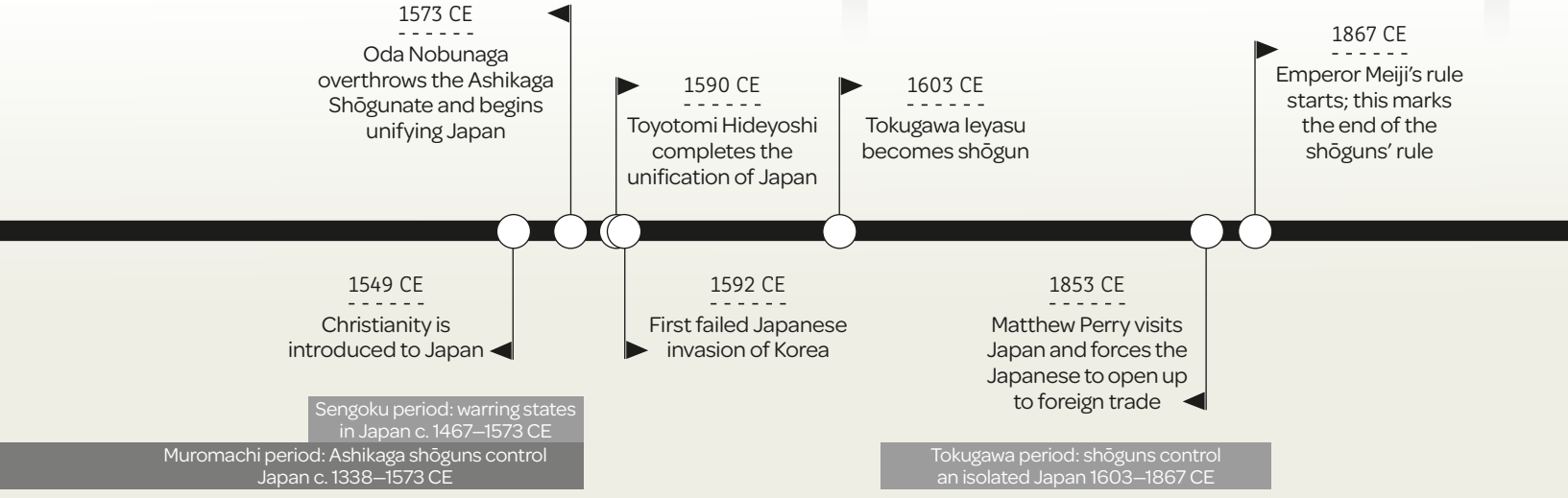
1. Source 1: Identify the four main islands of Japan.
2. Source 1: Describe Japan's physical features.
3. Explain how Japanese society was organised in the 4th century CE.
4. Source 1: Explain why control of the Ōsaka Plain was important to Japan's rulers.

Chronology

1. Source 2: Identify the dates of the two attempted Mongol invasions of Japan.
2. Put the following events into chronological order:
   - 1600 CE: Battle of Sekigahara
   - 1180–1185 CE: Genpei War
   - 1467–1573 CE: Sengoku period
   - 1336 CE: Battle of Minatogawa
   - 1331–1333 CE: Genko War.
3. Create a timeline using the events in Question 2.
4. Source 2: Explain how this timeline demonstrates continuity and change.

HOW TO

Chronology, page 198



H7.2

Key individual

Who was Murasaki Shikibu?

Murasaki Shikibu was a Japanese writer and lady-in-waiting during the Heian period. In c. 1010 CE, she wrote the world's first novel, called *The Tale of Genji*.

Murasaki's identity

Murasaki Shikibu was born in c. 978 CE in Heian-kyō (Kyōto) into a noble family. Many historians believe she was born into the powerful Fujiwara clan.

The name Murasaki Shikibu is a pen name. 'Murasaki' is the name of a plant that produces a purple dye, while 'Shikibu' means 'Bureau of Ceremonial' and refers to a post once held by the writer's father. Her real name is unknown.

Murasaki's education

Many members of Murasaki's family were well-educated poets and scholars. As a noblewoman, Murasaki received an education. She was taught poetry, calligraphy, music and Japanese script, known as *kana*. When Murasaki was young, in the late 10th century CE, kana was only beginning to develop. It was mainly used by noblewomen to write letters and poetry. Most noblemen learned to write using Chinese script. During the early medieval period in Japan, Chinese script was used by government officials to write official documents. Noblewomen had only a limited knowledge of Chinese.

Murasaki's brother, Nobunori, was taught Chinese to prepare him for a role in government. Murasaki learned Chinese by listening to her brother recite his lessons. She proved to be so skilled at the language that her father decided to allow her to have lessons too, and she quickly excelled. However, since it was considered 'unladylike' for a Japanese woman to be fluent in Chinese, Murasaki did not flaunt her knowledge of the language.

The Tale of Genji

Murasaki married a nobleman named Fujiwara no Nobutaka, who was a much older distant cousin. In 1001 CE, only two years after their marriage, Murasaki's husband died of the disease cholera. After his death, Murasaki began her career as a writer.

She wrote *The Tale of Genji*, which is a story about the life of a Japanese prince who is removed from the line of succession by his father, the emperor, and lives his life as a commoner named Minamoto.

Source 1: This image is based on a legend stating that Murasaki Shikibu was inspired to write *The Tale of Genji* on an August night while looking at the Moon, during a visit to the temple Ishiyama-dera at Lake Biwa. [Harunobu Suzuki (1767 CE), *Murasaki Shikibu at Ishiyama-dera*]

The Tale of Genji is considered to be one of the greatest works of Japanese literature. Not only is it recognised as the world's first novel, but it also vividly describes the customs and practices of Japanese nobles in the 11th century CE.

Murasaki gave copies of her book to her friends, who passed it on to their friends. Through this practice, Murasaki became a famous author: her story became known throughout the Heian court and the noble families of the provinces.

Source 3: Murasaki Shikibu, featured on a card for a game based on the classical Japanese collection called *One Hundred Poets*, c. 1750 CE

Life in the imperial court

In 1005 CE, Murasaki was summoned to serve at the imperial Japanese court as a lady-in-waiting. In the 11th century CE, Japanese ladies-in-waiting were noblewomen who educated, entertained and organised the affairs of the ladies in the royal household. Murasaki was appointed by Fujiwara no Michinaga, a powerful official, to educate his daughter, Shōshi, the wife of Emperor Ichijō from 1000 CE to his death in 1011 CE.

Shōshi was very interested in Chinese art and poetry and Murasaki began teaching her Chinese script. Although these lessons were secret, Emperor Ichijō and Shōshi's father found out about them. However, they decided that Shōshi's knowledge of Chinese was valuable for the emperor and so her father had a range of Chinese texts copied for the women.

While living at the imperial court, Murasaki wrote *The Diary of Lady Murasaki*, a work that includes poems and short stories about Shōshi and her children. After five or six years at court, Murasaki retired to Lake Biwa. She died in 1014 CE.

> The Queen made me read [to her] the poetical works of Chinese poet Li T'ai Po, and as she wished to learn them, I have been teaching her since the Summer of two years ago, the second and third volumes of that collection, very secretly when none were present. Her Majesty and I tried to conceal it, but His Majesty the Emperor and her father [Fujiwara no Michinaga] found out. Her father then presented to the Queen many poetical books which he had had copied.
>
> **Source 2:** This text is from *The Diary of Lady Murasaki*, which Murasaki Shikibu wrote between 1007 and 1010 CE.

Murasaki's legacy

Murasaki's poetry and her novel have lived on since her death. She was recognised as one of Japan's foremost poets in the *One Hundred Poets* collection, compiled in c. 1200 CE. Her novel was studied by Japanese scholars from the 12th century CE onwards and translated into hundreds of languages. Images based on *The Tale of Genji* have been created as woodblock prints, scroll paintings and screen paintings since 1110 CE. Along with other Heian women writers, Murasaki was also instrumental in the development of Japanese kana.

Learning ladder H7.2

Significant people, ideas and events

1. Source 1: Identify the person in the image.
2. Describe Murasaki Shikibu's education.
3. Source 2: Using the source and your knowledge, explain how women in Japan were prevented from accessing political power.
4. Explain why Murasaki Shikibu's education was unusual at the time.

Significance

1. Identify two of Murasaki's famous works.
2. Describe how Murasaki became a famous author.
3. Explain why *The Tale of Genji* is significant.
4. Source 3: Using this source and your knowledge, explain why Murasaki Shikibu was significant.
5. Analyse the importance of Murasaki's education and class to her being a historically significant woman.

HOW TO

Significance, page 212

Why did the shōguns take control of Japan?

Japan's powerful noble families – known as the *daimyō* class – had a long history of influencing the Japanese imperial family. In 1192 CE, a daimyō rose to become Japan's first shōgun.

The power behind the throne

During the Heian period from 794 to 1185 CE, Japan was ruled by an **emperor** whose seat of government was the **imperial court** in Heian-kyō (Kyōto). However, the real power was held by the powerful Fujiwara clan, headed by the Fujiwara daimyō. Members of this noble Japanese family controlled most of the key roles in the imperial court and were governors of many provinces. Many Fujiwara women married emperors.

If an emperor died before his son was old enough to rule, a member of the Fujiwara family ruled as **regent** until the child was old enough.

Wrestling for power

Towards the end of the Heian period, the struggle for power between the largest **daimyō** clans intensified. The Minamoto, Taira and Tachibana clans resented the influence of the Fujiwara clan. The four powerful clans often fought each other over land, using their powerful **samurai** armies. They also tried to undermine members of the Fujiwara clan at court.

Emperor Go-Sanjō (reigned 1068–1073 CE) also resented the Fujiwara clan's power. In an attempt to regain control of his throne, Emperor Go-Sanjō appointed members of the rival Minamoto clan to his court in order to reduce the power of the Fujiwara clan.

By the middle of the 12th century CE, the Fujiwara clan had lost most of its power over the imperial court, leaving the Taira and Minamoto clans to fight for supremacy.

The first shōgun

Rivalry between the Minamoto and Taira clans finally erupted in the Genpei War (1180–1185 CE). The Minamoto clan emerged victorious, and in 1192 CE its daimyō, Minamoto no Yoritomo, was appointed to the position of **shōgun** (supreme leader of the armed forces) by Emperor Go-Toba (reigned 1183–1198 CE).

This marked a major turning point in Japanese history. Minamoto's military power enabled him to establish a new form of government, known as a **shōgunate**. The emperor, meanwhile, would be gradually reduced to merely a ceremonial head of state. Japan was ruled by shōguns for the next 675 years.

Source 1: This drawing is of Emperor Go-Toba, who was the emperor of Japan from 1183 to 1198 CE.

Source 2: Minamoto no Yoritomo became shōgun in 1192 CE and set up his shōgunate in the city of Kamakura while the emperor stayed in Heian-kyō. [Painting by H.M. Burton from Hutchinson (1915 CE), *History of the Nations*]

The Kamakura Shōgunate

Minamoto no Yoritomo established his base of government in Kamakura. He then appointed district stewards and constables to govern the provinces of Japan on his behalf. This greatly undermined the authority and power of the emperor.

He also rewarded his daimyō supporters with land in exchange for their ongoing military support. This established a system of **feudalism** and ensured that Minamoto had military control over Japan. It also made the samurai class more prestigious.

The Kamakura Shōgunate ruled Japan for the next 141 years.

Learning ladder H7.3

Background and origins

1. Source 1: Identify the emperor in this image.
2. Describe the role of the Fujiwara clan.
3. Explain how the Fujiwara clan lost its power.
4. Explain why the Minamoto clan rose to power.
5. Evaluate the benefits and disadvantages of powerful daimyō families in Heian Japan.

Significance

1. Source 2: Identify the significant leader in this image.
2. Describe the medieval cities of Heian-kyō and Kamakura.
3. Explain how the emperor's role in Japan changed after 1192 CE.
4. Explain why the Fujiwara clan was significant in Heian Japan.

HOW TO

Significance, page 212

H7.4

How was medievalJapanese society organised?

Shōgunate Japan was organised according to the feudal system, where all people had rights and obligations. Society was organised in a strict hierarchy, from the shōgun and rich daimyō down to the lowly merchants.

Feudalism in medieval Japan

Under the rule of the shōguns, feudalism in Japan was similar to the model in Europe. Feudalism required a strict hierarchy of social classes organised from the most to the least important members of society. People knew what was expected of them and there was no social mobility.

Feudalism worked on a system of rights and responsibilities for each class in society.

Source 1: This is a modern-day photo of Himeji Castle in Japan. In the battles for control of Japan, emperors and shōguns rewarded their samurai and daimyō supporters with land to build castles. In 1333 CE, Emperor Go-Daigo gave land for a castle to samurai Akamatsu Norimura. Then, in 1601 CE, shōgun Tokugawa Ieyasu awarded the site to daimyō Ikeda Terumasa, who built the present castle between 1601 and 1609 CE.

Emperor

The emperor was at the highest level of Japanese society. He lived in the Imperial Palace in Heian-kyō (Kyōto). The emperor was the spiritual head of the country, but after 1192 CE his role was mainly ceremonial. As a descendant of Amaterasu, he provided a living connection with the gods and brought a sense of continuity and legitimacy to the shōgun's government.

Shōgun

The shōgun was the actual leader of Japan, and owned one-quarter of the land in the country. Shōguns ruled Japan from 1192 until 1867 CE. The shōgun was formally appointed by the emperor.

Daimyō

The shōgun provided land (called a **domain**) to powerful lords known as daimyō. Each daimyō hired an army of samurai warriors to protect his property. These armies were made available to the shōgun when he needed them. The daimyō received taxes and labour from peasants living in his province.

Samurai

The samurai were Japanese warriors who swore an oath of loyalty to serve and protect their daimyō. They followed a code of conduct called *Bushidō* that highlighted honour, courage and military skill. In return, samurai were paid in rice and given a fief (land) and peasants to work their land.

A ***rōnin*** was a samurai who had no daimyō master, because his master had died, or because he had behaved dishonourably and been dismissed from his master's service. Rōnin had no land or income and were considered to be low-status members of society.

Peasants

Peasants were farmers or fishers. Peasants made up 80 per cent of the population of feudal Japan. Peasants were in a higher class than artisans or merchants because producing food for the community was highly valued.

Artisans

Artisans made goods, weapons and tools. Artisans had a low status in society because their products, while useful, were not regarded as being essential for life.

Merchants

Merchants traded goods and lent money. They had a low social status because they did not make anything of value, and they profited from the hard work of others. Despite their low social status, merchants were often very wealthy.

Outcasts

There were two groups of outcasts at the bottom of feudal Japanese society: the *eta* and the *hinin*.

- The eta performed tasks considered distasteful such as tanning hides, butchering animals, preparing bodies for burial and executing prisoners.
- The hinin were undesirable people, such as street cleaners, beggars, former criminals and street performers.

Source 2: The groups in feudal Japanese society

Learning ladder H7.4

Significant people, ideas and events

1. Source 2: Identify the main groups of people in feudal Japanese society.
2. Source 2: Describe the two types of outcasts in feudal Japanese society.
3. Sources 1 and 2: Explain the rights and responsibilities of the samurai.
4. Source 2: Explain why merchants had a lower social status than peasants in medieval Japan.
5. Evaluate the benefits and disadvantages of the feudal social structure.

Continuity and change

1. Source 2: Identify how the leadership of Japan changed.
2. Describe how the presence of the emperor provided continuity in medieval Japan.
3. Explain how the life of a samurai changed if he became a rōnin.
4. Explain why the shōguns did not abolish the emperor.

Continuity and change, page 203

HOW TO

What were the roles of women in medieval Japan?

In medieval Japan, women were expected to marry and run their households. They also fought as warriors and became highly respected *geisha*.

A lifetime of service

In medieval Japan, women were expected to serve men throughout their lifetime. A girl obeyed her father; a wife obeyed her husband; and if a woman became a widow, she obeyed her son. A married woman was expected to have a son to carry on her husband's family name. Women in medieval Japan were not allowed to divorce or to remarry if they were widowed.

Women from higher social classes had less freedom than lower-status women. A noblewoman's husband was chosen by her family as a business deal to create an alliance with another family and to improve her family's social status and wealth. While women in lower social classes faced more hardships, they had more freedom to choose their partners than noblewomen.

Onna-musha (female samurai)

The men and women born into the samurai class were all trained to fight. ***Onna-musha*** used weapons called *naginata*, which were small daggers or poles with blades at the end. A famous onna-musha was the warrior Tomoe Gozen; she is described in the *Tale of Heike*, which was compiled in the 14th century CE and is based on traditional stories told by monks.

Japanese women also fought in all-female cavalry units during the Genpei War between the Taira and Minamoto clans (1180–1185 CE) and in the many battles of the Sengoku period (1467–1573 CE).

> She [Tomoe Gozen] handled unbroken horses with superb skill; she rode unscathed down perilous descents. Whenever a battle was imminent, Yoshinaka sent her out as his first captain, equipped with strong armour, an oversized sword, and a mighty bow; and she performed more deeds of valour than any of his other warriors.
>
> **Source 1:** *Tale of Heike*, compiled before 1330 CE

After the rise of the Tokugawa shōguns at the start of the 17th century CE, onna-musha were less likely to fight in battles. However, they still defended their homes and lands. With their samurai husbands away for long periods, it was up to the women to protect their homes and children and to take revenge when required. Samurai women also oversaw the crops and food supplies and managed servants.

Geisha

With white make-up, red lips and silk kimonos, ***geisha*** are still associated with Japan. Since around 600 CE, geisha have been highly trained entertainers, skilled in Japanese dance, poetry and playing musical instruments.

In medieval Japan, geisha were highly respected and were even used by members of the daimyō class to spy on or assassinate rival lords.

1 Apply white face-powder paste to your face, chest and neck.

2 Draw eyebrows with pencil and apply red eye shadow to corners of the eyes.

3 Apply red lipstick.

Before becoming a geisha, a young girl was a ***maiko***. Girls began their training around the age of six. Maiko learned how to sing, play instruments, hold witty conversations, conduct the traditional tea ceremony and perform traditional dances.

Geisha were expected to be single. They remained unmarried and were viewed as independent workers who earned their own money from entertaining clients. Any geisha who married had to leave the geisha house.

Source 2: Geisha are Japanese women who earn a living through entertaining mainly male audiences. They were highly regarded in medieval Japanese society. Geisha wear silk kimonos, and distinctive white and red make-up.

Source 3: A 19th-century-CE Japanese artist has painted a scene from the Battle of Awazu in 1184 CE: Tomoe Gozen kills her enemy while on horseback. She fought in the conflicts that led to the first shōgunate in Japan. [Yōshū Chikanobu (1899 CE), *Tomoe Gozen with Uchida Ieyoshi and Hatakeyama no Shigetada*]

Learning ladder H7.5

Significant people, ideas and events

1. Source 3: Identify the role of women shown in this source.
2. Describe the onna-musha.
3. Explain the purpose of marriage in the higher social classes in medieval Japan.
4. Compare the lives of onna-musha and geisha in medieval Japan.
5. How powerful were the geisha in medieval Japanese society?

Sources

1. Source 1: Identify the origin of this source.
2. Source 2: Describe how the geisha applied their make-up.
3. Source 1: Explain how this source was created.
4. Sources 1 and 3: Using these sources and your knowledge, describe the life of Tomoe Gozen.

HOW TO Sources, page 201

How does Japanese art and culture reflect beliefs?

Japanese arts and culture, gardens and martial arts are greatly influenced by the ancient Japanese Shintō religion and by introduced religions such as Buddhism.

Shintō

Shintō is Japan's ancient religion. Followers of Shintō believe in sacred ancestral spirits known as ***kami***, who take on many natural forms such as the Sun, hills, rocks, lakes, rivers and trees. All people, animals, places and things are believed to possess kami. Japanese people go to Shintō shrines to pray for good fortune or good health. They enter the Shintō shrine through a special gateway, called a *torii*. The torii separates the everyday world from the spiritual world.

Buddhism

Buddhism arrived in Japan from China in 525 CE. The form of Buddhism practised in Japan is called Zen Buddhism. Zen Buddhism is a form of Buddhism that promotes mindfulness (staying focused on the present moment) through meditation. Often, Zen Buddhists meditate on *koans*. Koans are special stories or questions that are designed to help meditation, such as 'What is the sound of one hand clapping?' The object of the koan is not to find an 'answer' but to meditate on the question.

Another aid to meditation is the Zen garden. Zen gardens are specifically designed to help people reflect on the present moment. They have carefully placed rocks and moss surrounded by sand or gravel that is raked to represent ripples in water.

Martial arts

Both Zen Buddhism and Shintō are closely related to the development of Japanese martial arts, such as judo, karate, kendo, ***ninjutsu*** and ***sumō***. Samurai warriors embraced Zen Buddhism's principles of mindfulness in martial arts, which encouraged self-discipline and rising above fear. Shintō also influenced martial arts, with fighters encouraged to fight for ancestral spirits.

Source 1: The main torii (gateway) at Fushimi Inari Taisha, a shrine in Kyōto, Japan

Sumō (wrestling)

Sumō is the Japanese word for 'wrestling'. Sumō is steeped in Shintō traditions and symbols. Referees dress in the style of Shintō priests, and before sumō became a professional sport during the time of the Tokugawa Shōgunate (1603—1867 CE) it was performed in the grounds of a Shintō temple. The wrestling ring (***dohyō***) symbolises Earth and is considered to be sacred. The day before a sumō tournament, sumō judges, called ***gyōji***, perform a ring-blessing ceremony. Dressed in the white robes of Shintō priests, the gyōji purify the dohyō with salt. Sake, a traditional Japanese alcoholic drink, is poured around the ring as an offering to the kami.

Source 3: Sumō wrestlers, known as *rikishi*, need to develop strength, fast reflexes and balance.

Source 2: Zen gardens like this one are structured around seven guiding principles: austerity (not being grand), simplicity, naturalness (letting nature grow how it will), subtlety (symbolic elements), asymmetry, unconventionality and stillness.

Learning ladder H7.6

Significant people, ideas and events

1. Identify the two main religions in Japan.
2. Describe the nature of Japan's ancient religion.
3. Source 2: Explain how this source demonstrates three elements of Zen garden design.
4. Explain why the samurai embraced Zen Buddhism.
5. Evaluate the importance of mindful meditation in Zen Buddhism.

Causes and consequences

1. Source 2: Identify the intended effect of Zen gardens.
2. Describe the effect of koans.
3. Explain how the Shintō religion influenced sumō.
4. Explain why people in Japan might visit a Shintō shrine.

HOW TO

Causes and consequences, page 206

How did the samurai help keep the peace in feudal Japan?

During the time of the shōguns in Japan, the warrior class was a powerful force. The word 'samurai' means 'one who serves'. From around 900 to 1600 CE, these highly trained and loyal warriors enforced law and order for their daimyō and fought for the shōgun.

The mighty samurai

As part of the feudal system, the samurai gave their services as warriors to the daimyō in return for grants of land. Samurai not only kept the peace in their lord's domain, but they were also called on to protect the domain from invading forces or to attack a rival lord.

The samurai were highly skilled in martial arts. For the samurai, a battle was a matter of personal and family honour. When two opposing samurai fought, they charged at each other on horseback, slashing with their long swords called *katana*. When they dismounted, they fought hand-to-hand combat using two swords: their katana and a short sword called a *wakizashi*.

To be a samurai, you had to be born into a samurai family. Rigorous training began around age five. Boys learned fighting and military strategy along with reading, writing, calligraphy, poetry and Zen Buddhism. One of the key martial arts the students learned was ***kendo***, which helped them to develop fast movements and sword techniques. Archery was also practised, using bows (*yumi*) that measured over two metres in length and could inflict fatal wounds from 80 metres away. Onna-musha were also trained in martial arts so they could protect their homes.

Source 1: Samurai warriors in battle armour fight using katana, curved fighting swords. [Utagawa Kunisada III (1893 CE), *Genji Samurai in Battle*]

Bushidō

Samurai were expected to live by a strict code of conduct called ***Bushidō*** (meaning 'the way of the warrior'). The code stressed being loyal to one's master, respecting superiors, behaving ethically and showing courage.

Bushidō also taught the samurai to choose their own death rather than to suffer any dishonour in defeat. Samurai warriors often chose ritual suicide, known as ***seppuku***, rather than face humiliation at the hands of the enemy. Bushidō required complete self-discipline, even when facing death.

> Bushidō is nothing but charging forward, without hesitation, unto death. A bushi in this state of mind is difficult to kill even if he is attacked by 20 or 30 people ... In a normal state of mind, you cannot accomplish a great task. You must become like a person crazed and throw yourself into it as if there were no turning back. Moreover, in the Way of the martial arts, as soon as discriminating thoughts arise, you will have already fallen behind.
>
> **Source 2:** Yamamoto Tsunetomo (c. 1709–1716 CE), *Hagakure: The Book of the Samurai*

Ninjas

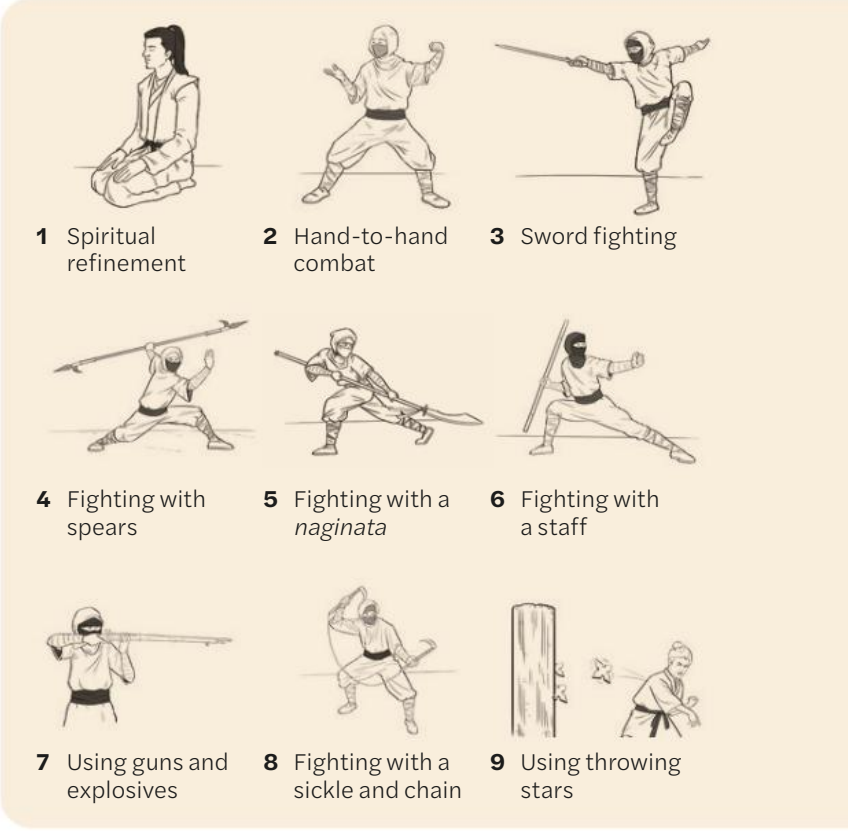
Ninjas were recruited from the lower social classes and were not bound by Bushidō to a daimyō. Nevertheless, they were highly skilled warriors who were trained as spies, assassins and saboteurs.

Ninjas were hired by daimyō to carry out secret missions, such as sneaking into an enemy castle to spy, sabotaging castle defences or assassinating a rival daimyō.

Source 3: Samurai weapons and armour

Source 5: Panel from the Heiji scroll (c. 1250 CE) showing an attack on Sanjo Palace in 1159 CE. The scroll depicts the events of the Heiji Rebellion (1159–1160 CE) between the Taira and Minamoto clans. It was made during the Kamakura period to celebrate the victory of the ruling Minamoto clan.

Source 4: The 18 disciplines of ninjas



Ninjas devoted their lives to perfecting the art of ninjutsu. The skills and traditions of the ninja were passed on from ***sensei*** (teacher) to student. Like the samurai, ninjas began training at an early age. They learned 18 disciplines (Source 4), which included how to fight with weapons such as throwing stars.

Ninjas were extremely fit and could run for extended periods, jump long distances, scale high walls and fight without weapons.

10 Archery

11 Water crossing techniques

12 Using disguises

13 Disappearing techniques

14 Using concealed weapons

15 Climbing walls

16 Medicines and first-aid

17 Spying techniques

18 Astronomy

Learning ladder H7.7

Significant people, ideas and events

1. Identify the meaning of the word 'samurai'.
2. Source 3: Describe the armour and weapons of the samurai.
3. Explain the similarities and differences between the samurai and the ninjas.
4. Source 4: Explain why the ninjas needed to learn a range of disciplines.
5. Analyse the role of the samurai in feudal Japan.

Sources

1. Source 2: Identify the origin of the source.
2. Source 5: Describe the image in the source.
3. Source 2: Using the source and your knowledge, explain the nature of Bushidō.
4. Source 5: Explain why this source was made.

HOW TO Sources, page 201

H7.8

Site study

How was the castle town of Himeji designed?

Shōguns and powerful daimyō lived in well-protected castles designed to keep out the samurai armies of rival daimyō.

Castle fortresses

Daimyō built castles all over Japan to show their power and to protect them from their enemies. Most attacks on castles came from the samurai armies of other daimyō. Japan was embroiled in **civil wars** for hundreds of years, during which daimyō warlords fought for control.

The first castle towns were surrounded by moats and wooden fences. From the 1300s CE, the daimyō built stone walls around their wooden castles. Medieval castles in Japan looked different to those in Europe, but shared many features:

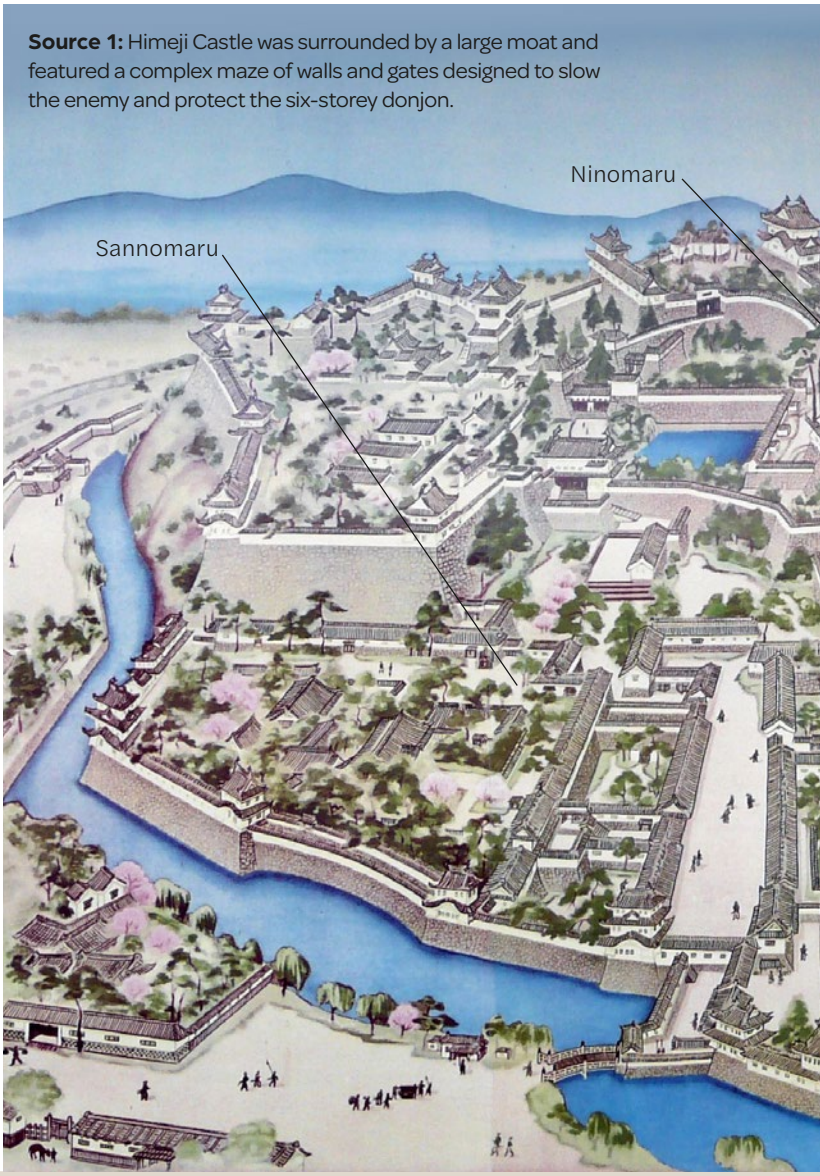
- castles were located on the top of hills
- a series of high walls protected each castle
- moats surrounding the castles stopped enemies accessing the castle by tunnelling
- castles had steep stairways to make attack difficult
- castles had a solid main gate.

Himeji Castle

Before Himeji Castle was built between 1601 and 1609 CE, three other castles had been built on the same site. When Shōgun Tokugawa Ieyasu rose to power, he gave his son-in-law, Ikeda Terumasa, the land containing the castle. Ikeda began constructing the present castle in 1601 CE. Even though the years of war were nearing an end in Japan, the castle was built in case war resumed.

The entire town of Himeji was built with defence in mind. The town was surrounded by a moat. There were only a few entrances to the town and each entrance had a strong gate and was guarded by high-ranking samurai.

The central tower (***donjon***) was made of wood and was six storeys tall. The daimyō and his samurai could retreat to the donjon when under attack. The donjon is connected by corridors to three smaller towers that enclose the main courtyard (*honmaru*). Surrounding the honmaru is a labyrinth of twisting paths and guard towers that make up the inner compound (*ninomaru*). Outside this was the *sannomaru*, which was encircled by the moat.



Source 1: Himeji Castle was surrounded by a large moat and featured a complex maze of walls and gates designed to slow the enemy and protect the six-storey donjon.

Other castle defences

Even if enemy soldiers managed to cross the moat, scale the castle's walls and navigate the labyrinth, the castle had other ingenious defences to outwit and repel invaders. Special holes in the defensive walls (called *sama*) were built so defenders could shoot at the attackers with arrows or firearms. There were also rock chutes at the corners of buildings, through which defenders could drop rocks, hot sand or boiling water on invaders.

Source 2: This illustration shows samurai storming the gate of Hirado Castle, which was the seat of the Matsura clan. ['Storm on Gate of Hirado', *History of Japan*]

Learning ladder H7.8

Significant people, ideas and events

1. Source 1: Identify the castle in this source.
2. Source 1: Describe the main features of Himeji Castle.
3. Explain how the donjon functioned.
4. Explain why Tokugawa ordered his son-in-law to reconstruct Himeji Castle.
5. Analyse the overall effectiveness of the design of Himeji Castle.

Causes and consequences

1. Source 1: Identify the consequences of the moat.
2. Source 1: Describe the consequences of the labyrinthine paths.
3. Explain the consequences of the castle's construction on the town of Himeji.
4. Explain how the castle defences caused difficulties for invading forces.

HOW TO

Causes and consequences, page 206

H7.9

Who were the Three Unifiers?

The Sengoku period was an era of warfare between competing daimyō clans, who all wanted to control Japan. Three warriors, known as the Three Unifiers, ended the conflict.

The Sengoku period (1467–1573 CE)

During the Muromachi period (c. 1338–1573 CE) – when the Ashikaga shōguns controlled Japan – weakness in the shōgunate encouraged nobles to begin fighting each other to decide which families would control Japan. Samurai joined the fighting, hoping they could gain larger estates for themselves.

Earthquakes and famines also occurred during this period, which provoked peasant uprisings. Peasants stormed the cities, calling for their debts to be cancelled and for taxes to be reduced. The unrest lasted for over 100 years.

The Azuchi–Momoyama period (1573–1603 CE)

The years of war and chaos that characterised the Sengoku period were slowly brought to a close by three men (known as the 'Three Unifiers') who reunified Japan. The Three Unifiers were:

- Oda Nobunaga
- Toyotomi Hideyoshi
- Tokugawa Ieyasu.

The period during which these men unified Japan is known as the Azuchi-Momoyama period (1573–1603 CE).

Oda Nobunaga

Oda Nobunaga was a daimyō from Owari, Japan. In 1560 CE, he fought in the Battle of Okehazama against a powerful warlord called Imagawa Yoshimoto. Imagawa was a supporter of the ailing Ashikaga Shōgunate. Against overwhelming odds, Oda defeated Imagawa's forces and killed Imagawa on the battlefield.

During the next 22 years, Oda's armies fought against numerous samurai clans and successfully brought a large area of Japan under his control. In the process, Oda made an alliance with the powerful Tokugawa clan.

The Ashikaga Shōgunate was destroyed in 1573 CE when Oda drove the reigning shōgun, Ashikaga Yoshiaki, out of Kyōto.

Toyotomi Hideyoshi

Oda Nobunaga died in 1582 CE. His successor, Toyotomi Hideyoshi, was appointed *kampaku* (chief counsellor to the emperor). Hideyoshi introduced several laws to bring Japan under control. In 1588 CE, Hideyoshi ordered a 'sword hunt' to find weapons owned by peasants, merchants and monks; from this point on, only samurai could carry arms.

Japan, 1560–1582 CE

Source: Matilda Education Australia

▲ **Source 1:** Oda Nobunaga's control over Japan, 1560–1582 CE

Hideyoshi also outlawed Christianity and expelled all Christian missionaries from Japan. Christianity had been brought to Japan by the Portuguese in the mid-16th century CE and was seen as a dangerous religion because many of the peasants who rebelled against Hideyoshi's rule had adopted Christianity.

Farmers of all provinces are strictly forbidden to have in their possession any swords, short swords, bows, spears, firearms, or other types of weapons. If unnecessary implements of war are kept, the collection of annual rent may become more difficult, and without provocation uprisings can be fomented ... Therefore, the heads of the provinces, samurai who receive a grant of land, and deputies, must collect all the weapons described above and submit them to Hideyoshi's government.

Source 2: This text was written by Yamamoto Tsunetomo, who was a samurai in the early 18th century CE. [Yamamoto Tsunetomo (c. 1709–1716 CE), *Hagakure: The Book of the Samurai*]

Tokugawa Ieyasu

Hideyoshi had attempted to invade Korea in 1592 CE, but this campaign had failed, weakening his hold on power. Meanwhile, Tokugawa Ieyasu had been building alliances with daimyō from east Japan. When Hideyoshi died in 1598 CE, Tokugawa saw that his opportunity had finally arrived. He launched a battle against Hideyoshi's forces, known as the Battle of Sekigahara (1600 CE). Tokugawa won the battle.

Over the next three years, Tokugawa worked to strengthen his hold on Japan. In 1603 CE, he was appointed shōgun by Emperor Go-Yozei, the first shōgun for 30 years. He established his new government in the city of Edo (Tokyo). The Tokugawa clan ruled Japan for over 250 years, until 1867 CE.

Oda Nobunaga:
If the bird won't sing, I'll kill it!

Toyotomi Hideyoshi:
If the bird won't sing, I'll make it sing!

Tokugawa Ieyasu:
If the bird won't sing, I'll wait for it to sing.

Source 3: The sayings of the Three Unifiers

Source 4: Tokugawa Ieyasu

Learning ladder H7.9

Significant people, ideas and events

1. Identify the Three Unifiers.
2. Describe Oda Nobunaga's actions to unify Japan.
3. Source 3: Explain how each of the Three Unifiers demonstrated his saying.
4. Source 2: Using the source and your knowledge, explain why Hideyoshi introduced new laws for the peasant class.
5. Which of the Three Unifiers was the most significant? Explain your choice.

Continuity and change

1. List three changes that occurred during the Sengoku period.
2. Source 1: Describe the changes to Oda Nobunaga's and Toyotomi Hideyoshi's control of Japan between 1560 and 1582 CE.
3. Explain how Tokugawa Ieyasu introduced change and continuity to the rule of Japan.
4. Explain why the Azuchi–Momoyama period was a time of significant change.

HOW TO

Continuity and change, page 203

Key individual

How did Hideyoshi rise to lead Japan?

Toyotomi Hideyoshi, the son of a peasant farmer, rose from a low social class to become a samurai and then a powerful *daimyō*, who would unify Japan and put an end to 150 years of civil war.

Rise of the peasant leader

When Toyotomi Hideyoshi was born in 1536, Japan was made up of a series of provinces controlled by local daimyō. They no longer feared the shōgun, Japan's military leader. Life was chaotic, with lords battling one another for power, peasant rebellions, and bandits and pirates running amok. Amid the chaos, Hideyoshi was born in a small village in Owari Province.

At 22 he joined the army of Oda Nobunaga, a ruthless daimyō who was set on conquering all of Japan. Hideyoshi began as Nobunaga's sandal-bearer, the person who looked after the warlord's shoes. He quickly proved himself as capable of more and served in Nobunaga's army. His intelligence and courage led him to be made a general at the age of 30. The peasant boy had quickly risen to be a samurai noble.

Hideyoshi became one of Oda Nobunaga's leading generals. He captured many castles using innovative tactics such as digging tunnels under castle walls and diverting a river to flood another. In 1582, Nobunaga died and a fight erupted for leadership of the Oda clan. Hideyoshi won and installed Nobunaga's grandson as the new Oda daimyō. Some lords refused to acknowledge the authority of a man of peasant birth, but Hideyoshi quickly put down challenges, such as the one from the Oda general Shibata Katsuie at the Battle of Shizugatake in 1583.

Hideyoshi unifies Japan

Hideyoshi had himself been adopted by the Fujiwara clan. He took the title of ***kampaku***, not shōgun, and installed the teenage Go-Yozei as his **puppet emperor**.

In 1588, Hideyoshi called a meeting of his daimyō at his new palace in Kyoto. In the presence of the young emperor, Hideyoshi had the daimyō pledge their allegiance to him as kampaku. By 1590, Hideyoshi had defeated the Shimazu and Hojo clans to unify Japan for the first time.

Hideyoshi was now the supreme commander and quickly introduced a number of measures to bring peace and stability to Japan. Hideyoshi would not allow wars between daimyō or uprisings from peasants. To achieve control, Hideyoshi froze the social order so that the class you were born in was the class you died in. In the new social order:

- towns were banned from allowing farmers to become merchants or craftspeople
- to prevent peasant uprisings, no Japanese citizens (except for samurai) could own a weapon
- no-one could hire a rōnin (a samurai without a master) to fight on their behalf
- to keep an eye on daimyō lords, each lord had to spend every second year in the capital and they were ordered to leave their wives and children there permanently
- a **census** of population and land was held to accurately set taxation rates.

Expansion of Japan

Hideyoshi put together an army of 140 000 men and 2000 ships to invade Korea. With help from China, Korea repelled Japan's samurai army on two occasions. During the second invasion in 1598, with his troops fighting a losing battle, Hideyoshi died. His heir was just 5 years old, so Hideyoshi had put in place a trusted Council of Five Elders to rule until the child came of age.

Source 1: The Battle of Shizugatake Pass in 1583 occurred in the Sengoku period in Japan between supporters of Toyotomi Hideyoshi and Shibata Katsuie. [*Battle of Shizugatake Pass 1583*, coloured lithograph print, 1904]

Source 2: A colour lithograph of Toyotomi Hideyoshi (1536–98)

Learning ladder H7.10

Significant people, ideas and events

1. Describe Hideyoshi's personality using three adjectives.
2. How did Hideyoshi prevent further rebellions?
3. In a small group, brainstorm what benefits might have come from uniting the whole of Japan.
4. Do you think it was right that Hideyoshi set the social classes in stone? Justify your answer.

Sources

1. Sources 1 and 2: What clues in these images suggest they are from medieval Japan?
2. Source 2: List the features used by the artist to suggest that Hideyoshi was a heroic leader.
3. Source 1: What is the main idea the artist was trying to get across? Give examples from the artwork in your answer.
4. Source 2: With what you have learnt about Hideyoshi's character, how do you explain the expression on Hideyoshi's face? Why do you think the artist painted him in this way?

HOW TO

Sources, page 201

H7.11

Key individual

Who was Tokugawa Iemitsu?

Tokugawa Iemitsu was the grandson of Tokugawa Ieyasu. He ruled as shōgun between 1623 and 1651 CE. Iemitsu issued a series of strict laws to tighten his control over the daimyō, samurai and peasant classes.

Impact of laws on the daimyō

While Ieyasu's grandfather had already imposed many laws on the daimyō, Iemitsu took these laws further to make sure he had the daimyō under his control. He established the right of the shōgun to take the lands of any daimyō he considered disloyal and give them to other daimyō who supported him (known as the *fudai* daimyō). He also forced daimyō he didn't entirely trust (known as *tozama* daimyō) to move to the outer regions of Japan.

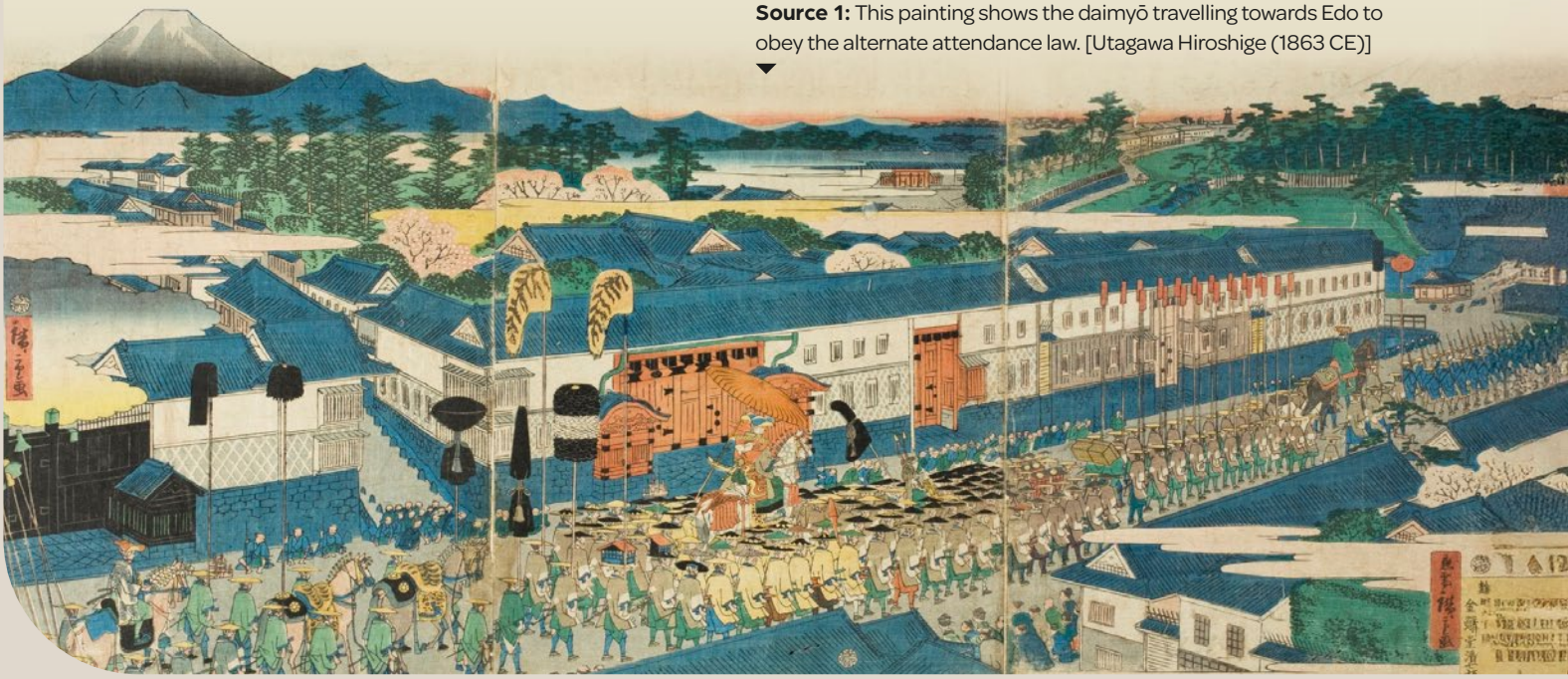
Perhaps most far-reaching was Iemitsu's system of 'alternate attendance' (*sankin kotai*) for the daimyō. Iemitsu required all daimyō to maintain residences in Edo as well as their home domain. They then had to 'attend' on the shōgun by living in Edo every second year. Their wives and children, however, had to stay in Edo permanently. Tozama daimyō such as the Satsuma and Choshu were especially affected by alternate attendance and faced long, difficult and expensive journeys to and from Edo. Many daimyō imposed heavy taxes on the peasants in order to fund their travels to Edo.

Impact of laws on the samurai

Due to the shōgun's power to take away a daimyō's land if he was disloyal, the daimyō were unable to wage war against the shōgun. Therefore, they ordered their samurai to undertake administrative jobs in the towns or to serve the daimyō's family in Edo. Life in the cities was expensive, and the samurai soon fell into debt. In addition, the samurai's fiefs were taken over by the daimyō and the shōgun, such that the samurai themselves gradually lost their connection to their land.

While the samurai were still allowed to wear their two samurai swords, their military duties were greatly reduced. These changes meant that the samurai gradually lost their military skills.

Source 1: This painting shows the daimyō travelling towards Edo to obey the alternate attendance law. [Utagawa Hiroshige (1863 CE)]



The people endured the ill-treatment of their former daimyō as long as he was present among them. But his son, the present daimyō, who resides in Edo ... forces the farmers to pay far more taxes than they are able to do, in such a manner that they languish from hunger, taking only some roots and vegetables for nourishment. The people resolved not to bear this hardship any longer and to die one single death, instead of the many slow deaths to which they were subjected.

Source 2: Account by Nicholas Koeckebacker, 1637 CE. Koeckebacker was a Dutch merchant based at Nagasaki, Japan. Here he describes the reasons for a peasant rebellion at Shimabara in 1637 CE.

Source 4: Tokugawa Iemitsu, shōgun of Japan, 1623–1651 CE

Impact of laws on the peasants

Tokugawa Iemitsu's grandfather had continued the older laws made by Toyotomi Hideyoshi, which prevented peasants from owning weapons. In addition, Ietmitsu ruled that peasants were not allowed to change villages or travel without permission. He also forced them to register at a Buddhist temple.

Peasant life became even more difficult when they were asked to pay higher taxes by the daimyō, leading to much hardship and hunger.

Impact of the laws on the merchants

Japanese merchants actually benefited from shōgunate rule. When the daimyō found it difficult to meet the expenses of two residences and the samurai struggled to afford a city lifestyle, the merchants lent money to them. As moneylenders, the merchants became very wealthy, so wealthy in fact that the Tokugawa shōguns passed a series of laws called 'sumptuary laws'. These sumptuary laws tried to stop the merchants from 'living above their status' by buying big houses or expensive clothing. Many merchants ignored the sumptuary laws passed by the Tokugawa shōguns and continued to flaunt their wealth.

Satsuma warriors donned full armour every year on the anniversary of Sekigahara, visiting a temple near the castle town of Kagoshima to meditate on what had been for them an epochal [huge] defeat. In Choshu, mothers told their boys ... never to forget Sekigahara, even in their dreams.

Source 3: Christopher Harding (2020), *A History of Modern Japan*. Christopher Harding is a historian.

Learning ladder H7.11

Significant people, ideas and events

1. Source 1: Identify the law being followed by the daimyō in this source.
2. Complete the table below.

Social class targeted	Laws that controlled military power	Laws that controlled wealth	Laws that controlled movement
Daimyō			
Samurai			
Peasants			

3. Using the table in Question 2, explain how Tokugawa Iemitsu maintained control.
4. Explain why the merchants became wealthy.
5. Sources 1, 2 and 3: What do these sources demonstrate about the extent of Tokugawa Iemitsu's control over the people of Japan?

Perspectives

1. Source 2: Identify the author, whose perspective is provided in the source.
2. Source 2: Describe the author's perspective on the peasants.
3. Source 3: Explain the perspective of the Satsuma and Choshu clans towards the Tokugawa Shōgunate.
4. Source 3: Explain why the Satsuma and Choshu clans held this perspective towards the Tokugawa Shōgunate.

HOW TO Perspectives, page 210

Why did the Tokugawa shōguns isolate Japan from the world?

From 1633 to 1639 CE, Shōgun Tokugawa Iemitsu enacted the *sakoku* policy, which closed off Japan from most of the world. This policy stayed in place for over 200 years.

The sakoku ('closed country') policy

The Tokugawa shōguns isolated Japan from most of the rest of the world for over 200 years through the government policy of ***sakoku***.

The sakoku policy was enacted through a series of edicts (orders or laws) that were implemented over several years (1633 to 1639 CE). The edict of 1635 CE, introduced by Tokugawa Iemitsu, was the most significant of these laws.

During the sakoku period, only Dutch, Korean and Chinese traders were allowed to trade with Japanese merchants. Trade in and out of Japan could only take place through the port of Nagasaki, a city controlled by the Tokugawa clan. Merchants had to pay fees and taxes for the right to take part in foreign trade.

In addition, all Japanese people were forbidden from travelling overseas. This prevented them from making alliances with foreign powers, which could help them to overthrow the Tokugawa shōguns.

Why did the Tokugawa shōguns isolate Japan?

Tokugawa Iemitsu introduced the sakoku policy to increase his control over the daimyō and the samurai. Strict laws were applied to the daimyō and the samurai, limiting the amount of trade they were allowed to conduct with foreign merchants. This meant that they could not profit from trade as much as in previous eras. Instead, most of the profits from trade went to the Tokugawa shōguns. In addition, the daimyō and samurai were unable to build strong trade relationships with foreigners, import foreign weapons or adopt foreign religions such as Christianity.

Source 2 contains excerpts from the edict of 1635 CE, which was written by Tokugawa Iemitsu.

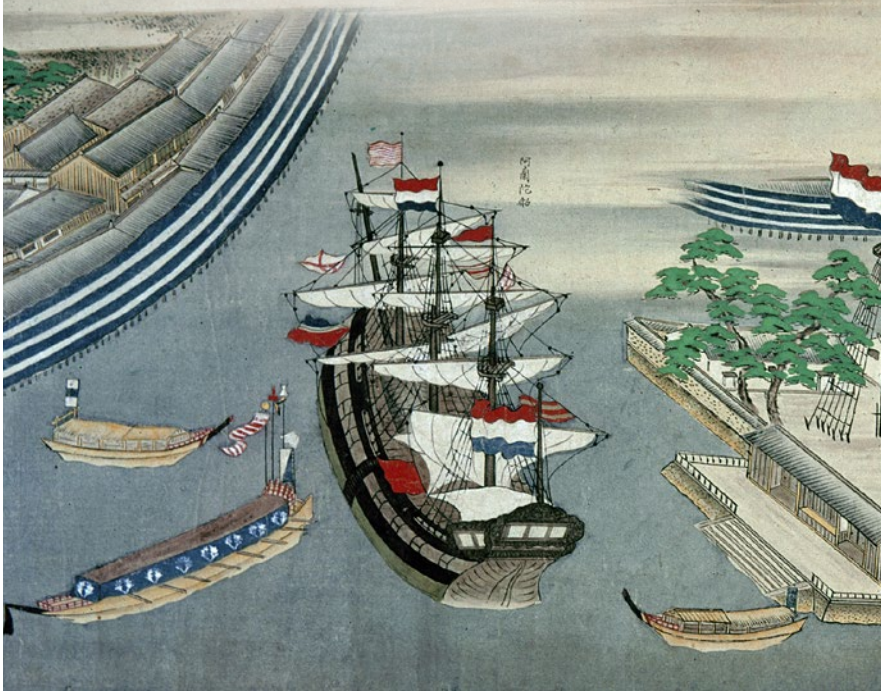
Rangaku

In addition to maintaining trade with China, Korea and the Dutch Republic (the Netherlands) throughout the period of the sakoku policy, Japan also kept itself informed of new ideas and technology in the world.

One of the most important ways this was achieved was through Japanese contact with the Dutch. *Rangaku* (Dutch studies) introduced European ideas about anatomy, surgery, biology and mechanics to Japanese scholars.

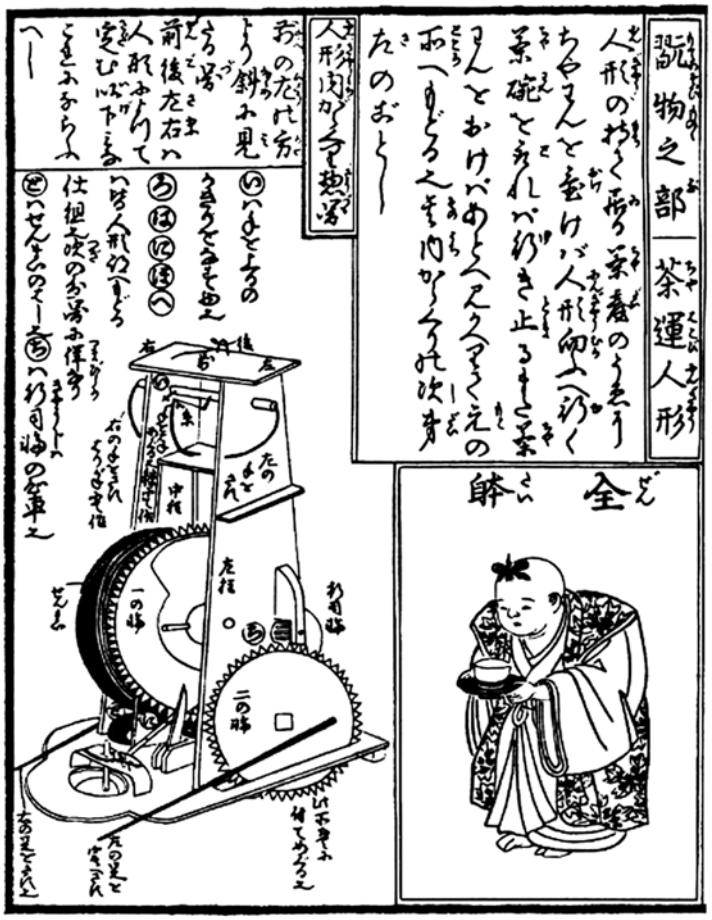
While many Japanese scholars were fascinated by Western science, rangaku provoked much debate about whether Japan should adopt 'foreign ideas' or retain its own cultural perspectives.

Source 1: This painting depicts a Dutch ship at the Dejima trading post in the port of Nagasaki. [*Nagasaki: Dejima Island* (1804 CE)]

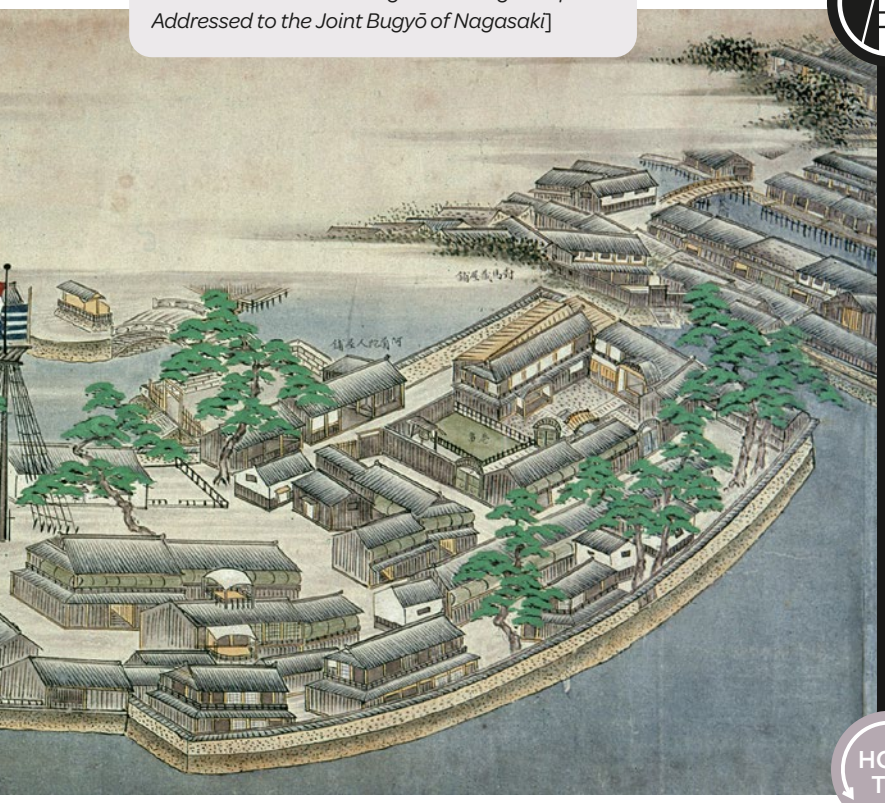


1 Japanese ships are strictly forbidden to leave for foreign countries.
2 No Japanese is permitted to go abroad. If anyone attempts to do so secretly, he must be executed. The ship so involved must be impounded and its owner arrested, and the matter must be reported to the higher authority.
3 If any Japanese returns from overseas after residing there, he must be put to death.
4 If there is any place where the teachings of the [Catholic] priests is practised ... you must order a thorough investigation.
5 Any informer revealing the whereabouts of the followers of the [Catholic] priests must be rewarded accordingly.

Source 2: Some of the orders from the sakoku edict of 1635 CE. [*Shōgun* Tokugawa Iemitsu, *The Edict of 1635 Ordering the Closing of Japan: Addressed to the Joint Bugyō of Nagasaki*]



Source 3: This is a page from *The Illustrated Compendium of Clever Machines* (1796 CE) by Hosokawa Hanzo Yorinao, describing the mechanism of clocks and automata. The book is an example of rangaku ('Dutch learning').



Learning ladder H7.12

Significant people, ideas and events

1. What was the sakoku policy?
2. Source 3: Describe rangaku.
3. Source 2: Explain how the sakoku policy limited trade between Japan and the outside world.
4. Explain why the study of rangaku provoked debate.
5. Analyse the positive and negative aspects of the sakoku policy.

Causes and consequences

1. Source 1: Identify the purpose of Dejima.
2. Compare the consequences of sakoku on daimyō and merchants.
3. Explain why the sakoku policy was introduced.
4. Source 2: Using this source and your knowledge, explain the cause of the opposition to Christianity.

HOW TO Causes and consequences, page 206

How were Japan's resources conserved?

The daimyō and shōguns had cut down many of Japan's forests to build ships, houses and castles. By the time the Tokugawa Shōgunate gained control in the early 17th century CE, Japan faced an environmental disaster due to deforestation.

The use of natural resources in early medieval Japan

Most early societies relied heavily on nature to provide the resources needed for survival. Little thought was given to the conservation or regeneration of natural resources.

In particular, medieval people relied greatly on trees. Forests were cleared so that wood could be used for building houses, castles, monuments and ships. Families needed fire for cooking and warmth, and wood was the fuel for these fires. Also, land needed to be cleared to grow crops and to graze farm animals.

The shōguns and daimyō had become very wealthy by selling the wood harvested from the forests on their lands. Their wealth was increased by using the cleared land for agriculture, and for charging peasants taxes to work the fields.

Environmental issues in medieval Japan

Agricultural land in Japan was (and still is) extremely limited. Approximately 70 per cent of Japan is mountainous and only 20 per cent is usable for farming. This meant that the small section of usable land was used intensely.

This problem was exacerbated by population growth. Logging trees did not have a dramatic impact while the population was small. However, by midway through the 16th century CE, Japan's population had reached 10 million people.

By this time, most of Japan's forests had been subject to logging. Land degradation and deforestation were noticeable. High-quality timber was scarce, mudslides and flooding were frequent, erosion was evident and rivers were closing off as a result of the build-up of silt. All of this indicated that more control over the use of the forests was needed.

Japan

Source: Matilda Education Australia

▲ **Source 1:** Areas of Japan that have been logged over time

Tokugawa Shōgunate's forestry policy

The Tokugawa shōguns realised that removing trees, especially those close to rivers, was causing flooding. In 1666 CE, the shōgunate introduced policies for communal land that:

- forbade cutting down certain types of trees
- regulated how wood was used: government officials had to approve the use of timber in any construction
- encouraged people to replant trees so that forests could regenerate (Japan had some of the first planned forest plantations in the world)
- ensured that time and effort were given to the study of forest development and management.

In 1678 CE, the shōgun introduced laws prohibiting the cutting of branches and stripping of bark. Further laws were enacted in 1684 CE that banned uprooting grasses, burning fields, and building close to river banks.

Source 2: Giant Japanese cedar trees, some up to 800 years old, line the path into the Okusha shrine near Nagano. According to Shinto beliefs, trees that are over 100 years old are inhabited by tree spirits called *kodama*.

Over time, the enforcement of these policies helped villagers and government officials to experiment with and develop successful techniques to manage forests and plant and nurture trees. Many areas of Japan were effectively reforested, ensuring ongoing wealth, resources and spiritual continuity for Japan.

This program of care for the environment also meant that Japan was at the forefront of environmental policy-making. Most other countries, including the United States and Australia, caused significant environmental damage during the 19th century. Environmental conservation did not receive serious attention in these countries until the last few decades of the 20th century CE.

Year	Population	Forest (ha)	Forest (%)
1600 CE	17 million	27 million	72%
1850 CE	32.3 million	25.5 million	68%

Source 3: Forest cover in Japan between 1600 CE and 1850 CE

Learning ladder H7.13

Impact and legacies

1. Identify the ways timber was used in Japan during the medieval period.
2. Describe how the daimyō became wealthy from harvesting timber.
3. Explain how the shōgunate tried to limit deforestation.
4. Explain why the Tokugawa Shōgunate's environmental policy was significant.

Continuity and change

1. Source 1: Which area of Japan was logged between 1550 and 1700 CE?
2. Source 3: Describe how population growth changed Japan's forests.
3. Source 2: Explain how trees provide a sense of continuity in the Shintō religion.
4. Explain why the Tokugawa Shōgunate changed Japan's approach to tree conservation.

HOW TO Continuity and change, page 203

H7.14

How did the Tokugawa Shōgunate decline?

Historians are divided over what caused the Tokugawa Shōgunate to decline. Was it due to long-term discontent with the Tokugawa shōguns? Or was the arrival of outsiders to blame?

Discontent with the Tokugawa Shōgunate

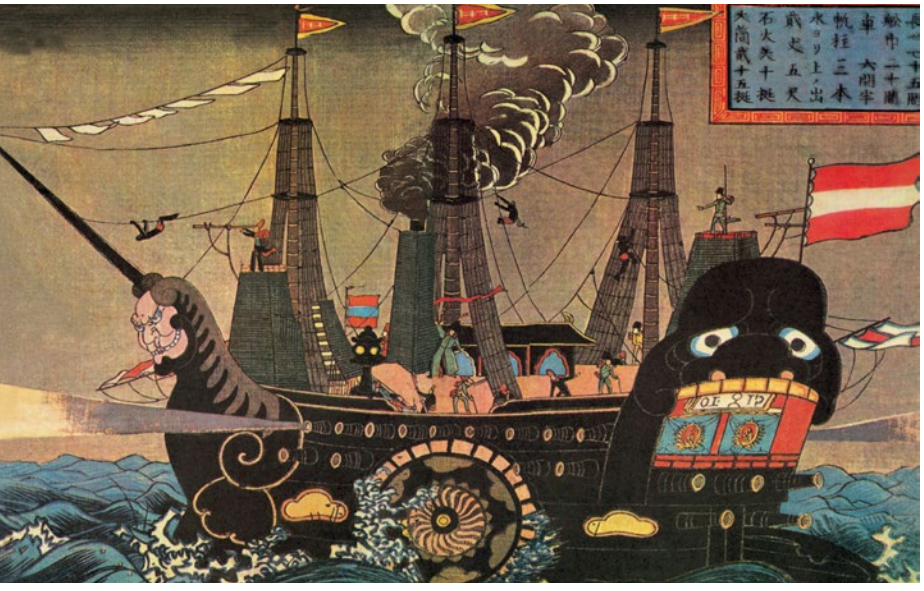
The Tokugawa Shōgunate ruled Japan from 1603 to 1867 CE. Despite the longevity of their rule, people at all levels of Japanese society were unhappy with the rule of the Tokugawa shōguns.

The daimyō and the samurai were unhappy with the shōgunate because the Tokugawa shōguns had limited the opportunities for the daimyō and the samurai to build their wealth. They had also restricted the military power of the daimyō and the samurai, and forced the daimyō to undertake alternate attendance.

The peasants were unhappy with the Tokugawa Shōgunate because under the shōgun's laws, peasants were unable to leave their villages, even when their harvests failed due to bad weather or insect infestations.

Due to the Tokugawa Shōgunate's control of the Japanese people's wealth, military power and freedoms, the people of medieval Japan were unable to rise up against the shōgunate. All they could do was wait for an opportunity to change their circumstances.

Source 1: This is a Japanese artist's impression of one of Matthew Perry's ships arriving in Tokyo Bay in 1853.



The arrival of Matthew Perry

Japan's sakoku policy helped the shōguns to control trade in Japan, but it had angered merchants in Europe and in the United States. They envied the trade relationship between the Netherlands and Japan and wanted the opportunity to trade with Japan themselves. These merchants hoped to buy Japanese goods, such as silk and lacquerware, and sell the goods in their home countries and make a substantial profit.

The Tokugawa shōguns held fast to their sakoku policy until 1853 CE, when an American naval officer named Matthew Perry arrived in Edo (Tokyo) Bay. Perry's fleet of steam ships – which belched thick black smoke into the sky – terrified many Japanese people. Perry threatened to declare war on Japan unless the shōgun, Tokugawa Iesada, agreed to trade with the United States. Japan's sword-wielding samurai were no match for Perry's gunships. Faced with an impossible situation, Iesada agreed. The United States forced the shōgun to sign a series of unfair treaties, which allowed the Americans to buy Japanese goods and to sell cheap manufactured American products in Japan, putting many Japanese artisans out of business.

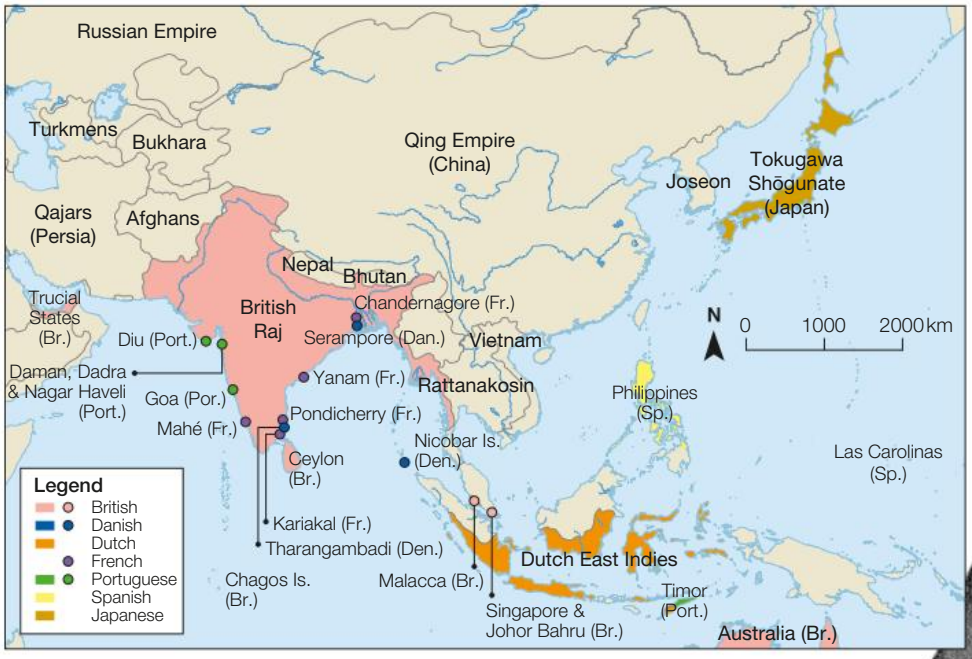
Emperor Kōmei

The signing of the unfair trade agreement made the Tokugawa shōgun look weak. Some of the daimyō began to lose faith in the shōgun and called on him to keep Japan closed to the United States. They feared that the United States might take control of Japan and turn it into an American colony, just as many Western countries had already done in other areas of Asia.

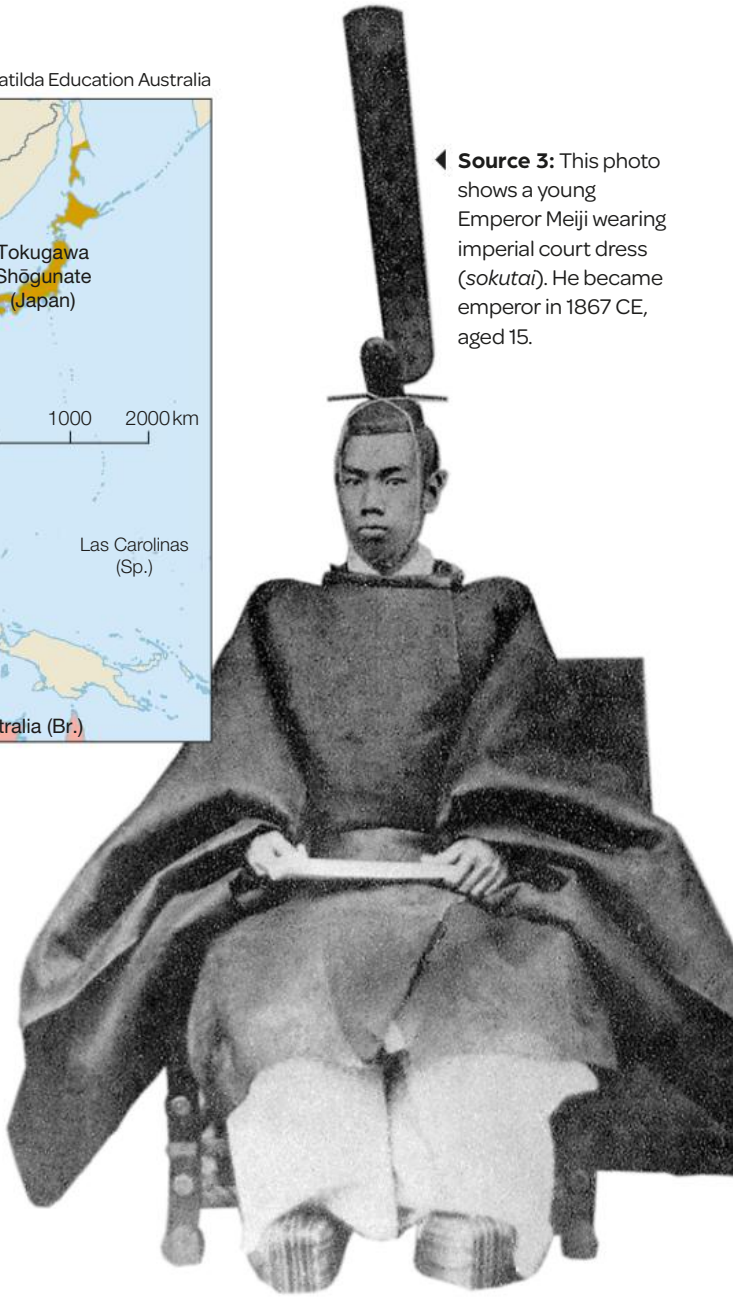
Emperor Kōmei – who had previously always supported the shōgun – now sided with the daimyō. He called on the shōgun to reject the trade agreement and to expel all foreigners from Japan. This reinforced the view that the shōgun was weak.

Asia, c. 1880 CE

Source: Matilda Education Australia



▲ **Source 2:** This map shows European imperialism in Asia, c. 1880 CE.



◀ **Source 3:** This photo shows a young Emperor Meiji wearing imperial court dress (*sokutai*). He became emperor in 1867 CE, aged 15.

The downfall of the Tokugawa Shōgunate

The Tokugawa Shōgunate survived for a few more years until 1867 CE, when the opposition of the emperor and many of the daimyō and samurai became overwhelming. Two of the biggest daimyō clans – the Satsuma and the Chōshū – formed a secret alliance in 1866 CE. Together, they overthrew the last Tokugawa shōgun, Tokugawa Yoshinobu, and destroyed the Tokugawa clan in a battle called the Boshin War (1868–1869 CE). Samurai from the Satsuma and Chōshū clans then formed a new government. They installed Emperor Kōmei's son Mutsuhito, known as Emperor Meiji, as head of their government. This change in government was known as the 'Meiji restoration'.

Learning ladder H7.14

Impact and legacies

1. Source 1: Identify the key event depicted in this source.
2. Source 1: Describe how the United States forced Japan to open the country to trade.
3. Explain how the arrival of Perry affected the shōgun's power.
4. Source 2: Explain why some daimyō feared opening Japan to trade with Europe and the United States.
5. Source 3: Using this source and your knowledge, explain how the samurai brought about the Meiji restoration.

HOW TO

Interpretations, page 214

Interpretations

1. Identify the debate over what caused the fall of the Tokugawa Shōgunate.
2. Describe the reasons why the daimyō, the samurai and the peasants were unhappy with the Tokugawa shōguns.
3. Compare the roles of Matthew Perry and Emperor Kōmei in making the shōgun look weak.
4. Explain whether the shōgun could have rejected Perry.
5. Analyse whether the fall of the Tokugawa Shōgunate was due to problems within Japan or was caused by external factors.

How have the samurai influenced modern Japan?

The samurai lost much of their prestige and power during the Tokugawa period. During the Meiji period, the samurai class was abolished. While the samurai warriors are long gone, the Bushidō values of loyalty, honour, courage and self-discipline continue to inspire Japanese people today.

The 47 rōnin

In 1703 CE, during the Tokugawa period, a daimyō named Asano Naganori was forced to perform seppuku after he assaulted a Tokugawa court official named Kira Yoshinaka. As a result, Asano's 47 samurai became rōnin. The 47 rōnin avenged their master's death and killed Kira. The rōnin were then arrested and sentenced to be executed. However, due to public support for the 47 rōnin, the authorities changed their minds and allowed the rōnin to commit seppuku instead. Seppuku was a more honourable death than execution.

Almost immediately, the story of the 47 rōnin was retold in a play called *The Night Attack at Dawn by the Soga*. This play was quickly shut down by Tokugawa authorities, but other similar plays followed, sometimes setting the events in the 14th century CE to avoid the attention of the Tokugawa censors.

The story of the 47 rōnin became very popular. It symbolised the qualities of Bushidō – loyalty, honour and self-sacrifice – and deeply resonated in Japan at a time when the country was undergoing rapid change. The story inspired Japanese woodblock prints, plays and literature. The story continues to inspire culture today, through film, manga and graphic novels.

The Satsuma Rebellion (1877 CE)

After Japan started trading with European countries and the United States, Japanese rulers began to see the need to protect Japan from the modern militaries of the West. To do this, the Meiji Government decided to modernise Japan's social structure and military forces. The old feudal classes were abolished, and a modern army was formed, which consisted of conscript soldiers armed with modern weapons that had been bought from Europe.

Source 1: This artwork depicts Asano Naganori's samurai. [Kunisada Utagawa (1847 CE), *The 47 Faithful Samurai before the Night Attack*]

The Meiji Government had no need for a class of sword-wielding warriors in a modern Japanese society. The samurai class was formally abolished by the Meiji Government in 1873 CE. Some samurai successfully transitioned to the modern world and became administrators, teachers and modern military leaders, but many others bitterly resented the change.

In 1877 CE, a band of samurai, led by Satsuma leader Saigō Takamori, took a last stand against the modern world in the Satsuma Rebellion. Even though the Satsuma clan had played a key role in the demise of the Tokugawa regime, they had not envisaged that the Meiji restoration would mean the end of the samurai class. The battle was fought between the samurai and the new modern Japanese army. The rebellion lasted from 29 January until 24 September 1877 CE, when Saigō was shot and killed.

The Satsuma Rebellion has inspired many movies, television series and novels in Japan. In the West, the movie *The Last Samurai* (2003 CE) was loosely based on the Satsuma Rebellion and other samurai uprisings during the early Meiji period.

The samurai and popular culture

The samurai have become iconic figures in popular culture, often featuring in movies, manga, anime and video games as heroic figures who display the courage, valour, sacrifice and self-discipline of Bushidō. Video games such as *Ghost of Tsushima* and *Rise of the Rōnin* feature samurai protagonists, while famous movies such as *Seven Samurai* (1954 CE) and *13 Assassins* (2010 CE) have samurai heroes.

The *Star Wars* films were greatly inspired by samurai movies such as *Seven Samurai* and *The Hidden Fortress* (1958 CE), with the Jedi based on samurai warriors. The word 'Jedi' comes from the Japanese word for samurai films, *jidaigeki*, which means 'history piece'.

The manga series *Demon Slayer* is strongly based on the sword culture, self-sacrifice and honour of the samurai. It tells the story of a boy named Tanjiro who trains to become a demon slayer so he can protect people from the demonic beings that emerge at night. He also hopes to save his sister, Nezuko, who survived an attack by demons, but has been partially transformed into a demon herself. *Demon Slayer* is a very popular manga series, having sold over 150 million copies. The associated films, anime series and video games are among the highest-grossing media franchises of all time. The huge popularity of the franchise can be partly attributed to the spectacular animation, but it is also due to its embodiment of the samurai values.

Source 2: The cover of the first edition of *Demon Slayer*, featuring Nezuko and Tanjiro

Source 3: Troops from the Japanese army prepare to leave Yokohama to fight against Saigō Takamori and his samurai in 1877 CE.

Learning ladder H7.15

Impact and legacies

1. Source 1: Identify the story this source depicts.
2. Source 3: Describe the clothing and weapons used by the soldiers of the modern Japanese army who fought the samurai in the Satsuma Rebellion.
3. Explain how the Meiji regime affected the samurai.
4. Explain why the 47 rōnin became a famous story in Japan.

Significance

1. Identify an example of the influence of the samurai on popular culture.
2. Describe how the *Star Wars* films have been influenced by samurai ideas.
3. Source 2: Using this source and your knowledge, explain how the samurai are a significant influence on popular culture.
4. Explain why the samurai are significant today.

HOW TO

Significance, page 212

How do I conduct a good inquiry?

Now that you've finished the chapter, it's time to conduct your own historical inquiry on Japan under the shōguns. Throughout the chapter you have developed knowledge and understanding of Japan under the shōguns. Background knowledge is important because it helps you make connections to new information, ask better questions and consider different perspectives. As you progressed through the chapter, you have gathered information through classroom discussion, highlighting, note taking and answering questions. Now you are ready to start planning your own historical inquiry!

A historical inquiry gives you the opportunity to be an active historian: forming questions, interrogating sources and communicating insights about the past on a topic of your choice. The chapter has covered the origins and legacies of Japan under the shōguns in addition to significant people, events, ideas and beliefs. What would you like to know more about?

- The lives of outcasts, page 170
- The life of Tomoe Gozen, page 172
- Sumō wrestling, page 174
- The Sengoku period, page 182
- The Battle of Sekigahara, page 182

Return to the relevant pages in the chapter and read them again.

Next, complete the 'see, think, wonder' process to help develop ideas you might cover in your inquiry.

Jot down your answers to these questions. Your answers will help you to formulate your own research ideas. Once you have worked through this process, you are ready to start the historical inquiry.

Refer to pages 218–25 of the How-to chapter for a step-by-step guide to this process.

See

What do you see?
Who is involved?
What are the key features?
When and where was this happening?

Think

What do you think about that?
How do you think people were affected at the time?
How is this similar to or different from today?
How do we know?

Wonder

What did different groups think about this?
Why is this important to know?
What does it make you wonder?

Level up!

Throughout the chapter, you have been working to move up the Learning ladder. An inquiry investigation is a great opportunity to expand your knowledge and attempt new skills.
When planning your inquiry, consider how the experiences and perspectives of individuals and groups shaped societies, beliefs and events in the past. Think about how the past has had an impact on the present. Use the How-to chapter to support your planning and research.

Asia and the Pacific region
(c. 600–1750 CE)

The Polynesian expansion across the Pacific

H8

HOW WAS POLYNESIA COLONISED?

HOW ARE POLYNESIAN SOCIETIES SIMILAR?

WHY WERE THE STATUES ON RAPA NUI BUILT?

WHY DID THE RAPA NUI SOCIETY COLLAPSE?

How can I understand the Polynesian expansion across the Pacific?

The settlement of the remote islands in the Pacific Ocean by Polynesians is one of the most remarkable stories of exploration and colonisation in world history.

Learning ladder

The Learning ladder lists the knowledge and skills you will learn. Each has five levels of difficulty. Learning skills at the bottom of the ladder will help you to master the skills at the top of the ladder.

Steps in knowledge progression	Background and origins	Significant people, ideas and events	Impact and legacies	Continuity and change	Causes and consequences
5	I can evaluate the impact of the rise and fall of societies.	I can evaluate how societies were influenced by significant people and ideas.	I can evaluate the legacy of a society.	I can evaluate patterns of continuity and/or change.	I can analyse causes and consequences.
4	I can explain why a society developed.	I can explain why ideas influenced people and events.	I can explain why a society has a legacy.	I can explain patterns of continuity and/or change.	I can explain why something was caused or why it led to certain consequences.
3	I can explain how a society developed.	I can explain how ideas influenced people and events.	I can explain the impact of one society on another.	I can explain continuity and change.	I can explain how something was caused or its consequences.
2	I can describe the origins of societies.	I can describe key people, ideas and events.	I can describe the legacy of a society.	I can describe continuity and change.	I can describe causes and consequences.
1	I can identify the origins of societies.	I can identify key people, ideas and events.	I can identify the legacy of a society.	I can identify continuity and change.	I can identify a cause and a consequence.

Knowledge and understanding

Source 1: Surfing began in Polynesia. It was originally a spiritual practice that allowed people to interact with the ocean. Surfing became paricularly important to Hawaiians, who developed it as a sport. Cave paintings dating to the 12th century CE show people riding waves.

Perspectives	Significance	Interpretations	Chronology	Sources	Steps in skill progression
I can evaluate historical perspectives.	I can evaluate historical significance.	I can evaluate the evidence supporting a historical interpretation.	I can explain change or causality from a timeline.	I can evaluate sources to determine their accuracy, usefulness and reliability.	5
I can compare perspectives.	I can explain why something is historically significant.	I can compare historical interpretations.	I can summarise the events on a timeline.	I can explain the historical context of a source.	4
I can explain a perspective.	I can explain something historically significant.	I can explain an interpretation of history.	I can follow timeline conventions.	I can apply historical knowledge to explain sources.	3
I can describe perspectives.	I can describe something historically significant.	I can describe an interpretation of history.	I can place events on a timeline chronologically.	I can describe a source.	2
I can identify the perspective of a person from the past.	I can identify something historically significant.	I can identify a historical debate.	I can read a timeline.	I can identify the origin of a source.	1

Historical concepts and skills

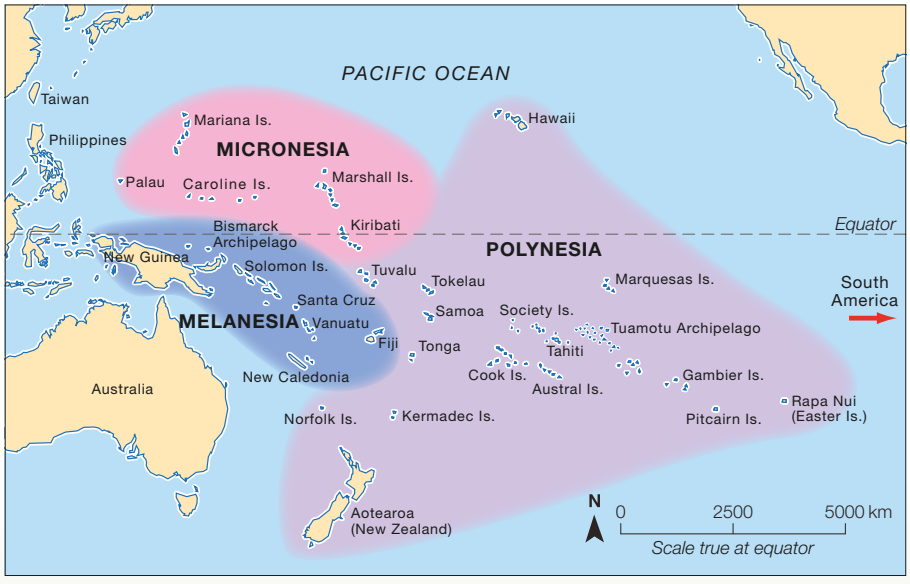
How did the Polynesians migrate across the Pacific Ocean?

Polynesians migrated across the vast expanses of the Pacific Ocean to settle hundreds of tiny islands. This is one of the greatest feats of human exploration and navigation.

Location of Polynesia

Polynesia is a region of the Pacific Ocean that comprises many islands (Source 1). The name 'Polynesia' comes from two ancient Greek words: *poly*, which means 'many', and *nēsoi*, which means 'islands'. Polynesia shares the Pacific Ocean with two other regions: Micronesia, which means 'small islands', and Melanesia, which means 'black islands'.

The Micronesia, Melanesia and Polynesia regions of the Pacific Ocean



The term 'Polynesia' was first used in 1756 CE by Charles de Brosses, a French scientist and writer. He used this term to describe all the islands of the Pacific Ocean. Later, in 1831 CE, Jules Dumont d'Urville, a French explorer and naval officer, proposed that the term 'Polynesia' be used to describe the islands within a large triangle, with its extreme points located at Aotearoa (New Zealand), Hawaii and Rapa Nui (Easter Island). D'Urville's definition was based on the language and cultural differences between the people who lived on the islands within that triangle and the inhabitants of the other islands in the Pacific Ocean.

Polynesia covers an enormous area of the Pacific Ocean. The distance between Hawaii and New Zealand is 7413 kilometres; 6930 kilometres separates New Zealand and Rapa Nui; and the distance from Rapa Nui to Hawaii is 7221 kilometres.

Source 1: Jules d'Urville proposed the islands of the Pacific Ocean be grouped into three regions: Polynesia, Melanesia and Micronesia.

Source: Matilda Education Australia

Source 2: Polynesian expansion timeline

Key ideas timeline

- c. 1000 BCE — Lapita culture spreads from the Bismarck Archipelago in Melanesia to Samoa and Tonga in Polynesia
- c. 700 CE — Beginning of the Polynesian expansion
- c. 1000 CE — Settlement of the Cook Islands and the Society Islands
- c. 1100–1300 CE — Settlement of Hawaii, Rapa Nui and Aotearoa
- c. 1300–1400 CE — Start of monument building on Rapa Nui

Origin of the Polynesian people

The east–west theory

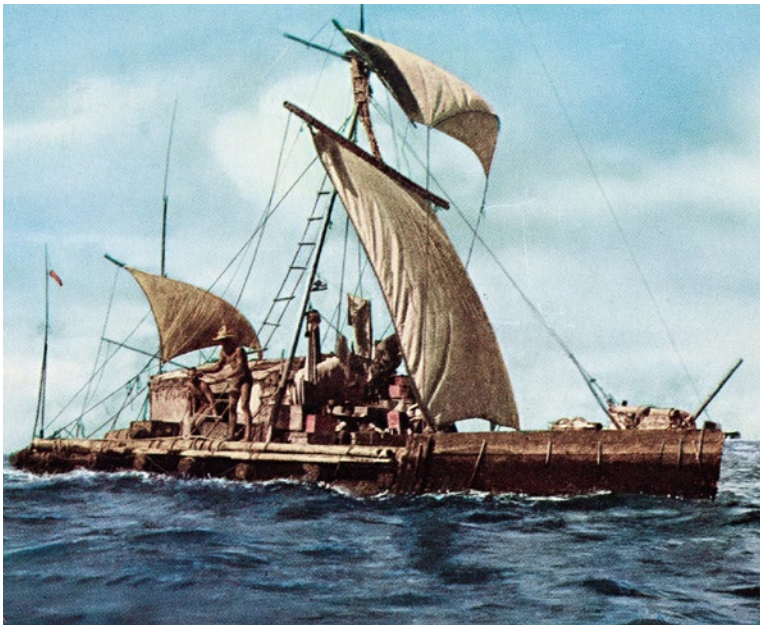
Prevailing winds and ocean currents move from east to west across the Pacific Ocean. Thor Heyerdahl, a Norwegian scientist, thought that people from Peru in South America had sailed west across the Pacific Ocean and settled the islands they found there. The similarities between stone monuments in Peru and the statues on some Polynesian islands support Heyerdahl's theory.

In 1947 CE, Heyerdahl built a balsawood raft called the *Kon-Tiki*. With five companions, he departed from Peru and, 101 days later, the *Kon-Tiki* struck a reef off the Tuamotu Archipelago. They had travelled nearly 7000 kilometres. However, this experiment only proved that people could sail from Peru to Polynesia in simple wooden rafts. Heyerdahl did not prove that this was how the ancestors of modern-day Polynesian people had reached Polynesia.

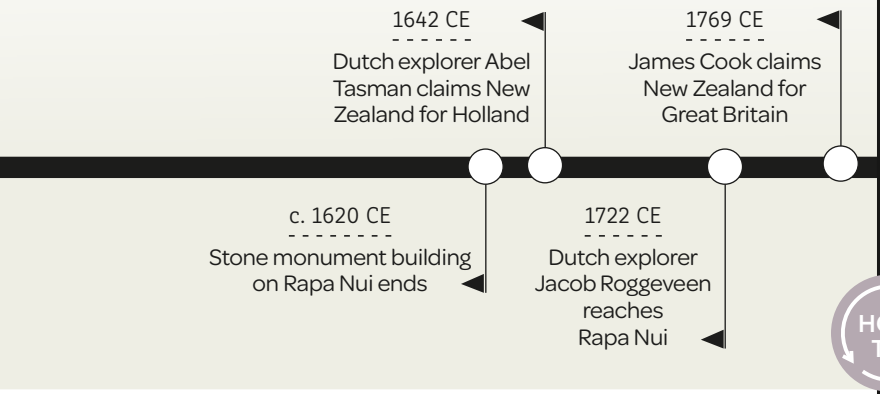
The west–east theory

A more widely held theory is that Polynesians originated in Asia or the west Pacific region and travelled east towards the more remote islands. Several pieces of strong evidence support this theory:

- **Language**: Polynesian people speak distinct but clearly related languages. Today, 40 different Polynesian languages are part of the Austronesian language family, spoken in South-East Asia and the Pacific region.
- **Tools and implements**: The tools used by Polynesians are similar to those used in South-East Asia and New Guinea.
- **Belief systems and social structures**: Polynesian religions and societies are similar to those in Melanesia.
- **DNA analysis**: Recent DNA analysis of Polynesians from many islands shows that they share characteristics with DNA samples taken from people in Asia.



Source 3: In 1947 CE, Thor Heyerdahl set out to prove the east–west theory of the origins of the Polynesian people. He drifted on the Pacific Ocean's east–west current on this balsawood raft – called the *Kon-Tiki* – for nearly 7000 kilometres.



Learning ladder H8.1

Background and origins

1. Source 1: Identify the three island groups of the Pacific Ocean.
2. Outline the meaning of the word 'Polynesia'.
3. Explain how the islands of Polynesia were defined by Jules Dumont d'Urville.
4. Explain why Jules Dumont d'Urville decided that the islands of Polynesia were separate from the islands elsewhere in the Pacific.

Interpretations

1. Identify the debate about the origin of the Polynesian people.
2. Source 3: Describe Thor Heyerdahl's experiment.
3. Source 3: Explain how Thor Heyerdahl's experiment failed to prove the east–west theory.
4. Explain why the west–east theory is more likely.
5. Analyse the reasons why the west–east theory has become more accepted in recent years.

HOW TO

Interpretations, page 214

When were the Pacific islands colonised?

Polynesian culture began in Tonga and Samoa around 800 BCE. Polynesian people only started migrating to islands in other areas of the Pacific Ocean around 1025 CE, more than 1800 years later.

Colonisation of the Pacific islands

Another puzzle that historians, archaeologists and anthropologists have tried to piece together is exactly when the different islands of the Pacific Ocean were settled. As no written records from the time exist, we must study archaeological evidence and use radiocarbon dating to determine when the islands were colonised.

Colonisation of Melanesia

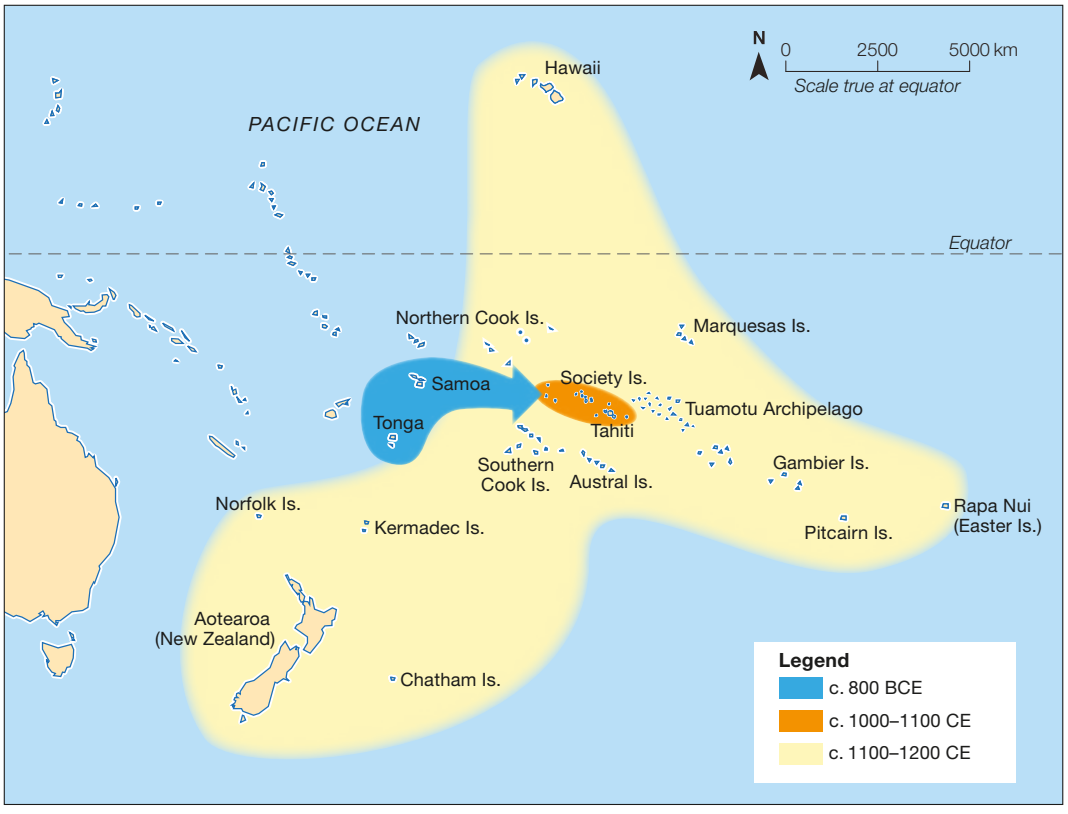
Archaeologists think that Austronesian peoples migrated from Taiwan and other regions of East Asia to the islands of Melanesia sometime between 3000 BCE and 1000 BCE. These people developed a distinctive culture called Lapita. They established themselves in the Bismarck Archipelago in Melanesia by 2000 BCE and, by 1600 BCE, were living on the Solomon Islands.

The main evidence for the existence of the Lapita culture comes from the shards of pottery the Lapita people left behind (Source 3). Lapita pottery was made from clay and baked hard in low-temperature ovens. People decorated the pottery with simple designs and human figures, using bark or seashells. Archaelogists have dated pottery found in the Bismarck Archipelago and the Solomon Islands to around 1350 BCE.

Colonisation of Tonga and Samoa

Archaelogists have also found Lapita pottery on the Polynesian islands of Samoa and Tonga. Seashell fragments lodged in the pottery from these island groups have been carbon-dated to c. 800 BCE. This supports the theory that the Lapita people had reached and colonised parts of west Polynesia by c. 1000 BCE.

The Polynesian region of the Pacific Ocean



Source: Matilda Education Australia

A distinctive Polynesian culture emerged on Tonga and Samoa from c. 800 BCE, which eventually spread to the rest of the Pacific region.

Source 1: The spread of Polynesian culture in the Pacific region

Source 2: This is the island of Bora Bora, which is one of the nine islands in the Society Islands, an archipelago in the Pacific Ocean. The other islands in the archipelago are Tahiti, Moorea, Raiatea and Huahine.

Source 3: These pieces of Lapita pottery were found at Nenumbo in the Solomon Islands in Melanesia. Together, the pieces measure 7.6 centimetres across and are thought to date from 1000 BCE.

Colonisation of central Polynesia

However, only after a 'long pause' of several centuries did the Polynesians settle other islands in the Pacific Ocean.

Archaeologists and historians are not sure why this long pause took place. Computer modelling of wind direction and ocean currents has shown that changes in the wind and oceans may have affected the Polynesians' ability to explore further. Another theory for the long pause is that it took time for Polynesians to develop sophisticated navigational techniques and boat-building technology.

Carbon dating now shows that the Society Islands and Tahiti were settled between 1000 and 1100 CE, while the far reaches of Polynesia were settled between 1100 and 1200 CE.

Learning ladder H8.2

Background and origins

1. Identify the dating method used by archaeologists to accurately date the settlement of Polynesia.
2. Source 3: Describe the main evidence for the existence of the Lapita culture.
3. Source 3: Explain how archaeologists have used Lapita pottery to date the colonisation of Melanesia, Tonga and Samoa.
4. Explain the theories for the 'long pause'.

Chronology

1. Source 1: Identify when the Society Islands were settled.
2. Source 1: Find the approximate date of settlement for each of the following:
   - Rapa Nui (Easter Island)
   - Tahiti
   - Tonga
   - Norfolk Island.
3. Using the dates you found for Question 2, create a timeline of the spread of Polynesian culture from c. 800 BCE to c. 1290 CE.
4. Explain what is meant by the term 'long pause'.

HOW TO

Chronology, page 198

How was Polynesia colonised?

The Polynesian peoples' migration throughout the Pacific region was an extraordinary feat of daring, skill and navigation that used innovative technology.

Transportation

Perhaps the most incredible aspect of the Polynesian people's migration to the islands throughout the Pacific region is how they were able to travel between the islands. Polynesia is vast and some of the islands are thousands of kilometres apart.

The Polynesians made their long ocean voyages in **outrigger canoes** (Source 2) or in double-hulled rafts (Source 1). They made canoes from trees that were hollowed out so people and supplies could be carried in them. The ends of the canoes were streamlined so they could move easily through the water. The Polynesians ensured their canoes remained stable by attaching outriggers to their canoes. An outrigger is a long beam or structure that projects over the side of a boat to prevent it from rolling over.

A safer mode of transport was the double-hulled raft. These boats consisted of two canoes connected by a wooden platform. A covered compartment was used for storing tools, animals and plants. The explorers could also shelter in the compartment during rough weather. Rafts were steered using moveable square or triangular sails that caught the wind and propelled the craft forward.

All the parts of a watercraft were held together with rope made from tree bark or coconut fibres. The largest rafts – built for sailing across the ocean or raiding other islands – were up to 30 metres long and could carry 200 people.

Navigation

Navigating the vast expanses of the Pacific Ocean without a compass or map required considerable skill and experience. Polynesian navigators devised several methods to find the tiny islands dotted throughout the ocean.

One of these methods used the stars. Navigators memorised the movement of the stars across the sky, particularly as they passed over certain islands. The navigator could then sail to that island by following the correct star.

Polynesians also used waves and ocean currents to navigate. The island chains in the Pacific Ocean influence the movement of ocean currents. When they were looking for new islands, navigators would recognise how a distant island chain was influencing the ocean currents. They could then locate the island by following the current and wave direction.

Clouds and birds are other good indicators of the location of land. Clouds are more likely to form over islands. Also, the shallow waters around islands cast distinctive shadows on the underside of clouds. Birds can typically fly about 150 kilometres from their home island. This means that, if a navigator sees birds flying over the ocean, they know that an island is no more than around 150 kilometres away in any direction.

Accurate navigation was vital to the survival of Polynesian societies. Therefore, navigators were highly respected. They passed their knowledge orally to apprentices. In spite of European contact, this traditional knowledge was retained in many parts of Polynesia and Melanesia.

European colonisation in the 19th century had suppressed Polynesian culture, and for a long time it was widely believed that Polynesians had expanded from Tonga and Samoa to other islands by chance. In 1967 CE, however, British anthropologist David Lewis sought out traditional Polynesian navigators to learn their skills. Using their help, Lewis was able to sail a modern sailboat from Tahiti to Aotearoa (New Zealand), showing that traditional Polynesian navigational skills were accurate and effective. Lewis published an account of his journey in a book called *We, the Navigators* (1972 CE), which helped to inspire new research into traditional voyaging methods in the Pacific.

Source 2: Two Polynesian outrigger canoes. The larger vessel on the right could sail across the ocean while the smaller one on the left was only used for fishing near the coast. [Herb Kāne (1928–2011 CE), *Baurua Kiribati*]

Source 1: A Polynesian double-hulled raft. The largest of these vessels could carry dozens of people across the vast distances of the Pacific Ocean. [Herb Kāne (1928–2011 CE) , *Pahi of Tuamotu Islands*]

Learning ladder H8.3

Background and origins

1. Sources 1 and 2: Identify the types of boats the Polynesians used.
2. Source 1: Describe the Polynesian double-hulled raft.
3. Explain how Polynesian explorers navigated the Pacific Ocean using the stars.
4. Explain why the double-hulled raft was a safer mode of transport than the outrigger canoe.
5. Analyse the reasons why Polynesians were able to maintain their navigational knowledge for hundreds of years.

Causes and consequences

1. Identify a cause of Polynesian expansion.
2. Describe the effect of the outrigger.
3. Explain how David Lewis's research affected people's understanding of Polynesia.
4. Explain the effects of water currents, cloud formation and bird behaviour on navigation.
5. Evaluate whether Polynesian technology or navigational skills was more important in their expansion.

HOW TO

Causes and consequences, page 206

How are Polynesian societies similar?

As Polynesians migrated throughout the Pacific region, they took their culture with them. Over time, new traditions developed in the different environments colonised by the Polynesians, but similarities remained in the languages, social structures, beliefs and practices.

Polynesian societies

Given their common ancestry and similar lifestyles, it is not surprising that the Polynesian societies that developed across the Pacific region – including those of Tonga, Hawaii, Samoa, Rapa Nui (Easter Island) and Aotearoa (New Zealand) – have many broad similarities, particularly in the areas of language , culture and social organisation.

One key similarity is that all Polynesian societies were ruled by a chief. Chiefs were thought to be related to the gods and were believed to possess a sacred power, called ***mana***, with which they could control the natural world. Chiefs could also declare any place, object, food, animal or name to be ***tapu*** (taboo), meaning it was forbidden or restricted, or sacred.

Māori society

According to legend, the Māori came to Aotearoa (New Zealand) in 12 large canoes. Each canoe carried a different tribe (***iwi***).

The tribes are divided into ***hapu*** (clans) of several hundred people. Each hapu contains several large family groups and is centred on a village. The hapu was governed by members of the ***rangatira***. The rangatira were people in the clan who could trace their ancestry directly to an important ancestor.

Source 1: This is a Māori chief of the Ngāpuhi iwi. Rule by a chief was a common feature of Polynesian societies. [Gottfried Lindauer (1890 CE), *Tamati Waka Nene*]

Source 2: A *hei-tiki* pendant from New Zealand (c. 1700–1850 CE). Different forms of *tiki* are found throughout Polynesia. The tiki is a representation of ancestors and gods. Perhaps this female tiki represented an ancestor or a god linked to fertility or childbirth.

Source 3: A Māori woman with a traditional female chin tattoo, called a *moko kauae*. Traditionally, women received a moko kauae to recognise their high status or their experience and achievement. Each moko kauae was unique and told the story of the wearer's ancestry and history. In more recent times, Māori women acquire a moko kauae to celebrate their Māori identity.

There was also another important class called the ***tohunga***. Priests and skilled artisans were members of the tohunga. Below the tohunga were the commoners who grew food, farmed, hunted and raised children. At the bottom of the social structure were slaves. Slaves were people who had been captured in battle.

Tattoo art

The English word 'tattoo' comes from the Samoan word *tatau*. The word tatau comes from the tapping sounds of the sharpened bone tool used by Polynesians in the tattooing process.

In traditional Polynesian societies, a person's body was tattooed with symbols and designs that indicated their social rank, links to communities, important milestones and local environment.

Tribal chiefs and warriors generally had the most elaborate tattoos to indicate their status, including whole-face tattoos. Some people, however, were not tattooed, due to their high status or role as a tohunga.

Traditional Polynesian tattooing techniques were almost lost. In New Zealand, the government outlawed the practice of tattooing (***tā moko***) in 1907 CE. However, in the 1980s CE, Māori tattooing was revived. Older Māori with tattoos were able to share their knowledge of the process of tā moko and enable a revival of the art.

Learning ladder H8.4

Significant people, ideas and events

1. Source 1: Identify the role of the man in this image.
2. Describe the powers of chiefs in Polynesian societies.
3. Explain how Māori societies were organised.
4. Explain why social structures and tattooing practices are similar across Polynesia.

Continuity and change

1. Identify two similarities among different Polynesian societies.
2. Source 3: Describe how traditional Polynesian tattooing represents continuity with the wearer's past.
3. Source 3: Explain how the practice of moko kauae represents continuity and change.
4. Explain why the revival of tattooing among the Māori represents continuity and change.
5. With reference to the concept of continuity and change, analyse the importance of family and community in Polynesian societies.

HOW TO
Continuity and change, page 203

How sustainable was the Polynesians' use of resources?

While the Polynesians had a highly developed understanding of marine conservation, other environmental resources were overexploited, resulting in extinctions and devastation to the environment.

Polynesian people's use of environmental resources

The Polynesians sourced their food from the sea or from farms and vegetable gardens. Houses were made from the stone, wood, palm leaves and grasses that were found locally. Tools were fashioned from shells, whale and fish bones, human bones, stone and wood. Coconut trees provided food, and palm leaves and palm fibres were used to make rope. Flax fibres, palm leaves and grasses were woven into clothing, baskets, rope and mats. Jewellery was created from shells and bone.

Sustainable practices

Since much of what the Polynesians ate was from the sea, they had a highly developed appreciation of the importance of marine conservation. Living close to nature also gave them an intimate understanding of the seasonal cycles of their environment. They knew how food abundance was affected by the position of the Moon and stars, the direction of the wind and the level of the tides. They took note of when fish migrated and spawned. With this knowledge, Polynesians were able to control their harvests, so they did not take too much from the ocean. In addition, chiefs placed restrictions on where, when and what species fishing parties could hunt, to promote a sustainable marine environment. Each village had its own reserved fishing areas, and people who trespassed from other villages were punished.

Religion played a key role in protecting marine resources. Some fishing areas could only be accessed by the chiefs, and certain types of seafood, such as sea turtles, could only be eaten by chiefs and priests. Chiefs also made rules about what foods could be eaten at what times of the year, such as during religious ceremonies or following the death of an important person.

To ensure these rules were followed, tapu and threats were used. People were encouraged to believe that if they ate the wrong foods, a god would inhabit the body of an animal, which would then kill or wound them. The chief would also administer severe punishments, including expulsion from the community or death.

Source 1: The green turtle is considered tapu in many Polynesian societies.

Plant and animal extinctions

Extinction of the moa

The moa were large flightless birds that were native to Aotearoa (New Zealand) (Source 2). The largest moa were over 3 metres tall and weighed about 250 kilograms. Archaeologists think these birds were covered in reddish-brown feathers, from the base of the beak to the feet.

Before Polynesian settlers arrived in New Zealand sometime between 1100 and 1200 CE, the country may have been home to 12 species of moa. At this time, the moa were abundant and easy to hunt. No specialised hunting tools have been found and the moa, being unused to humans, were probably docile and unafraid.

Māori cooking sites that date back to the 14th century CE contain thousands of pieces of moa remains. In Kaupokonui and Waitaki River Mouth, the remains of piles of uncooked birds have been found around Māori cooking sites – some still in the ovens – suggesting an enormous abundance (and wastage) of meat. Carbon dating has shown that most of the moa were killed within 100 years of the arrival of the Māori and that the moa were extinct within 300 years.

Other extinctions

The Māori were not the only Polynesians to cause extinctions. Archaeologists have found evidence of plant and animal extinctions caused by Polynesians across the Pacific region, including in Tahiti, Hawaii, Tonga, Fiji, Rapa Nui (Easter Island) and the Cook Islands. In some cases, the extinctions were caused by overhunting; in others, they were caused by deforestation or by the introduction of the Polynesian rat, which ate sea birds' eggs.

Source 2: The comparative heights of the extinct South Island giant moa (3.6 metres) and the ostrich (2.7 metres). The South Island giant moa is the largest bird ever to have existed.

To ascertain the number of moas in each heap we paired the … broken tibiae [bone of a bird's leg from the knee to the ankle]. From one heap we had sixteen pairs, from a second heap eighteen pairs, from a third heap fourteen pairs, and from other parts of the area twenty pairs, thus accounting for sixty-eight moas; but judging by the area covered by burnt bones, this would be only a small fraction of the birds dealt with here. The three heaps would be about twelve yards [11 metres] apart from each other suggesting the number of birds brought in and killed at one time … We found several moa skulls, the beaks of which were missing but the skull was intact, showing the birds were not clubbed to death.

Source 3: Extract from an archaeologist's report [David Teviotdale (1939 CE), 'Excavation of a moa-hunters' camp near the mouth of the Waitaki River', *The Journal of the Polynesian Society*, vol. 48, pp. 167–85]

Learning ladder H8.5

Impact and legacies

1. Create a two-column table.
   - **a** In the left-hand column, list the environmental resources available in Polynesia.
   - **b** In the right-hand column, identify how the Polynesians used each resource.
2. Describe the sustainable practices used by Polynesians to conserve and manage fish stocks.
3. Explain how the chiefs controlled food stocks.
4. Explain why Polynesian societies were successful in managing resources.
5. Evaluate the significance of the extinctions caused by Polynesians for the world today.

Sources

1. Source 3: Identify the origin of the source.
2. Sources 1 and 2: Describe the ways these two food sources were managed by Polynesian settlers.
3. Source 3: Using the source and your knowledge, explain how the Māori hunted and cooked moa.
4. Source 3: Explain the context of the source in relation to the extinction of the moa. What further evidence would help us understand the extinction of the moa?

HOW TO Sources, page 201

How was the society of Rapa Nui (Easter Island) structured?

Rapa Nui (Easter Island) is the most easterly island of Polynesia. Society was organised in a similar way to other Polynesian cultures, with a noble class of chiefs (*ariki*) who controlled the common people (*kio*).

Social classes

Like most Polynesian societies, the society of Rapa Nui was arranged into a strict hierarchy, with a clear distinction between those who were rich and powerful and those who were not. There were four distinct social classes on Rapa Nui: noblemen (*ariki*), priests (*ivi-atua*), warriors (*matatoa*) and servants and farmers (*kio*).

The ariki

The upper class of Rapa Nui society was called the ariki. This term applied to clan chiefs and high-ranking nobles. This status was usually hereditary; this means it was passed on from parents to their children. However, occasionally, skilled members of the lower classes – such as hunters, canoe-builders and navigators – were welcomed into the ariki as a reward for their accomplishments.

The ariki had the power of being able to declare something tapu, a power they drew from their exclusive control of mana. This was a life force that permeated all living things and helped people perform great deeds. By claiming to control mana, the ariki could control all the people in their society.

Source 1: Hotu Matu'a was the legendary first *ariki mau* or king of Rapa Nui. Subsequent ariki mau are believed to be his descendants.

The foundation of Rapa Nui

In the 1860s CE, Christian missionaries recorded the foundation myth of the people of Rapa Nui. They believed that the leader of the first expedition to settle their island was a chief named Hotu Matu'a ('the great parent'). He is also called *ariki mau* (supreme chief or king). Hotu Matu'a sailed to Rapa Nui from a place called Hiva, a mythical island, in one or two large canoes with his wife, six sons and extended family. They landed on Rapa Nui and each son was given a portion of the island for himself and his family. Their descendants became the hereditary tribal chiefs of the different clans of Rapa Nui.

Source 2: An artist's conception of a partially reconstructed *hare paenga*. A wooden frame was built on a basalt foundation, and then thatch was placed over the wooden frame.

Houses

The easiest way to determine a person's status on Rapa Nui was to look at their house. People lived in two types of houses.

Houses of the ariki

The ariki lived in houses called *hare paenga*, which were long, narrow and canoe-shaped (Source 2). Hare paenga were usually about 12 metres long and 3 metres wide; however, archaelogists have found a hare paenga that was nearly 100 metres long. The ends of hare paenga were streamlined just like a canoe. The walls and roof were made from layers of thatch. The base was outlined neatly with basalt rocks, with a stone-paved terrace. The ariki houses were built within 200 metres of the coast and were clustered together in groups of 6 to 10.

Houses of the kio

The common people of Rapa Nui did not live in elaborate houses; their houses were much smaller than those of the ariki. The common people's houses had the same wooden frame and thatch covering as hare paenga, but not the basalt foundation stones. Each kio house had an oven, a circular stone garden for growing crops and a garbage pit. Next to each kio house was a hare moa, or chicken house. These small, rectagular stone structures were tapu for the ariki, possibly because they were considered to be unclean or unhygienic. This meant that the ordinary people of Rapa Nui had to build their houses inland, far from the coast and the hare paenga. This way, the ariki would not be at risk of breaking tapu.

Learning ladder H8.6

Significant people, ideas and events

1. Identify the four social classes of Rapa Nui.
2. Describe the concept of *mana*.
3. Explain how the houses of the ariki were different from those of the kio.
4. Explain why allowing skilled matatoa and kio to enter the ariki class would have been beneficial for the society.

Significance

1. Source 1: Identify the leader of the expedition to settle Rapa Nui.
2. Source 2: Describe the significance of the shape of the hare paenga.
3. Explain the significance of the six sons of Hotu Matu'a.
4. Explain why the foundation myth of Rapa Nui was significant for the authority of the chiefs.

HOW TO

Significance, page 212

What was daily life like on Rapa Nui (Easter Island)?

Living in one of the most remote locations on Earth, the Rapa Nui people needed to be self-sufficient. They fished, raised chickens and grew crops. They drew the fresh water that pooled in volcanic craters and drank sugar cane juice.

An isolated settlement

Rapa Nui (Easter Island) is one of the most isolated inhabited places in the world. Its nearest neighbour, Pitcairn Island, is 1921 kilometres to the west. Chile, in South America, is 3540 kilometres to the east.

Polynesians arrived and settled on Rapa Nui around 1200 CE. While the traditions and practices throughout the rest of Polynesia were remarkably similar, Rapa Nui also developed a unique culture because of its remoteness.

Source 1: Traditional Polynesian clothing worn by people on Rapa Nui

Clothing

The clothing worn by the people of Rapa Nui was determined by the climate and the available resources. Rapa Nui has a subtropical maritime climate, which means it is warm throughout the year. The temperature reaches a high of 28 degrees Celsius in February and a low of 18 degrees Celsius in July. Because of this temperature range, the islanders did not need to wear lots of clothes to keep warm.

Like other Polynesians, the people of Rapa Nui wore skirts made of woven grass. Jacob Roggeveen – a Dutch explorer who visited Rapa Nui in 1722 CE – described the islanders' clothing in the official log of his ship (Source 2).

> The wraps worn on their bodies were composed of some field-product, sewn three or four ply in thickness, yet neat and trim … The ear-plates imagined to be of silver were made out of the root of some vegetable. This ear-ornament is roundish, or oval, having a diameter of about two inches [five centimetres].

Source 2: This is an extract from a ship's log, written by Jacob Roggeveen, who was the first European to visit Rapa Nui.

Food and water

The rainfall on Rapa Nui is abundant and evenly spread across the seasons. The rainwater could be collected from where it pooled in the craters of extinct volcanoes. Apart from the rain, there are very few sources of fresh water on Rapa Nui. To compensate for this, the Rapa Nui people drank the juice squeezed from sugar cane. This was very sweet and tasty but rotted their teeth.

While Rapa Nui does not have the warm-water corals that allow shallow-water fishing that other Polynesian islands enjoy, excavations of **middens** show that seals, porpoises and tuna were all harvested from the ocean around the island.

However, evidence suggests that by the 18th century CE, the Rapa Nui people were not eating much fish or many seabirds. When James Cook visited in 1774 CE, he noted that Rapa Nui provided little in the way of natural food resources and that the people grew much of the food they ate (Source 3).

Yam	A large orange or yellow vegetable that is similar to sweet potato	
Taro or edoy	A starchy plant root; the leaves of the plant can also be eaten	
Plantain	A fruit that is similar to a banana	
Gourd	A large, fleshy vegetable; the hollowed-out shell can be used as a cup	

▲ **Source 4:** Some of the foods James Cook mentions in his diary

> The produce is potatoes, yams, taro or the edoy root, plantains and sugar cane, all excellent in its kind, the potatoes are the best of the sort I ever tasted; they have also gourds and the same sort of cloth plant as at the other isles but not much, [chickens] like ours which are small and but few of them and these are the only domestic animals we saw among them, nor did we see any quadrupeds [four-legged animals], but rats which I believe they eat as I saw a man with some in his hand which he seemed unwilling to part with. The sea seems as barren of fish for we could not catch any although we tried in several places with hook and line and it was very little we saw among the natives. Such is the produce of Easter Island ...

Source 3: This is an extract from a diary entry written by James Cook in 1774 CE. Cook visited Rapa Nui during his second voyage to the Pacific (1772–1775 CE). The purpose of his voyage was to prove that the fabled Great South Land known as *Terra Australis Incognito* did not exist.

Learning ladder H8.7

Significant people, ideas and events

1. Source 4: Identify the foods farmed by the people of Rapa Nui.
2. Sources 1 and 2: Describe the clothing worn by the people of Rapa Nui.
3. Explain how the people of Rapa Nui sourced fresh water.
4. Explain why the people of Rapa Nui did not engage in shallow-water fishing.
5. Analyse the similarities and differences between the environment of Rapa Nui and other Polynesian islands.

Causes and consequences

1. Identify the effects of isolation on the culture of Rapa Nui.
2. Describe the effects of the limited availability of fresh water.
3. Source 3: Explain how the limited food resources on Rapa Nui affected the diet of people living there.
4. Source 3: Explain the cause of James Cook's visit to Rapa Nui.

HOW TO

Causes and consequences, page 206

What are the cultural achievements of the people of Rapa Nui (Easter Island)?

The Rapa Nui people developed their traditions and beliefs in isolation from other influences. They built huge stone statues called *moai*, created a new writing system, and developed traditions such as the Birdman contest.

Cultural achievements

The people who settled Rapa Nui (Easter Island) brought their Polynesian customs and traditions with them. However, the isolation and remoteness of the island meant that they developed a unique culture, shaped by the environment of Rapa Nui.

The cultural practices and achievements of the Rapa Nui people have attracted a great deal of attention from archaeologists and tourists. In particular, the famous stone statues on the island continue to generate debate about their origin and purpose.

The Rongorongo script

In the entire span of human history, there are very few instances of a writing system being created without the influence of other cultures. The Rongorongo script – a simple writing system developed on Rapa Nui – is one of these. It is the only known system of writing to have emerged independently in Polynesia. The symbols of the Rongorongo script (known as glyphs) are the outlines of humans, animals, plants and geometric forms (Source 1).

The existence of the script was first recorded by a French Catholic priest named Eugène Eyraud in 1864 CE; Eyraud was the first foreigner to settle on Rapa Nui. He noted in his diary that pieces of wood inscribed with small symbols were found inside every house on the island. At this time, possibly hundreds of these pieces of wood existed. However, four years later, another French priest named Hippolyte Roussel could find only two dozen pieces. No-one knows what happened to the rest.

However, the inhabitants of Rapa Nui in 1864 CE could not understand the text. Perhaps many years earlier, the last people who could read the script died before they could pass on their knowledge. Some anthropologists think the Rongorongo script was used to record the names of chiefs or revered ancestors. Another explanation is that the symbols are chants to be recited during special ceremonies. These, however, are just theories.

Source 1: Some of the symbols, or glyphs, that make up the Rongorongo script and some suggested meanings

Source 2: A petroglyph of the Birdman on rocks at Rapa Nui. A petroglyph is a sign or symbol that has been carved into stone.

The Birdman contest

Something else that amazed the Europeans who visited Rapa Nui in the 19th century CE was the Birdman contest. This contest started around 1500 CE. Every year, each chief on the island selected one young man from his clan to compete. The contestants, called *hopu*, climbed down the 300-metre cliffs that form the lip of the crater of Rano Kau, an extinct volcano. From the base of the cliffs, the hopu swam to the islet of Motu Nui to collect the first eggs of the season laid by the *manu tara*, or sooty tern (a type of seabird). This is a distance of about 1.5 kilometres and the water can be rough.

Seabird eggs were precious to the people of Rapa Nui. The first settlers hunted the various species of seabird almost to extinction. The birds that survived were those that made their nests on three islets off the south-west point of the island.

After collecting the eggs, the hopu swam back to the cliffs of Rano Kau and climbed to the top. Many hopu died trying to climb up and down the cliffs. Some drowned in the ocean, while others were eaten by sharks. The winner was the hopu who first climbed to the top of the Rano Kau cliffs with an egg intact.

The winning hopu gave his egg to his clan chief and was then declared Tangata-Manu or Birdman. The Tangata-Manu was entitled to gifts of food and other forms of tribute. Most importantly, the Tangata-Manu's clan was the only one allowed to harvest the sooty terns' eggs from Motu Nui for the rest of the season. The Birdman contest was suppressed by Christian missionaries in the 1860s CE.

Learning ladder H8.8

Significant people, ideas and events

1. Source 1: What does this source show?
2. Source 1: Describe the four main types of symbols in Rongorongo script.
3. Source 1: Explain how the Rongorongo script has been interpreted.
4. Explain why the Rongorongo script is significant.

Significance

1. Source 2: Identify the significant image in this source.
2. Describe the Birdman contest.
3. Explain how the eggs of the sooty tern became valuable to the Rapa Nui people.
4. Explain why becoming the Tangata-Manu was significant in Rapa Nui society.

HOW TO

Significance, page 212

Site study

Why were the statues on Rapa Nui (Easter Island) built?

More than 50 000 people visit Rapa Nui (Easter Island) every year to see the legacy of the Rapa Nui people – mysterious statues.

Moai

The statues on Rapa Nui are called ***moai*** (pronounced mow-eye). Historians estimate that the Rapa Nui people had built more than 1000 moai by the time Dutch explorer Jacob Roggeveen visited the island in 1722 CE.

Today, only 833 moai are left and only 50 of those are still standing (Source 2). Most of the other statues are in various stages of completion in a quarry at Rano Raraku (a large volcanic crater in the eastern part of the island), including a huge moai estimated to be about 21 metres long and weighing more than 270 000 kilograms. Abandoned basalt picks and axes have also been found at the quarry.

The average height of a moai is 4 metres. The average weight is 10 000 kilograms. The tallest moai ever successfully erected, called Paro, is just under 10 metres tall and weighs 75 000 kilograms. A slightly shorter but much bulkier moai at the coastal village of Ahu Tongariki weighs 87 000 kilograms.

Almost all the moai are male and probably represent ancestral chiefs or important nobles. Some moai are buried up to their chest or chin. This was not deliberate; it is the effect of erosion over the centuries since they were built.

Most of the moai were carved from a material called tuff. This stone is easy to work with and is formed from the compressed volcanic ash that was readily available at Rano Raraku. When statues were completed, they were rubbed smooth with pumice. A small number of statues were carved from other types of rock such as basalt and trachyte.

Decorations on the moai

Perhaps the most striking aspect of the moai is the cold stare from the hollowed-out eyes under heavy eyebrow ridges (Source 1). In 1979 CE, a team of archaeologists argued that the empty eye-sockets had a purpose: they might have been designed to hold eyes made out of coral with obsidian or scoria pupils.

Source 1: A line of moai sit on their *ahu* platform on Rapa Nui.

Rapa Nui (Easter Island)

Source 2: This map of Rapa Nui shows the locations of the moai and other significant sites.

Source: Matilda Education Australia

These two substances are types of volcanic rock. Obsidian is black and glassy while scoria is reddish-brown.

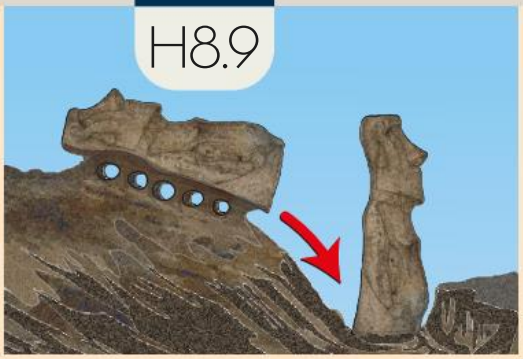
Some of the statues wear red *pukao* (topknots) on their heads. These were carved from scoria that was quarried at Puna Pau, a volcanic crater in the south-west corner of Rapa Nui. The pukao are cylindrical and can be up to about 2.4 metres high. It would have been extremely difficult to place a pukao on top of a standing moai. They were probably slotted on the top of a moai before the statue was hoisted into position. Archaeologists have located about 100 pukao on the island. Some sit on top of the moai while others lie in pieces at the feet of the statues. Others are still in the crater of Puna Pau.

The *ahu*

The finished moai were transported to platforms all over the island. The platforms are called *ahu* and each one held between one and 15 moai. The ahu, though less spectacular than the moai, are no less impressive. Almost all the ahu are situated near the coast. Of the 300 ahu on Rapa Nui, 113 hold moai. The ahu are made of rubble held in place by four stone retaining walls made of grey basalt.

Step 1

The moai were carved directly out of the volcanic rock at Rano Raraku using basalt tools. The front and sides were carved first. A 'spine' of rock held the moai in place. It is estimated that carving a single moai took 30 men one year.



Step 2

Workers reduced the stone 'spine' until the moai slid down into a man-made ditch. The back was completed and the entire statue was smoothed with pumice.

Step 3

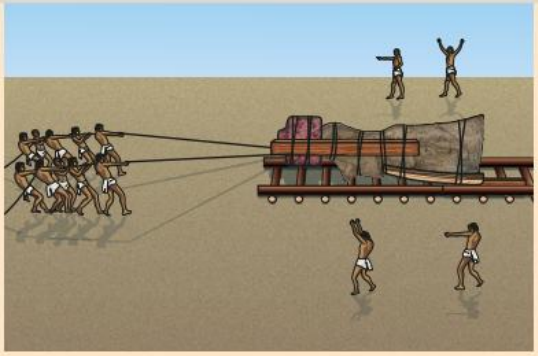
A wooden sled was tied to the upright moai, which was then lowered to the ground using strong rope made from tree bark.

Source 3: A depiction of how the moai were constructed, transported and erected, based on drawings by Jo Anne Van Tilberg (1998 CE)

Source 4: Once a statue had reached its ahu, it was raised using long poles as levers. Stones were placed behind the moai to hold it in its new position. This process was repeated a number of times until the moai was standing on its own. The next step was to carve eye sockets into which coral and stone eyes were placed to activate the *mana* (power) of the moai.

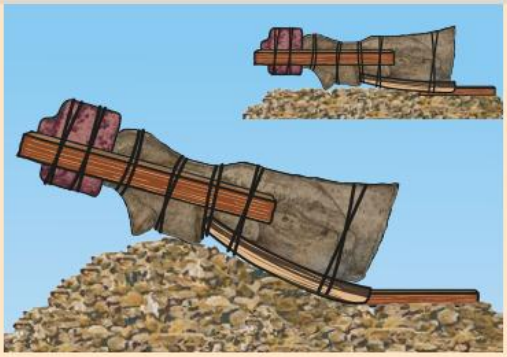
Why were the moai built?

European explorers were amazed by the moai and tried to determine their purpose. Jacob Roggeveen witnessed the Rapa Nui people burning fires at the base of the moai and sitting in what he assumed was prayer. James Cook believed that the moai did not represent gods or places of worship; rather, he thought they marked the burial places for tribes or families.



Step 4

The moai was dragged to an ahu, which could be as far as 12 kilometres away. This task might have taken 90 men two months to complete. The pukao (topknot) was probably added at this time.



Step 5

At the ahu, a mound of rocks was gradually built up under the moai so that, eventually, it stood upright. Ropes were used to haul up the moai and to ensure it did not topple backwards.

Step 6

Once the moai was in place on its ahu, the mound of rocks was removed and the wooden beams taken away. The raising stage is estimated to have taken 90 men about three months. The coral eyes were inserted at this point.

Oral accounts of the Rapa Nui people, recorded by Christian missionaries, suggest that the moai represented ancestral chiefs or high-ranking nobles. The moai may have been built as part of a clan rivalry that developed on the island. Each of the clans on Rapa Nui had its own territory. The chiefs and ariki of each clan competed for prestige. Building and erecting large moai was one way the chiefs could demonstrate their power to the other clans and to their own people.

How were the moai constucted, transported and erected?

There are many theories about how the massive moai were constructed and moved into position. Roggeveen thought the moai were made of clay or clumps of earth covered in a thin layer of rock; hence, they would have been relatively easy to move. But the moai are solid stone.

So how did the Rapa Nui people, without modern technology, build and move such heavy objects? By combining archaeological evidence with oral accounts that were written down by Europeans in the mid-1800s CE, and some experimentation, we can make a reasonable guess about how these fascinating and mysterious statues were carved, transported and erected (Source 3).

In 1998 CE, archaeologist Jo Anne Van Tilburg and her team of about 60 people dragged an average-sized, 12 000-kilogram statue mounted on a wooden sled almost 15 kilometres. In another experiment, Rapa Nui people demonstrated how to erect a statue using the method described in Source 4; that is, by lifting the statue a couple of feet, piling rocks under it, then letting the statue rest.

Learning ladder H8.9

Impact and legacies

1. Source 1:
   - **a** What is a moai?
   - **b** What are most of the moai made of?
2. Describe how a moai was made and decorated.
3. How did European explorers explain the purpose of the moai?
4. Explain why the moai were built.

Sources

1. Source 3: Identify the origin of the source.
2. Source 2: Describe the location of the moai and the key geographical features of Rapa Nui.
3. Source 3: Using the source and your knowledge, explain how the moai were moved into place.
4. Source 3: Explain why the source is currently believed to be accurate.

Sources, page 201

HOW TO

Why did the Rapa Nui (Easter Island) society collapse?

Historians believe that the reasons for the collapse of the Rapa Nui (Easter Island) society include deforestation, overpopulation and colonisation.

In 1722 CE, Jacob Roggeveen visited Rapa Nui and wrote in his ship's log that the island was 'devoid of trees'. Fifty-two years later, James Cook visited the island and noted that only 600 or 700 people lived there, and only a few of them were women. This is very strange. Building, transporting and erecting hundreds of moai required lots of trees and lots of people; so at some point, Rapa Nui must have had many trees and a much larger population than observed by the European visitors.

Deforestation

Before humans settled there, it is likely that Rapa Nui was almost totally covered in a type of tree called the Rapa Nui palm. These trees have thick trunks and are very tall; a fully grown palm can be up to 30 metres tall.

The Rapa Nui people used the timber from the palms to make many things, including houses and canoes. The timber was also used in the process of transporting and erecting moai. The trees would also have been cleared so the land could be planted with crops of taro, yams and plantains.

As the people cleared more land and produced more food, inevitably the population grew. More people meant more land-clearing for farms.

Polynesian rats

Another key reason for the loss of trees on Rapa Nui was the Polynesian rat. Rats were brought to Rapa Nui with the settlers. Rapa Nui was a rat's paradise – it had an almost unlimited supply of food and no predators. Rat populations would have reached over 1.5 million within three years of the settlers arriving. One of the main foods the rats loved was the palm seeds of the Rapa Nui palm. Almost all of the palm seed shells found on the island show signs of having been gnawed on by rats.

The impact of deforestation

The deforestation of Rapa Nui led to a crisis that almost totally destroyed the island's society. The root systems of the giant palms held the soil together, so the fertile soil blew away in the strong winds. This meant that there was less soil in which to grow food.

Civil war?

As food supplies dwindled it is possible that a civil war broke out. When Jacob Roggeveen arrived in 1722 CE, he recorded that a few moai had been knocked over; but when James Cook arrived in 1774 CE, he noted that many more had been toppled.

Source 1: This wooden statue with bone eye sockets – called a *moai kavakava* – was found on Rapa Nui; it was carved by local inhabitants in the 19th century CE. The figure is believed to represent the body of an ancestor.

Source 2: The Polynesian rat and some gnawed palm seed shells

The moai may also have been knocked over as each clan tried to destroy each other's link with their sacred ancestors, or simply to destroy the prestige represented by the moai.

In 1887 CE, Rapa Nui was made part of Chile. The Rapa Nui chiefs gave up their land, but retained their titles as chiefs and their culture. Over the next decades, the remaining Rapa Nui population were forced to work for foreign farming companies.

The tragedy of outside contact

In 1862 and 1863 CE, the Peruvian Government took between 1000 and 2000 men and women from Rapa Nui (about half the population at that time) to other islands in the Pacific region to work as slaves. In 1865 CE, the 15 survivors were returned to the island.

Unfortunately, the survivors carried smallpox, which is a highly contagious virus that causes terrible blisters all over the body. The Rapa Nui people had never been exposed to smallpox before, so they had no immunity to the virus. Smallpox rapidly spread and almost wiped out the island's population. By 1872 CE, only 111 Rapa Nui people were left.

Today, approximately 5000 people live on Rapa Nui, 60 per cent of whom are the descendants of the Rapa Nui people. There have been efforts made to protect Rapa Nui culture and restore the rights of the Indigenous Rapa Nui people.

Learning ladder H8.10

Impact and legacies

1. Identify the legacy of Rapa Nui.
2. Source 1: Describe the moai kavakava figure shown in the source.
3. Explain how Rapa Nui had changed between 1722 and 1774 CE.
4. Explain why the Rapa Nui population declined dramatically between 1862 and 1872 CE.
5. Analyse the Rapa Nui people's options. What solutions existed for the problems they faced?

Causes and consequences

1. Source 2: Identify the effect of Polynesian rats on the palm trees of Rapa Nui.
2. Describe the effects of deforestation on Rapa Nui.
3. Explain how civil war may have led to the toppling of the moai.
4. Explain why deforestation occurred on Rapa Nui.

HOW TO Causes and consequences, page 206

How have Polynesian societies been depicted?

Europeans have visited Polynesia since the 18th century and have long been fascinated by its culture and heritage, but they have often misunderstood it. However, Polynesian historians and artists have provided more accurate representations of Polynesia's past and present.

The Art of Paul Gauguin

In 1890 CE, French artist Paul Gauguin travelled to the island of Tahiti in Polynesia. He wanted to paint images of a land and people that were 'unspoilt' by modern life. His paintings featured bright colours and vibrant images of Tahitian society. However, they also depicted Tahitians in a way that was disrespectful, showing Tahitian people as 'primitive', submissive and docile. Gauguin's paintings were popular in Europe and the United States and contributed to the belief that Polynesian society was primitive, lacking sophisticated technology and knowledge.

Children's films

The children's films *Lilo and Stitch* (2002 CE) and *Moana* (2016 CE) are both set in Polynesia. On the one hand, these films present positive images of Polynesian people and culture. In *Lilo and Stitch*, Lilo is shown to be a fun-loving orphaned girl, while her sister, Nani, is depicted as caring, responsible and strong, working hard to preserve their family. In *Moana*, the lead character is a skilful navigator who restores the heart of the ocean.

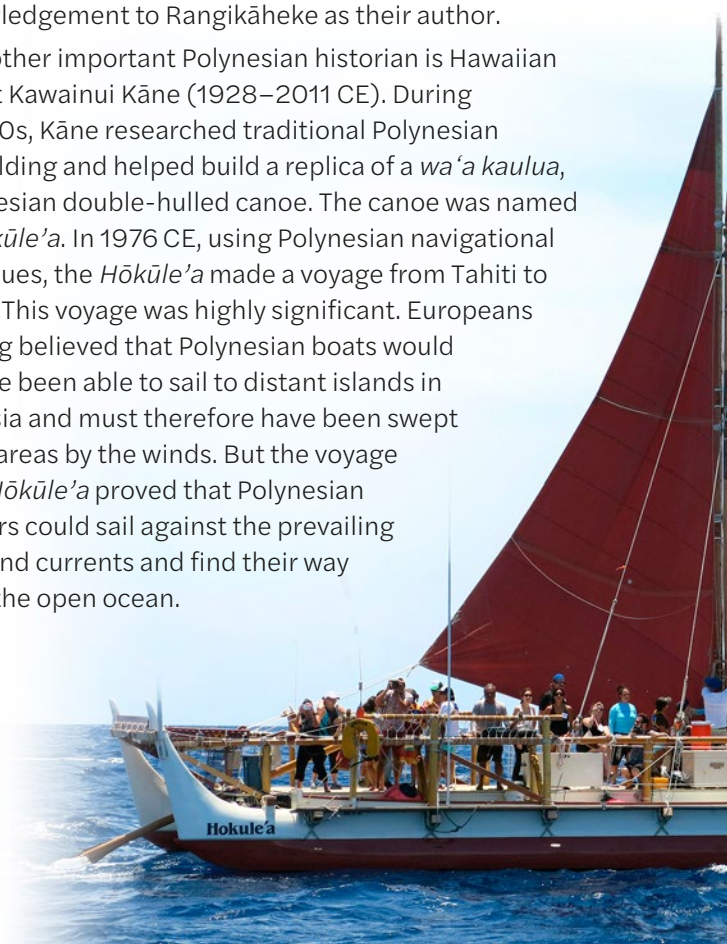
However, these films make a number of cultural misrepresentations. For example, in *Moana*, the god Maui is presented as a large man who is somewhat foolish. In Polynesian mythology, however, Maui is a young, heroic god. He is accompanied by the goddess Hina, who helps him achieve amazing feats to help humanity, such as stealing fire from the underworld and bringing islands up from the bottom of the sea with his magical hook.

Furthermore, the film *Moana* shows Polynesian villagers living a pre-modern lifestyle, happily gathering coconuts. This not only misrepresents Polynesian culture but also ignores the fact that traditional culture was destroyed by European colonisation.

Polynesian historians

Polynesian historians, who have deep cultural understanding, have been able to present a far richer story of Polynesia's past. In Aotearoa (New Zealand), Māori historian Te Rangikāheke wrote the first accounts of Māori history in the late 1840s CE, during the early period of New Zealand's colonisation by the British. He created over 800 pages of manuscript that provided detailed descriptions of Māori mythology, customs, history and social structures. His writings appeared in the appendices of New Zealand governor Sir George Grey's book *Polynesian Mythology* (1855 CE). Since 1949 CE, Rangikāheke's writings have been re-published, including as *Māori Religious Beliefs and Observances* (1949) and *The Story of Māui* (1992), with proper acknowledgement to Rangikāheke as their author.

Another important Polynesian historian is Hawaiian Herbert Kawainui Kāne (1928–2011 CE). During the 1970s, Kāne researched traditional Polynesian shipbuilding and helped build a replica of a *wa'a kaulua*, a Polynesian double-hulled canoe. The canoe was named the *Hōkūle'a*. In 1976 CE, using Polynesian navigational techniques, the *Hōkūle'a* made a voyage from Tahiti to Hawaii. This voyage was highly significant. Europeans had long believed that Polynesian boats would not have been able to sail to distant islands in Polynesia and must therefore have been swept to new areas by the winds. But the voyage of the *Hōkūle'a* proved that Polynesian seafarers could sail against the prevailing winds and currents and find their way across the open ocean.



Source 1: Maui and Moana from the film *Moana* (2016 CE), made by the United States film production company, the Walt Disney Company

Source 2: The *Hōkūle'a* sailing canoe is seen off Honolulu. The Polynesian voyaging canoe is returning to Hawaii after a three-year journey around the world guided only by nature, with navigators using no modern navigation to guide *Hōkūle'a* across 40 000 nautical miles to 19 countries. Thousands welcomed the double-hulled canoe to Oahu, Hawaii, on Saturday, 17 June 2017.

Learning ladder H8.11

Significant people, ideas and events

1. Source 2: Identify the ship shown in this source.
2. Describe how Gauguin depicted Tahitian people.
3. Explain how Kāne was able to prove that Polynesians had been able to navigate across the ocean without instruments.
4. Explain why the work of Te Rangikāheke is significant.
5. Analyse the significance of the *Hōkūle'a*'s voyage.

Perspectives

1. Source 1: Identify how Moana is depicted in the source.
2. Describe the perspectives of Polynesian culture in the Disney films *Lilo and Stitch* and *Moana*.
3. Source 1: Explain how the depiction of Maui does not reflect a Polynesian perspective.
4. Explain why an understanding of Polynesian sources provides a more accurate perspective.
5. Analyse the accuracy of *Lilo and Stitch* and *Moana's* portrayal of Polynesian culture.

HOW TO Perspectives, page 210

How do I conduct a good inquiry?

Now that you've finished the chapter, it's time to conduct your own historical inquiry on the Polynesian expansion across the Pacific. Throughout the chapter you have developed knowledge and understanding of Polynesian expansion across the Pacific. Background knowledge is important because it helps you make connections to new information, ask better questions and consider different perspectives. As you progressed through the chapter, you have gathered information through classroom discussion, highlighting, note taking and answering questions. Now you are ready to start planning your own historical inquiry!

A historical inquiry gives you the opportunity to be an active historian: forming questions, interrogating sources and communicating insights about the past on a topic of your choice. The chapter has covered the origins and legacies of the Polynesians in addition to significant people, events, ideas and beliefs. What would you like to know more about?

- How the Polynesians travelled across the Pacific Ocean, H8.1
- The role of chiefs in Polynesian societies, page H8.4
- What life was like on Rapa Nui (Easter Island), page H8.7
- The moai statues, H8.9
- The Rongorongo script, H8.8

Return to the relevant pages in the chapter and read them again.

Next, complete the 'see, think, wonder' process to help develop ideas you might cover in your inquiry.

Jot down your answers to these questions. Your answers will help you to formulate your own research ideas.

Once you have worked through this process, you are ready to start the historical inquiry. Refer to pages 218–25 of the How-to chapter for a step-by-step guide to this process.

See

What do you see?
Who is involved?
What are the key features?
When and where was this happening?

Think

What do you think about that?
How do you think people were affected at the time?
How is this similar to or different from today?
How do we know?

Wonder

What did different groups think about this?
Why is this important to know?
What does it make you wonder?

Level up!

Throughout the chapter, you have been working to move up the Learning ladder. An inquiry investigation is a great opportunity to expand your knowledge and attempt new skills.
When planning your inquiry, consider how the experiences and perspectives of individuals and groups shaped societies, beliefs and events in the past. Think about how the past has had an impact on the present. Use the How-to chapter to support your planning and research.

Asia and the Pacific region
(c. 600–1750 CE)

Mongol expansion

H9

HOW DID GENGHIS KHAN'S EMPIRE EXPAND?

WHY WAS THE MONGOL ARMY SO POWERFUL?

HOW DID KUBLAI KHAN RULE CHINA?

How can I understand the Mongol expansion?

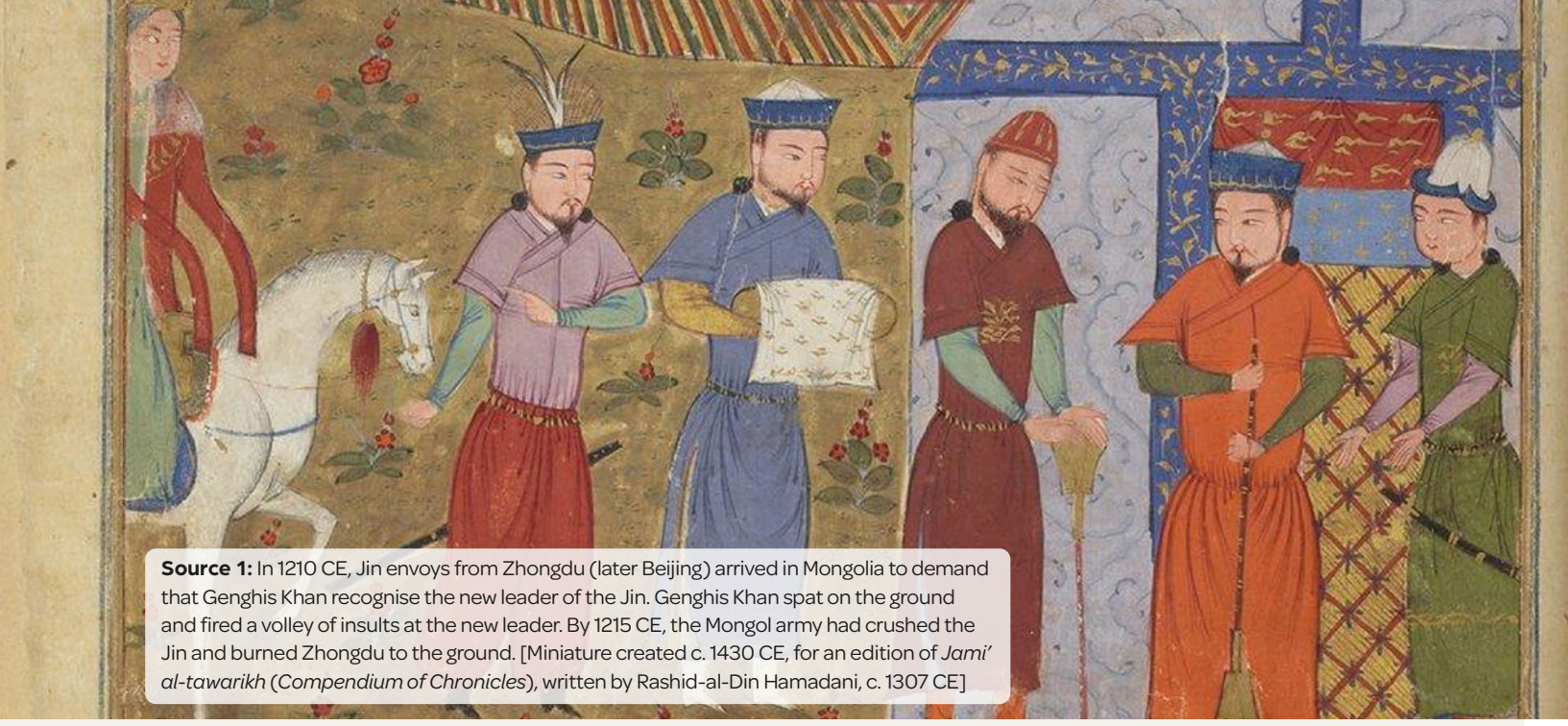
Genghis Khan unified the Mongols and created the largest land empire in history through a series of violent, bloody conquests. The Mongols also fostered cultural development in the arts, ensured peace among their peoples, respected different cultures and religions, and improved trade.

Learning ladder

The Learning ladder lists the knowledge and skills you will learn. Each has five levels of difficulty. Learning skills at the bottom of the ladder will help you to master the skills at the top of the ladder.

Steps in knowledge progression	Background and origins	Significant people, ideas and events	Impact and legacies	Continuity and change	Causes and consequences
5	I can evaluate the impact of the rise and fall of societies.	I can evaluate how societies were influenced by significant people and ideas.	I can evaluate the legacy of a society.	I can evaluate patterns of continuity and/or change.	I can analyse causes and consequences.
4	I can explain why a society developed.	I can explain why ideas influenced people and events.	I can explain why a society has a legacy.	I can explain patterns of continuity and/or change.	I can explain why something was caused or why it led to certain consequences.
3	I can explain how a society developed.	I can explain how ideas influenced people and events.	I can explain the impact of one society on another.	I can explain continuity and change.	I can explain how something was caused or its consequences.
2	I can describe the origins of societies.	I can describe key people, ideas and events.	I can describe the legacy of a society.	I can describe continuity and change.	I can describe causes and consequences.
1	I can identify the origins of societies.	I can identify key people, ideas and events.	I can identify the legacy of a society.	I can identify continuity and change.	I can identify a cause and a consequence.

Knowledge and understanding



Source 1: In 1210 CE, Jin envoys from Zhongdu (later Beijing) arrived in Mongolia to demand that Genghis Khan recognise the new leader of the Jin. Genghis Khan spat on the ground and fired a volley of insults at the new leader. By 1215 CE, the Mongol army had crushed the Jin and burned Zhongdu to the ground. [Miniature created c. 1430 CE, for an edition of *Jami' al-tawarikh* (*Compendium of Chronicles*), written by Rashid-al-Din Hamadani, c. 1307 CE]

	Perspectives	Significance	Interpretations	Chronology	Sources
5	I can evaluate historical perspectives.	I can evaluate historical significance.	I can evaluate the evidence supporting a historical interpretation.	I can explain change or causality from a timeline.	I can evaluate sources to determine their accuracy, usefulness and reliability.
4	I can compare perspectives.	I can explain why something is historically significant.	I can compare historical interpretations.	I can summarise the events on a timeline.	I can explain the historical context of a source.
3	I can explain a perspective.	I can explain something historically significant.	I can explain an interpretation of history.	I can follow timeline conventions.	I can apply historical knowledge to explain sources.
2	I can describe perspectives.	I can describe something historically significant.	I can describe an interpretation of history.	I can place events on a timeline chronologically.	I can describe a source.
1	I can identify the perspective of a person from the past.	I can identify something historically significant.	I can identify a historical debate.	I can read a timeline.	I can identify the origin of a source.

Steps in skill progression

Historical concepts and skills

Why learn about Mongol expansion?

The Mongols created the largest land empire the world had ever seen, stretching from Hungary in Eastern Europe to the Sea of Japan. The Mongol Empire was significant not only for its enormous size, and the ferocity of its army, but also for its influence on history. Countries, religions and entire continents have all been affected by the impact of Mongol rule.

Source 1: The Mongols pursue Chinese forces at the Battle of Yehuling, 1211 CE. [Image created c. 1430 CE for Rashid al-Din Hamadani, *Jami' al-tawarikh*]

Source 2: Mongol Empire timeline

Key ideas timeline

- 1206 CE — Genghis Khan is made ruler of the Mongols
- 1215 CE — Mongols destroy Jin capital, Zhongdu
- 1242 CE — Mongols withdraw from Europe

Mongols invade Europe 1223–1241 CE

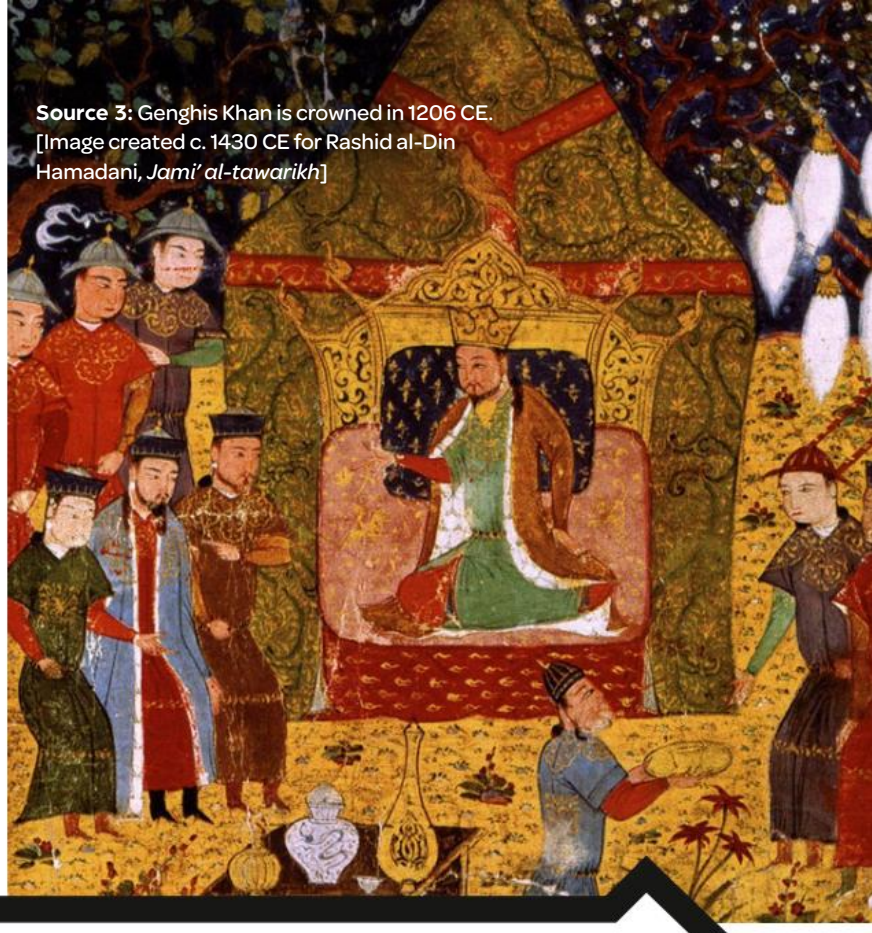
Life of Kublai Khan 1215–1294 CE

Life of Genghis Khan 1162–1227 CE

The Mongols emerged when a leader named Genghis Khan managed to unite the Mongol tribes and found an empire in 1206 CE.

As the Mongols spread across Asia they caused enormous change and disruption. At the same time, however, they were greatly influenced by the peoples they conquered. They adopted Islam from their Persian subjects and sponsored history writing, art, science and city-building in Persia. They were also inspired by the Chinese model of imperial rule and adopted it as their own.

The great expanse of the Mongol Empire allowed for secure and organised trade along the Silk Road, a trade route stretching from China to Europe. This not only enabled the Mongols to become wealthy, but also enabled the exchange of religious, scientific and cultural ideas across much of the world.



Source 3: Genghis Khan is crowned in 1206 CE. [Image created c. 1430 CE for Rashid al-Din Hamadani, *Jami' al-tawarikh*]

Learning ladder H9.1

Background and origins

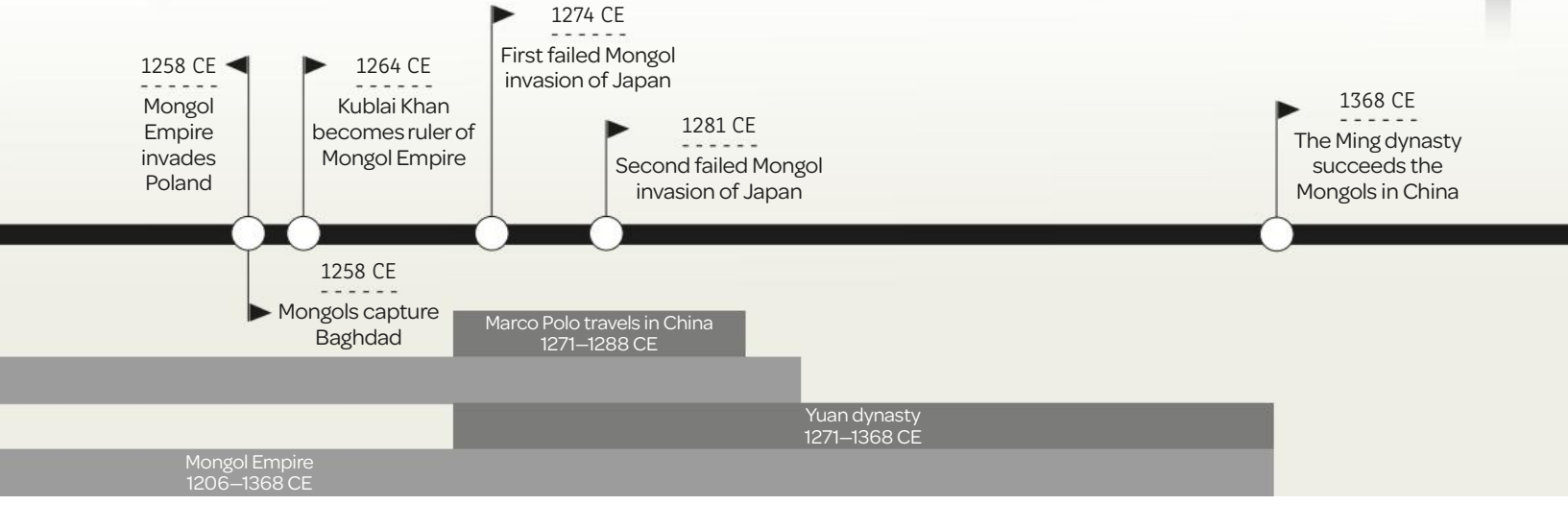
1. Source 3: Identify the leader depicted in this source.
2. Source 1: Describe the event depicted in this source.
3. Explain how the Mongol Empire was founded.
4. Explain why the Mongol Empire became influential.

HOW TO

Chronology, page 198

Chronology

1. Source 2: Identify the date when the Mongols destroyed the Jin capital, Zhongdu.
2. Source 2: Using information from this section, put these events in order from the earliest to the latest event:
   - Kublai Khan becomes Mongol ruler
   - The Ming dynasty reclaims China and the Mongol Empire ends
   - Mongol army conquers Zhongdu, capital of medieval China
   - Genghis Khan dies.
3. Create a timeline showing the events from Question 2.
4. Source 2: Explain how the timeline reflects the concepts of continuity and change.



What was life like in Mongolia?

Mongolia's harsh landscape and cold, windy, dry climate made life difficult. People adopted a nomadic lifestyle, herding their animals from one place to another.

Harsh life on the steppes

The amazing expansion of the Mongol Empire began with **nomadic** herders on the high, cold grasslands known as **steppes** in Mongolia. In this dry region with few trees, cold winds swept across the plains, forcing temperatures as low as –40°C in winter. In summer, temperatures reached as high as 38°C in the Gobi Desert region.

The grasslands were covered in snow and ice during the long winters and could turn to straw during the baking summers. However, the short spring season provided good pasture for horses, goats, yaks and sheep.

Nomadic way of life

The harsh steppe environment forced the Mongols to become nomads, as growing crops was almost impossible. They moved their herds of animals around in search of the best pasture and weather. In the spring and summer, the herds stayed on the open plains to graze, and in winter they were herded to protected valleys.

The Mongols lived in portable circular tents called **yurts**. The yurts were covered in felt and had a small felt door. A hole was left open at the top to allow air to circulate, light to come in and the chimney pipe to poke through. Heavy woollen carpets lined the walls next to where people slept on beds, which served as couches during the day. In the middle of the yurt was a small charcoal stove and a dining table and chairs.

Source 1: Bayan-Ölgii is the westernmost and highest province of Mongolia. Even today, the Mongols herd goats in the traditional manner, moving their portable tents, called yurts, and using horses as transport. The region is famous for the traditional practice of hunting on horseback with trained eagles.

Source: Matilda Education Australia and Wayne Murphy

▲ **Source 2:** Mongolia's terrain and the location of its cities

Mongol horses

Horses were central to daily life in Mongolia and the Mongols had the reputation for being the best horsemen on Earth. The Mongols tamed and trained wild horses. They shot wild game with their bows and arrows while riding on horseback. These skills made them excellent warriors.

Horses were also used to transport tents and belongings. Female horses produced milk that the Mongols used to make yoghurt and cheese. This provided the main source of nutrition for the Mongols in the bleak steppe conditions. Mongols also trained eagles to find and hunt prey such as foxes and hares.

> Their habitations are round and cleverly made with wicker poles in the manner of a tent. But in the middle of the top of the tent, they have a window open to allow the light in and the smoke out, for their fire is always in the middle of the tent. The walls are covered with felt. The doors are made of felt also. Some of these tents may be quickly taken down and stowed upon carts. And wherever they go, be it to war or any other place, they transport their tents with them.
>
> **Source 3:** Extract from John de Plano Carpini, who was an Italian traveller and the first European to write an account of the Mongols. [John de Plano Carpini (c. 1248 CE), *The Long and Wonderful Voyage of John de Plano Carpini*]

Learning ladder H9.2

Background and origins

1. Source 2: Identify the geographical features of Mongolia.
2. Source 1: Describe the features of the Mongolian way of life.
3. Explain how the Mongolian climate influenced the development of a nomadic lifestyle.
4. Sources 1 and 3: Explain why the yurt was a practical form of shelter.

Causes and consequences

1. Match each cause to a consequence:

Cause	Consequence
Growing crops was difficult in Mongolia	Grass can turn to straw
Mongols could shoot arrows on horseback	Mongols became nomads
Temperatures can reach 38°C in summer	Mongols were excellent warriors

2. Describe the effects of horses on Mongol culture.
3. Source 3: Explain how information about Mongol customs first reached Europe.
4. Source 3: Using the source and your knowledge, explain why the Mongols were effective conquerors of vast territory.

HOW TO Causes and consequences, page 206

What was Mongol society like?

Mongol society was organised into tribes, which were led by a khan. The tribes often fought each other for dominance.

The Mongol tribes

Before the Mongols united and conquered most of the known world, the Mongols were grouped into separate tribes, including the Kiyat, Merkit, Olkonud, Borjigin, Kerait and Tatar tribes. Within each Mongol tribe, there were a number of smaller clans. Mongol clans were usually made up of several families. Each clan obeyed a leader (sometimes called a lord) who had been elected by the clan members.

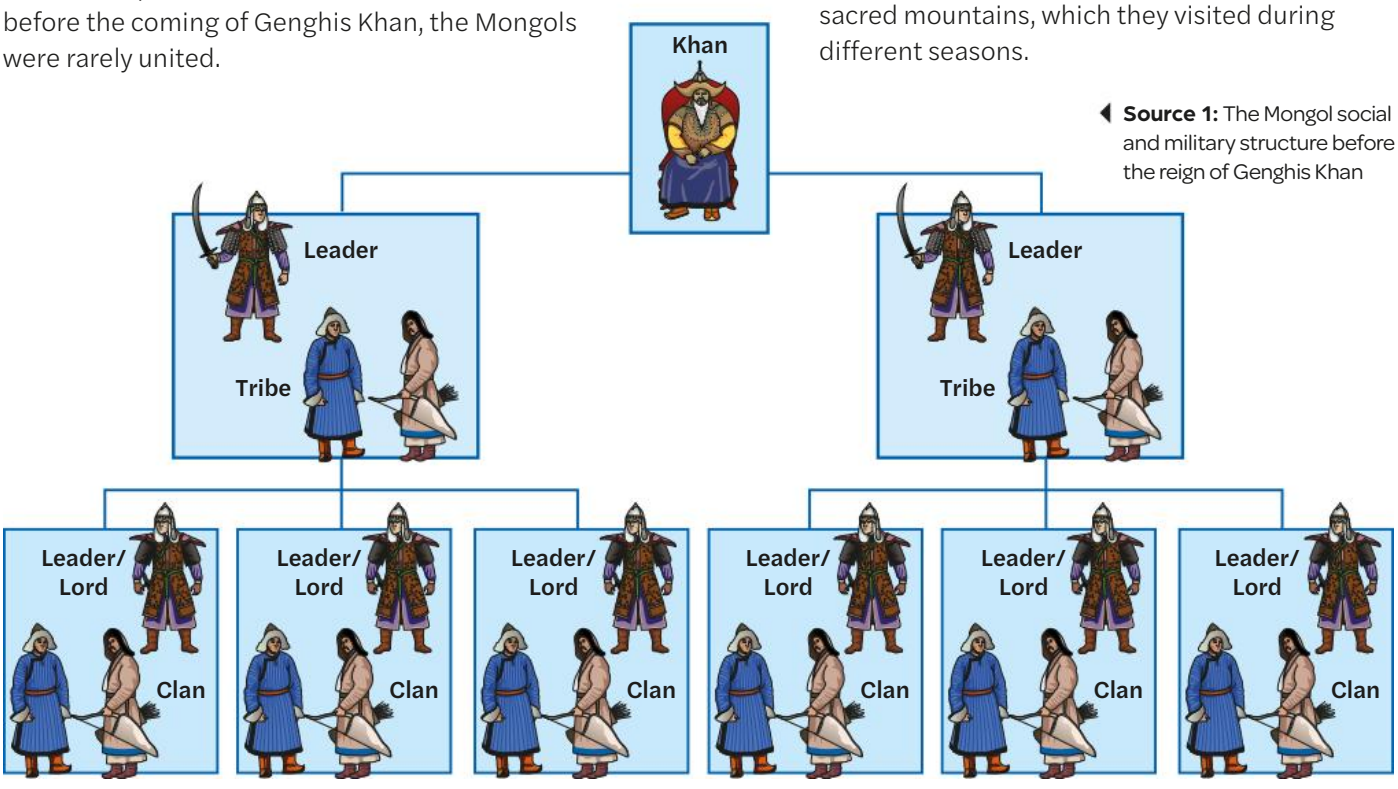
At the top of the social structure was the Great Khan: the leader of all the Mongols. The **khan** (king) was elected by the leaders of the Mongol tribes at the Mongol political council, which was known as the *kurultai*. During some periods of Mongol history, all tribes obeyed the Great Khan; during other periods, some tribes obeyed the Great Khan and others did not.

Power struggles were common. Feuds between the tribes could last for many years and involve theft, kidnap and murder. These feuds meant that before the coming of Genghis Khan, the Mongols were rarely united.

Religion

Traditional Mongolian beliefs and religious practices can best be described as shamanism. They believed in many different nature gods (including gods of water, weather, land and sky) who had the power to control various aspects of their lives. The Mongols also believed that dreams foretold the future, that a baby born holding a clot of blood in their hand was destined for greatness, and that the spirits worked through animals to guide humans in their life. Dogs were especially prized by the Mongols, as they were believed to have the same sort of spirit as humans. Wolves, falcons, deer and horses were also important symbolic animals.

Each tribe, and sometimes each clan, had a religious priest known as a shaman. Shamans communicated with the gods through visions and dreams in which they asked the gods to heal the sick. Shamanism suited the Mongols' nomadic way of life. The Mongols did not have temples, but they had tree shrines and sacred mountains, which they visited during different seasons.



Source 1: The Mongol social and military structure before the reign of Genghis Khan

Source 2: A Mongol camp [Image created c. 1430 CE for Rashid al-Din Hanadani, *Jami' al-tawarikh*]

Before the appearance of Genghis Khan, they had no chief or ruler. Each tribe or two tribes lived separately; they were not united with one another, and there was constant fighting and hostility between them. Some of them regarded robbery and violence ... as deeds of manliness and excellence.

Source 3: This extract was written by Ata Malik Juvayni, who was a Persian scholar and grand vizier of the Mongol's Il-Khanate of Persia. [Ata-Malik Juvayni (1260 CE), *The History of the World Conqueror*]

Mongol women

Since the Mongols were nomads, everyone had to be able to undertake a range of tasks. While Mongol women were mainly responsible for raising children, setting up camps, cooking food and tending animals, these jobs would be taken over by a husband if his wife died. In turn, women were taught to ride horses and hunt at an early age. Mongol women had a range of rights that were not enjoyed by women elsewhere. For example, Mongol women could own and inherit property and could become shamans.

The ability to quickly and efficiently set up and pack up camps was an important aspect of the Mongol expansion. During military campaigns, women followed the male warriors into battle with the supplies and horses. The women ensured that the Mongol warriors were fed and rested and were ready to continue fighting.

Learning ladder H9.3

Significant people, ideas and events

1. Source 1: Identify the different social groups in Mongol society.
2. Describe the nature of the Mongol religion.
3. Explain how the kurultai functioned.
4. Explain why it was important for men and women to possess a variety of skills.
5. Evaluate the benefits and disadvantages of traditional Mongol society.

Sources

1. Source 3: Identify the origin of the source.
2. Source 2: Describe the content of the source.
3. Source 3: Using the source and your knowledge, explain how the arrival of Genghis Khan transformed Mongol society.
4. Source 2: Using the source and your knowledge, explain why the role of Mongolian women was crucial to the empire's expansion.

HOW TO

Sources, page 201

Key individual

Who was Genghis Khan?

Genghis Khan, or Temüjin as he was first named, was born in 1162 CE on the freezing plains of Mongolia. The son of a tribal chief, he would unite the warring Mongolian tribes and establish the second-largest land empire in history.

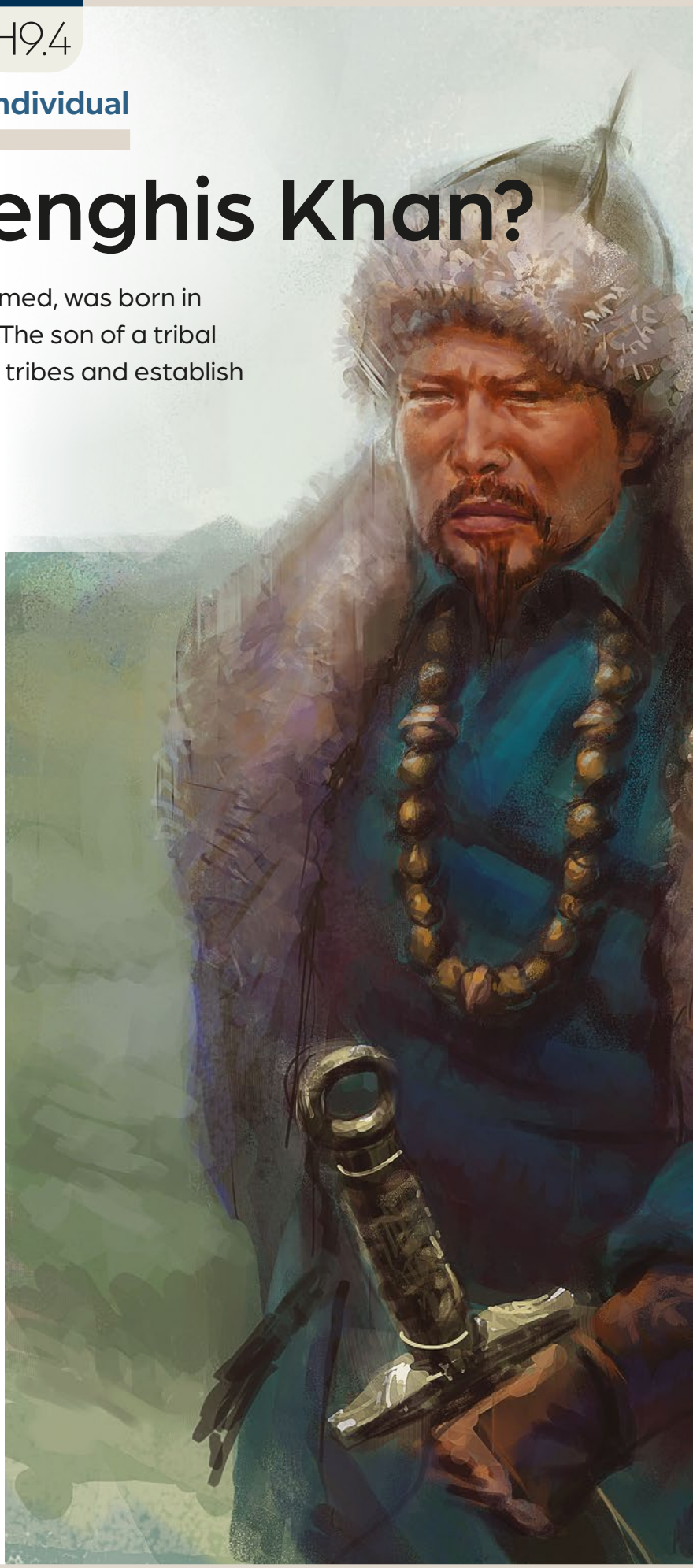
Rivalry and fighting between the Mongol tribes was a feature of Temüjin's early life. When he was nine years old, his father promised him in marriage to Börte, the daughter of a leader of the Olkonud tribe. But when his father was killed shortly afterwards by a member of the rival Tatar tribe, nine-year-old Temüjin tried to claim his rightful position as chief of his clan. The clan rejected him and cast his family out into the bleak Mongolian plains to live on berries, rats and birds.

At the age of 16, Temüjin married Börte, but she was kidnapped by the powerful Merkit tribe. Temüjin convinced another tribe to fight with him to free her. They overran the Merkit tribe and freed his wife.

Through conflict and negotiations, Temüjin gradually gained the respect of other Mongolian tribes. He avenged his father's death by crushing the Tatar tribe, boiling the leaders alive and ordering the death of every male taller than a wagon's axle. By 1206 CE, at the age of 44, Temüjin had united the Mongolian tribes under his leadership. Temüjin was now the lord of the Mongolian tribes and given the title Genghis Khan: 'genghis' means universal and 'khan' is the Mongolian title for a ruler.

The Secret History of the Mongols

A manuscript known as *The Secret History of the Mongols* (1227 CE) is the oldest surviving Mongolian script of its kind. It was written not long after Genghis Khan's death, at the request of the Mongol royal family, to commemorate his deeds of conquest and to show that his rule was ordained by the gods.



Source 1: Genghis Khan developed a fearsome reputation as a bloodthirsty leader who would not let anything get in his way. His loyal army slaughtered enemies in brutal ways, which sent a message to others to surrender to the Mongol army.

Genghis Khan was born with his destiny ordained by Heaven above. At the time of his birth, he held in his right hand a clot of blood as big as a knucklebone. Born at the time of the capture of the Tatar [named] Temüjin-üge, they thought to name him Temüjin.

When Temüjin was nine, [his father] Yisügei-ba'atur decided to find a wife for him ... They set out together. While travelling, they met Dei-sechen of the Olkonud tribe. Dei-sechen said: 'Yisügei-quda, who will you see?' Yisügei-ba'atur replied: 'I am going to the Olqunu'ut people with my son to ask his mother's brothers for a wife.' Dei-sechen said: 'This boy of yours has fire in his eyes and light in his face. Yisügei-quda, last night I had a dream. A white gerfalcon, holding both the sun and the moon, flew down and perched on my hand ... What good thing did this portend? Yisügei-quda, my dream foreshadowed your arrival, together with your son ...'

When Yisügei saw Dei-sechen's daughter, there was light in her face and fire in her eyes. After seeing the girl, he kept her in his thoughts. She was 10 years of age, a year older than Temüjin; her name was Börte. Yisügei stayed overnight and asked for the girl the next day. Dei-sechen replied: 'It is not the fate of a girl to grow old in the doorway behind which she was born. I will give you my daughter. Leave your son here as my son-in-law when you go.' They agreed to the marriage, and Yisügei-ba'atur said: 'I leave my son as a son-in-law ...' After saying these words, he gave his spare horse as a gift and, leaving Temüjin behind as a son-in-law, departed.

Source 2: Extract from *The Secret History of the Mongols* (1227 CE). The author is unknown.

Historians do not consider large portions of the manuscript to be historically accurate. Much of the information about Genghis Khan contains references to mythology and dreams. Other parts cannot be proven using other historical sources or archaeological evidence. However, *The Secret History of the Mongols* does contain valuable information about the language, writing and culture of the Mongols.

Learning ladder H9.4

Background and origins

1. Who was Temüjin?
2. Describe Mongol society during Temüjin's childhood.
3. Explain how Temüjin led an attack on the Tatar tribe.
4. Explain why Temüjin became known as 'Genghis Khan'.

HOW TO

Sources, page 201

Sources

1. Source 2: Identify the origin of the source.
2. Source 2: Describe the childhood of Genghis Khan, according to the source.
3. Source 2: Explain how the source describes marriage customs in Mongol society.
4. Source 2: Explain why this source was written.
5. Evaluate the usefulness of this source for a historian studying:
   - **a** Genghis Khan
   - **b** Mongol customs.

Why was the Mongol army so powerful?

The Mongol army consistently overpowered much larger armies thanks to their discipline, horses, innovative weaponry and superior riding skills.

Mongol cavalry

When Genghis Khan was the leader of the Mongol Empire, all Mongol men aged 15 to 70 were expected to fight. The Mongol army was made up of **cavalry**, which are soldiers who fight on horseback. The Mongols' horses, riding skills and weapons gave them the advantage against slower, less agile enemies.

Mongols began riding and hunting at an early age and became very skilled. The tough Mongol horses made excellent warhorses. They were small, easy to mount and dismount, and foraged for their own food. They were resilient and could travel long distances in both extremely hot and cold climates.

Source 1: A mounted Mongol archer. Members of the Mongol cavalry were armed with powerful bows that could fire an arrow more than 500 metres. A lifetime of training and special wide stirrups allowed the rider to stand and turn to shoot as the horse galloped forward. [Creator unknown, *A Mongol Horseman with a Composite Bow* (c. 13th century CE)]

Source 2: Soldiers in the Mongol cavalry were perfectly equipped for battle.

Each warrior would care for a small herd of three to five horses, to ensure they always rode a fresh horse into battle. Being able to change horses also meant they could travel at high speed for days without stopping or wearing out the animals.

There were two types of cavalry troops. At the front-line was the heavy cavalry. These warriors were horsemen who brandished curved swords, spears and lances. They would charge forward on horseback towards the enemy in battle. Armour for the heavy cavalry was usually made out of small plates of iron sewn in parallel rows onto a vest of cloth or silk. They also wore an iron helmet.

Behind the heavy cavalry came the light cavalry. These were mounted archers who would fire a deadly volley of arrows towards the enemy and then pull back to allow the heavy cavalry to charge again. The light cavalry wore leather armour.

Sword

The metre-long curved scimitar was used for slashing attacks on horseback.

Arrow

Different arrows were used in different situations. Whistle arrows produced a whistling sound designed to terrify enemies. Flaming arrows were used to burn down villages.

Horses

The Mongolian horse was a breed native to Mongolia. These horses were small, fast and well balanced, allowing Mongol archers to stand and turn to fire on enemies. Mongolian horses were very hardy: they could be ridden for up to 40 kilometres each day and could withstand the extremes of the Mongolian climate.

Quiver

Soldiers carried two quivers containing more than 60 arrows.

Bow

Bows were made in layers of birch wood, deer sinew and sheep horn to give the flex needed to fire straight and long. Mongol arrows could travel over 500 metres.

Stirrups

The metal stirrup was a game-changing Mongol invention. The strong and wide metal stirrups allowed the rider to stand and fire arrows as the horse twisted and turned.

Order and discipline

Genghis Khan wanted an army that was structured effectively, so he organised his army according to the decimal system, arranging his troops in groups of 10. The largest unit was called a *tumen*. A tumen was a division of 10 000 warriors, led by officers (known as *noyan*). Within each tuman were 10 *minghan* (regiments) of 1000 warriors each, also led by noyan. Within each minghan were 10 *jaghan* (squadrons) of 100 warriors each. Each jaghan was divided into 10 *arban* (troops) of 10 soldiers. The leader of each group reported to the leader of the next level.

The *keshik*

Genghis Khan had a special unit known as the *keshik*. The members of this group were Genghis Khan's personal bodyguards and protectors. Of these, 1000 were required to follow him into battle.

Members of the keshik were trained to be future generals and governors of the Mongol Empire. Governors and generals would send their sons to the keshik to be trained in Mongol warfare and administration. This was a clever system because it ensured that Genghis Khan personally knew every general or governor in the empire and that they were loyal to him.

Training and tactics

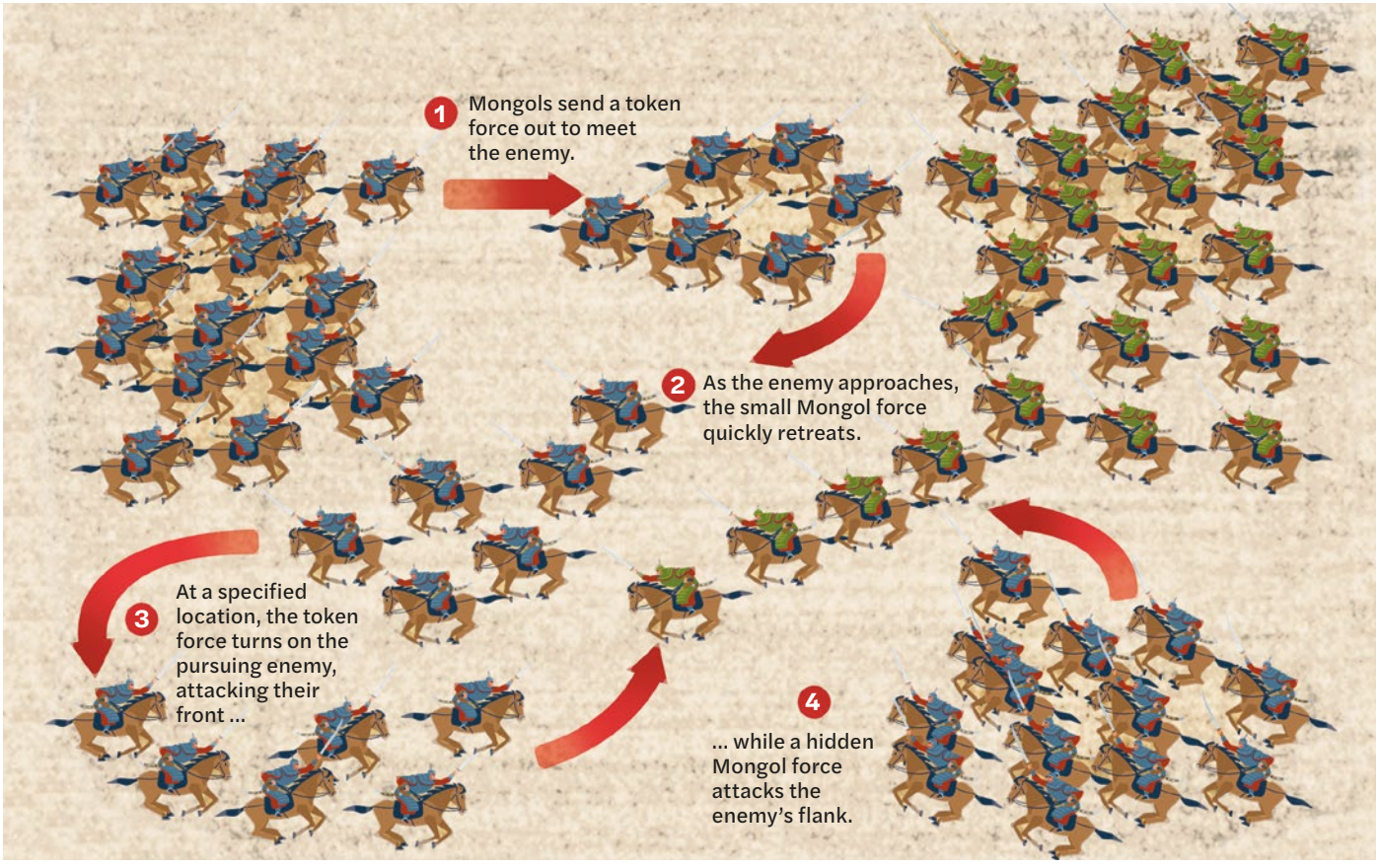
Genghis Khan maintained effective training and strict discipline in his army. His military system focused on quick, decisive manoeuvres that utilised the riding ability of the Mongol horsemen. At the same time, disobedience led to severe punishments. If a solider fled from battle, he and all the other members of his arban were executed.

The Mongol army developed many clever tactics for different situations. A favoured tactic was the fake retreat (feint), where they would charge the enemy and then retreat, to lead the enemy into an ambush. They also used encirclement, where the light cavalry would encircle the enemy from a distance and then shower them with arrows.

Psychological warfare

The most effective weapon that the Mongols had was the spread of fear. When the Mongols approached a city they intended to conquer, they gave the leaders of the city a choice: resist or surrender. If the leaders chose to resist, the full force of the Mongol army would be unleashed.

Source 3: Diagram showing the Mongols' fake retreat tactic



Genghis Khan would ensure that nearly everyone was killed. Those left alive had their ears cut off and were told to flee. The Mongols knew they would most likely run to the next city where they would tell the people of the Mongols' brutality, spreading terror and panic.

However, if a city's leaders chose to surrender, the lives and property of its citizens were spared. Genghis Khan installed a Mongol leader to take charge of the city and its wealth, and integrated all male citizens into the Mongol army. This ensured that as the Mongols expanded into new territories, their troop numbers continued to increase.

Source 4: The Mongols' heavy cavalry troops charging into battle. The heavy cavalry was followed by the light cavalry armed with bows and arrows.

Learning ladder H9.5

Significant people, ideas and events

1. Source 4: Identify the two types of cavalry forces in the Mongol army.
2. Source 3: Describe the fake retreat tactic.
3. Explain how the Mongol army was structured.
4. Explain why the Mongols' army structure was beneficial.
5. Evaluate the advantages and disadvantages of surrendering to the Mongols.

HOW TO

Significance, page 212

Significance

1. Source 2: Identify the significant Mongol invention that was used by the cavalry.
2. Describe the significance of the Mongolian horse to the Mongols' military success.
3. Source 2: Explain the significance of the invention of the stirrup.
4. Sources 1, 2 and 3: Using the sources and your knowledge, explain why Genghis Khan could be considered a historically significant military leader.

How did Genghis Khan's empire expand?

Genghis Khan built a large army of ruthless soldiers who terrorised enemies throughout Asia and Europe. He also built the largest empire the world had seen. During the 13th and 14th centuries CE, almost one-quarter of the world's population lived in the Mongol Empire.

Attacks on China

Genghis Khan first looked south to China to expand his empire and obtain resources not found in Mongolia. The Mongols were dependent on China for many goods including grain, metals and manufactured items such as fabrics. Before the time of Genghis Khan, the Jin dynasty, which controlled northern China, and the western Xia dynasty from north-west China had regularly conducted raids against the Mongols. Following Genghis Khan's rise to power, a Jin official arrived at his court and ordered the Mongols to pay tribute to the Jin state. Genghis Khan refused and instead, after consulting his generals, decided to declare war on the Jin.

The battles against the Jin

In 1211 CE, the Mongols sent 90 000 troops, nearly their entire army, in a military campaign against the Jin dynasty. Khan's army launched a surprise cavalry charge through the Huan'erzui passage towards Yehuling. The Mongol army slaughtered the entire Jin army at Yehuling, leaving bodies strewn over hundreds of kilometres.

The Mongolian Empire, 1206–1279 CE

Source 1: The expansion of the Mongolian Empire from 1206 CE

Source 2: The Mongol army rides into battle in the 2007 CE movie *Mongol*. Often outnumbered, the Mongols relied on their superior tactics, skills, speed and endurance to defeat enemies.

Source: Matilda Education Australia

The fall of Zhongdu

By 1213 CE, Genghis Khan's troops controlled the Jin territory up to the Great Wall of China, the ancient wall built to keep out all tribal raiders living north of the wall. Genghis Khan decided to break his invading army into three smaller armies. Each broke through the wall and reunited to attack Zhongdu (modern-day Beijing), the Jin capital. Here the Mongol army used siege tactics: it surrounded the city and cut off its supply routes. With the population starving, the Jin eventually surrendered in 1215 CE. The people were slaughtered and the city was looted and burned.

The Mongols then attacked the surrounding provinces of Shanxi, Hebei and Shandong between 1217 and 1223 CE. After the death of Genghis Khan, the Mongols continued to expand their territories in China, leading to the collapse of the Jin empire in 1234 CE. The Mongols would rule over China for almost a century.

Attacks on Central Asia

Genghis Khan did not originally intend to expand into Central Asia. He sent the ruler of the Khwarezmid Empire a message asking to trade with them:

> I am master of the lands of the rising sun while you rule those of the setting sun. Let us conclude a firm treaty of friendship and peace.
>
> **Source 3:** Genghis Khan, cited in a book by the Persian scholar Ata-Malik Juvayni [Ata-Malik Juvayni (1260 CE), *The History of the World Conqueror*]

The Khwarezm ***shah*** (king), Muhammad II, sent word that he would agree to a peace treaty and trade with the Mongols. The Mongols immediately sent a trade caravan, but the traders were killed and their goods were stolen. Genghis Khan sent three officials

Source 4: Shah Jalal al-Din escaping Genghis Khan's army at the Battle of the Indus [From Mas'ud bin Osmani Kuhistani (c. 1540 CE), *History of Abul-Khayr Khan*]

Source 5: Pavel Ryzhenko (1996 CE), *The Battle of Kalka*. This image shows the capture of the Rus prince Mstislav of Kyiv at the Battle of Kalka in 1223 CE.

to protest to the shah, but the shah had their heads cut off and returned to Genghis. In 1219 CE, the Mongol army of 200 000 men rode west and raided several cities in the Khwarezmid Empire. Using captured prisoners as a human shield, Genghis Khan's army stormed the capital city of Samarkand in 1220 CE.

Battle of the Indus, 1221 CE

Shah Muhammad II died in December 1220 CE and was succeeded by his son Jalal al-Din. Jalal al-Din pulled together what was left of the Khwarezm army in Afghanistan. Genghis sent forces to hunt them down, but they were defeated. The furious Mongol leader headed to the battlefront himself and crushed the Khwarezm army in battle at the Indus River.

Jalal al-Din managed to escape Genghis Khan's forces by riding his horse off a 10-metre cliff to cross the Indus River. But his troops and his young sons were slaughtered by the Mongols.

Attacks on Europe

Following the defeat of the Khwarezmid Empire, Genghis's trusted *noyan* (general), Jebe, asked him for a chance to continue his conquests. Genghis agreed and Jebe and another general called Subutai led a force of 20 000 troops into the Caucasus (a region spanning Western Asia and Eastern Europe).

They pressed forward into Persia, Azerbaijan and Georgia, plundering and slaughtering as they went. Meanwhile, the Rus princes looked on with alarm at the Mongol advance. They decided to form an alliance to fight the Mongols. Their army would meet the Mongols at the Battle of Kalka River in 1223 CE. The Mongols were victorious, decimating the Rus army and capturing and killing the Rus leader, Mstislav of Kyiv.

Lacking the resources to conquer and hold any territory, the Mongols then headed back east for home. Their expedition had been the longest cavalry raid in history, with the Mongols travelling 8900 kilometres. Thirteen years later, in 1236 CE, Subutai and Genghis Khan's grandson, Batu, would return and conquer the Rus principalities for the empire.

Learning ladder H9.6

Significant people, ideas and events

1. Source 1: Identify three groups that had been conquered by the Mongols by 1227 CE.
2. Source 1: Describe the expansion of the Mongol Empire between 1206 CE and 1227 CE.
3. Explain how the Mongol army defeated the Jin army at Zhongdu.
4. Source 4: Using the source, explain why the shah survived the Battle of the Indus.
5. Was Genghis Khan justified in attacking other empires in Asia and Central Asia? Explain your answer.

Causes and consequences

1. Source 5: Identify an outcome of the Battle of Kalka (1223 CE).
2. Describe the causes of the Mongol attack on China.
3. Explain the effects of the Mongols' conquest of Zhongdu.
4. Explain why Genghis Khan conquered the Kwarezmid Empire.
5. Sources 1 and 5: Using the sources and your knowledge, assess the effects of the Mongols' attacks on Europe.

HOW TO

Causes and consequences, page 206

How did Genghis Khan manage a vast empire?

Genghis Khan managed the massive Mongol Empire with skilled administrators, strict rules, severe punishments and a relay communication system that enabled messages to travel quickly.

Genghis Khan's empire

Genghis Khan was a brilliant, merciless leader who built a vast empire, slaughtering millions in his quest to rule the world. If Genghis's great Mongol Empire was to survive and expand, he needed to work with the people he had conquered and provide structures for the empire that, in his time, stretched for 13.5 million square kilometres.

Whenever he and his forces attacked a city, Genghis Khan spared the lives of skilled workers and hand-picked talented military leaders to work for his empire. Furthermore, he allowed his conquered people to follow their own religions. This led religious leaders to support Genghis Khan and, in turn, saw them encourage their followers to accept the rule of the Mongols. However, he also insisted on loyalty to himself and no other. Any disobedience could mean death.

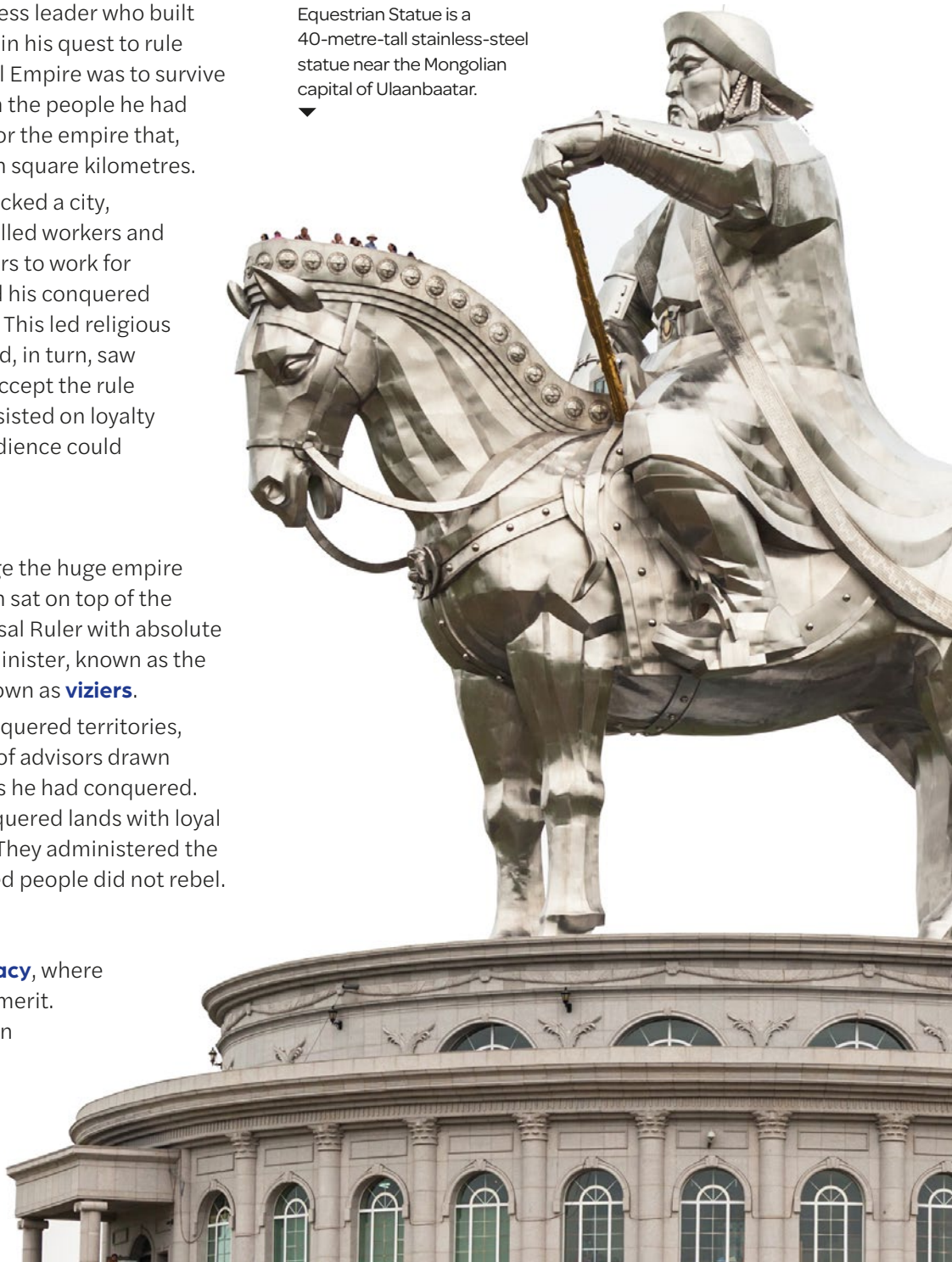
Governing the empire

The Mongols had to adapt to manage the huge empire they now controlled. The Great Khan sat on top of the government structure as the Universal Ruler with absolute power. He was advised by a prime minister, known as the ***beqlare-beq***, and his ministers, known as **viziers**.

To maintain control over his conquered territories, Genghis Khan established councils of advisors drawn from the different nations and tribes he had conquered. He also replaced the leaders of conquered lands with loyal military governors called ***basqaqs***. They administered the territory, collected taxes and ensured people did not rebel.

Meritocracy

The Mongol Empire was a **meritocracy**, where all positions were chosen based on merit. Positions of responsibility were given to those who showed great loyalty or bravery.



Source 1: The Genghis Khan Equestrian Statue is a 40-metre-tall stainless-steel statue near the Mongolian capital of Ulaanbaatar.

This ensured that the leaders of the empire were staunchly loyal to Genghis Khan and carried out his orders directly. It also meant that his best warriors had leadership roles in the Mongol army, making the army continually effective.

A code to live by

According to *The Secret History of the Mongols*, Genghis Khan established a set of laws, known as the ***Yassa***, for his empire in 1206 CE. While the *Secret History* does not specifically list any of these laws and no full copy has ever been found, several texts written in the 14th century nonetheless refer to fragments of Genghis Khan's Yassa.

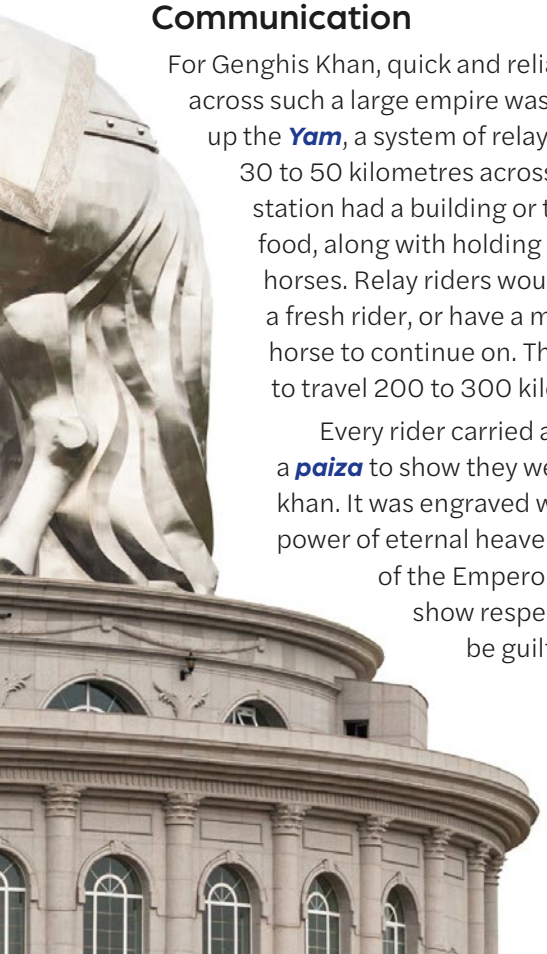
The Yassa represented a significant change from the Mongols' use of customary laws to the use of written, codified laws. It also introduced change for subject peoples. Troops were stationed across the empire to maintain control and to ensure people followed the Yassa.

The aim of the Yassa was to enforce obedience to Genghis Khan and his successors, resolve social and economic disputes and punish wrongdoers. The death penalty was applied frequently, even for minor offences. The Yassa also ensured that those loyal to the khan were treated favourably under the law and given pardons or lenient punishments.

Communication

For Genghis Khan, quick and reliable communication across such a large empire was critical. He set up the ***Yam***, a system of relay stations every 30 to 50 kilometres across the empire. Each station had a building or tent with beds and food, along with holding pens and food for horses. Relay riders would hand a message to a fresh rider, or have a meal and take a fresh horse to continue on. This enabled messages to travel 200 to 300 kilometres per day.

Every rider carried a metal pendant called a ***paiza*** to show they were messengers of the khan. It was engraved with a message: 'By the power of eternal heaven, [this is] an order of the Emperor. Whoever does not show respect [to the bearer] will be guilty of an offence.'



Source 2: Paiza were medallions carried by Yam riders and diplomats to show they were official representatives of the khan.

Learning ladder H9.7

Significant people, ideas and events

1. Source 1: Identify the individual shown in this source.
2. Source 2: Describe how this artefact was used in the Mongol Empire.
3. Explain how Genghis Khan governed the empire.
4. Explain why Genghis Khan established the Yam.
5. Evaluate the fairness of Genghis Khan's rule.

Continuity and change

1. Identify the name of the new law code for the Mongol Empire.
2. Describe how Genghis Khan changed the leaders of conquered lands.
3. Explain how allowing conquered people to continue their religion ensured their support for Mongol rule.
4. Explain why the Yassa represented a significant change for the Mongols and their subject peoples.
5. Analyse whether continuity or change was dominant in governing the Mongol Empire.

HOW TO

Continuity and change, page 203

What is the legacy of Genghis Khan?

By the time Genghis Khan died in 1227 CE, his empire stretched from Mongolia to Central Asia. Within 50 years it would expand even further, into Eastern Europe, China and the Middle East. Today, the legacy of Genghis Khan remains highly debated – was he a great leader, a barbarian or a maker of the modern world?

Mongolian views of Genghis Khan

In Mongolia today, Genghis Khan is seen as a great leader who laid the foundations of modern Mongolia. His establishment of a strong government, written laws and fairness towards all religions are seen as important contributions. Rather than view Genghis Khan as a violent conqueror, they instead believe that he brought peace, trade and improved communications across Europe and Asia.

The views of former conquered nations

The modern nations in Eastern Europe and the Middle East that were once part of the Mongolian Empire have very different views of Genghis Khan. Here Genghis Khan is seen negatively, as a 'barbarian savage' whose empire set in motion events that caused tremendous damage to their society and culture, from which they have barely recovered. In Russia, especially, historians have often portrayed Genghis Khan as the 'greatest disaster in Russian history' and an enemy of world peace.

Meanwhile, in China, Genghis Khan's legacy has shifted. While Genghis Khan was seen as a barbarian conqueror at different times in the past, historians in China now view Genghis Khan much more favourably. National Chinese policy, which includes Guangxi, Inner Mongolia, Tibet, Ningxia and Xinjiang as autonomous (self-governing) regions of China, sees Genghis Khan as an important founder of modern China. A wax statue of him stands in the National History Museum in Beijing next to the most prominent emperors in Chinese history, and he is praised for his conquests in Europe. In 1954–1956 CE the Chinese Government built a mausoleum to Genghis Khan in the traditional Mongol style.

Source 1: Statue of Genghis Khan at the Government Palace (parliament house), Ulaanbaatar, Mongolia

Source 2: The Genghis Khan Mausoleum, Xinjie, Inner Mongolia. The mausoleum doesn't actually hold Genghis Khan's body – his tomb has never been found.

The building underwent extensive restoration in 1981–1982 CE and was expanded in 2006 CE. It is used as a centre for the worship of Genghis Khan, according to traditional Mongolian shaman practices.

Western views

For historians in Western Europe, whose lands were never conquered by the Mongols, the legacy of Genghis Khan has changed over time. During the time of the Italian merchant Marco Polo, who travelled the entire length of the Silk Road to meet with Genghis Khan's grandson, Kublai Khan, views of Genghis Khan were largely positive. He was seen as a wise ruler and a great warrior.

However, from the 18th century, Western Europeans believed their society to be enlightened and saw Genghis Khan as an uncivilised **barbarian**. More recently, however, Western European historians have seen Genghis Khan as a pioneer of globalisation. They see Genghis Khan's vast empire as a forerunner to the expansive networks of trade, communications and cultural ideas that move across the modern world.

Genghis Khan is [known as] as a genius conqueror and strategist; a savage barbarian and a sophisticated law giver … This multiple image and its continuous evolution is partially explained by the phenomenal scope of Genghis's career which made him remembered in each of the realms on which he had an impact – Mongolia, China, the Muslim world, Russia, and Western Europe …

Moreover, Genghis did not remain only an historical figure: his life has inspired a host of epic myths, legends and literary works from Buddhist compilations to English and French plays, Hollywood movies, Chinese TV series, Muslim chronicles … and historical novels from around the world.

Source 3: Extract from Michal Biran (2007 CE), *Chinggis Khan*. Michal Biran is a historian.

Learning ladder H9.8

Impact and legacies

1. Source 1: Identify the location of the statue of Genghis Khan.
2. Source 1: Describe the image of Genghis Khan as portrayed in this statue.
3. Source 2: Explain the purpose of this building.
4. Explain why Western European historians link Genghis Khan's legacy to modern globalisation.

Interpretations

1. Identify the debate over Genghis Khan's legacy.
2. Describe the Russian view of Genghis Khan.
3. Source 1: Explain how this source demonstrates the Mongolian view of Genghis Khan.
4. Compare the Chinese and Russian views of Genghis Khan.
5. Source 3: Using the source, evaluate the reasons why Genghis Khan's legacy is contested.

HOW TO Interpretations, page 214

Key individual

How did Sorghaghtani Beki solidify Mongol rule?

Women played key roles in the Mongol Empire. Perhaps the most important woman in the Mongol Empire was Sorghaghtani Beki, who ruled the central lands of the Mongol Empire and ensured its ongoing success.

Who was Sorghaghtani Beki?

Sorghaghtani Beki was born in c. 1190 CE. She was a member of the Kerait tribe and the niece of its leader, Toghrul (also known as Ong Khan). The tribe followed a form of Christianity known as the Church of the East.

In c. 1204 CE, Sorghaghtani married Genghis Khan's youngest son, Tolui. Tolui was a great military leader and led the Mongols to victory against the Jin dynasty and the Khwarazmian Empire. According to Mongol tradition, the youngest sons of the khans always inherited their father's lands and ruled until a new khan was elected. Therefore, when Genghis Khan died in 1227 CE, Tolui inherited his lands in the centre of the empire and ruled as regent until a successor could be elected at a kurultai. At the kurultai of 1229 CE, Tolui's older brother Ögedei was elected as the second Great Khan, in accordance with Genghis Khan's wishes.

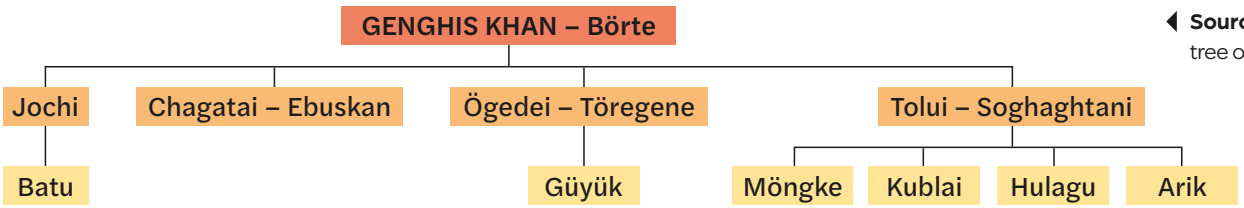
Tolui died suddenly in 1232 CE, for reasons that are not clear. Following Tolui's death, Ögedei Khan asked Sorghaghtani to marry him. He hoped to link her lands with his, given that they were located at the heart of the Mongol Empire. But Sorghaghtani refused. Ogedei then asked her to marry his son Güyük instead, but again she declined. This was unusual, as it was customary for a Mongol woman to remarry after her husband had died. However, Sorghaghtani's decision allowed her to remain in charge of Tolui's estates in eastern Mongolia, Persia (Iran) and northern China, and also to have complete control over the training of her sons as future leaders.

The sons of Sorghaghtani

Sorghaghtani had four sons: Möngke, Kublai, Hulagu and Arik. She devoted herself to bringing up her sons to be young men of courage, wisdom and integrity. Sorghaghtani never learned to read, but she understood the importance of education and ensured that her sons could read and write Mongolian and that they had an extensive understanding of the societies around them, including the Jurched, Uighurs and Chinese. She instructed them in Christian teachings but also encouraged them to be tolerant of all religions, founding several mosques and Muslim religious schools throughout the empire. In addition, she insisted that they always maintain upright behaviour, so they might never be under suspicion for disloyalty or misconduct.

The kurultai of 1251 CE

Ögedei Khan died in 1241 CE. By this time, all four of Genghis Khan's sons were dead and most of his empire was ruled by the women who had married his sons. Ebuskun, the widow of Genghis Khan's second son, Chagatai, ruled Central Asia or Turkestan. Sorghaghtani ruled in eastern Mongolia, Persia and northern China.



Source 1: The family tree of Genghis Khan

Töregene, the widow of Ögedei Khan, ruled the territory of her late husband in the centre of Mongol territory, and was empress over the whole empire. Only the Mongol lands in Russia (known as the Golden Horde) were under the control of a male leader, Batu Khan, the son of Genghis's oldest son Jochi.

As an aristocratic woman, Sorghaghtani had grown up at the centre of Mongol political life and knew how to influence and persuade those around her. She had built an alliance with the influential Batu Khan and with Genghis Khan's surviving brothers. In 1250 CE, Batu summoned a kurultai, which elected Sorghaghtani's son Möngke as the fourth Great Khan, but this election was opposed as it had not been held in the Mongolian homelands. Since the Mongolian homelands were part of Sorghaghtani's lands, she organised a second kurultai in 1251 CE. This kurultai confirmed Möngke's election.

The consolidation of Mongol power

Sorghaghtani died in 1252 CE, but her efforts to protect her lands, educate her children and build alliances set a strong foundation for the consolidation of Mongol power. Her son Möngke Khan sent his brother Hulagu to conquer the Middle East and his brother Kublai to conquer the rest of China. By the time Möngke died in 1259 CE, the Mongol Empire was at its greatest extent. Kublai became the fifth Great Khan in 1260 CE and founded the Yuan dynasty in China, while Hulagu ruled as khan of the Il-khanate, with control over Persia, Turkey, Georgia and Armenia.

Now in the management and education of all her sons, in the administration of affairs of state, in the maintenance of dignity and prestige and in the execution of business, Sorghaghtani Beki ... laid such a foundation that no man would have been capable of. In any business which Ögedei Khan undertook, whether with regard to the good of the empire or the use of the army, he used first to consult and confer with her and would suffer no change or alteration of whatever she recommended ... For the report of her wisdom and prudence and the fame of her counsel had spread to all parts, and none would go against her word.

Source 3: Text describing Sorghaghtani Beki [Ata-Malik Juvayni (c. 1270 CE), *The History of the World Conqueror*]

Source 2: Sorghaghtani Beki and her husband Tolui [An image from Rashid al-Din Hamadani (c. 1307 CE), *Jami' al-tawarikh*]

Learning ladder H9.9

Significant people, ideas and events

1. Source 1: Identify the four sons of Genghis Khan.
2. Describe the outcomes of the kurultais of 1229 CE and 1251 CE.
3. Explain how Sorghaghtani equipped her sons to become Mongol leaders.
4. Explain why there was pressure for Sorghaghtani to remarry after the death of her husband.
5. Evaluate the role of noble women in Mongol society.

Significance

1. Source 1: Identify the sons of Sorghaghtani and Tolui.
2. Source 2: Describe how this source shows the importance of Sorghaghtani in Mongol society.
3. Explain how Sorghaghtani was able to ensure the election of her son Möngke.
4. Source 3: Using the source and your knowledge, explain why Sorghaghtani was a significant individual in Mongol history.

HOW TO

Significance, page 212

Key individual

How did Kublai Khan conquer China?

Kublai Khan brought the empire to its greatest height by defeating the Song dynasty in southern China to create the Yuan dynasty. He reigned for 30 years, crushing rebellions against him to ensure that all knew he was the Great Khan, ruler of the Mongol Empire.

Becoming the Great Khan

When Möngke Khan first appointed his brother Kublai as governor of the Chinese territories, only northern China was under Mongol rule, with the south ruled by the powerful Song dynasty.

In 1250 CE, Möngke asked Kublai to join him in an attack on the Song dynasty to bring all of China under Mongol control. The Mongols quickly overcame the Song defences on the Yangtze River and moved into south-west China, as far as Vietnam.

However, in 1259 CE, Möngke died during the campaign and Kublai was forced to return to the Mongol capital of Karakorum. When he arrived, he discovered that his brother Arik had claimed the title of Great Khan. Kublai challenged Arik, and a four-year **civil war** broke out between the brothers. In 1264 CE, Kublai's army won and he became the fifth Mongol Empire ruler, called Kublai Khan.

Conquering the Song dynasty

After becoming the Great Khan, Kublai continued his conquest of the Song dynasty. Kublai Khan was greatly outnumbered. The Song dynasty had a huge population of 70 million people and an army many times the size of the Mongol force.

In 1268 CE, the Mongol forces were stalled at the city of Xiangyang on the Han River. The high walls that surrounded the city were 7 metres thick and 5 kilometres long. Laying siege to the city was very different from fighting on horseback in an open plain. While the Song warriors emerged to fight the Mongols from time to time, they could always retreat into their city if the Mongols started to overpower them.

The Mongols tried blockading the Han River with 5000 ships to stop supplies getting into the city in an attempt to starve the Song out, but the Song had stockpiled years of supplies and could hold out for a very long time.

Source 1: Kublai became the Great Khan in 1264 CE. This source is an image of Kublai Khan from the television series *Marco Polo*, made in 2014 CE.

Source 2: A trebuchet attack on Zarang, in Sijistan, Persia, by the Mongol army in 1222 CE, from an illuminated manuscript by Rashid al-Din Hamadani (c. 1307 CE), 'Mahmud ibn Sebuktegin Attacks the Fortress of Zarang', *Jami' al-tawarikh*

By 1272 CE, the Mongols tried a new approach. They brought in 20 000 extra troops and began to build a new super-weapon: the counterweight trebuchet. The counterweight trebuchet was used extensively in Europe and Persia. It had a shooting range of 500 metres and could throw projectiles weighing over 300 kilograms. Thanks to their vast empire, the Mongols had learned about Persian and European technology and could recruit Persian engineers from the Il-khanate to build a trebuchet for them. They built 20 counterweight trebuchets and used them at the siege of Xiangyang. This proved highly effective and on 14 March 1273 CE, the commander of Xiangyang, Lu Wenhuan, surrendered the city.

The Yuan dynasty

In the midst of his efforts to subdue the Song, Kublai Khan had declared the beginning of the Yuan dynasty, and crowned himself as the first Yuan emperor of China in 1271 CE. He moved the Mongol capital of Karakorum to Dadu, the modern-day city of Beijing.

Learning ladder H9.10

Significant people, ideas and events

1. Identify the dynasty that was overthrown by Kublai Khan.
2. Describe how Kublai Khan became the fifth Great Khan.
3. Source 2: Using the source and your knowledge, explain how the counterweight trebuchet worked.
4. Explain why Kublai Khan was able to defeat the Song forces at Xiangyang.
5. What does the Mongols' victory at Xiangyang demonstrate about their adaptability as a fighting force?

Chronology

1. Source 1: Identify the year that Kublai became the fifth Great Khan.
2. Put the following events in chronological order:
   - 1271 CE: Kublai Khan founds the Yuan dynasty
   - 1250 CE: Möngke Khan begins the conquest of the Song dynasty
   - 1268–1273 CE: The Siege of Xiangyang
   - 1259 CE: Möngke Khan dies
   - 1264 CE: Kublai Khan becomes the fifth Great Khan.
3. Use the events from Question 2 to create a timeline.
4. Explain how the events on your timeline demonstrate continuity and change.

HOW TO

Chronology, page 198

Key individual

How did Kublai Khan rule China?

Kublai Khan's rule in China was characterised by the integration of Chinese, Persian and Mongol cultures.

Kublai's administration

Having established the Yuan dynasty, Kublai Khan's next task was to integrate two different cultures under his rule as the Great Khan. The Great Wall of China separated two different ways of life: the nomadic Mongolian herders north of the wall and the sophisticated Chinese cities south of the wall.

The Chinese had always regarded the Mongols as barbarians, but Kublai Khan's knowledge of, and respect for, Chinese culture helped him gain their acceptance.

Kublai Khan adopted many Chinese ideas into his government structures. He included Chinese rituals at his court, retained the traditional Chinese Six Ministries (personnel, revenue, religious rites, defence, justice and public works) and appointed Chinese advisors. However, the most important government posts were only given to Mongols.

The Mongols also introduced new ideas from Persia, Central Asia and Europe to help them govern in China. The Mongols admired Persian expertise in science and invited Persian astronomer Jamal Al-Din to set up an observatory in China. Here he helped Chinese astronomers develop a more accurate calendar. Kublai Khan invited foreign physicians to China and established an Academy of Medicine to support their studies of herbal remedies. In turn, Chinese physicians travelled to other parts of the Mongol Empire and spread Chinese medical techniques such as acupuncture.

In addition, the Mongols transferred their own communication and trade practices to China. Kublai Khan greatly improved communication and trade throughout China. He expanded the Yam postal service, which was already the fastest in the world. He also forced 2.5 million workers to restore and extend China's Grand Canal all the way to Dadu (Beijing). The canal and paved highway next to it became a 1600-kilometre link between north and south.

Source 1: *Kublai Khan on the Hunt* (1280 CE). Painted by Liu Guando, who was a Chinese artist in the Yuan court.

Source 2: Cobalt exported from Persia (known as 'Islamic blue') was combined with white kaolin Chinese pottery to create blue-and-white porcelain. Pieces such as this dish (c. 1330 CE), which contains designs of bamboo, grapes and melons, were then shipped to Central Asian markets.

Art and culture

The Mongols' major construction projects – such as their new capitals at Karakorum and Dadu –required highly skilled artisans. About half of the agencies in the Yuan dynasty's Ministry of Public Works dealt with crafts, including textiles, bronzes, and gold and silver utensils. The Mongols recruited artisans from all over the world to travel to the Yuan dynasty, where they enjoyed special protections and low taxes.

Weavers from Eastern Europe and Central Asia were particularly prized by the Mongols, as they produced a special type of fabric known as 'cloth of gold'. Cloth of gold was a fabric woven with gold-wrapped yarn, which the Mongols loved.

The Mongols' attitude towards artisans not only benefited the Mongols themselves but also encouraged cultural exchange across the empire. Just as artisans from Central Asia, Persia and Europe had come to China, in turn, Chinese painters travelled to to Persia and elsewhere. Their paintings of dragons and phoenixes were especially influential in Persian art during the Mongol period.

Social hierarchy

While the Mongols were keen to borrow ideas from other cultures, they were less willing to share power. To ensure the Mongols remained in control, Kublai established a social hierarchy based on race.

The Yuan social hierarchy had four levels:

1. Mongols were the elite people in society who were given the most important government jobs. Mongols did not pay tax and were given large estates of land to be worked by Chinese peasants.
2. *Semuren* were non-Chinese allies, such as Turks or Persians. Semuren were appointed as government officials. They did not pay tax.
3. *Hanren* were the inhabitants of northern China.
4. *Nanren* were the inhabitants of southern China (the former Song dynasty).

Laws were different for each race. Mongols enjoyed lenient laws while laws for the Hanren and Nanren were harsh.

Learning ladder H9.11

Impact and legacies

1. Identify the cultures that were integrated in Kublai Khan's Yuan dynasty.
2. Describe the social hierarchy Kublai Khan implemented in the Yuan dynasty.
3. Source 1: Using the source and your knowledge, explain how the Mongols encouraged the work of artisans.
4. Source 2: Using the source and your knowledge, explain why the Mongol Empire led to cultural exchange across the world.
5. Evaluate the rule of Kublai Khan in China.

Continuity and change

1. Identify the two major influences on the government of the Yuan dynasty.
2. Describe how Kublai Khan continued Chinese administration practices.
3. Explain how the Mongol Empire enabled changes to scientific knowledge in China.
4. Explain why the Mongols were able to continue to control their empire in China.

HOW TO

Continuity and change, page 203

Site study

Why was Xanadu built?

In 1252 CE, Kublai Khan decided to build a summer capital in Kaiping, about 350 kilometres north of Beijing. He employed Chinese architect Liu Bingzhong to design the city. Liu incorporated Mongol and Chinese cultures in his design.

Design of Xanadu

The site was oriented according to traditional Chinese feng shui principles, so that its entrances aligned with the position of important stars in the sky, the location of nearby water sources and the direction of the wind.

The city's Mongol influences included a campsite for Mongol nobles within its walls. Kublai Khan's palace was the largest building in the city, with its four walls each over 500 metres long. Originally known as Muqingge, Kublai renamed the city Xanadu (Shengdu in Chinese) in 1264 CE.

In 1272 CE, the Mongols began building Dadu (now Beijing) as the capital of their Chinese Empire. The new buildings and landmarks of Dadu were strongly influenced by those of Xanadu, in part because the cities were built by the same architect, Liu.

Xanadu remained the summer capital throughout Kublai's rule. Following Kublai Khan's death in 1294 CE the city's fortunes declined. In 1369 CE, Xanadu was torched by the Ming army. The last ruling Khan of the Yuan dynasty, Toghun Temur, fled. The city was abandoned in 1430 CE.

The archaeology of Xanadu

Chinese archaeologists began excavating the Xanadu site in 1964 CE, discovering the moat in front of the Mingde Gate and identifying the ruins of the royal palace, Muqingge. They also discovered the remains of the Yutian Gate, where officials gathered to receive their orders.

Source 1: Aerial view of the Xanadu archaeological site

Source 2: A turtle sculpture, representing the north, and a dragon sculpture, representing the east, found at the Xanadu site

And when you have ridden three days ... you come to a city called Xanadu which was built by the Khan now reigning. There is at this place a very fine marble Palace, the rooms of which are all gilt and painted with figures of men and beasts and birds, and with a variety of trees and flowers, all executed with such exquisite art that you regard them with delight and astonishment. Round this Palace a wall is built, enclosing a [park] ... and inside the park there are fountains and rivers and brooks, and beautiful meadows, with all kinds of wild animals (excluding such as are of ferocious nature), which the Emperor has procured and placed there to supply food for his gerfalcons and hawks, which he keeps there in a mew ... The Khan himself goes every week to see his birds sitting in the mew, and sometimes he rides through the park with a leopard behind him on his horse's croup; and then if he sees any animal that takes his fancy, he slips his leopard at it, and the [animal] when taken is made over to feed the hawks in the mew. This he does for diversion.

Source 3: 'The Khan's Palace' by Marco Polo, who visited Xanadu in 1275 CE [Extract from Marco Polo (1299 CE), *The Travels of Marco Polo*]

Within the Palace City, the foundations of the Da'an Pavilion have been uncovered. The famous Venetian merchant and traveller Marco Polo met Kublai Khan at this site. In addition, the remains of the Muqing Pavilion, the inner palace where Kublai Khan lived, have also been located.

The site also includes the remains of temples, tombs, campsites, the Tiefan'gang Canal and other waterworks. In 2012 CE, Xanadu became a UNESCO World Heritage site.

Learning ladder H9.12

Impact and legacies

1. What was Xanadu?
2. Source 1: Describe what archaeologists have discovered at Xanadu.
3. Explain how Liu Bingzhong incorporated Chinese and Mongolian cultures into the design of Xanadu.
4. Explain why Xanadu is a significant site.

Sources

1. Source 3: Identify the origin of the source.
2. Source 2: Describe these two artefacts.
3. Source 3: Using the source, explain how the city looked, according to Marco Polo.
4. Source 3: Explain why this source is useful to an archaeologist working on the Xanadu site.
5. Sources 1, 2 and 3: Using the sources and your knowledge, explain what the site reveals about the life of the rulers of the Yuan dynasty.

HOW TO

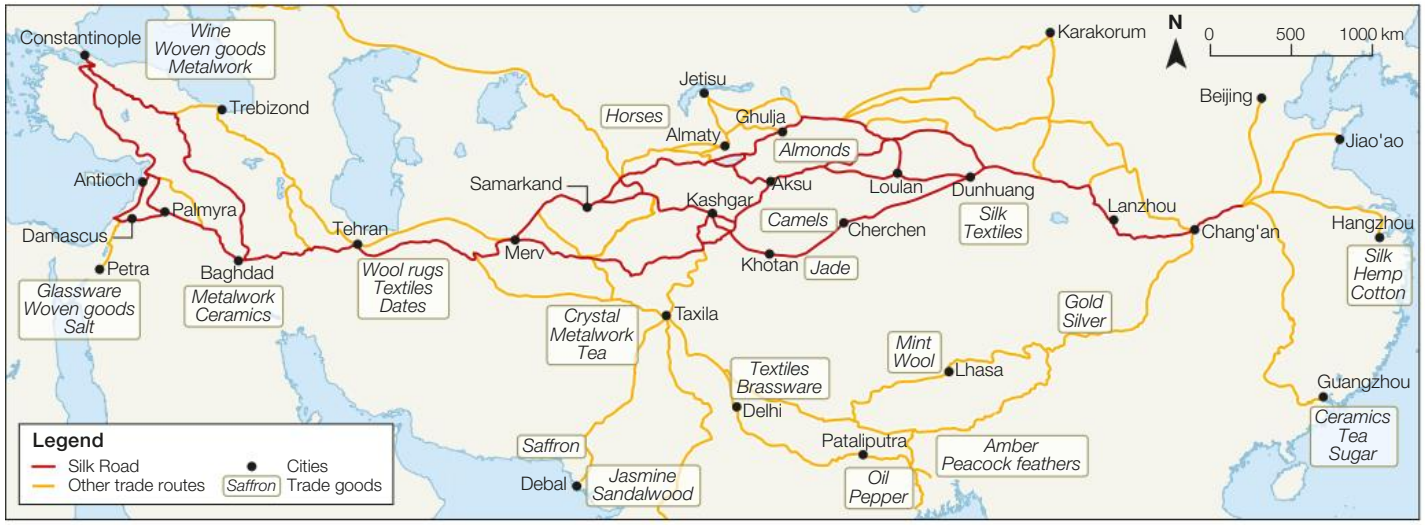
Sources, page 201

What were the legacies of the Mongol Empire?

The vast expanse of the Mongol Empire enabled the exchange of goods, ideas and military technology on a scale never seen before.

The Mongol Empire

Source 1: Trade routes in the Mongol Empire



Source: Matilda Education Australia

The expansion of trade

The growth of the Mongol Empire meant that much of the ancient Silk Road trade route lay within the empire. This route moved goods, religious ideas and inventions between Asia and Europe.

The Mongols greatly encouraged trade. They set up merchant associations called *ortogh* that helped merchants travelling long distances across the empire and protected their goods from theft by bandits. They also allowed merchants to rest at the Yam postal stations. In addition, they encouraged the use of paper money, which was much easier to carry than coins.

The Mongols' support of trade generated great prosperity across Asia and Europe. It also allowed people to experience new foods, fabrics and metal goods, supported a vast network of scientific and medical ideas, helped spread religious ideas to new places and encouraged the development of new technologies.

Source 2: Kublai Khan and Marco Polo from the 2014 CE television series *Marco Polo*. In 1271 CE, at only 17 years old, Marco Polo travelled along the Silk Road to China with his father and uncle. Marco Polo stayed in China for 17 years. He learned to speak Mongolian and Chinese, and soon became a special representative of Kublai Khan. He was sent on special missions to China, India, Vietnam, Burma and Sumatra.

Marco Polo

Safe passage for merchants made the long travel across Asia easier for European traders like Marco Polo. Much of what we know about the Mongol Empire in the time of Kublai Khan comes from Marco Polo. He described the palaces, customs, inventions and trade in great detail.

Marco Polo was amazed to find that paper currency had replaced metal coins. He wrote:

> With these pieces of paper, they can buy anything and pay for anything. And I can tell you that the papers that reckon as 10 bezants [gold coins] do not weigh one … all these pieces of paper are issued with as much solemnity and authority as if they were of pure gold or silver … the chief officer deputed by the Khan smears the seal entrusted to him with vermilion, and impresses it on the paper, so that the form of the seal remains imprinted upon it in red; the money is then authentic. Anyone forging it would be punished with death.

Source 3: *The Travels of Marco Polo*, Book 2, Chapter 24 (c. 1250 CE)

Source 4: A Yuan dynasty banknote, 1287 CE, from China/Mongolia

Learning ladder H9.13

Impact and legacies

1. Source 1: Identify the main trade route shown in the source.
2. Source 1: Describe the main trade goods from Guangzhou, Dunhuang, Tehran, Baghdad and Constantinople.
3. Explain the legacy of the Mongols' support of trade.
4. Explain why Marco Polo has had a significant impact on our understanding of Kublai Khan.

Continuity and change

1. Source 4: Identify how this source changed trade.
2. Describe how merchants' experiences changed under the Mongols.
3. Sources 3 and 4: Explain how the use of paper money in the Mongol Empire demonstrates continuity and change.
4. Explain why the operation of the Silk Road under the Mongols demonstrates continuity and change.

HOW TO

Continuity and change, page 203

What happened to the conquered people?

The huge Mongol Empire was an incredible achievement, but the cost of this was borne by millions of people.

The *pax Mongolica*?

Many historians refer to the time of the Mongol Empire as *pax Mongolica*, or Mongol Peace, arguing that it was a period of political, economic, social, religious and cultural stability. While there were positive outcomes from the expansion of the Mongol Empire – such as revived trade between Western Europe and Asia – the ferocity of the Mongols suggests that for many people, the period was anything but peaceful.

Impact on the population

The Mongols wreaked havoc and devastation wherever they went as they established their empire. In addition to battles and sieges, they conducted massacres and waged biological warfare against millions of innocent people. It is difficult to know exactly how many people were killed by the Mongols as they expanded their empire across Asia, Central Asia and into Europe, but historians believe that as many as 57 million people may have been killed between 1206 CE and 1405 CE. Many more suffered terrible injuries and lost their homes.

Destruction of culture

The Mongol conquests destroyed many cities across Asia, the Middle East and Eastern Europe, including the great cities of Baghdad, Nishapur, Merv, Samarkand and Kyiv. Some of these cities dated back to ancient times, while others were wonders of the medieval world. Much literature and many artefacts were also lost during their campaigns. Almost no written records from the Jin dynasty survive, while many of the books from the great library in the city of Baghdad, known as the House of Wisdom, were lost when the Mongols sacked the city in 1258 CE. Thousands of temples, churches and mosques were also damaged.

The Mongols also ruined important infrastructure. The irrigation systems of Persia had been built over hundreds of years to manage waterflows for farming. These were destroyed by the Mongols, leading to a loss of food and starvation.

Slavery

Traditionally, it was customary in Mongol society to enslave people captured in war, but this practice had long been relatively small in scale. However, the Mongol conquests that began in the 13th century CE created a huge number of war captives. These captives all became slaves, leading to a massive expansion of slavery in the Mongol Empire. Not only were there many hundreds of thousands of people captured during the Mongol invasions, but also the extent of the Mongol conquests, along with their encouragement of trade, saw a huge expansion of the pre-existing slave trade across Asia and eastern Europe.

Whenever they captured a city, the Mongols rounded up people with particular skills, such as metalworkers or leatherworkers, to be sold at slave markets. They also gathered unmarried men and women, as well as children, and selected some for enslavement. These people were all considered 'war captives' who could be ransomed by their relatives. If they were not ransomed, they were sold into slavery. Slaves were sent to different slave markets around the Mongol Empire to be sold. The main centres were in the Mongol capital Karakorum, Dadu (Beijing), Xanadu, Bukhara, Baghdad, Sarai and Kaffa.

> What occurrence has ever been more memorable than the birth of the dynasty of Genghis Khan … who subjugated the many kingdoms of the world, conquered and destroyed a host of unruly peoples? … He gave the world one face, and the same feelings to all hearts; he purified the territories of the Empire, in delivering them from the domination of evil usurpers and the oppression of proud tyrants.

Source 1: Extract from Rashid al-Din Hamadani (c. 1307 CE), *Jami' al-tawarikh (Compendium of Chronicles)*. Rashid al-Din Hamadani was a statesman and historian from the Il-Khanate. He was commissioned by Ilkhan Ghazan to write *Jami' al-tawarikh*.

Source 2: The Mongol siege of Suzdal in 1238 CE. [Image from a Russian chronicle called *The Illustrated History of Ivan the Terrible* (c. 1550 CE)]

1238 AD: That same year foreigners called Mongols came in countless numbers, like locusts, into the land of Ryazan ... And then the pagan foreigners surrounded Ryazan and fenced it in with a stockade ... and the Mongols took the town on December 21, and they had advanced against [it] on the 16th of the same month. They likewise killed the leaders, and men, women, and children, monks, nuns and priests, some by fire, some by sword ... And we, indeed, having seen it, were terrified and wept with sighing day and night ...

Source 3: This extract is from a medieval Russian chronicle, written in Novgorod by Christian priests, and based on eyewitness accounts. [*The Novgorod Chronicle* (1016–1471 CE)]

Learning ladder H9.14

Significant people, ideas and events

1. Identify two negative impacts of the Mongol Empire on subject peoples.
2. Describe the concept of pax Mongolica.
3. Explain how the Mongols affected populations across Asia, the Middle East and Europe.
4. Explain why slavery became so widespread under the Mongols.
5. Source 2: Using the source and your knowledge, evaluate the impact the Mongols had on conquered peoples.

Perspectives

1. Source 2: Whose perspective is shown in this source?
2. Sources 1 and 3: Describe the perspective of the Mongols in each source.
3. Source 3: Explain whose perspective this source is written from.
4. Sources 1 and 3: Compare the differences between the perspectives of these sources.
5. Sources 1, 2 and 3: Using the sources and your knowledge, evaluate the pax Mongolica.

Perspectives, page 210

HOW TO

Why did the Mongol Empire fall?

Family squabbles, pestilence, natural disasters and invasion led to the decline of the once-mighty Mongol Empire.

The division of the Mongol Empire

The descendants of Genghis Khan's sons never fully resolved their differences. Those descended from Ögedei and Chagatai continued to secretly oppose those descended from Tolui and Jochi. They particularly resented the dominance of the Tolui clan, led by Kublai Khan.

In 1268 CE, a civil war broke out between Kublai Khan and the leaders of the Ögedei and Chagatai clans. By the time this war ended in 1301 CE, the Mongol Empire had fractured into four separate parts: the Golden Horde **khanate** in eastern Europe, the Chagatai khanate in Central Asia, the Il-Khanate in Persia, and the Yuan dynasty in east Asia. The four Mongol states followed their own agendas from then on.

The fall of the Il-Khanate

The Il-Khanate was the first Mongol state to fall. It was led by Hulegu, Kublai's brother. One of the key reasons for the demise of the Il-Khanate was the Battle of Ain-Jalut (1260 CE), when Christian and Muslim forces joined to oppose the Mongol invaders. Even though Christians and Muslims usually fought against each other in the medieval period, they both feared the Mongols and recognised them as the greater threat. Mongol forces suffered their first major defeat, and from that point on did not take any more territory in the Middle East.

By the 1330s CE, the Il-Khanate had been ravaged by the Black Death, and by 1335 CE it had collapsed.

The fall of the Yuan dynasty

China was hit by a series of natural disasters and epidemics in the 1330s CE. In 1331 CE, an unidentified epidemic occurred in Hebei and spread to other parts of China, killing millions of people. Another epidemic broke out in Fujian in 1344 CE, followed by others in the 1340s CE and 1350s CE. At the same time, flooding along the Yellow River repeatedly devastated farms.

Chinese peasants channelled their anger and despair against the Yuan dynasty. A Buddhist group known as the Red Turbans led a series of rebellions. One of their leaders, a peasant named Zhu Yuanzhang, captured the city of Nanjing in 1356 CE. Zhu would overthrow the Yuan and become Emperor Taizu, the leader of the Ming dynasty.

The Mongol Empire

Source: Matilda Education Australia

The rise of the Timurid Empire

The Chagatai and the Golden Horde khanates were invaded by Timur, a Turko-Mongolian leader who established an empire in Central Asia during the late 14th century CE.

The Chagatai khanate suffered defeat by Timur in 1363 CE. Their much-reduced empire slowly declined until 1705 CE, when the last Chagatai khan was removed from power. The Golden Horde was invaded in 1396 CE by Timur, after which it broke into smaller khanates, which eventually collapsed.

Source 1: The Mongol Empire at its height, 1294 CE

Source 2: Image of the Ming Emperor Taizu, formerly known as Zhu Yuanzhang. Prior to becoming emperor, Zhu had led the Red Turban peasant rebellions against the Yuan dynasty, 1351–1360 CE.

Learning ladder H9.15

Significant people, ideas and events

1. Source 2: Identify the significant individual shown in the image.
2. Describe the family feud between the Jochi, Chagatai, Ögedei and Tolui clans.
3. Source 1: Explain how the Mongol Empire was divided.
4. Explain the reasons for the fall of the Il-Khanate.

Causes and consequences

1. Identify the causes of the decline of the Mongol Empire.
2. Describe the reasons for the fall of the Yuan dynasty.
3. Explain how the Timurid Empire rose to power.
4. Explain whether the decline of the Mongol Empire was inevitable.

HOW TO

Causes and consequences, page 206

How do I conduct a good inquiry?

Now that you've finished the chapter, it's time to conduct your own historical inquiry on the Mongol expansion. Throughout the chapter you have developed knowledge and understanding of the Mongol expansion. Background knowledge is important because it helps you make connections to new information, ask better questions and consider different perspectives. As you progressed through the chapter, you have gathered information through classroom discussion, highlighting, note taking and answering questions. Now you are ready to start planning your own historical inquiry!

A historical inquiry gives you the opportunity to be an active historian: forming questions, interrogating sources and communicating insights about the past on a topic of your choice. The chapter has covered the origins and legacies of the Mongol expansion in addition to significant people, events, ideas and beliefs. What would you like to know more about?

- The Mongolian horses, H9.2
- The Mongols' conquest of the Khwarezmid Empire, H9.6
- The role of Mongol women, H9.3, H9.9
- The Golden Horde, H9.15
- The Mongols' destruction of Baghdad, H9.14

Return to the relevant sections in the chapter and read them again.

Next, complete the 'see, think, wonder' process to help develop ideas you might cover in your inquiry.

Jot down your answers to these questions. Your answers will help you to formulate your own research ideas. Once you have worked through this process, you are ready to start the historical inquiry.

Refer to pages 218–25 of the How-to chapter for a step-by-step guide to this process.

See

What do you see?
Who is involved?
What are the key features?
When and where was this happening?

Think

What do you think about that?
How do you think people were affected at the time?
How is this similar to or different from today?
How do we know?

Wonder

What did different groups think about this?
Why is this important to know?
What does it make you wonder?

Level up!

Throughout the chapter, you have been working to move up the Learning ladder. An inquiry investigation is a great opportunity to expand your knowledge and attempt new skills.
When planning your inquiry, consider how the experiences and perspectives of individuals and groups shaped societies, beliefs and events in the past. Think about how the past has had an impact on the present. Use the How-to chapter to support your planning and research.

Asia and the Pacific region
(c. 600–1750 CE)

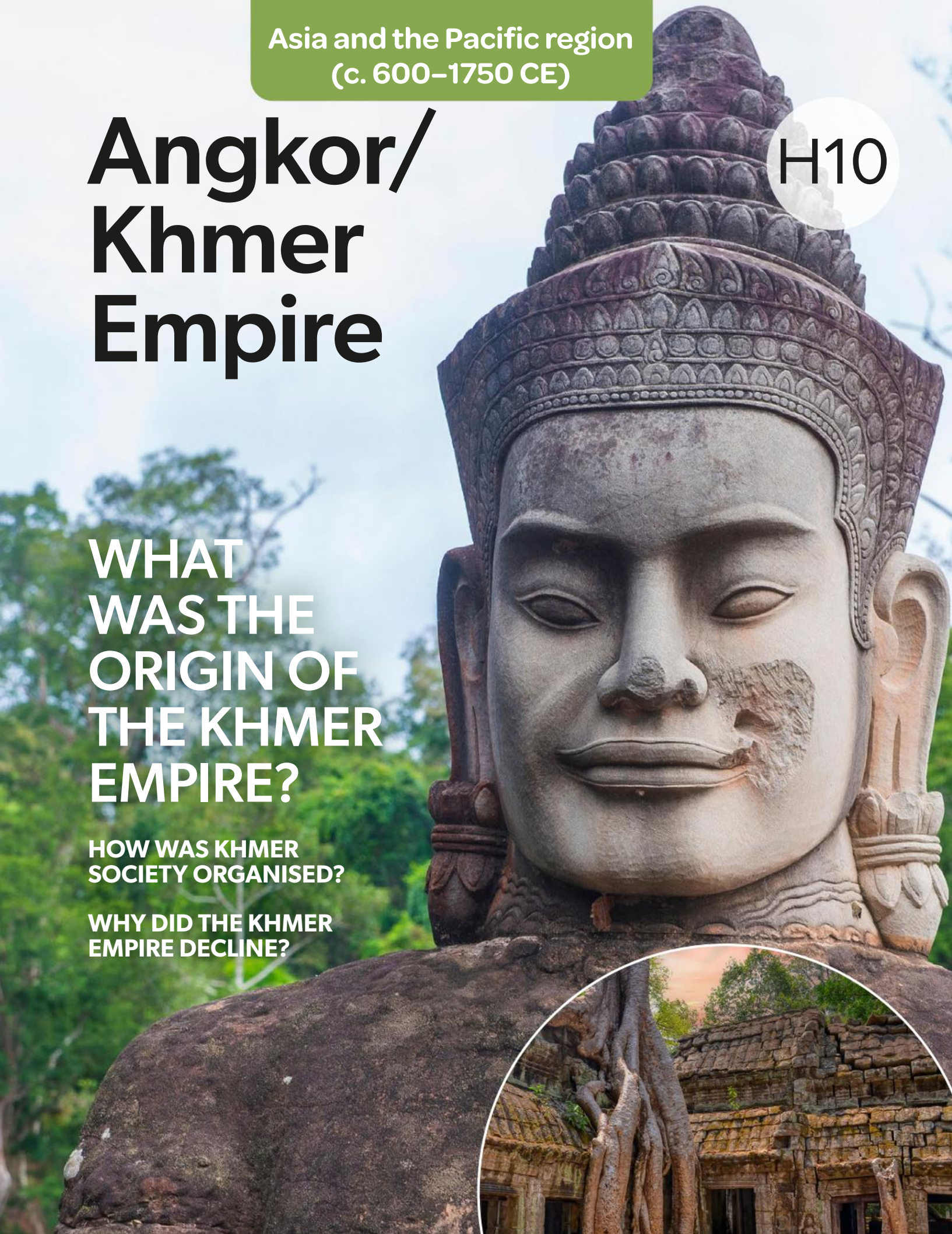
Angkor/ Khmer Empire

H10

WHAT WAS THE ORIGIN OF THE KHMER EMPIRE?

HOW WAS KHMER SOCIETY ORGANISED?

WHY DID THE KHMER EMPIRE DECLINE?



How can I understand the Khmer Empire?

The Khmer Empire, which began in 802 CE, was one of the world's most powerful, wealthy and populous civilisations before its decline from the middle of the 14th century CE. The structure of its society and culture was greatly influenced by India.

Learning ladder

The Learning ladder lists the knowledge and skills you will learn. Each has five levels of difficulty. Learning skills at the bottom of the ladder will help you to master the skills at the top of the ladder.

Steps in knowledge progression	Background and origins	Significant people, ideas and events	Impact and legacies	Continuity and change	Causes and consequences
5	I can evaluate the impact of the rise and fall of societies.	I can evaluate how societies were influenced by significant people and ideas.	I can evaluate the legacy of a society.	I can evaluate patterns of continuity and/or change.	I can analyse causes and consequences.
4	I can explain why a society developed.	I can explain why ideas influenced people and events.	I can explain why a society has a legacy.	I can explain patterns of continuity and/or change.	I can explain why something was caused or why it led to certain consequences.
3	I can explain how a society developed.	I can explain how ideas influenced people and events.	I can explain the impact of one society on another.	I can explain continuity and change.	I can explain how something was caused or its consequences.
2	I can describe the origins of societies.	I can describe key people, ideas and events.	I can describe the legacy of a society.	I can describe continuity and change.	I can describe causes and consequences.
1	I can identify the origins of societies.	I can identify key people, ideas and events.	I can identify the legacy of a society.	I can identify continuity and change.	I can identify a cause and a consequence.

Knowledge and understanding

Source 1: Angkor Wat in Cambodia is the largest religious monument in the world. It was built in the early 12th century CE as a monument to the powerful Khmer king Suryavarman II.

I can evaluate historical perspectives.	I can evaluate historical significance.	I can evaluate the evidence supporting a historical interpretation.	I can explain change or causality from a timeline.	I can evaluate sources to determine their accuracy, usefulness and reliability.	5
I can compare perspectives.	I can explain why something is historically significant.	I can compare historical interpretations.	I can summarise the events on a timeline.	I can explain the historical context of a source.	4
I can explain a perspective.	I can explain something historically significant.	I can explain an interpretation of history.	I can follow timeline conventions.	I can apply historical knowledge to explain sources.	3
I can describe perspectives.	I can describe something historically significant.	I can describe an interpretation of history.	I can place events on a timeline chronologically.	I can describe a source.	2
I can identify the perspective of a person from the past.	I can identify something historically significant.	I can identify a historical debate.	I can read a timeline.	I can identify the origin of a source.	1
Perspectives	**Significance**	**Interpretations**	**Chronology**	**Sources**	Steps in skill progression

Historical concepts and skills

How did geography influence the Khmer Empire?

What was the Khmer Empire?

The Khmer Empire dominated mainland South-East Asia for approximately 500 years, from the beginning of the 9th century CE to the early 14th century CE. It was one of history's most powerful, wealthy and populous civilisations, excelling in the fields of art and architecture, agriculture, warfare and government. The country of Cambodia was the geographic and political heart of the Khmer Empire.

Cambodia's geography

Most of Cambodia consists of flat, low-lying plains that are drained by the Tonlé Sap Lake and the Mekong River. The source of the Mekong River is melting snow in the Himalayas. The heavy monsoonal rains that fall annually across South-East Asia also add to the volume of water in the Mekong River.

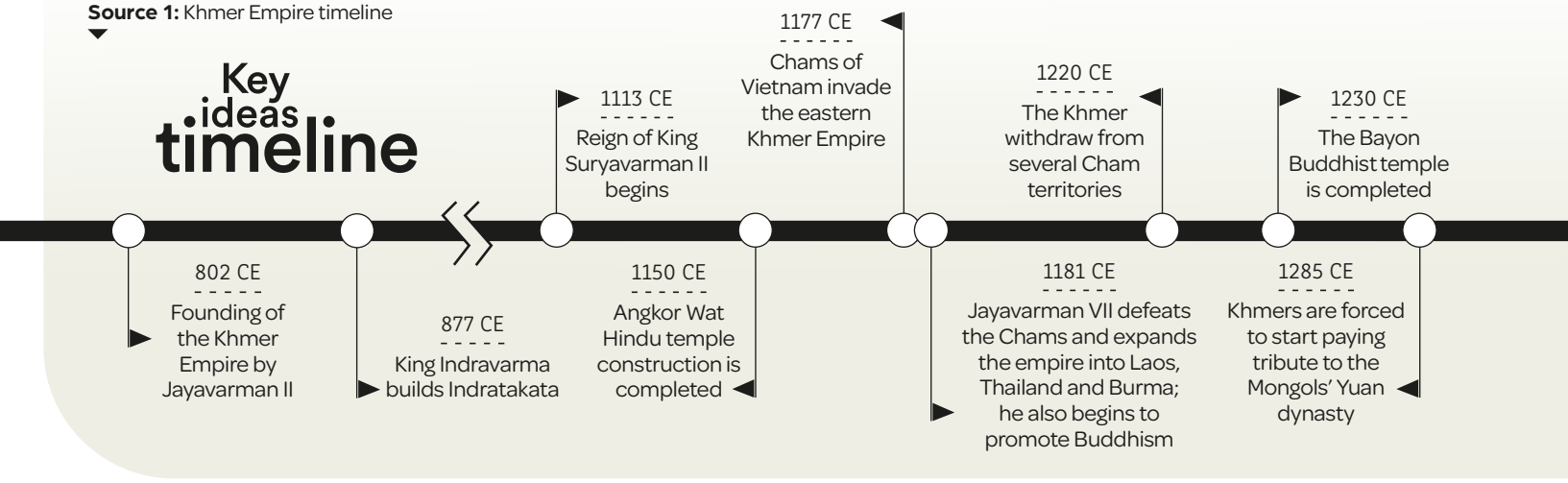
The Mekong Delta acts as a brake on this flow of water. Every year, as the floodwaters build from the delta, the Tonlé Sap River, which flows into the Mekong River from the Tonlé Sap Lake, reverses its flow and creates an inland sea known as the Great Lake. When this inland sea drains away after the flood season, it leaves behind fertile soil that can support intensive rice cultivation.

The Khmer Empire in South-East Asia, c. 1130 CE

Source: Matilda Education Australia

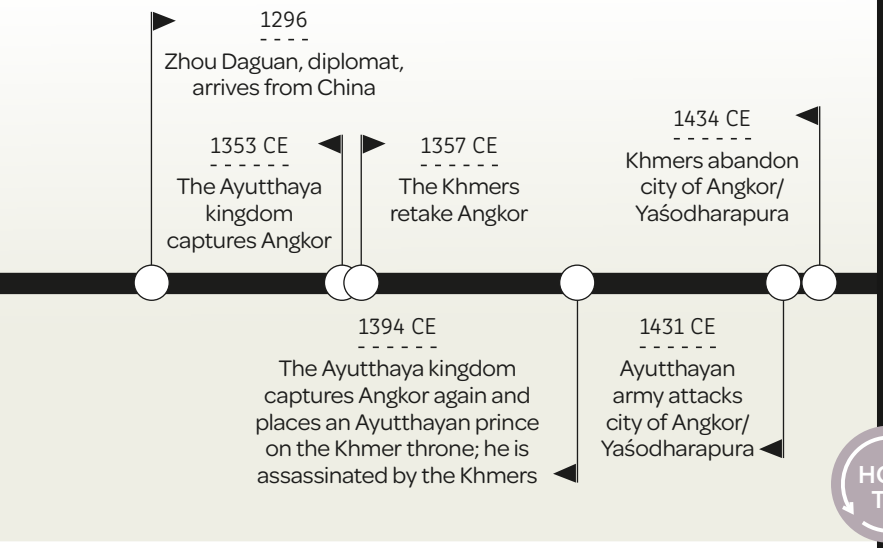
▲ **Source 2:** The extent of the Khmer Empire in c. 1130 CE

Source 1: Khmer Empire timeline



Source 3: The Mekong River flows through the centre of Cambodia. It is an important source of fish and water for the irrigation of rice crops.

The centre of the Khmer Empire in the Angkor region was close to important sources of water – the Tonlé Sap Lake and the Siem Reap River – and to the farming land supported by these water sources. The sandstone used to build the Khmer's amazing temples was quarried from nearby Mount Kulen.



Learning ladder H10.1

Background and origins

1. Source 2: Identify the two major rivers running through the Khmer Empire.
2. Describe the role of the Mekong Delta.
3. Explain how the draining of the Great Lake enables rice cultivation.
4. Source 2: Explain why the location of the Khmer Empire was advantageous.

Chronology

1. Source 1: Identify the date when the Angkor Wat temple was completed.
2. List these events in order, from the oldest to the most recent:
   - 1006–1050 CE: reign of Suryavarman I
   - 877–889 CE: reign of Indravarman I
   - 802–835 CE: reign of Jayavarman II
   - 1113–1150 CE: reign of Suryavarman II
   - 889–910 CE: reign of Yasovarman I.
3. Create a timeline using the events in Question 2.
4. Source 1: Summarise the events that led to the decline of the Khmer Empire, from 1353 to 1434 CE.
5. Source 1: Explain how the timeline demonstrates the concept of causes and consequences.

HOW TO

Chronology, page 198

What was the origin of the Khmer Empire?

The medieval Khmer Empire emerged from the ancient Khmer kingdoms in South-East Asia. The ancient Khmers were significantly influenced by the beliefs, ideas and social practices of ancient India, which spread through trade links.

Early Khmer kingdoms

Ancient Chinese chronicles record that the first known Khmer state was called Chenla. Chenla was located near the Mekong and Bassac rivers from the 1st to 6th century CE and was a **vassal state** of the larger Kingdom of Funan in South-East Asia. While some historians have suggested that Funan was also a Khmer state, the evidence is inconclusive. Later records suggest that the Kingdom of Chenla conquered Funan.

Chenla was ruled by a series of kings and queens. The chronicles record that during the reign of King Jayavarman I (657–681 CE), Chenla was a highly organised and centralised state with its own army. Jayavarman I's daughter Jayadevi succeeded him and ruled as queen of Chenla until 720 CE.

Trade routes from India

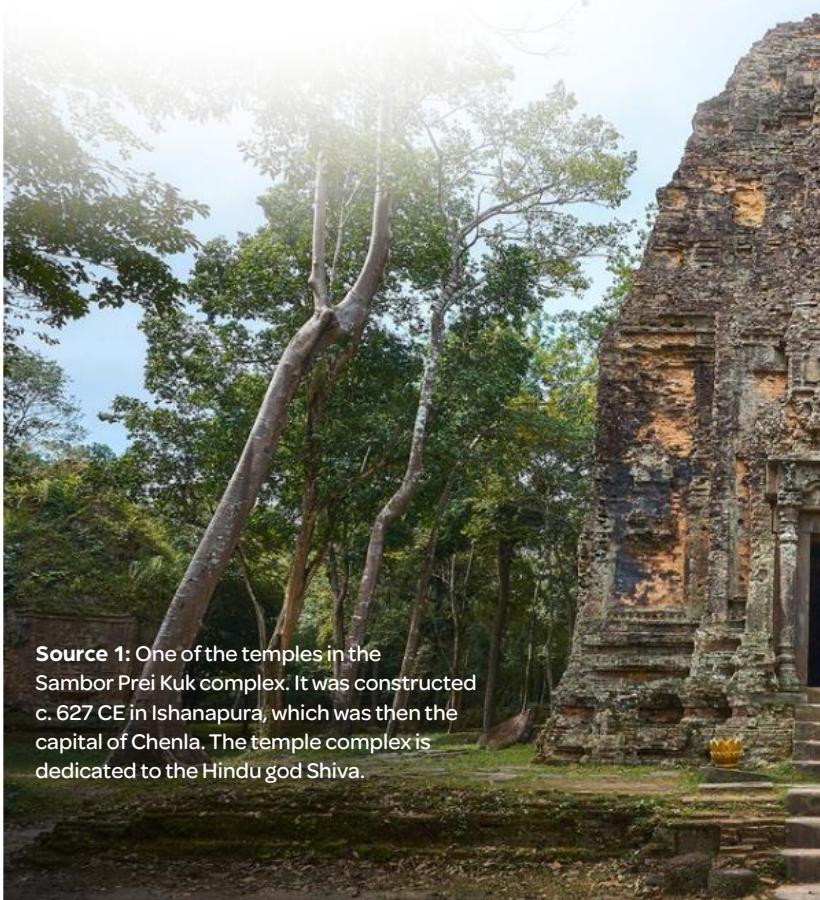
Throughout the ancient period, Indian merchants from the Gupta Empire (320–550 CE) in the north and the Pallava Empire (275–897 CE) in the south travelled to South-East Asia, bringing luxury goods such as cotton, spices, ivory, precious stones and pepper. The kings of Chenla profited greatly from Indian trade and quickly adopted the Indian Hindu religion as a way of cementing the trade relationship. The Hindu temples of Sambor Prei Kuk, the first of which were built by King Isanvarman I (616–637 CE), are the oldest known examples of Indian culture and religion in Cambodia.

The elites of Chenla society also embraced Indian ideas that helped them to cement their power. For example, the Khmer kings adopted the Hindu concepts of the *chakravatin* and *devaraja*. A chakravatin was an 'ideal' universal king. Devaraja was a cult that established the king as a divine ruler, the living embodiment of the Hindu gods Vishnu and Shiva. Khmer kings deliberately promoted themselves as universal and god-like rulers.

The Khmer language

Ancient India also greatly influenced the Khmer language and written script. Many words from the ancient Indian languages of Sanskrit and Pali can be found in Khmer. These languages were also used during the time of the Khmer Empire. Sanskrit was spoken exclusively by Khmer royalty and used to record the deeds of kings on Khmer monuments. Pali was used to write sacred Buddhist scripts.

Khmer script is based on the ancient Pallava script, a form of writing that developed in the Pallava Empire in South India. The oldest inscription in the Khmer script that has been found in Cambodia dates back to 611 CE. **Stelae** (upright stones or columns) featuring the Khmer script have been found throughout Cambodia and other areas of the former Khmer Empire, including in Laos and Thailand.



Source 1: One of the temples in the Sambor Prei Kuk complex. It was constructed c. 627 CE in Ishanapura, which was then the capital of Chenla. The temple complex is dedicated to the Hindu god Shiva.

Source 2: The Sdok Kak Thom stele (c. 1053–1300 CE). A stele (pronounced 'steel-ee') is a tall stone slab that bears inscriptions. The Sdok Kak Thom stele was constructed to record the temple owners' royal service to the Khmer court and the great deeds of the Khmer kings. The inscription written in Khmer script consists of two parts: 194 lines in Sanskrit and 146 lines in Khmer.

Ancient cities of India and South-East Asia

Source: Matilda Education Australia

Source 3: Trade routes between ancient India and South-East Asia

Learning ladder H10.2

Background and origins

1. Source 3: Identify two cities in India from where goods were exported to South-East Asia.
2. Describe the ancient Khmer Kingdom of Chenla.
3. Explain how Indian languages were used in the Khmer kingdoms.
4. Source 3: Explain why the Pallava script became influential in the Khmer kingdoms.

Causes and consequences

1. Source 2: Identify the cause of the construction of the Sdok Kak Thom stele.
2. Source 1: Describe the consequences of Indian religious influence on the Kingdom of Chenla.
3. Explain the effect of Indian culture on the Kingdom of Chenla.
4. Explain why the Khmer elites adopted certain aspects of Indian culture.

HOW TO

Causes and consequences, page 206

Key individual

How did Jayavarman II establish an empire?

Historical information about the life of Jayavarman II is scarce and much of the evidence about him has been found in insciptions written centuries after his death. He is traditionally regarded as the founder of the Khmer Empire.

The queens of Jayavarman

Sometime after Queen Jayadevi's reign, Chenla had collapsed into small rival kingdoms that fought each other for power. The Khmer states were also subject to invasions by the nearby Cham kingdom and were dominated by the Kingdom of Java.

In c. 780 CE, a Khmer prince named Jayavarman was crowned king of the small Chenla state of Indrapura. As king, Jayavarman II married Jayendrabha, the queen of the Sambhupura Chenla state, to unite the two Chenla kingdoms. He also married another six queens. Marriages to these women were important because royal power was **matrilineal** in Khmer culture. This meant that a king claimed his right to the throne through his mother's royal line. His mother's royalty was much more important than whether his father was the king.

Having united the Khmer kingdoms through his marriages, Jayavarman II then undertook a series of military campaigns to conquer several small neighbouring states and force the Javanese out of the region. He established the Khmer Empire in 802 CE.

The god-king

Jayavarman II had himself crowned as chakravartin by partaking in a ritual conducted by a Brahman (Hindu) priest. He then promoted the devaraja concept (cult) by conducting a ceremony that linked him with the Hindu supreme god Shiva and proclaiming himself to be a divine universal ruler. Jayavarman II and his successors ruled the Khmer Empire as god-kings with absolute power over the people.

Source 1: This is a photo of the remains of Prasat Rong Chen (c. 802 CE), the temple in the ancient city of Mahendraparvata where Jayavarman II was crowned as chakravartin.

Source 2: The Temple Ruins of Sdok Kok Thom in Thailand contains an inscription in Sanskrit and ancient Khmer recounting the conquests and spiritual power of previous kings, including Jayavarman II. Sdok Kok Thom was built in the 11th century CE.

Then [Jayavarman II] went to reign at Mahendraparvata … Then a Brahmin named Hisanyadarma, wise in magic science, came from Janapada, for [Jayavarman II] had invited him to conduct a ritual so that [Cambodia] would not be dependent any more on Java and that he would be a sovereign chakravartin.

Source 3: This text is a translation of some of the Sanskrit text on the Sdok Kak Thom inscription (c. 1063–1300 CE), which describes Jayavarman II's ascension to become chakravartin in 802 CE.

The first capital cities

Jayavarman II initially ruled from the city of Mahendraparvata in the north-east of the Khmer Empire. Sometime before his death in 835 CE, Jayavarman II moved south to establish a new capital city, Hariharalaya, north of the Great Lake. Hariharalaya is named after the god Harihara, who is a combination of the Hindu gods Vishnu and Shiva.

Jayavarman II was succeeded by his son, Jayavarman III, and then by his nephew, Indravarman I, who were responsible for completing the royal temple mountain known as the Bakong at Hariharalaya.

Learning ladder H10.3

Background and origins

1. Identify the king who founded the Khmer Empire.
2. Describe the kingdom of Chenla before Jayavarman II's reign.
3. Explain how Jayavarman II united the small rival Khmer states.
4. Source 1: Using this source and your knowledge, explain why Jayavarman had himself declared a chakravartin and a god-king.

Significance

1. Source 2: Identify the historically significant site shown in this source.
2. Describe the significant city established by Jayavarman II.
3. Explain how the Khmer queens played a significant role in the establishment of the Khmer Empire.
4. Sources 1, 2 and 3: Using these sources and your knowledge, explain why Jayavarman II is a historically significant individual.

HOW TO Significance, page 212

How did the Khmer Empire grow?

By the end of the 9th century CE, the Khmer kings had established key engineering principles that would be used by his successors to build a vast empire. The supply of a reliable source of water in barays helped the Khmer Empire grow rice for food and trade.

Building an empire

Jayavarman II was succeeded by his son Jayavarman III (who reigned from 835 to 877 CE). He continued to build temples at the Khmer capital city of Hariharalaya. However, it was the next king, Indravarman I (reigning from 877 to 889 CE), who established key features that would transform the cities and temple complexes of the Khmer Empire.

The barays

The first key feature was the building of massive reservoirs of water known as **barays** (or *tataka* in the Khmer language). The Indratataka was the first large reservoir built by Indravarman I; it was constructed in 877 CE to provide a reliable water supply to Hariharalaya. The Indratataka was 3.8 kilometres long and 800 metres wide, and could hold up to 7.5 million cubic litres of water, which is approximately the volume of 2270 Olympic-sized swimming pools.

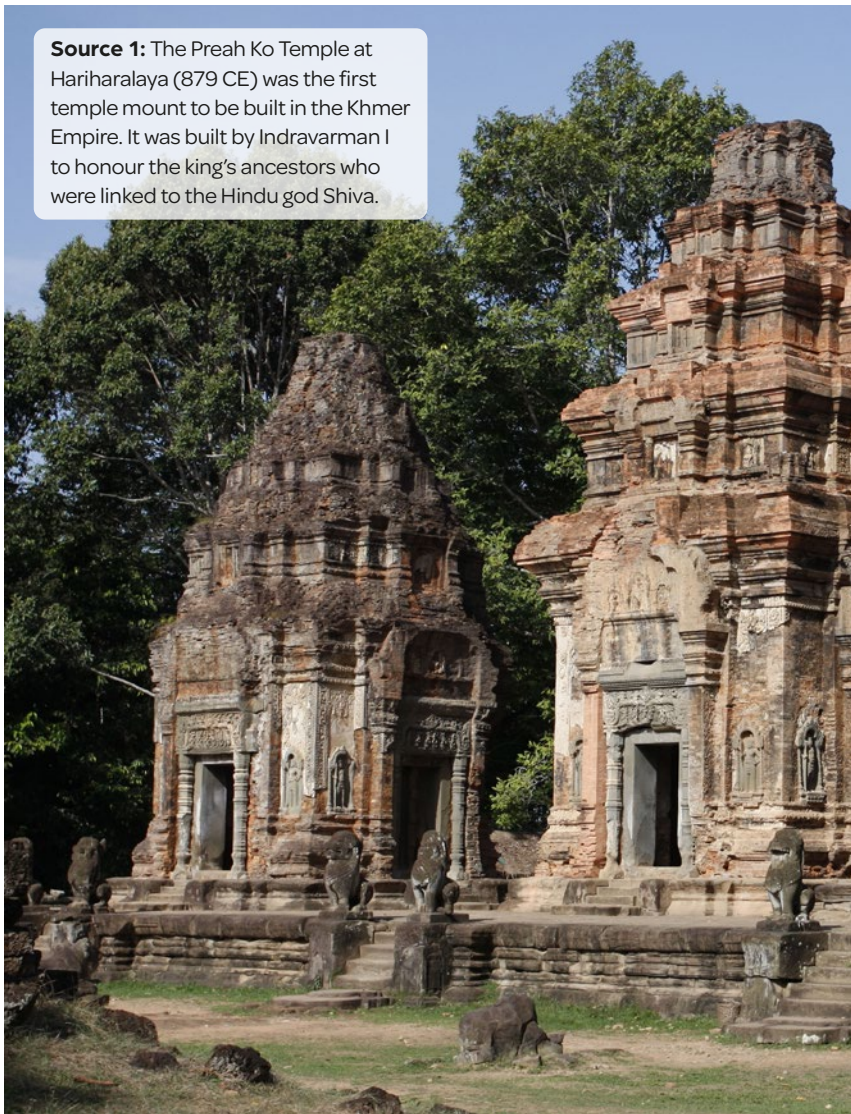
Historians believe that the Khmer kings carried out these irrigation works for several reasons. One was that through providing a water source in the form of the barays, the kings were able to honour both their subjects and the local water divinities. Another was that by building these enormous reservoirs, the kings were demonstrating their power and their closeness to the gods by creating earthly representations of the lakes that surrounded Mount Meru, the home of the Hindu gods.

Temple complexes

The second feature Indravarman I established was the ancestral and state temples within the capital city. The ancestral temple featured statues of Hindu gods that represented the king's ancestors, making it clear that the king was god-like.

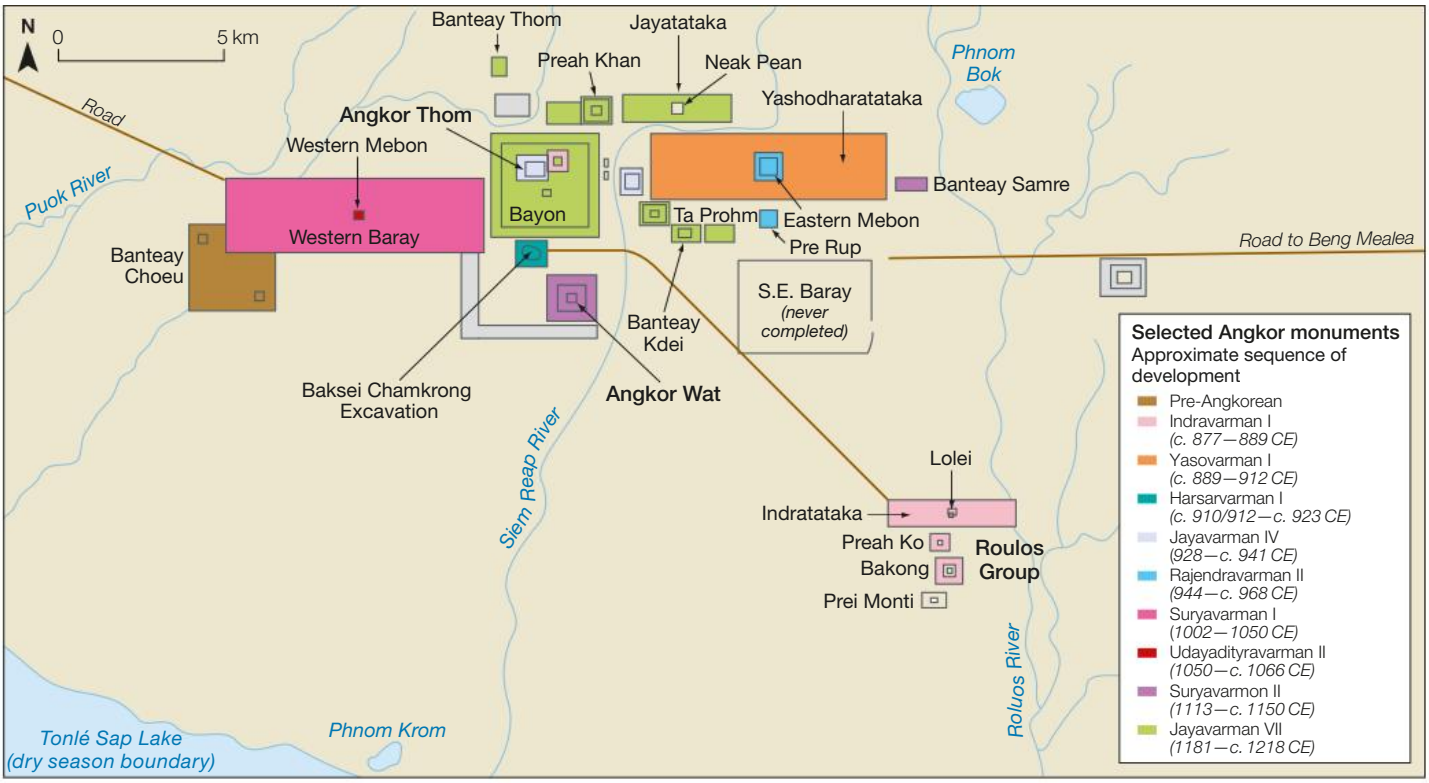
The state temple was an earthly representation of Mount Meru and as such was a 'temple mount'. State temples had five towers representing the peaks of the Himalayan Mountains and were surrounded by a moat.

Temple mounts and barays used large amounts of water and required the construction of canals and dykes. These engineering features displayed the king's power and success as a ruler, because extraordinary resources of labour were required to build them.



Source 1: The Preah Ko Temple at Hariharalaya (879 CE) was the first temple mount to be built in the Khmer Empire. It was built by Indravarman I to honour the king's ancestors who were linked to the Hindu god Shiva.

The city of Angkor/Yaśodharapura in Cambodia



▲ **Source 2:** The development of the city of Angkor/Yaśodharapura over time

Source: Matilda Education Australia

Learning ladder H10.4

Significant people, ideas and events

1. Source 2: Identify two barays (tatakas) in this source.
2. Describe the Indratataka.
3. Explain how the temple complexes made the kings appear god-like and powerful.
4. Explain why the Khmer kings built barays.

Continuity and change

1. Source 1: Identify the site that provides continuity with the king's ancestors.
2. Source 1: Describe how Indravarman I changed the design of temples.
3. Source 2: Explain how this source demonstrates continuity between the time of Indravarman I to Jayavarman VII.
4. Source 1: Explain why Indravarman I changed the design of temples.

HOW TO Continuity and change, page 203

What was the nature of kingship in the Khmer Empire?

Khmer kings ruled as universal god-kings. The king's right to rule was based on his mother's or aunt's family line.

The matrilineal line

At the head of the Khmer state was the king. In the history of Western society, royal succession usually went through the oldest male heir. In classical Cambodia, however, royal succession was matrilineal. Potential kings had to demonstrate that their mother or aunt was 'more royal' than the female ancestors of a rival king.

Kings had temples built to honour their female ancestors to legitimise their claim to the throne. For example, King Indravarman I claimed his right to the throne through his mother Prthivindradevi and aunt Dharanindradevi, who were Khmer queens and descendents of Jayadevi, rather than through his uncle Jayavarman II. He erected six temples at Preah Ko: two to his parents, two to his mother's parents and two to his aunt and her husband (Jayavarman II). The dedication of temples to his mother, his aunt and his mother's parents (rather than his father's parents) emphasised Indravarman I's line of descent from the royal women in his family, justifying his right to rule.

Once a king's right to rule had been established, he was recognised as a chakravatin and as a god-king through the cult of devaraja. As king, a Khmer ruler was expected to build barays, uphold religious values and lead the army into battle.

Source 1: The Bayon was the state temple of King Jayavarman VII. It was built in c. 1200 CE in the Khmer Empire's capital city of Angkor/Yaśodharapura. The temple has 216 smiling faces of the Buddha, which were likely modelled on the face of Jayavarman VII.

The customs of Cambodia

Chinese diplomat Zhou Daguan travelled to the Khmer Empire in 1296 CE and remained there for 11 months. His book *The Customs of Cambodia* is the only written eyewitness account of the Khmer Empire. In addition to its account of everyday life, it provides detailed observations of King Indravarman III's court and of King Indravarman III himself. The book discusses Indravarman III's gold crown, pearl and gold jewellery and his rule of the Khmer Empire.

Twice each day the king holds audience for the affairs of government. There is no fixed agenda. Those officials or commoners who wish to see the sovereign sit on the ground to wait for him. After some time, one hears distant music in the palace, and, outside, conches are blown in welcome to the king. I have heard it said that he uses only a gold palanquin. He does not have to go far. An instant later you see two girls of the palace raise the curtain with their tiny fingers, and the king, holding the sword in his hand, appears at the golden window. Ministers and common people clasp their hands and strike the ground in front of them; when the sound of the conches stops, they can raise their heads again. Immediately thereafter the king sits down. In the place where he sits there is a lion skin, which is a hereditary royal treasure. When business is concluded, the prince returns; the two girls let the curtain fall, and everyone rises. We see from this that, even though this is a barbarous kingdom, these people know what a prince is.

Source 2: This description of King Indravarman III was written by Zhou Daguan in his book *The Customs of Cambodia* (c. 1312 CE).

Source 3: Figure of Dharanindradevi, aunt of Indravarman I, at her temple, Preah Ko, 879 CE

Learning ladder H10.5

Significant people, ideas and events

1. Source 1: Identify the Khmer king depicted in this source.
2. Describe Zhou Daguan's role in documenting Khmer history.
3. Sources 1 and 3: Using the sources and your knowledge, explain the basis of the king's power in the Khmer Empire.
4. Source 3: Using the source and your knowledge, explain why Indravarman I honoured his female relatives.

HOW TO

Perspectives, page 210

Perspectives

1. Source 2: Identify from whose perspective this source is written.
2. Source 1: Describe the perspective of Jayavarman VII shown in this source.
3. Source 2: Explain the perspective of the author of this source.
4. Sources 1 and 2: Compare the perspectives of these sources.
5. Source 2: Evaluate the usefulness of the perspective of this source for a historian studying Khmer kings.

How was Khmer society organised?

The Khmer social structure was based on the Hindu caste system, but was modified to better suit their society.

Elites

The Khmer elite class combined the Hindu Brahman and Kshatriya castes. It included priests, scholars and royal bureaucrats (Brahman) as well as military leaders (Kshatriya).

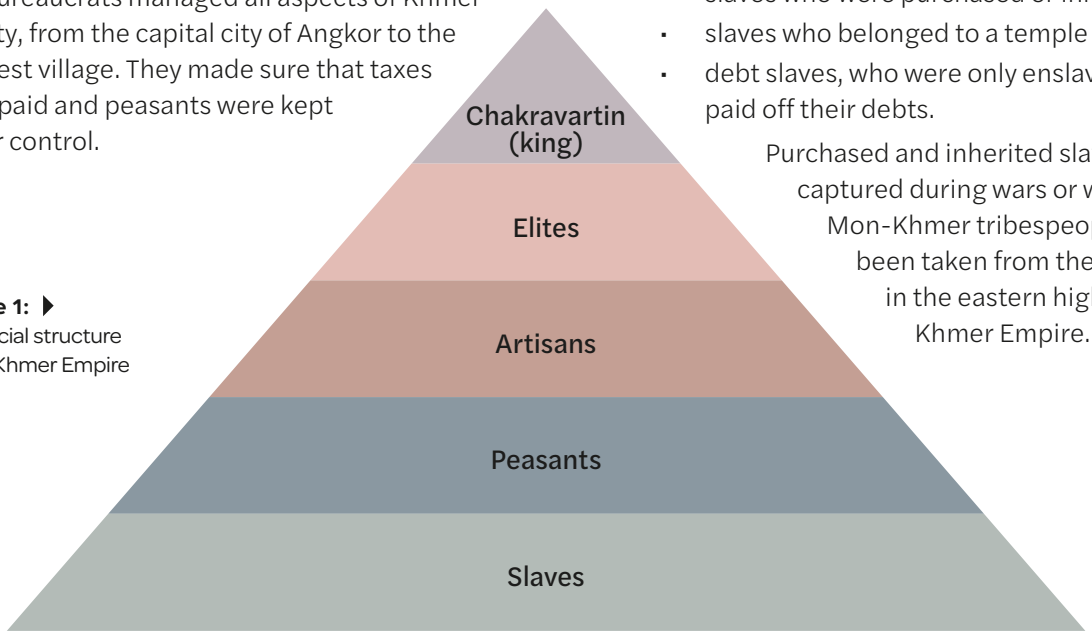
Bureaucrats managed all aspects of Khmer society, from the capital city of Angkor to the smallest village. They made sure that taxes were paid and peasants were kept under control.

Slaves

A large number of people in the Khmer Empire were **slaves**. Unlike in the Hindu caste system, slaves were not outcasts in Khmer society. There were many different types of slaves in the Khmer Empire, including:

- slaves who were purchased or inherited
- slaves who belonged to a temple complex
- debt slaves, who were only enslaved until they paid off their debts.

Purchased and inherited slaves were people captured during wars or were indigenous Mon-Khmer tribespeople who had been taken from their homelands in the eastern highlands of the Khmer Empire.



Source 1: The social structure of the Khmer Empire

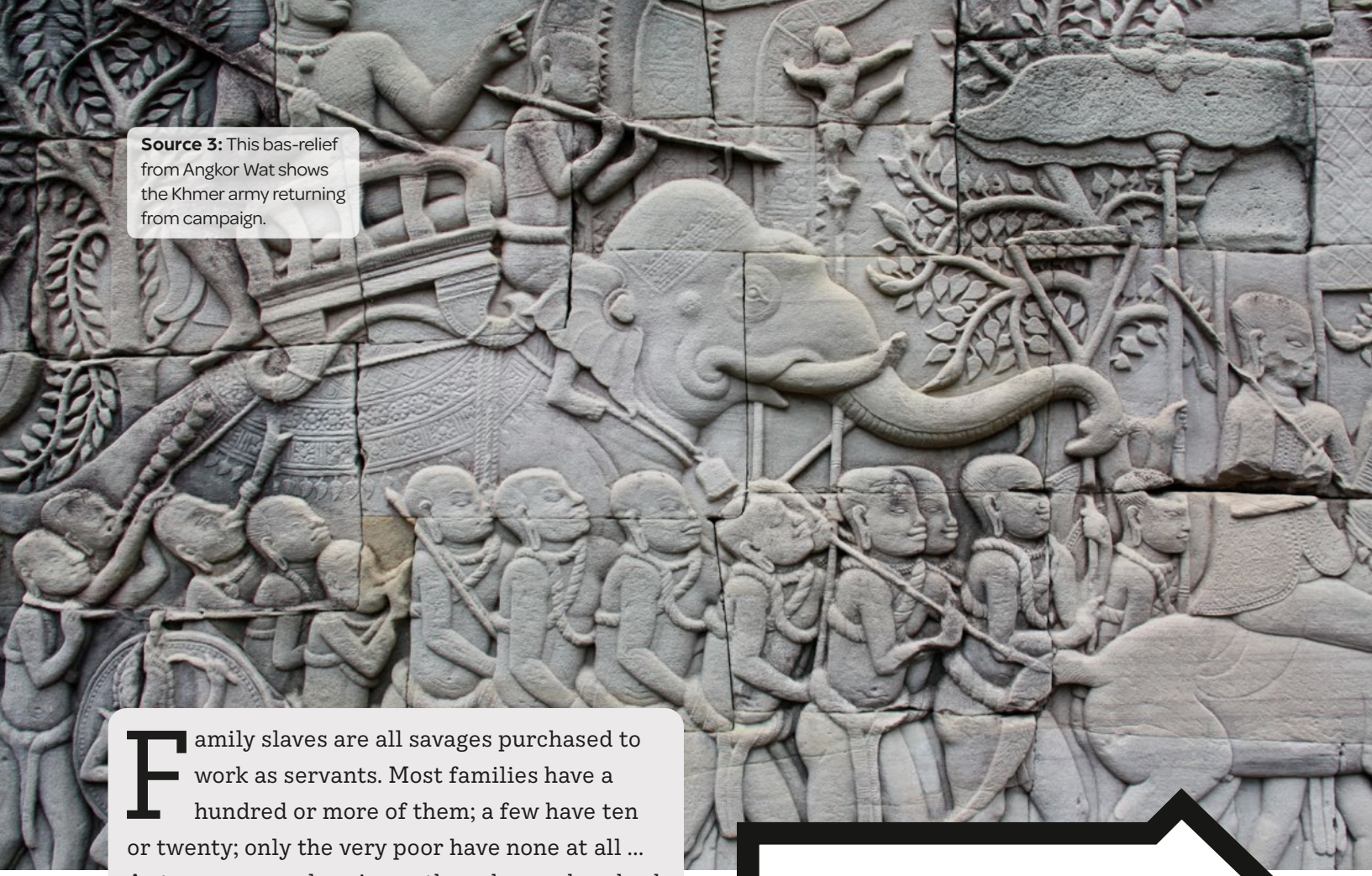
Artisans

The Hindu caste system did not have a separate class for **artisans**, but in Khmer society artisans were highly prized. Artisans included architects, sculptors, goldsmiths, potters, blacksmiths, weavers, miners and merchants. The king's wealth, prestige and power depended on artisans' skill and expertise.

Peasants

Like the Hindu caste system, there was a large peasant (or Shudra) class in Khmer society. Most people in the Khmer Empire were peasants. While some owned land, the majority worked on the estates of the elites or on temple estates. Peasants were also required to provide **corvée labour**, meaning they had to work on public projects such as roads, irrigation and temples.

Source 2: This drawing shows a sculptor creating a **bas-relief**, which is a stone sculpture that projects slightly from a flat surface. Sculptors were part of the artisan social class in the Khmer Empire.



Source 3: This bas-relief from Angkor Wat shows the Khmer army returning from campaign.

Family slaves are all savages purchased to work as servants. Most families have a hundred or more of them; a few have ten or twenty; only the very poor have none at all ... A strong young slave is worth perhaps a hundred pieces of cloth; a weak old one can only fetch thirty or forty ... If they do something wrong they are beaten and take their caning with their heads bowed. Sometimes slaves run away. Those that are caught and taken back must carry a dark blue tattoo on their face ...

Source 4: Zhou Daguan (c. 1312 CE), *The Customs of Cambodia*

Learning ladder H10.6

Significant people, ideas and events

1. Source 1: Identify the five social groups in the diagram.
2. Describe the role of peasants in the Khmer Empire.
3. Explain the differences between the Hindu caste system and the Khmer social system.
4. Explain why artisans were highly prized in the Khmer Empire.
5. Assess the advantages of including military leaders in the elite class.

Sources

1. Source 4: Identify the origin of the source.
2. Source 3: Describe the image in the source.
3. Source 4: Explain how slaves were treated by their masters.
4. Sources 3 and 4: Using the sources and your knowledge, explain why slavery was widespread in the Khmer Empire.

HOW TO Sources, page 201

What role did women play in the Khmer Empire?

Kings and queens could rule independently in the Chenla kingdoms, but after the establishment of the Khmer Empire only kings ruled. However, Khmer queens still wielded substantial spiritual power. In addition, ordinary women retained the same rights as men in many respects.

Elite women and power

Queens and princesses were seen as representatives of their family's land. A king or prince had to marry a queen in order to gain control of land. Even in the non-elite classes, the association between women and land was strong. Families who wished to show their loyalty to the king would often send their daughter to the king's household. The daughter represented the family's land. She served in the king's court as a handmaiden, diplomat or administrator. In return, her family members were given special privileges for pledging their land to the king.

▲ **Source 1:** Women at the royal court, bas-relief, Bayon Temple, Angkor Thom, c. 1200 CE

▲ **Source 2:** Queen Jayarajadevi, Bayon Temple, Angkor Thom, c. 1200 CE

Rights and freedoms

Unlike other regions of the medieval world, Khmer women kept many of the rights they had enjoyed during the time of the Chenla kingdom. For example, Khmer women kept control of their property. Records indicate that elite and peasant women owned land in their own right and made donations of land, goods and slaves to religious communities and family members. Women were able to choose who would inherit their property and usually bequeathed it to their daughters.

Ordinary women enjoyed similar rights to men in Khmer society. Under the law, men and women were treated the same, with punishments for men and women usually consisting of fines or, in serious cases, the amputation of hands, feet or the nose.

Source 3: Women merchants at the marketplace, bas-relief at Bayon Temple, Angkor Thom, c. 1200 CE

Men and women were both eligible to serve as temple officials. While men were given priority to conduct temple ceremonies for their families, if there were no male heirs, women were allowed to officiate.

Education

Many women in the elite class received an education, usually in the important aspects of religion. Women who were sent by their families to serve in the royal palace were also educated.

Sometimes other women received an education. During the reign of Jayavarman VII (1181–1218 CE), his queen, Jayarajadevi, set up a school to teach Buddhism to girls living in poverty, thereby changing their life opportunities. When Jayarajadevi died, her sister Indradevi married Jayavarman VII and was appointed head of Nagendratunge, Tilakottare and Narendraśrama – three schools that taught Buddhism and literature to women.

Merchants

Women merchants also seem to have been especially prominent. Zhou Daguan related that the women of Cambodia were the merchants, adding that 'for this reason a Chinese man, arriving in the country, loses no time in getting himself a [Khmer] wife, for he will find her commercial instincts a great asset'.

Learning ladder H10.7

Significant people, ideas and events

1. Source 2: Identify the person shown in this image.
2. Source 3: Describe the role of the women in this scene.
3. Explain how the rights of women were similar to those of men in the Khmer Empire.
4. Explain why queens were able to wield power in the Khmer Empire.
5. Evaluate the power of women in the Khmer Empire.

Continuity and change

1. Identify the change in leadership between the time of the Chenla kingdom and the Khmer Empire.
2. Describe the continuity of women's property rights.
3. Source 2: Explain how Queen Jayarajadevi and her sister changed the lives of women in their community.
4. Explain why the rights of women during the period of the Khmer Empire demonstrates the concept of continuity.
5. Evaluate the extent of change in women's lives between the time of the Chenla kingdom and the Khmer Empire.

HOW TO Continuity and change, page 203

What were the key economic features of the Khmer Empire?

The Khmer Empire amassed great wealth by growing huge quantities of rice and by having access to valuable raw materials. At the height of the Khmer Empire in the 13th century CE, the Chinese referred to it as 'Cambodia the rich'.

The importance of rice

Money or coinage was not used in the Khmer Empire; instead, the Khmers used systems of trade and barter. The Khmers excelled at producing an abundance of rice and this formed the basis of their economic system.

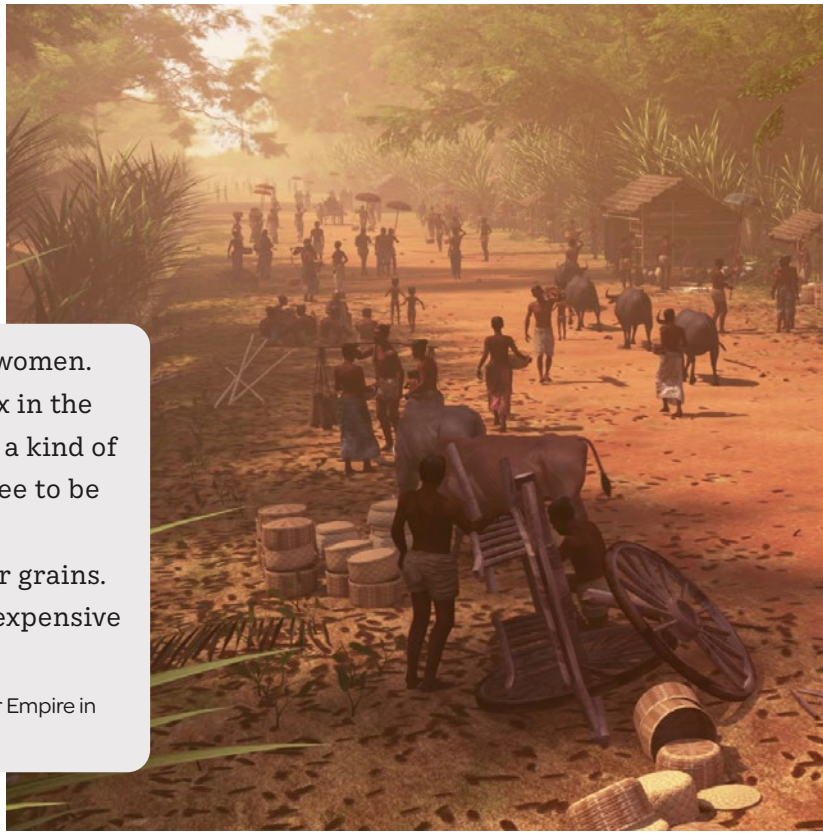
Historians estimate that approximately 80 per cent of the population was involved in growing rice. Zhou Daguan believed that three or four crops occurred per year in the medieval period; in the region today, there are only one or two crops per year.

What did the Khmer Empire trade?

Trading products other than rice was also important to the Khmer economy. International trade was dominated by China, but evidence exists of trade with neighbouring Champa, the Srivijaya Empire (western Indonesia) and Java (eastern Indonesia), as well as India, which had long-held trade relations with the region.

The Khmer Empire's main trade goods were raw materials, collected by hunters and foragers in the Khmer forests. Forest products traded from the Khmer Empire included blue kingfisher feathers, elephant tusks, rhinoceros horns, beeswax, rosewood and cardamom. These goods were highly valued and were in great demand. For example, Chinese nobles used blue kingfisher feathers in their ceremonial headdresses. In addition, these goods required no investment in industry and manufacture. Zhou Daguan reported that the hunters of elephants and rhinoceros were the Indigenous peoples of the Khmer Empire, many of whom were slaves. Hence, the Khmer Empire sourced trade goods for little cost and sold these goods for high prices.

Another important trade product was Cambodian beeswax. Beeswax came from honeycombs gathered from the forest, with each one weighing up to 25 kilograms. Beeswax was highly valued in China,

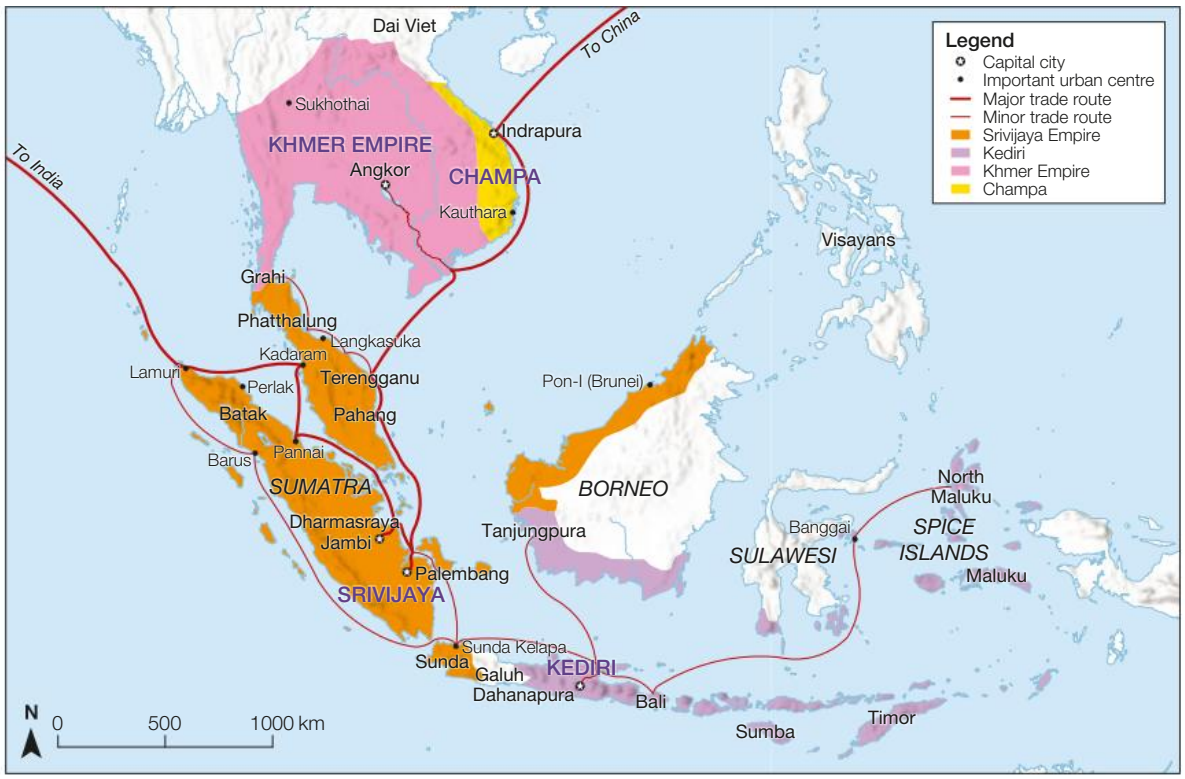


The local people who know how to trade are all women. There is a market every day from around six in the morning until midday. There are no stalls, only a kind of mat laid out on the ground. I gather there is a rental fee to be paid to officials.

Goods of small value are paid for with rice or other grains. Higher value goods are paid for with cloth. The most expensive goods are paid for with gold and silver.

Source 1: This text was written by Zhou Daguan after he visited the Khmer Empire in 1296–1297 CE. [Zhou Daguan (c. 1312 CE), *The Customs of Cambodia*]

Medieval South-East Asian trade routes



Source: Matilda Education Australia

Source 2: Map showing the main sea trade routes in South-East Asia during the medieval period

where it was used for medicine, candles, cosmetics and as a type of glue. Chinese ships, known as junks, could carry 2000 to 3000 honeycombs. In return, the Khmers bought gold, silver and sandalwood, and Chinese-manufactured products such as silks, pewter, writing paper, iron pots, copper dishes and umbrellas.

Source 3: This image depicts an artist's impression of a busy thoroughfare (with goods being taken to and from the markets) into the city of Angkor/Yaśodharapura. [Tom Chandler, Mike Yeates and Chandara Ung, Monash University (2021 CE)]

Learning ladder H10.8

Significant people, ideas and events

1. Source 2: Identify the main trading partners of the Khmer Empire.
2. Describe the Khmer Empire's key exports.
3. Explain how elephant and rhinoceros tusks were harvested in the Khmer Empire.
4. Explain why rice was important in the Khmer economy.

Causes and consequences

1. Identify a cause for the use of rice as currency in the Khmer Empire.
2. Describe the effect of Chinese trade on the Khmer Empire.
3. Explain how the Khmer Empire's abundant forest resources affected its economy.
4. Explain why the Khmer Empire was wealthy.
5. Evaluate the short- and long-term consequences of the Khmer Empire's economic system.

HOW TO

Causes and consequences, page 206

What were the key beliefs of the Khmer people?

The main religions of the Khmer people – Hinduism and Buddhism – originated in India.

Hinduism

Hinduism arrived in the Khmer Chenla kingdom during the 6th century. It included a range of Indian spiritual traditions that centred around the concept of ***dharma***. Dharma is the idea that if people follow rituals and live in the right way, the order of the world will be maintained. Important beliefs in Hinduism include the cycle of birth and rebirth (known as *samsara*) and *karma* (the consequences for one's actions and intentions).

There are numerous Hindu gods and goddesses who control various aspects of people's lives. During the Khmer Empire, the most important gods were Vishnu (the god of creation and protection) and Shiva (the god of destruction).

Buddhism

Buddhism was present in the early days of the Khmer Empire, but was a minority religion. Buddhism slowly became more influential in the 10th century CE.

In 1181 CE, King Jayavarman VII ascended the throne. Encouraged by his queens Jayarajadevi and Indradevi, Jayavarman VII established Buddhism as the official Khmer religion. Many Hindu temples, such as Angkor Wat (built 1150 CE), were gradually changed to Buddhist temples by the end of the 13th century. Jayavarman VII also built the Bayon temple as a monument to Buddhism.

Source 1: *Apsaras*, bas-relief, Angkor Wat temple, 1150 CE. Apsaras were water-nymph or angel-like beings in Hindu and Buddhist culture that could change shape at will and move between the sacred and everyday worlds.

Source 2: Banteay Srei, a Hindu temple in Angkor, 967 CE. Banteay Srei is surrounded by a moat and has three central shrines: two dedicated to Shiva and one to Vishnu. The temple also features numerous apsaras, *devatas* (guardian spirits), *gandharvas* (musician or dancer spirits), and Hindu gods and goddesses.

After a brief return to Hinduism under the reign of Jayavarman VIII (1254–1295 CE), Buddhism was reinstated as the official religion by King Indravarman III (1295–1308 CE). Buddhism was readily adopted by the Khmer people because it was more inclusive. In contrast, Hinduism was more closely associated with the power of the royal family.

Temples

Temples were an important way of distributing power and protection in the Khmer Empire.

When a king established a temple, all the people in its surrounding area came under the king's protection. In return for the king's protection, the people supplied labour, slaves and agricultural surplus to the temple. Temples were often decorated with carvings that emphasised the greatness of the king.

Since temples did not have to pay tax, they became very wealthy. The records from one temple show that it was rich enough to support 18 high priests, 2740 administrators, 2202 assistants and 615 dancers. In addition, it held 500 kilograms of gold dishes, 500 kilograms of silver dishes, 35 diamonds, 40 260 pearls, 4540 precious stones, 523 parasols and 512 sets of silk bedding.

Learning ladder H10.9

Significant people, ideas and events

1. **a** Identify the two main religions of the Khmer Empire.
   b Sources 1 and 2: Identify the Hindu and Buddhist concepts shown in these sources.
2. Describe the main Hindu gods of the Khmer Empire.
3. Explain how temples functioned during the Khmer Empire.
4. Explain why Buddhism became prominent during the Khmer Empire.

Chronology

1. Identify when Hinduism first arrived in the Chenla kingdom.
2. Put the following dates in chronological order:
   - 967 CE: Banteay Srei temple was constructed
   - 1295 CE: Indravarman III changes the Khmer religion to Buddhism
   - c. 500 CE: Hinduism arrives in the Chenla kingdom via Indian trade routes
   - c. 1290 CE: Angkor Wat becomes a Buddhist temple
   - c. 1200 CE: The Bayon Temple was constructed
   - 1254 CE: Jayavarman VIII changes the Khmer religion to Hinduism
   - 1181 CE: Jayavarman VII changes the Khmer religion to Buddhism.
3. Create a timeline using the events in Question 2.
4. Explain how your timeline demonstrates the concept of continuity and change.

HOW TO

Chronology, page 198

Site study

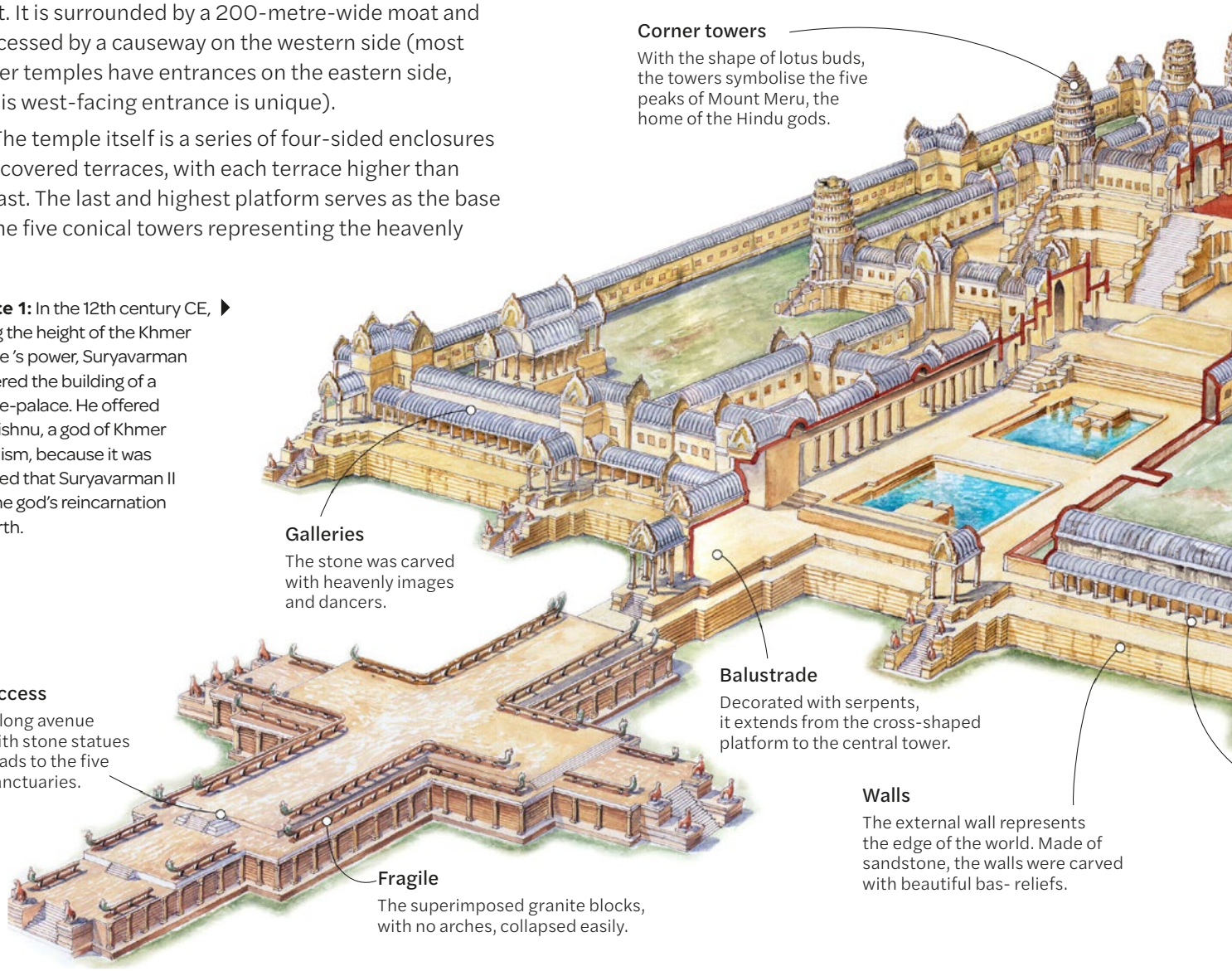
What was the purpose of Angkor Wat?

Of all the temples built during the Khmer Empire, Angkor Wat is in a class of its own.

World's largest religious structure

During Suryavarman II's reign (1113–1150 CE) the Khmers began to construct one of the world's most remarkable buildings: Angkor Wat, the largest religious structure ever built. It covers an area of 2 square kilometres and stands 65 metres high at its highest point. It is surrounded by a 200-metre-wide moat and is accessed by a causeway on the western side (most Khmer temples have entrances on the eastern side, so this west-facing entrance is unique).

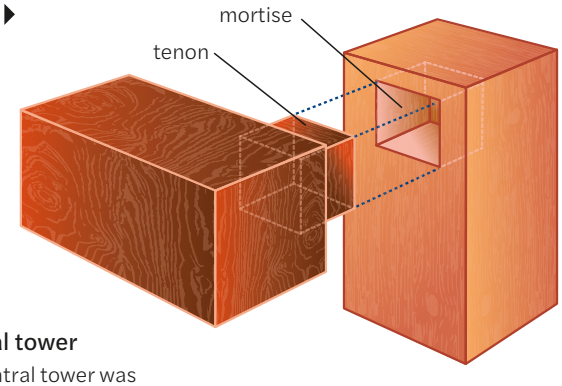
The temple itself is a series of four-sided enclosures with covered terraces, with each terrace higher than the last. The last and highest platform serves as the base for the five conical towers representing the heavenly peaks of Mount Meru. Originally, the shrine in the central tower had a statue of Vishnu, but when the Khmer Empire converted to Theravada Buddhism, the shrine was walled in and the new walls featured images of standing Buddhas.

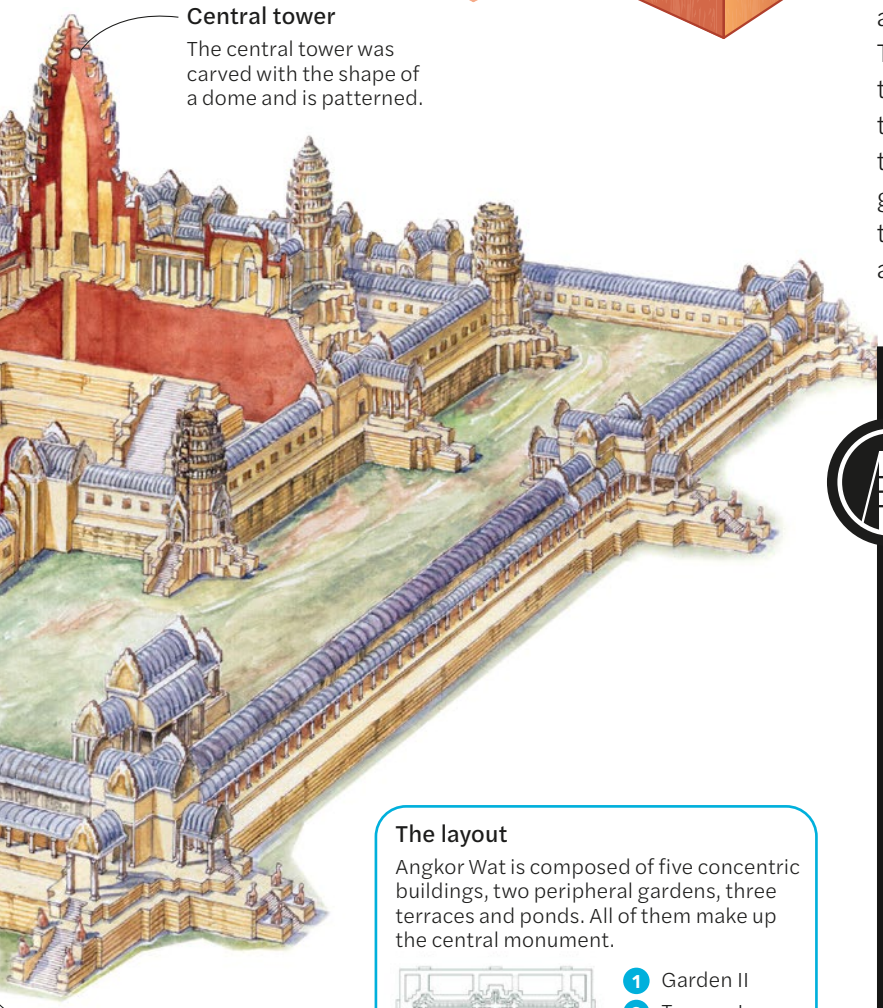


Source 1: In the 12th century CE, during the height of the Khmer Empire 's power, Suryavarman II ordered the building of a temple-palace. He offered it to Vishnu, a god of Khmer Hinduism, because it was believed that Suryavarman II was the god's reincarnation on Earth.

Like all religious monuments from the Khmer period, the temple is built of stone. The huge sandstone blocks are held together by mortise and tenon joints and also by interlocking joints, known as dovetailing. Thousands of builders and stone masons would have been needed to build the temple.

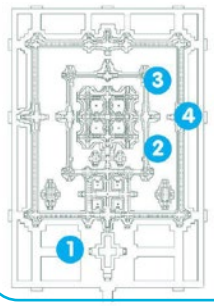
Source 2: ▶ A mortise and tenon joint





The layout

Angkor Wat is composed of five concentric buildings, two peripheral gardens, three terraces and ponds. All of them make up the central monument.



1. Garden II
2. Terrace I
3. Terrace II
4. Terrace III

The legacy of Angkor Wat

Angkor Wat is a valuable site for historians and archaeologists. Almost all the surfaces of the temple are covered in carvings. Bas-reliefs on the wall of the terraces depict scenes from Indian mythology and scenes of King Suryavarman II's court and military deeds.

Each bas-relief is approximately 2 metres high; together they add up to about 700 metres, which is the longest continuous bas-relief in the world. Bronze sheets may once have decorated the walls too. These bas-reliefs provide historians with a range of useful information, showing the clothing, weapons, army units, beliefs and practices of the Khmer period.

Angkor Wat was completed 800 years ago. Even though gigantic trees now grow all over the temple, its grandeur is still plain to see. What are no longer visible are the colours that once featured on these monuments. Thanks to the work of archaeologists, we know that the towers of Angkor Wat were covered in gold. It is also likely that many of the stone and bronze statues scattered throughout the Angkor Wat complex were covered in gold. Archaeologists have been able to determine how the temples were constructed, what resources were available at the time and what technologies were used.

Learning ladder H10.10

Impact and legacies

1. Identify the name of the king who built Angkor Wat.
2. Describe the layout of the Angkor Wat temple complex.
3. Source 2: Explain how the stones were held together.
4. Explain why the Angkor Wat bas-reliefs are useful for historians.

Significance

1. Source 1: Identify the main features of Angkor Wat.
2. Source 1: Describe the significance of the corner towers.
3. Explain how Angkor Wat demonstrates the power of King Suryavarman II.
4. Source 1: Using the source and your knowledge, explain why Angkor Wat is a historically significant site.

HOW TO

Significance, page 212

How did the Khmer Empire defend itself?

Hundreds of bas-relief carvings across Angkor/Yaśodharapura record great battles won by the Khmer army and navy. The Khmer Empire was a war-like society that often clashed with the neighbouring kingdom of Champa.

War and warfare

While relations with China were good during the Khmer Empire, Khmer armies were often engaged in military campaigns against other neighbours, particularly the Chams and Viets. Through conquest, the Khmers subdued and ruled much of mainland South-East Asia for 500 years.

The Khmer armies are well documented on the bas-reliefs on the temples of the empire. Historians have studied these and have learned many of the aspects of Khmer warcraft. For the most part, the Khmers were very successful in warfare.

Military organisation

It is likely that the Khmers were aware of the important ancient Indian texts on warfare, such as the *Arthashastra*, and the models suggested in the Indian epics the 'Ramayana' and the 'Mahabharata'.

The Indian military was based on four corps: infantry, cavalry, chariots and elephants. However, because of the conditions in Cambodia not all of these corps were practical. Cavalry and chariots were used by the Khmers in the early days of the empire but evidence suggests their use was later abandoned. This was probably because Cambodia is waterlogged for at least half of the year and chariots could become bogged. Unlike horses, elephants were available locally, and for a time they were used by the Khmers as a type of war machine with arrow- and spear-firing mechanisms strapped to their backs.

The backbone of the Khmer armies was its infantry. Trained from a young age, the infantry could be depended on to march long distances and win battles, and their ranks were enlarged from time to time with mercenaries from neighbouring states.

Another area of the military that differed from Indian models was the Khmer navy. We know from temple carvings that the Khmers constructed large open boats that were propelled by oarsmen as they did battle on Tonlé Sap Lake. These boats were probably about 20 metres long and were likely constructed from huge rainforest trees that had been hollowed out. Since no actual boats survive, these lengths and materials have been estimated from the bas-relief carvings.

Khmer Empire and surrounding states

Source: Matilda Education Australia

▲ **Source 1:** The Khmer Empire, c. 900 CE

Source 2: This bas-relief carving depicts a battle scene with an elephant at the Banyon, the state temple of Jayavarman VII in the city of Angkor/Yaśodharapura.

At the raised prow and stern (front and back) the boats had carvings of mythical beings such as Garudas, Apsaras, Nagas, Kalas and Makaras. These carvings were probably used to scare enemies and as morale boosters. Some boats, probably those of the king or admiral, also had elephant tusks at the front that may have been used to ram enemy ships.

▼ **Source 3:** A naval battle between the Khmers and the Chams, Bayon Temple, Angkor Thom, c. 1200 CE

Learning ladder H10.11

Significant people, ideas and events

1. Identify the Khmers' main enemies.
2. What were the main corps of the Khmer military?
3. Source 2: Using this source and your knowledge, explain how the Khmers used elephants in their armies.
4. Sources 2 and 3: Explain how historians know about the structure of the Khmer army and the nature of Khmer war ships.

Causes and consequences

1. Identify the consequences of the Khmers' warfare on the Chams and Viets.
2. Outline the reason why the Khmers changed the organisation of their military.
3. Source 3: Explain why the Khmers carved mythical beings onto the prow and stern of their war ships.
4. Explain the causes of the Khmers' success in warfare.

HOW TO Causes and consequences, page 206

Why did the Khmer Empire decline?

In the 15th century, the Khmers abandoned their capital at Angkor and moved to Phnom Penh in the south. Modern-day historians point to several reasons for this change. These include the growth of the empire's neighbours, changes in the environment, and economic decline.

The lost city

In 1859 CE, the French explorer Henri Mouhot was led by Cambodian guides to the temples in the city of Angkor/Yaśodharapura. Mouhot's writings popularised the view among Europeans that he had found a lost city abandoned long ago by an ancient society. As it turns out, none of these notions was correct. More accurately, the empire slowly lost influence and importance over an extended period of time.

Rise of the Tai

For much of the history of the Khmer Empire, the Chams to the east were the main threat. However, after the ultimate defeat of the Chams by Jayavarman VII in 1181 CE, a new enemy, the Tai kingdom of Ayutthaya (in a region of present-day Thailand not under Khmer rule), began conducting raids on Khmer cities. The Ayutthaya kingdom repeatedly attacked the Khmer capital during the 14th and 15th centuries. In 1394 CE, they had even managed to briefly place an Ayutthayan prince on the Khmer throne, but the Khmers assassinated him and recaptured Angkor.

In 1431 CE, however, the Ayutthaya kingdom attacked Angkor again. This time they wreaked such devastation on the city that more than half the population was killed. The Khmers decided to abandon the city and move their capital south to Phnom Penh.

Did the Khmer Empire collapse in 1431 CE?

Certainly after 1431 CE the Khmer Empire was no longer the dominant regional power it had been, but neither did it suddenly collapse. Khmer kings came back to the region to rule on several occasions in the 16th century CE. In addition, the region around the temple was still inhabited in the 18th century CE, indicating that Angkor/Yaśodharapura was not quite the 'lost city' that it was later believed to be.

Climate change

The Khmer Empire was established in one of the region's food bowls, which was abundant in rice and fish. This was probably assisted by a stable climate of above-average rainfall between the 9th and 13th centuries CE, during what is known as the medieval warm period.

Immediately after this period, the environment was affected by what is known as the medieval climate anomaly, which was a much drier period with less rainfall. This may have altered conditions so that rice was not as easy to grow and fish were not as plentiful. This drier period was responsible for a succession of droughts that may have damaged

Source 1: The fall of Angkor/ Yaśodharapura in 1431 CE was a three-year siege by the kingdom of Ayutthaya. The city was sacked for its wealth. The Khmers moved their capital south to Phnom Penh in 1434 CE.

Source 2: Ta Prohm is a temple located 1 kilometre east of Angkor Thom. It was built in the late 12th century CE by King Jayavarman VII as a Buddhist monastery. After it was abandoned, the jungle reclaimed the area.

the system of reservoirs and canals that made up the Khmer Empire's irrigation system.

Historians and archaeologists have suggested that the large barays became clogged with silt, as did many of the canals that linked the barays to the rice fields.

Changes in trade

The current capital of Cambodia, Phnom Penh, has been occupied since before the time of the Khmer Empire. It is located in south Cambodia at the top of the Mekong Delta, where the Tonlé Sap River branches off the Mekong River, which splits again into the Bassac River. In the mid-16th century CE, Phnom Penh was a thriving port city that took advantage of the increasing maritime trade in South-East Asia. This shift in trading patterns meant that people preferred the trading opportunities available in the south of Cambodia rather than the Angkor region in the north.

Resource management

Australian archaeologist Roland Fletcher has noted that by the 1200s CE, timber was scarce in the Khmer Empire. Timber was used to construct houses and the scaffolding for large building projects. With the decline of forest resources, more people were encouraged to move south to find work, resources and farming opportunities. Trade goods sourced from the forests, such as resins, sandalwood and oils, became more scarce as the forests shrunk, resulting in declining income from trade.

Legacies of the Khmer Empire

Much of what we know about the Khmer Empire has been reconstructed by archaeologists and historians over the last 150 years.

Scientists have learned a great deal from archaeologists' investigations of the Khmer Empire's water-management system. Today, the genius of this scheme, and the lessons to be learned from the role of water management in the empire's decline, are being applied in water-management schemes across South-East Asia. Angkor/Yaśodharapura is also of interest in the modern world due to the effect of climate change on the decline of its society.

Today, after decades of war, Cambodia is at peace with itself and its neighbours. The temples of the Angkor region attract millions of visitors every year and the region is recognised as a world heritage site.

Learning ladder H10.12

Impact and legacies

1. Source 1: Identify the group who defeated the Khmers in 1431 CE.
2. Source 1: Describe the fall of Angkor in 1431 CE.
3. Explain how changing patterns of trade affected the Khmer Empire.
4. Explain why environmental issues contributed to the decline of the Khmer Empire.
5. Evaluate the legacy of the Khmer Empire.

Interpretations

1. Identify the debate over the reasons for the decline of the Khmer Empire.
2. Describe the evidence that shows that the empire itself did not entirely collapse after the sack of Angkor in 1431 CE.
3. Explain Roland Fletcher's argument about the decline of the Khmer Empire.
4. Explain why there is so much debate over the cause of the Khmer Empire's decline.
5. Evaluate the evidence presented here. What is the most plausible reason for the decline of the Khmer Empire?

HOW TO Interpretations, page 214

How do I conduct a good inquiry?

Now that you've finished the chapter, it's time to conduct your own historical inquiry on the Angkor/Khmer Empire. Throughout the chapter you have developed knowledge and understanding of the Angkor/Khmer Empire. Background knowledge is important because it helps you make connections to new information, ask better questions and consider different perspectives. As you progressed through the chapter, you have gathered information through classroom discussion, highlighting, note taking and answering questions. Now you are ready to start planning your own historical inquiry!

A historical inquiry gives you the opportunity to be an active historian: forming questions, interrogating sources and communicating insights about the past on a topic of your choice. The chapter has covered the origins and legacies of the Angkor/Khmer Empire in addition to significant people, events, ideas and beliefs. What would you like to know more about?

- The construction of the barays, H10.4, H10.7
- Angkor Thom or Banteay Srei temples, H10.9
- Angkor Wat bas-reliefs, H10.10
- Khmer battles with the Chams, H10.11
- The rise of the Ayutthaya kingdom, H10.12

Return to the relevant sections in the chapter and read them again.

Next, complete the 'see, think, wonder' process to help develop ideas you might cover in your inquiry.

Jot down your answers to these questions. Your answers will help you to formulate your own research ideas. Once you have worked through this process, you are ready to start the historical inquiry.

Refer to pages 218–25 of the How-to chapter for a step-by-step guide to this process.

See

What do you see?
Who is involved?
What are the key features?
When and where was this happening?

Think

What do you think about that?
How do you think people were affected at the time?
How is this similar to or different from today?
How do we know?

Wonder

What did different groups think about this?
Why is this important to know?
What does it make you wonder?

Level up!

Throughout the chapter, you have been working to move up the Learning ladder. An inquiry investigation is a great opportunity to expand your knowledge and attempt new skills.
When planning your inquiry, consider how the experiences and perspectives of individuals and groups shaped societies, beliefs and events in the past. Think about how the past has had an impact on the present. Use the How-to chapter to support your planning and research.

History How-to

H11

Historians use particular skills to analyse and understand societies of the past. Historical skills are based on interpreting sources of evidence from the past, promoting inquiry and encouraging investigation.

How to develop history skills

The skills described in this How-to are important skills that **historians** use to understand the past. There are five levels of difficulty for each skill. Each skill is described and a model provided that demonstrates how to master the skill at each level. Learning skills at the lowest level of difficulty will help you to master the skills at the highest level.

Chronology

Chronology is the arrangement of events into the order in which they happened. Historians put events in order, from the oldest or earliest event to the most recent event.

Here are some key terms relating to chronology:

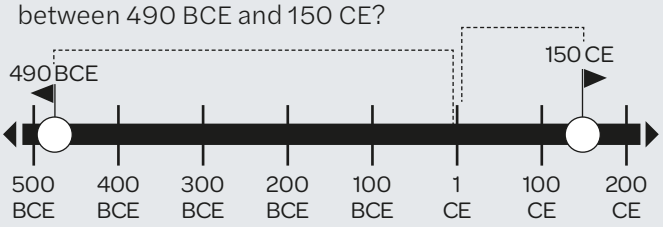
- **ancient:** relating to the time between c. 3000 BCE and c. 500 CE
- **Anno Domini (AD):** a Latin term meaning 'in the year of our Lord'; modern historians do not use this term but many other people do
- **Before Christ (BC):** the years before the birth of Jesus Christ; modern historians do not use this term but many other people do
- **BCE (Before Common Era):** the years before the common era (BC)
- **CE (Common Era):** the years after the common era (AD)
- **century:** 100 years
- **decade:** 10 years
- **era:** a distinct period with significant historical characteristics
- **medieval:** the 5th to 15th centuries CE
- **millennium:** 1000 years
- **modern:** the years from c. 1789 CE to the present
- **prehistoric:** the time before written records.

1 I can read a timeline

Timelines list key events and the years those events happened in the order they occurred. A one-off event is shown as a vertical line. A period of time is shown as a horizontal line, with the ends of the line showing the start and end of the period.

When answering questions about chronology, include part of the question in your answer. For example, if a question asks, 'When was the city of Rome founded?' you should answer with, 'The city of Rome was founded in 753 BCE', rather than just '753 BCE'.

For example, how many years were there between 490 BCE and 150 CE?

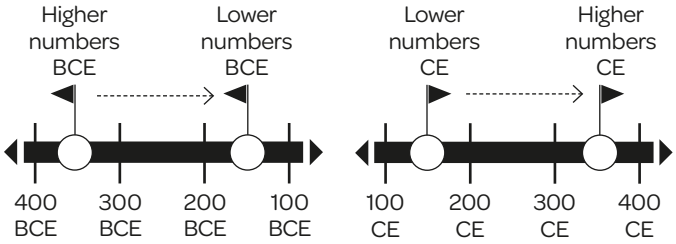


The difference in years between 490 BCE and 150 CE is:

490 + 150 = 640 years

2 I can place events on a timeline chronologically

Placing events on a timeline involves putting them in chronological order, from the earliest event to the most recent event. The order goes like this:



Source 1: The Arch of Titus was constructed in 81 CE, during the Roman Empire.

Source 2: This source is an artist's impression of a battle at Syracuse. [*Peloponnesian War: The Naval Battle in the Harbor of Syracuse* (19th century CE), wood engraving, Granger Historical Picture Archive]

It is similar to positive and negative numbers used in mathematics. A period of time that lasts 10 years in BCE starts with a higher number and goes *down*. A period of time that lasts 10 years in CE starts with a lower number and goes *up*.

For example:

700–690 BCE: an event taking 10 years

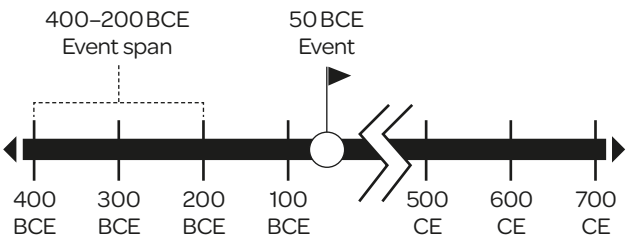
700–710 CE: an event taking 10 years

3 I can follow timeline conventions

Follow these steps to make a timeline:

1. Select events to include on your timeline.
2. Put the events in chronological order: from the earliest event to the latest event.
3. Work out the earliest and latest dates you want to include on your timeline.
4. Pick a span of years that your timeline will cover; this span should include the earliest and most recent dates.
5. Choose the unit of time you want to use: years, decades or centuries.
6. Work out how many segments your timeline needs.
7. Draw a straight line and divide it into segments. Figure out the size of each segment based on how much space you have on your sheet of paper.
8. Number the segments into the units you selected in Step 5.
9. Add the events to your timeline.

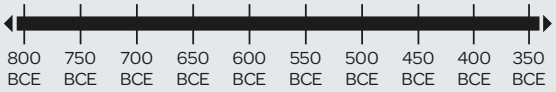
If an event goes over many years, add it as a span rather than a line. If there is a large gap between the events on your timeline, add a zigzag line to show there has been a jump in time. For example:



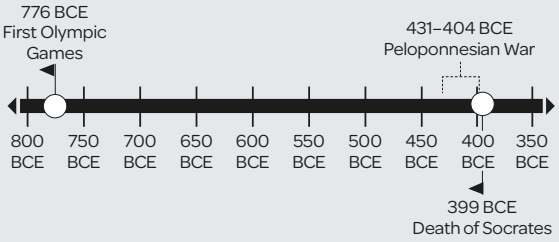
Example of creating a timeline

1. Select events to include on your timeline.
   First Olympic Games (776 BCE); Death of Socrates (399 BCE); Peloponnesian War (431–404 BCE)
2. Put the events in chronological order.
   First Olympic Games (776 BCE); Peloponnesian War (431–404 BCE); Death of Socrates (399 BCE)
3. Work out the earliest and latest dates you want to include on your timeline.
   776 BCE is the earliest date and 399 BCE is the latest
4. Pick a span of years that your timeline will cover; this span should include the earliest and most recent dates.
   800 BCE–350 BCE (450 years)
5. Choose the unit of time you want to use: years, decades or centuries.
   Segments of 50 years
6. Work out how many segments your timeline needs.
   Nine blocks of 50 years
7. Draw a straight line and divide it into segments. Figure out the size of each segment based on how much space you have on your sheet of paper.

   I am using an A4 exercise book. I have about 20 cm to draw in. Nine blocks at 2 cm per block gives me 18 cm.
8. Number the segments into the units you selected in Step 5.



9. Add the events to your timeline.



4 I can summarise the events on a timeline

Summarising information from a timeline involves condensing the key events into a brief, focused overview. This requires looking critically at the timeline to determine which points are most important and how they fit together. To summarise effectively, follow these steps:

- **Identify the most significant events:** Not all events on a timeline are of equal importance. Focus on the events that represent major turning points or milestones in history. These are often the moments that led to significant change or shaped future developments.
- **Look for patterns or connections:** Summarising is not just about listing events. Instead, try to understand how the events relate to one another. Are they part of a broader trend, such as the rise of empires? Grouping related events can help you to find patterns and connections between events.
- **Determine the overall theme or progression:** Timelines often illustrate change over time. In your summary, aim to describe this progression, whether it's a series of conflicts, the spread of ideas or periods of stability followed by upheaval. Think about what story the timeline is telling and convey this in your summary.

5 I can explain change or causality from a timeline

Explaining change or causality using a timeline means understanding how events are connected and how one event leads to another. To do this, follow these steps:

- **Find important events:** Look for key events on the timeline that caused big changes or had lasting effects. Focus on events that seemed to trigger shifts in areas such as politics, society or the economy.
- **Understand how events are connected:** To explain causality, think about how one event might lead to another. For example, a war could result in a change of government, or a new invention could change the way people live. Finding these connections helps you to understand why things changed.
- **Identify the type of change:** Consider how the change happened. Was it a sudden, major change or did it happen slowly over time? Changes in history can be quick, like revolutions, or gradual, like technological developments.
- **Look for multiple causes:** Changes in history often have more than one **cause**. For example, a revolution could be caused by a mix of economic problems, political issues and social unrest. Explaining change means thinking about all these reasons, not just one.
- **Compare with later times:** To better explain the change, you can compare the events on the timeline to a later period, such as today, to show how the changes continued to shape history.

Source 3: This is an artist's recreation of the Great Sphinx and the Great Pyramid of Giza as they might have appeared when they were built during the 4th dynasty of ancient Egypt. The Great Pyramid of Giza is the last of the Seven Wonders of the Ancient World still standing, representing continuity from ancient times to the present day.

Sources

Detectives use clues to solve mysteries. Historians use sources to understand the past. This involves looking at the **evidence** and asking, 'How do we know what we know about the past?' A good source analysis interprets and explains the meaning of the source.

First, you need to ask good questions of a source. These questions include:

- Who created it?
- When was it created?
- What was the author's or creator's purpose? Why was it made?
- What is the historical **context** of the source?

The more sources you use, the better your understanding of the past will be.

This is a vase or jug and its purpose was probably practical, but could also have been decorative or to commemorate an event. It was probably made by a skilled artisan.

This type of headdress is similar to images I have seen of ancient Spartan warriors, so this vase could date from the 6th century BCE. It was probably made in ancient Greece or in one of the ancient Greek Empire's territories.

The vase shows men holding spears and shields and wearing helmets. They look like they are warriors engaged in battle.

▲ **Source 4:** How to describe a source

1 I can identify the origin of a source

Sometimes, if you're looking at a photo of a source in a text, there may be a caption that provides information about the origin of a source (see Source 2). This caption tells you who made the source, the name of the source and when it was made. Sometimes we don't know the creator of the source. In this case we state that the source was made by an 'unknown creator'.

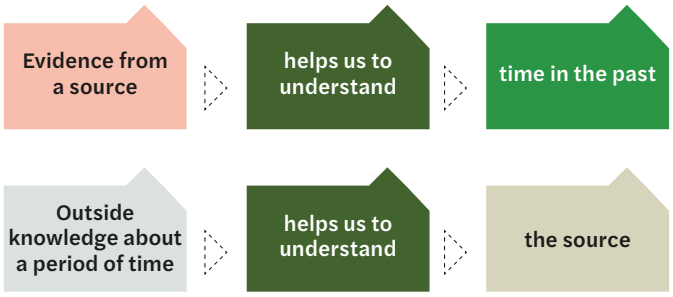
2 I can describe a source

Describing a source is when you describe its features. This involves more than listing facts about the source. Describing a visual source might involve relating what is in the image. Describing a written source might involve summarising the main things that the text states. For example:

Type of source	Source description
Visual source	This vase is very decorative. It features warriors who are engaged in a battle. They are wearing helmets and holding shields and spears. The helmet is similar to those worn by Spartan warriors.
Written source	The *Book of the Dead* was an ancient Egyptian book used to guide a dead person in the afterlife. It contained spells to help a dead person pass a series of tests, including weighing their heart, to reach the afterlife. This shows that the ancient Egyptians believed that their conduct on Earth determined their fate after death.

3 I can apply historical knowledge to explain sources

Sources can tell us a lot about a period of time in history. You can also use your knowledge of a period to explain a source. These are two different skills. They both help us to understand, but they should not be confused.



The more you know about the past, the better you will be at explaining sources. So, having lots of knowledge about the past is important for this skill.

What is in a source?	Outside knowledge that might help to understand it
Rock painting of people	Knowing how kinship systems work in First Nations cultures
Vase with fine detail	Knowing how craft technology allowed fine detail to be produced
Mummified corpse	Knowing why ancient Egyptians mummified bodies
Helmet	Knowing how common warfare was in ancient Greece
Engraved stone writing	Knowing who was the Roman emperor at the time, and what kind of ruler he was

4 I can explain the historical context of a source

Explaining the historical context of a source involves identifying and describing the important factors of the period in which a source was made. To help you think of important factors, use the acronym SHEEPT.

SHEEPT factor	Example from ancient India	How this might influence a source from the time
Social: how people lived, traditions, customs …	The caste system	A source could show **bias** against a caste
Historical: past events that influenced what was happening in that period of time …	The Maurya Empire	A source might compare the current empire with earlier, successful empires
Economic: how the economy influenced people's lives …	Trade, both local and with other regions	A source might reflect new ideas picked up from trading partners
Environmental: the impact of weather, climate, natural disasters and resources such as water …	The importance of the Ganges River to agriculture	A source might mention the importance of agriculture to the success of a society
Political: how people were governed, who had power, what the laws were …	Emperor Ashoka's focus on morality and ethics	A source might reflect the political views of the time
Technological: the influence of tools and machines; for example, wheels and computers …	Advanced urban planning and architecture	Technology from the past may itself be a historical source

5 I can evaluate sources to determine their accuracy, usefulness and reliability

The more sources you evaluate, the better your understanding of the past will be. Evaluating **primary** and **secondary sources** helps you judge how accurate, useful and reliable they are for understanding history.

Here is an example of an evaluation of sources. Runestones are raised stones with inscriptions, which were mainly created during the Viking Age (c. 790–1066 CE). Viking sagas are recorded stories of heroic achievements from history and folklore.

Category	Viking runestones	Viking sagas
Accuracy	More accurate: provides dates, events and names	Less accurate: includes a mix of history and folklore
Usefulness	Useful for specific facts	Useful for understanding culture and values
Reliability	Highly reliable but runestones have a limited perspective	Less reliable because sagas blend fact and fiction

To evaluate **accuracy**, check whether the source provides specific, verifiable details, such as dates, names or events, and whether it aligns with other known historical facts.

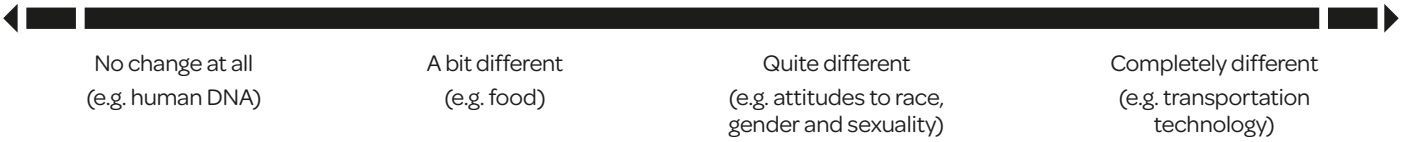
For **usefulness**, a source should help you understand history and be easy to find. For high school students, useful sources should be easy to understand and directly related to class topics. They should be available in accessible places, such as textbooks or online resources.

When evaluating **reliability**, think about who created the source, their purpose and how objective or biased they might have been. Reliable sources are trustworthy and less likely to mix fact with myth or exaggeration.

Continuity and change

On our quest to understand history, we need to grasp both **continuity** and change. Continuity refers to things that have stayed the same over time. Change refers to things that have altered over time.

Continuity and change can exist at the same time: some things stay the same, while others change. Change can be fast or slow, happen gradually or in a burst.



1 I can identify continuity and change

Identifying continuity and change involves seeing what has remained the same and what has changed. The easiest kind of continuity or change to notice is from a historical period to the present, because we know a lot about the present. This table shows examples of continuity and change from historical societies to the present.

Historical society	Continuity	Change
Vikings	Seafaring	Language (old Norse) replaced by Icelandic, Norwegian, Swedish and Danish
Medieval Europe	Some countries still have a monarchy	Technology (true for most societies)
Ottoman Empire	Architectural style of mosques	Political structure (was a monarchy, is now a democratic republic)

To help you identify continuity and change, ask:

1. Did it exist in the past and did it remain throughout the period, or does it still exist now? If yes, that is continuity. You can say: 'This situation remained and shows continuity.'
2. Did it exist in the past but changed during the period, or does not exist now? If yes, that is change. You can say: 'This situation represents a change.'

Source 5: The Leshan Giant Buddha is 71 metres tall. It was carved out of a mountain in the Sichuan province of China, in the 8th century CE, and still remains today. It is an example of continuity.

2 I can describe continuity and change

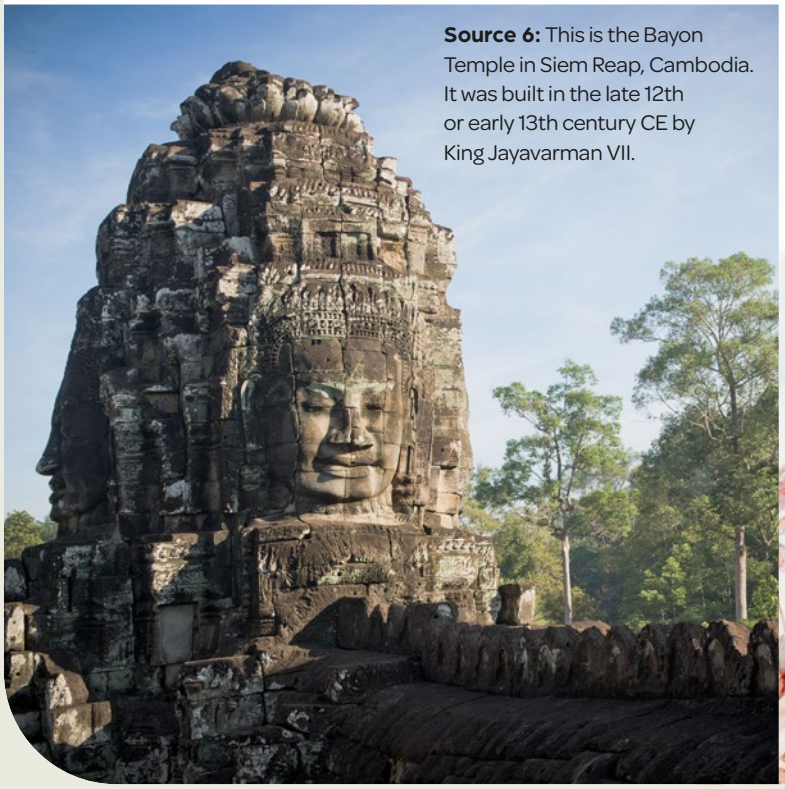
Describing continuity and change involves identifying in detail what has remained the same and what has changed, or both.

Society	Earlier time	Later time	Continuity between these times	Change between these times
Ancient Australia	65 000 BCE: A small number of First Nations Peoples lived in the north.	100 CE: First Nations Peoples had spread across the entire continent.	People lived in tribal groups.	People were spread across the whole of Australia.
Ancient Egypt	6000 BCE: Early settlers lived along the Nile River.	1450 BCE: The ancient Egyptian society was at its peak.	People relied on the Nile River for irrigation.	Powerful rulers controlled many people.

3 I can explain continuity and change

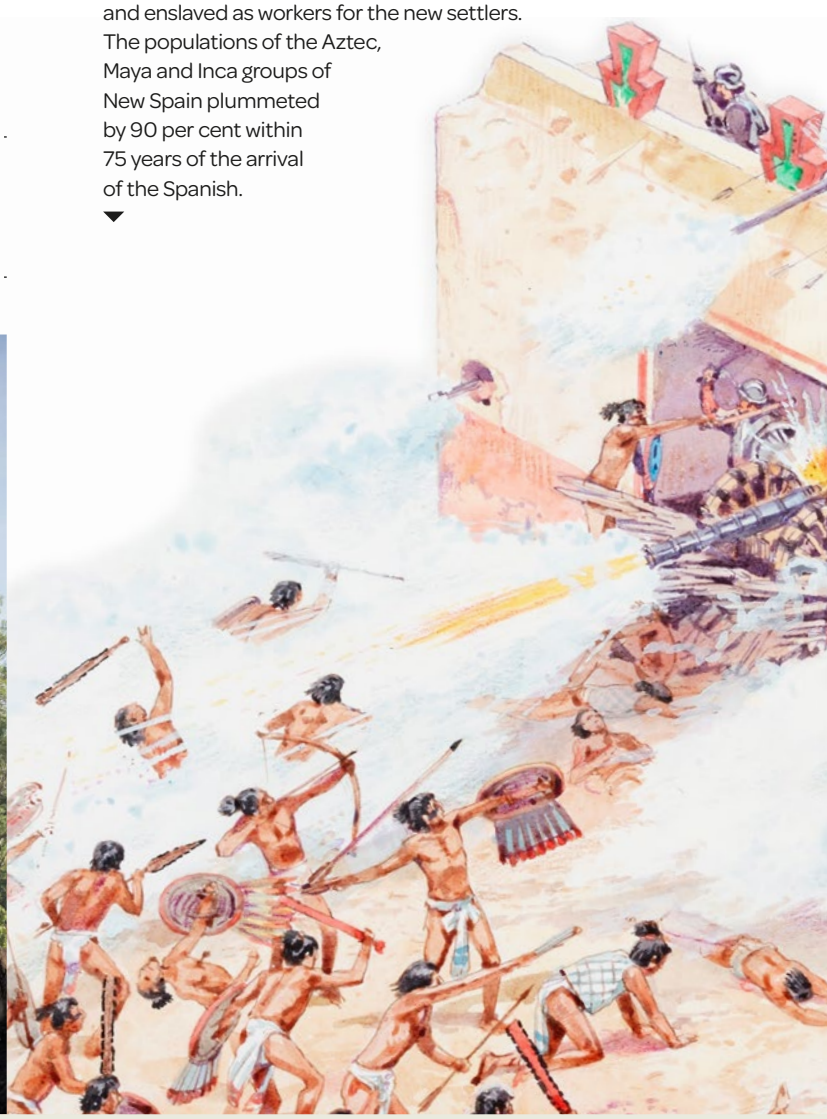
When you explain *how*, you are saying what happened to make the change. or what happened to ensure something stayed the same. Let us consider how we could explain how religion changed in the Khmer Empire and how religion stayed the same in medieval Europe:

Explaining how change occurred	More and more people changed from Hinduism to Buddhism, and many Hindu temples were changed to Buddhist temples.
Explaining how continuity occurred	Throughout the medieval period, people in Europe continued to follow Christianity and to build churches and cathedrals.



Source 6: This is the Bayon Temple in Siem Reap, Cambodia. It was built in the late 12th or early 13th century CE by King Jayavarman VII.

Source 7: In the 16th century CE, the Spaniards successfully colonised South America. The Spaniards used the latest technology, such as cannons and rifles, which gave them a huge advantage over the Aztecs. The Spanish invasion of South America resulted in significant change for the Aztecs, who were introduced to European diseases, converted to the Catholic faith and enslaved as workers for the new settlers. The populations of the Aztec, Maya and Inca groups of New Spain plummeted by 90 per cent within 75 years of the arrival of the Spanish.



4 I can explain patterns of continuity and /or change

Explaining patterns of continuity and change requires you to find a trend or pattern of something that has stayed the same or has changed over time. Many patterns of continuity and change are similar across different societies and time periods.

Common examples of **patterns of continuity** include:

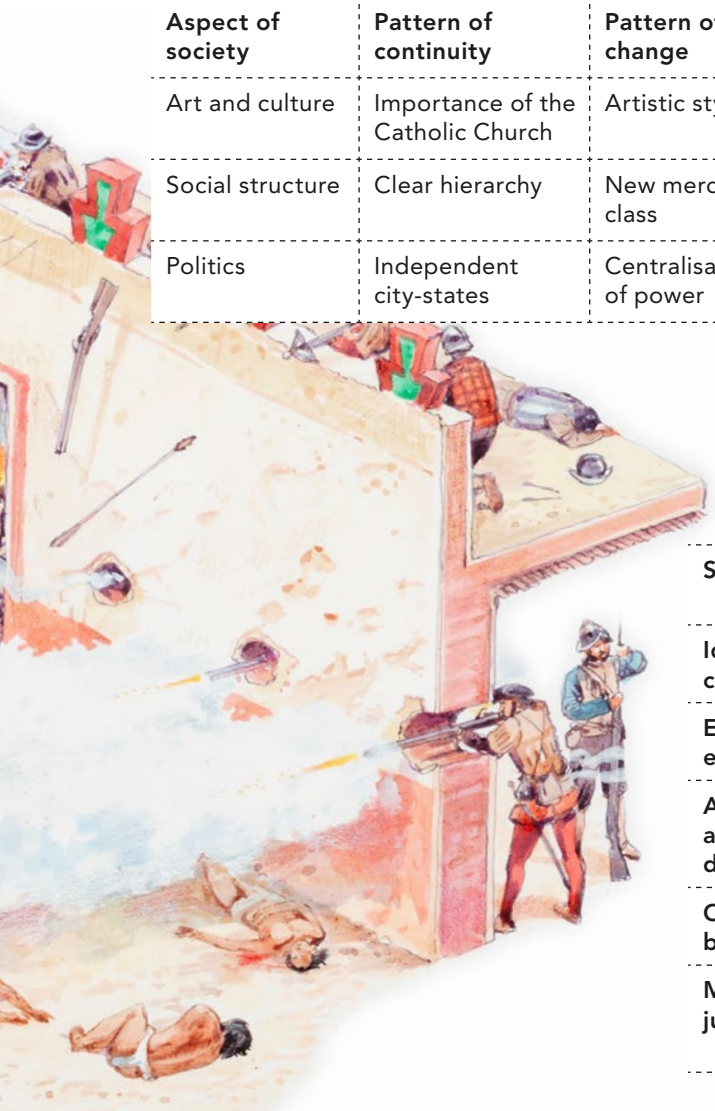
- close family bonds
- the importance of food
- the influence of religion
- trade.

Common examples of **patterns of change** include:

- the improvement in technology
- the increase in population
- the spread of new ideas
- the development of new political systems.

Here are some patterns of continuity and change from Italian history:

Aspect of society	Pattern of continuity	Pattern of change
Art and culture	Importance of the Catholic Church	Artistic styles
Social structure	Clear hierarchy	New merchant class
Politics	Independent city-states	Centralisation of power



Source 8: Pope Francis waves to large crowds at the Vatican in Rome in 2022 CE. The Catholic Church is an example of continuity as it remains an important part in the lives of millions of people today.

5 I can evaluate patterns of continuity and/or change

To evaluate patterns of continuity and/or change in history, you need to make a judgement about whether the change or continuity was positive or negative using evidence and logical reasoning.

Follow these steps to evaluate patterns of change:

- **Identify the change:** What changed over time?
- **Examine the effects:** Were the impacts positive or negative?
- **Assess the advantages and disadvantages:** What improved? What challenges arose?
- **Consider the broader context:** How does this change fit within the larger historical picture?
- **Make a value judgement:** Based on the evidence, decide whether the change was overall positive or negative. Remember that value judgements are not always 'right' or 'wrong' but depend on how well the evidence supports your judgement.

Here's an example of evaluating the change to iron weapons in ancient India:

Step	Example: Shift to iron weapons in warfare
Identify the change	Transition from bronze to iron weapons in warfare
Examine the effects	Improved military strength and allowed the expansion of kingdoms
Assess the advantages and disadvantages	**Advantages:** Stronger armies and more territorial control **Disadvantages:** Increased warfare and societal instability
Consider the broader context	Similar changes were happening in other ancient civilisations, leading to regional power shifts
Make a value judgement	Overall this change was positive for technological advancement, but it also contributed to increased conflict

Causes and consequences

Cause and consequence relationships are all around us. For instance, when you water plants, they grow taller and healthier. In this case, watering is the cause, and the consequence is the plants' growth. Similarly, when you press a button, the television turns on. The cause is pressing the button, and the consequence is the television turning on. Understanding causes and consequences will help you to make sense of how actions lead to specific outcomes. It is essential to understanding many aspects of our world.

Source 9: One cause of the perception of Rome's power and authority was the majestic buildings of the Roman Forum, which were built as symbols of Rome's wealth and supremacy.

To understand cause and consequence relationships, you need to identify which events are linked and understand why they are connected. When things are linked by causes and consequences, they have a *causal link*. This means that one thing *caused* the other.

Most things that happen have multiple causes and consequences, some of which are more important than others.

Two main types of causes are:

- **historical actors**: the individuals or groups involved – for example, Alexander the Great, Julius Caesar, Qin Shi Huangdi, the First Triumvirate
- **historical conditions**: the social, political, economic, cultural and environmental factors – for example, mass unemployment, drought, world religions and bad harvests.

However, just because one event occurred after another does not always mean that the first event caused the second event; for example, when the rooster crows in the morning, we do not think it makes the sun rise.

You also need to be able to provide a logical reason about why something caused a consequence. Events in history are not inevitable. When we study causes and consequences, it can seem like things were always going to work out in a certain way. Yet, change a few conditions and things could have happened differently. If Alexander the Great had fallen off his horse as a boy and died, would Greek society have spread so far and been so significant? It is easy, with hindsight, to think our cause-and-consequence explanations are perfect, so we need to be cautious when making claims about causes and consequences.

1 I can identify a cause and a consequence

Recognising a cause and its consequence means correctly choosing from a list of possibilities. Consider the outbreak of the Peloponnesian War (431 BCE). The Peloponnesian War was a war fought between the ancient Greek city-states of Athens and Sparta. Which of the following options is most likely to be the cause of the Peloponnesian War?

A Rome conquered Greece in 31 BCE.

B Athens and Sparta both wanted to control all of Greece.

C The Persians had better technology than the Greeks.

D Sparta is in Greece.

E Athens was founded before Sparta.

The only option that is linked to the Peloponnesian War is B. Option A refers to a time after the war, so it can't be the cause. Option C refers to Persians, not Greeks, so it is not relevant. Options D and E tell us facts that would not necessarily lead to conflict.

For events to be causally linked:

- one event must come before the other
- you must be able to provide a logical reason for why one event caused the other
- if possible, you should have evidence that one event caused the other.

2 I can describe causes and consequences

Describing a cause and its consequences requires you to give detailed information. Describing involves more than identifying. For this step in the skill, you could describe the cause or the consequence or both. For example:

Description of the cause	Description of the short-term consequence	Description of the long-term consequence
Genghis Khan's new military strategies – such as mounted archers and psychological warfare – terrorised populations.	By using new military strategies and tactics, the Mongols quickly overpowered their enemies. This meant they captured vast areas of land.	As the Mongols conquered more territory, these large areas of land were joined to form the largest continuous land empire up to that point in history, which was known as the Mongol Empire.

Source 10: Mongol warriors showing their horsemanship to the Chinese forces of Hung Wu. This was the cause of fear instilled in enemy forces, with the short-term consequence of military victories and the long-term consequence of the establishment of one of the largest empires the world has seen.

3 I can explain how something was caused or its consequences

'Explaining how' involves writing about the process by which something was caused or its consequence. This type of explanation is about the steps, the sequence or the process.

Source 11: The design of the National Library of Australia is based on the architecture of a 1st-century CE structure, the Parthenon in Athens.

Cause	Consequence	Explaining how the cause led to the consequence
About 180000 years ago, east Africa became overpopulated.	People migrated to the Middle East, India, Asia and Australia.	There were not enough resources in east Africa after a while. Hunting and gathering requires a lot of land so, as the population grew, there was not enough land. To avoid starvation, people were forced to find new land elsewhere. They moved north to the Middle East, then east to India, Asia and Australia.
Alexander the Great conquered the known world and spread Greek culture.	Greek culture – such as building styles, dress, religion and language – spread to the Middle East and west Asia.	Alexander the Great was a general who conquered Greece, Egypt, Persia and parts of India. He loved Greek culture. As he conquered territory, his soldiers moved into the new lands. The invaders mixed with the local people. Over time, they began to share the way they did things. This led to the existing culture being mixed with Greek culture. It created a new type of culture, known as 'Hellenistic' culture. People from areas conquered by Alexander begun to live differently, with new clothing styles, architecture and religious rituals, and language also changed.

The Middle East and parts of Asia, c. 334–323 BCE

▲ **Source 12:** The empire of the Macedonian king Alexander the Great

Source: Peter Hermes Furian

4 I can explain why something was caused or why it led to certain consequences

Explaining how focuses on the sequence of events – describing what happened and how one event led to another. Explaining *why* goes deeper by identifying the reasons an event occurred or identifying why it had a range of consequences. You need to look at the intentions or circumstances that caused people or societies to act, or the circumstances that ensured a cause produced certain consequences. Typical motivations for change in history include:

- **political power:** wanting to gain or maintain control
- **economic gain:** wanting wealth, trade opportunities or resources
- **social equality:** pursuing justice, human rights or societal reform
- **religious beliefs:** wanting to spread or reform a particular belief system
- **technological advancement:** needing to innovate to solve problems or gain advantages
- **military security:** needing to defend existing lands or conquer new lands for protection.

Cause (motivation)	Consequence
Political power in ancient Egypt: Pharaohs sought to consolidate power.	The pharaohs ordered the construction of the pyramids and temples, which reinforced their divine authority and their control over Egyptian society.
Economic gain in ancient China: The emperors during the Han dynasty needed to control trade routes and resources.	The emperors supported the expansion of the Silk Road, which led to increased wealth, trade with other societies and cultural exchange across Asia and Europe.

5 I can analyse causes and consequences

'Analysing' means breaking down something into its separate parts. If you can identify the different parts, and explain how together they make up the whole, you are analysing. If you can explain the rules or theories that show how these parts are organised, you are analysing.

The first step is being able to break down something into its parts. For example, what caused Egypt to fall to the Roman Empire? We can break down the cause into three parts:

Cause 1: Rome had superior military forces.

Cause 2: Rome needed Egypt's food resources.

Cause 3: At the time, there was civil unrest in Egypt.

Breaking down the cause is the first part of the analysis. Now we can explain how these combined causes led to Rome conquering Egypt:

Rome needed Egypt's food resources and had a more powerful army. Because Rome needed something (food) and had the ability get it (the army), it was always likely that Rome would conquer Egypt and make Egypt part of the Roman Empire.

Here, we have linked Cause 1 and Cause 2 together. Next, you need to decide how strong the causal link is.

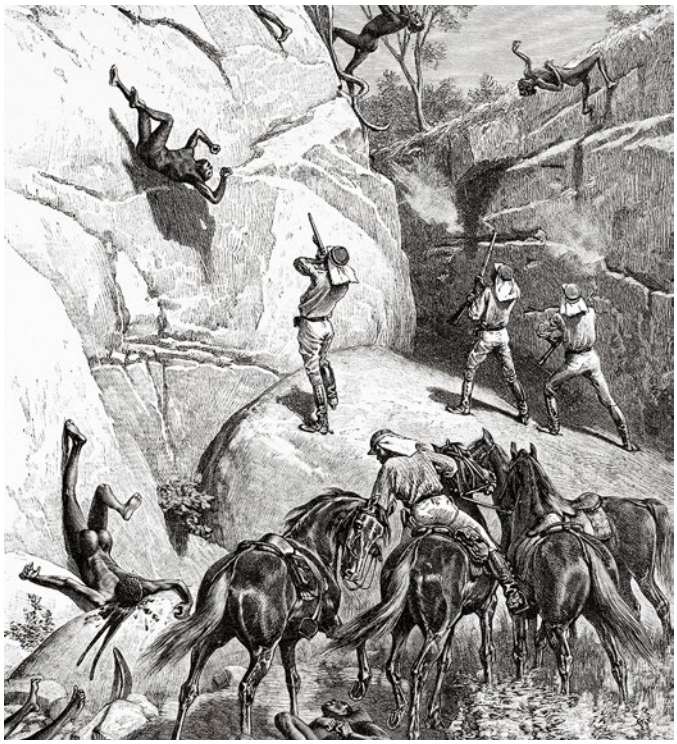
Less — **More**

Small causal link
Gradual, minor, almost no part, short-lived, partly, partial, to some extent, small extent

Large causal link
Radical, powerful, significant, important, to a great extent, considerable, main, crucial

Once you have decided how strong the causal link is, here are some words you can use to describe it:

- If something had a minor consequence, you could say: The lives of First Nations Peoples were only affected to a small extent by the introduction of dingos.
- If something had a major consequence, you could say: The lives of First Nations Peoples were significantly affected by European colonisation.



▲ **Source 13:** There was a large causal link between hardships faced by First Nations Peoples in Australia and the arrival of colonisers in 1788 CE. This illustration from the 19th century CE shows policemen on horseback shooting First Nations Peoples. [This illustration by Carl Lumholtz appeared in *Le Tour du Monde* in 1889 CE.]

Perspectives

Perspectives are different ways of looking at the world or different points of view. A person's perspective is influenced by their culture, social class, wealth, where they live and their gender. It is important for historians to understand the perspectives of people who lived in the past. This helps us to avoid 'presentism', which is when we mistakenly see the past from our own modern point of view, which can be very different from the perspectives of the people who lived at the time.

1 I can identify the perspective of a person from the past

To identify the perspective of a person who lived in a particular period in the past, imagine what that person might have thought. Try putting yourself in their shoes.

Here are some examples of the points of view of people from the past:

Example	Perspective they might have
Chinese emperor	'I have an obligation to my people to rule them wisely.'
Egyptian farmer	'The Nile River is very important to my harvests.'
Roman soldier	'I believe living in the Roman Empire is better than living outside it.'

2 I can describe perspectives

'Describing' is when you explain something in detail. Describing a perspective from the past is when you learn about a person's views and then use key details to paint a vivid picture of life from their perspective. For example, you watch a documentary about the life of an Egyptian pharaoh (ruler). You can then describe their perspective by writing, 'The pharaoh believed they were a living god. They showed this belief through their grand monuments, rituals and the way they presented themselves to their people as all-powerful and divine'.

3 I can explain a perspective

'Explaining a perspective' is when you say why a person from the past had a certain point of view. People in the past often held very different views from those held by people today. For example, people in many ancient and medieval societies believed:

- they had a right to invade other regions and take their resources
- their religion was superior to other people's religions
- royalty and nobles were more important than peasants.

In addition, like today, there were different perspectives on individuals and events:

- Some people were seen as heroes by one group and as villains by another.
- Battles could be seen as important victories by the conquerors or as shattering defeats by the victims.

Source 14: This is a wax sculpture of Suleiman the Magnificent at Madame Tussauds in Istanbul, Türkiye. During Suleiman's reign over the Ottoman Empire in the 16th century CE, the perspective of the people who lived in the empire was that Suleiman was the successor to the ancient Roman emperors.

Perspective	Historical context	Explanation
Ottoman perspective	During the reign of Suleiman the Magnificent (16th century CE), the people who lived in the Ottoman Empire believed that the sultan was the successor to the ancient Roman emperor.	The Ottoman rulers saw themselves as the successors to the ancient Roman emperors. Having conquered Constantinople, the capital of the Byzantine Empire (Eastern Roman Empire), the sultans believed they were justified in the expansion of their empire into North Africa, the Middle East and Europe.
Indian perspective	In ancient India, society was structured by the caste system. Brahmans considered themselves to be members of the highest caste. This is because, traditionally, Brahmans were priests and scholars, so they were closest to the creator god, Brahma.	The Brahmans' perspective was influenced by their religious education, which taught them that their duties were essential for upholding cosmic order. Brahmans saw their role as integral in maintaining social harmony and ensuring the spiritual wellbeing of society.

4 I can compare perspectives

'Comparing' is when you look at two things and identify what is the same and what is different. A good comparison makes an overall statement about how similar or different the two things are. Here are two examples:

Example	Similarities	Differences	Overall comparison statement
• Ancient Spartans • Ancient Athenians	• Language • Religion	• Athenians valued art. • Spartans valued the military.	While ancient Athenians and Spartans shared a language and religion, they had different views on art and the military.
Ancient Chinese: • farmer • wealthy landowner	• Depended on agriculture • Respected authority	• Landowner had power and wealth. • Farmer disliked the inequality of the social system.	Ancient Chinese farmers and landowners had very different levels of wealth and power, despite both relying on agriculture.

5 I can evaluate historical perspectives

To evaluate historical perspectives, you need to understand the social and cultural settings that influenced people's beliefs and actions.

Evaluating historical perspectives involves thinking about why people made the choices they did. By looking at different viewpoints, you can gain a deeper understanding of historical events and actions.

Here are some steps you could follow to evaluate a perspective:

1. **Understand the historical context:** Identify the social and cultural settings that influenced people's beliefs and actions during the period you are studying.
2. **Examine evidence:** Use primary sources from the period, such as artefacts or written historical records, to gather information about people's perspectives.
3. **Consider multiple viewpoints:** Explore the differences between the perspectives held by different groups of people (e.g. from different social classes). Use your understanding of these differences to form a more complete understanding of the historical situation.

Here is an example from ancient Egyptian history:

Perspective: The pharaoh was seen as a living god who maintained cosmic order in ancient Egypt.

Egyptians believed in *ma'at*, which was the cosmic balance in the world and the heavens. They believed it was the pharaoh's role to maintain ma'at because he was the divine ruler.

Inscriptions, temple reliefs and monumental structures, such as pyramids, depict the pharaoh's divine role in ensuring order. While the elite members of ancient Egyptian society promoted this belief, common people may have been focused more on daily survival than the pharaoh's divine status. They may have been more concerned about whether the pharaoh was providing enough food to eat than whether he was maintaining the balance between the world and the heavens.

Significance

How do we decide which events or time periods in the past are important? Not all events, people or developments hold the same weight. By understanding historical **significance**, you can prioritise information and make sense of the huge amount of historical evidence.

1 I can identify something historically significant

'Significant' means important – something worth noting. So 'identifying something historically significant' means deciding whether an event, person or development is important.

To identify if something is significant, ask yourself: Was it important back then? Were people deeply affected? Did it affect a lot of people for a long time? Is it still relevant to modern times? If you answer 'yes' to these questions, the event, person or development is likely to be historically significant.

2 I can describe something historically significant

'Describing historical significance' involves writing in detail about the importance of an event, person or development. For example:

Event	The Spanish conquered the Americas during the late 15th and early 16th centuries CE.
Immediate impact	The Spanish conquest of the Americas led to the fall of great societies such as the Aztecs and Incas, the deaths of many Aztecs and Incas due to diseases brought by the Europeans, and the establishment of Spanish colonies.
Long-term impact	The Spanish conquest led to the spread of European culture, language and religion (Christianity) across the Americas. It also established foundations that enabled the Atlantic slave trade and subsequent colonial conquests by other European powers.
Description of historical significance	The Spanish conquest of the Americas was a significant event in history due to its transformation of the New World's social and political landscape, decline of American societies, and its role in setting a precedent for further European colonial conquests. It also laid the foundations that enabled the establishment of the Atlantic slave trade.

3 I can explain something historically significant

Explaining historical significance means describing how or why something is important.

To help you explain why something (such as an event) was historically significant, you can ask a series of questions, such as how many people were affected and for how long were they affected. The answers will help you formulate your answer. The example below uses these questions to explain the historical significance of Julius Caesar's assassination.

Question	Example: Julius Caesar's assassination
How important was it to people at the time?	Caesar's assassination in 44 BCE shocked Rome and created immediate political chaos.
How deeply were people affected?	It deeply affected the Roman Senate and the population, leading to civil wars and the eventual rise of Augustus as emperor.
How many people were affected?	Millions across the Roman Republic were affected as it eventually led to the fall of the Republic and the rise of the Empire.
For how long were they affected?	The effects of Caesar's death shaped Roman politics and governance for centuries, as it ushered in the Roman Empire.
How does the event help us understand the modern world?	It helps us understand the dangers of political power struggles and the transition from democratic to autocratic rule.
Did the event change people's ideas or beliefs?	It changed people's beliefs about the stability of the Roman Republic and the role of leadership.
Does the event reveal any important themes or patterns in history?	The assassination highlights themes of political betrayal, the vulnerabilities of republics and how democratic rule can be replaced by authoritarian rule.

Source 15: This source shows a Spanish conquistador meeting Indigenous peoples in the Americas. The Spanish conquest of the Americas was a significant event in history.

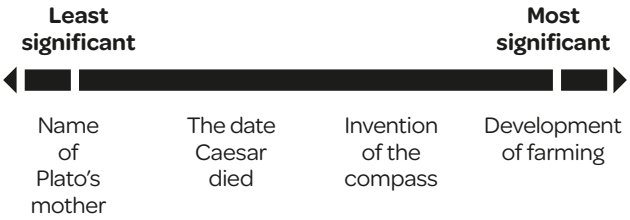
4 I can explain why something is historically significant

You can use primary and secondary sources to help you explain why something is historically significant. The steps in this process include finding sources, identifying what those sources say about an event, then using that information to determine the significance of the event. For example:

Event	The establishment of the Maurya Empire in ancient India
Relevant sources	• Primary sources, such as the book *Arthashastra* by Chanakya, and ancient scripts and coins • Secondary sources, such as history textbooks and scholarly articles about the Maurya Empire
What the sources say about the event	The sources suggest the Maurya Empire unified large parts of India, established efficient administrative systems and spread Buddhism to other parts of Asia.
Determine the historical significance of the event from the sources	The Maurya Empire's establishment in ancient India is historically significant due to its role in unifying large parts of India, introducing efficient administrative systems as described in *Arthashastra*, and spreading Buddhism, as documented in both primary and secondary sources.

5 I can evaluate historical significance

Historical significance is not black and white; it can be shown on a scale, like this one:



Question	Example of low historical significance	Example of high historical significance
Event	The construction of a small, local tomb for a minor official	The construction of the Great Pyramid of Giza
Importance at the time	Only important to the official's family and a small community	The pyramid symbolised the power of Pharaoh Khufu and was important to all of Egypt
Depth of impact	Limited to a small group of people directly involved	The Great Pyramid was a monumental achievement that required massive labour and resources
Quantity affected	Affected a handful of local workers and family members	Affected thousands of workers and the entire nation due to the resources and labour involved
Duration of impact	The tomb's significance faded after the official's death	The Great Pyramid remains a symbol of Egypt's architectural and cultural achievements
Relevance to today	Little relevance today beyond local historical interest	The Great Pyramid is still studied and admired, influencing architecture and engineering worldwide
Extent of significance	The impact was minor and localised, with no lasting influence	The Great Pyramid had a profound, long-lasting impact on Egypt and continues to be highly significant today

Interpretations

History is not just a list of facts. What we think we know about the past changes all the time as we uncover more information and interpret things in different ways. Historical knowledge is always being contested, or questioned and challenged. Being able to determine the validity of different interpretations is an important skill.

1 I can identify a historical debate

Historians do not always agree on exactly what happened in the past. Even though they are looking at the same evidence, they might interpret this evidence differently.

One historian might interpret the fall of the Western Roman Empire as being caused by internal weaknesses, such as political corruption and economic instability. Another historian, however, might argue that external factors, such as barbarian invasions, played a larger role. Both historians use the same facts but provide different interpretations of what caused the Western Roman Empire's collapse.

Source 16: *Head of Christ* is a chalk and pastel drawing by Leonardo da Vinci. He drew this study in c. 1494 CE in preparation for his work *Last Supper*. Some suggest Renaissance art mainly showed Christian themes, while others suggest the Renaissance period focused on human experiences.

2 I can describe an interpretation of history

Describing a historical interpretation involves outlining the main ideas and arguments of a historian's viewpoint on a particular event or period. It is a good idea to use evidence from the interpretation to support your description. For example:

Topic	Historical interpretation	Describing the historical interpretation
Why was Angkor Wat abandoned?	One argument is that environmental changes led to the city being abandoned.	A decline in rainfall meant that there was not enough water to grow rice. The drier weather also damaged the Khmer Empire's sophisticated irrigation systems.

Source 17: The temple of Angkor Wat, built at the time of the Khmer Empire

The imposition of forced labour (*vishti*) and several new levies and taxes from the Gupta period onwards further undermined the position of peasants ... Forced labour, taxes and other dues became all the more oppressive ... [and] generated much social tension, leading to peasant protest ...

Source 18: D.N. Jha (2009 CE), *Ancient India: In Historical Outline*, Manohar, pp. 155–6. D.N. Jha is a modern historian.

3 I can explain an interpretation of history

When explaining a historical interpretation you need to think about what evidence has led to this interpretation. Use primary and secondary sources to help you explain how an interpretation has been formed.

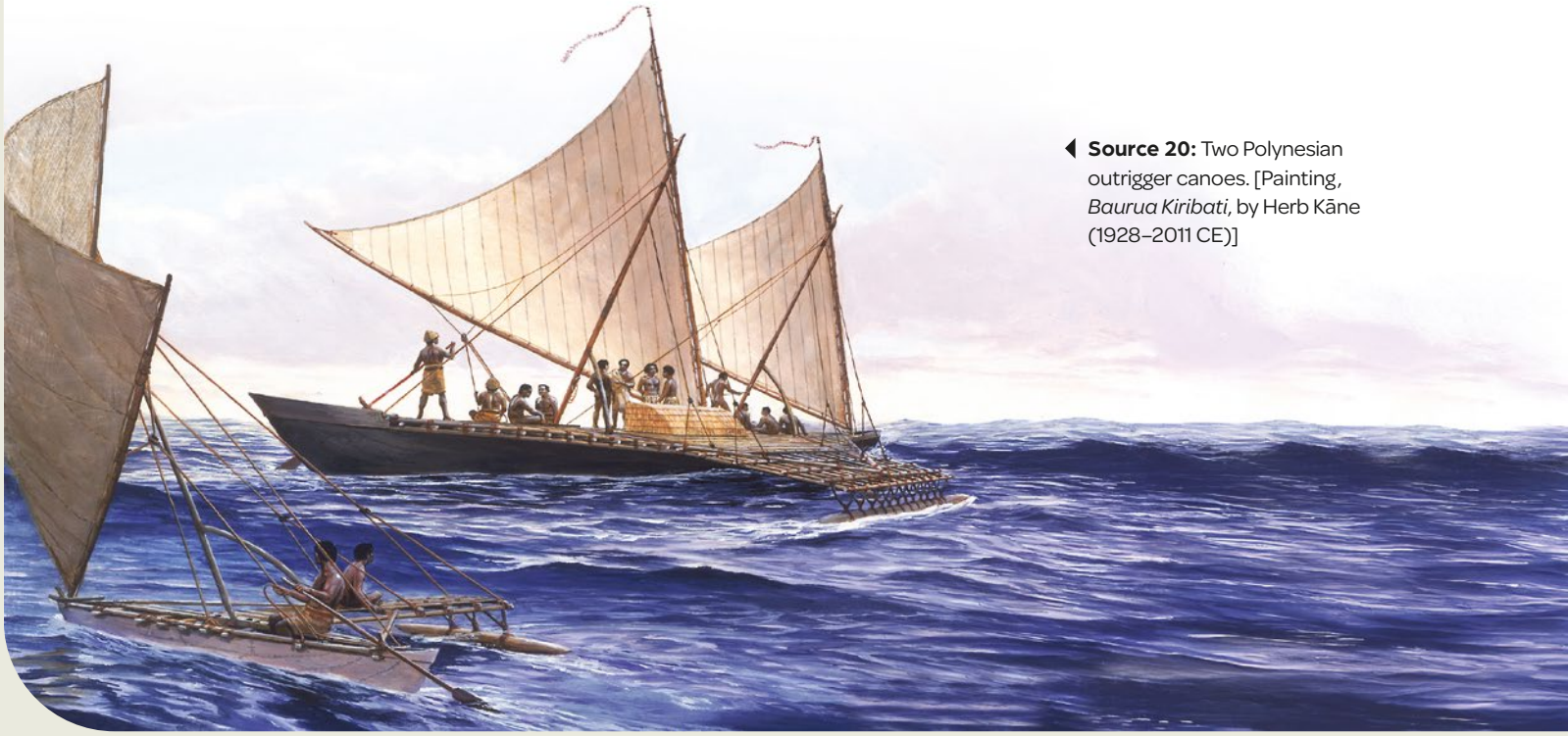
Topic	Historical interpretation	Explaining the interpretation using the source
Was the Gupta period a 'golden age'?	The Gupta period was not a golden age for most people.	Most people's lives did not improve during the Gupta period in ancient India. In fact, the period saw a worsening of economic conditions, leading to rising social tensions. As historian D.N. Jha notes in Source 18, peasants had to undertake 'forced labour (*vishti*)' and also to pay 'new levies and taxes'. These changes during the Gupta period were so harsh that 'peasant protest' erupted.

Source 19: *The Death of Julius Caesar* (1806) by Vincenzo Camuccini. In this image, the chief conspirators are attacking Caesar.

4 I can compare historical interpretations

When comparing historical interpretations, you need to explain the similarities and differences between historical interpretations. Are the interpretations completely different or are there some similarities?

Topic	Historical interpretation	Comparing the interpretations
Why was Caesar assassinated?	The assassins believed Caesar would abolish the Roman Republic.	The assassins were members of the Senate and strongly supported the Roman Republic. They believed Caesar was trying to overthrow the democratic republic and rule Rome as a king.
	The assassins were jealous of Caesar's power and wanted it for themselves.	The assassins were members of the Senate who had long opposed Caesar and believed that they would lose any chance of power and influence if Caesar installed a monarchy.



Source 20: Two Polynesian outrigger canoes. [Painting, *Baurua Kiribati*, by Herb Kāne (1928–2011 CE)]

5 I can evaluate the evidence supporting a historical interpretation

Evaluating the evidence supporting a historical interpretation is the final and most complex step. This involves assessing the quality, relevance and reliability of the evidence used to support a historical interpretation. For example, let us evaluate the evidence of the rock art depicting seafaring activities and the ancient Polynesian navigation tools found on some islands in the Pacific Ocean:

Quality of the evidence	Consider the reliability of the sources. For example, are the ancient navigation tools well preserved and authentic? Has the rock art been accurately interpreted? Evaluate the credibility and expertise of the historians studying and writing about these Polynesian artefacts.
Relevance of the evidence	Does the evidence directly support the historical interpretation that Polynesian people had excellent navigation and sailing skills, which resulted in Polynesian people colonising many of the islands in the Pacific Ocean? Are there alternative explanations for the tools and rock art found on these islands?
Reliability of the evidence	Has the evidence been corroborated by multiple independent studies and archaeological findings? Are there consistent patterns across different islands and Polynesian cultures?
Evaluation	Based on your evaluation of the quality, relevance and reliability of the evidence, form your own judgement about the strength of the interpretation of Polynesian navigation and sailing skills and the successful colonisation of the islands in the Pacific Ocean.

An evaluation of the evidence supporting a historical interpretation also considers the pros and the cons and then makes an 'on balance' judgement, taking the pros and cons into account. For example:

Evidence	Pro	Con	Evaluation
Quality of the evidence	Well-preserved navigational tools provide direct insights into Polynesian navigation techniques.	Some navigation tools may be incomplete or damaged, which limits their interpretive value.	The evidence demonstrates the Polynesians' remarkable navigational skills. While some limitations exist, the overall strength of the evidence reaffirms the interpretation of skilled navigation and sailing and successful colonisation of many islands in the Pacific Ocean.
Relevance of the evidence	There is a direct link between the navigation tools and Polynesian navigation skills.	Alternative explanations for some tools might exist.	The evidence demonstrates Polynesians' remarkable navigational skills. However, alternative explanations warrant careful consideration. The overall alignment with skilled navigation remains substantial.
Reliability of the evidence	Multiple independent studies confirm the validity of navigation tools. Consistent findings across different islands and Polynesian cultures enhance reliability.	The limited availability of certain tools may affect validation. Variations in cultural practices might lead to some inconsistencies in the evidence.	The evidence is highly reliable, showing strong agreement among studies and corroborating sources. Skilled Polynesian navigation is well supported by multiple pieces of evidence, despite minor limitations.

How to develop a historical inquiry

Historians develop their knowledge of history by posing questions, finding new sources, weighing up the evidence and then forming their own interpretation. This process is known as **historical inquiry**.

What is a historical inquiry?

A historical inquiry allows you to research an aspect of a topic that you have studied and want to know more about. You begin by examining a range of resources, including books, websites, documentaries and films, to explore ideas relating to your specific topic area. You then start to form 'small' questions to develop your focus, such as:

- 'What conflicts arose?'
- 'What tactics were used in battles?'
- 'What forms of leadership were effective?'

Once you have started to develop the small questions, you then conduct more detailed research. You can use this to help you form a 'big' question, such as 'Why were battles won/lost?' or 'How important was warfare to the society?'

You need to have evidence from primary and secondary sources to support your view.

Conducting a historical inquiry is a bit like an archaeological dig. Follow these steps to uncover your answers:

Step 1: Survey

Just as archaeologists arrive at a site and do a visual scan of the landscape, you need to identify and describe key historical facts about the time you are studying.

Step 2: Excavation

After conducting their survey, archaeologists begin to dig a little deeper, uncovering structures and objects that reveal connections and details not visible from the surface. Likewise, you need to start gathering evidence from a range of sources to deepen your knowledge.

Step 3: Discovery

This is when archaeologists uncover the most significant finds that reveal the bigger picture. You too need to uncover your key inquiry question by weighing up the evidence and forming your response to the big question.

Step 4: Curation

Archaeologists often present their findings in a museum, documentary, book, website or lecture.

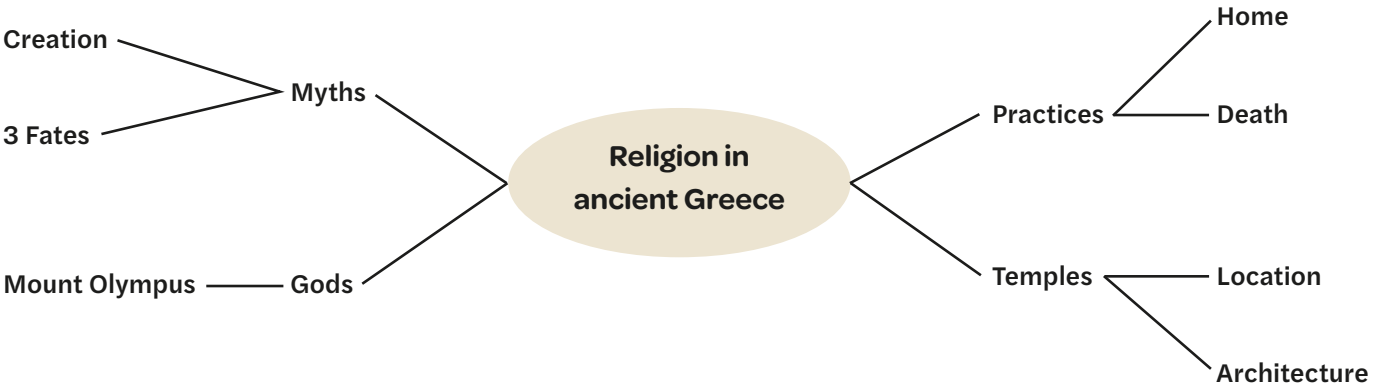
Think about how you will present your information and why it is important.

Step 1: Survey

Rationale

To begin your inquiry, think about which aspects of the ancient society have interested you the most – was it their culture, innovations, daily life or perhaps their interactions with other societies? Why is it interesting to you and why is it important to learn about this topic?

Next, draw a simple mind map or compile a list of what you already know. Then highlight the areas you would like to know more about.



Forming initial questions

Now that you have summarised the knowledge you already know, you need to devise some questions to guide your next steps. These questions should start with the words *who*, *what*, *when*, *where*, *why* and *how*.

For example, suppose you are interested in the ancient Greek gods:

Who	What	When	Where	Why	How
Who were the gods?	What was the role of the gods?	When did the ancient Greeks worship their gods?	Where were the gods worshipped?	Why were the gods worshipped?	How did the ancient Greeks worship their gods?

Or the tombs of ancient China:

Who	What	When	Where	Why	How
Who was buried in ancient Chinese tombs?	What were the tombs in ancient China like?	When did people begin constructing their tombs?	Where were the tombs located?	Why did people in ancient China build tombs?	How did people in ancient China build tombs?

Step 2: Excavation

Conducting research to find your evidence

Once you have your initial questions, you need to gather more evidence. Go back to the relevant pages in the chapter and select the information that answers your small questions.

Then begin your research. Go to the research section of this chapter (page 224) to guide your selection of research sources. These can include primary sources (from the time) and secondary sources (made after the time).

It is also important to consider perspectives (which show what different people thought at the time) and modern interpretations (what different historians have said about that time).

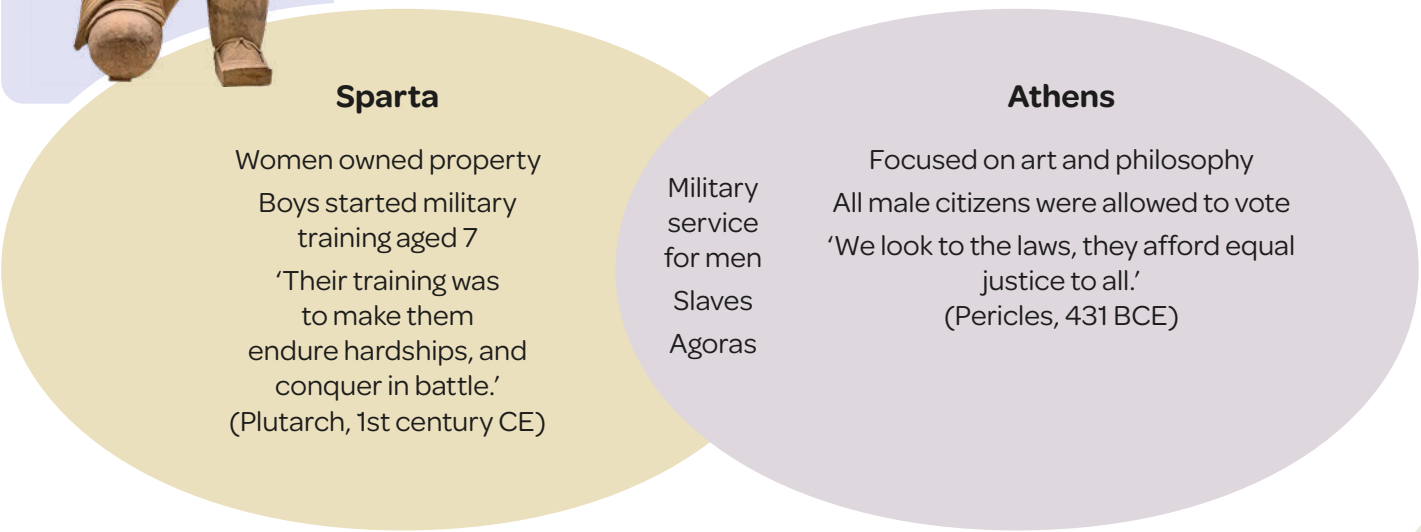
As you locate sources, organise them using the headings and/or table below. This can help determine whether the source is useful (gives you relevant information) and reliable (you can trust it).

Type of source? Primary or secondary?	Origin and purpose of source	Is this source reliable? Does it give you a perspective from the time or an interpretation of the time?	Which question(s) can it help to answer?
Example: sculpture of Terracotta Army warriors (primary source)	**Example:** c. 221–206 BCE Used to guard the tomb of China's first emperor, Qin Shi Huangdi	**Example:** reliable – it was found by archaeologists Tells us that legacy was important to Chinese emperors and that they believed in the afterlife	**Example:** • What were the tombs in ancient China like? • Why did people in ancient China build tombs?

Sorting your evidence

Having collected the relevant information and source evidence, make notes to help you form your big question. Summarise or list the key points – this includes quotes from written sources and descriptions of visual sources. You can use a graphic organiser such as a table, mind map, Venn diagram and/or colour coding to sort your evidence.

Here is an example of a Venn diagram comparing the ancient city-states of Sparta and Athens.



Here is an example of an analysis table to evaluate the impact of Ramses II's achievements on Egypt.

What were Ramses II's achievements?	Positive impacts	Negative impacts
• Ruled for over 66 years • Architecture – he commissioned grand architectural projects, including the temples at Abu Simbel and the Ramesseum	• Provided continuity and stability in society • Name was used by future leaders • Successful in battles • 'His majesty was like Sutekh, the great in strength, smiting and slaying among them.' (Unknown Egyptian writer, 1274 BCE) • Showcased Egyptian power to others and reinforced his legacy	• His death led to instability because Egypt was seen as weak without him. • Future rulers struggled to govern and maintain his empire. • Required intensive labour (including slave labour) to build his monuments. • Later rulers tried to continue his monument building, which contributed to Egypt's economic decline.

Step 3: Discovery

Forming and answering your 'big' question

Once you have collected and analysed your evidence, you are ready to form and answer your big question.

This can be a 'what', 'how' or 'why' question. It could also be an evaluative question that requires you to make a judgement. Have a look at the Learning ladder below to find the type of question that is right for you. Can you challenge yourself to try the next level?

	Command term	Definition	Question type	Sample question
5	Evaluate	Make a judgement based on criteria	Evaluate	How important was religion in ancient Greek life?
4	Explain	Show the relationship between things (such as cause and effect)	Why	Why were temples constructed in ancient Greece?
3	Explain	Provide an explanation of how something happened	How	How did the ancient Greeks bury their dead?
2	Describe	Provide characteristics and features	What (describe)	What was the role of mythology in ancient Greece?
1	Identify	Recognise and name	What	What gods did the ancient Greeks worship?

Discuss your ideas with a class member or your teacher. You may find there is more than one answer, or that your answer is different from others in your class. This is fine, as long as you have the evidence to support your view.

Step 4: Curation

Communicating your findings

It can be tempting to present every piece of evidence you have found; however, a historian has to consider what information is most useful in answering their question. You are presenting an explanation or an argument about history, so you need to make it engaging and relevant.

Use the presentation rubric below to select a suitable way to communicate your findings. Again, consider challenging yourself to try the next level.

My question is ...
Firstly, I have found ...
Secondly ...
Thirdly ...
But also ...
Ultimately, I believe ...

Presentation rubric

5	I can evaluate my choice of artefacts for a museum display for how significance or perspectives is communicated.	I can write an extended response to evaluate the causes or consequences of an event or the motivations of a key individual.	I can create a film that includes relevant images, footage, music and narration to evaluate the accuracy of a historical feature film.	I can create a 5-minute podcast that evaluates the causes or consequences of an event or the motivations of a key individual.	I can create a diorama using primary sources and evaluate it for its representation of significance or perspectives.
4	I can explain why I have chosen these artefacts to represent causes and consequences.	I can write an extended response to explain why an event occurred or the motivations of a key individual.	I can create a film that includes relevant images, footage, music and narration to explain why an event occurred, or the motivations of a key individual.	I can create a 5-minute podcast that explains why an event occurred or the motivations of a key individual.	I can use primary sources to create a diorama of a key site or event and write a rationale to explain my decisions.
3	I can explain how these artefacts demonstrate significance or continuity and change.	I can write an extended response to explain how an event occurred or the role of a key individual.	I can create a film that includes relevant images, footage and narration to explain an event or key individual.	I can create a 3- to 4-minute podcast that explains an event or the role of a key individual.	I can use primary sources to create a diorama of a key site or event.
2	I can label and describe artefacts for a virtual museum.	I can write a TEEL paragraph to describe an event or key individual.	I can create a film that includes relevant images, footage and narration to describe an event or key individual.	I can create a 3-minute podcast that describes an event or key individual.	I can create a diorama of a key event using secondary source images and include descriptive labels.
1	I can identify and label artefacts for a virtual museum.	I can write descriptive sentences about an event or key individual.	I can create a film that includes relevant images and subtitles about an event or key individual.	I can create a 2-minute podcast about an event or key individual.	I can use secondary source images to create and label a diorama of a key event.
	Museum display	**Written response**	**Film**	**Podcast**	**Diorama**
	Presentation format				

How to develop research skills

I can define the research topic

When researching a historical topic, a good place to start is to write a list of keywords for the subject. To do this, think of different ways of saying the topic, or search 'synonyms of ...' and insert the topic. Refer also to the section 'Developing a historical inquiry'. Pay particular attention to the 'Survey' section, which is when you form your initial questions to guide your next steps (page 220).

I know how to find the evidence and information I need

What type of evidence do you need?

Include these words in your search:

- facts, examples, definitions, quotes, artefacts, images, data, statistics
- primary sources, secondary sources
- databases, links, archives, collections, references, research, museums, journals, graphs, tables and letters.

Where is your evidence?

There are many different types of websites to look at: scholarly works, databases, archives, reference sources and information pages.

How do you decide if evidence is credible?

Ask yourself the following questions:

- Is the content relevant? Is it useful for my purpose? Does it contain links to other relevant sources? Is it at an appropriate reading level?
- Is the source believable? What type of source is it? (Published or official sources are better.) Who is the author? (Experts are better.) When was it published? (Newer is usually better.) Is the source biased?
- Is the source true? Is it backed up by other sources?
- Does the source state where its information comes from? This means it is more likely to be credible (able to be believed).

Online search strategies

Following are some search strategies:

- After you search a term, scan the first page of results. If they are not relevant, change your search term.
- Start with a wide search, then get more specific.
- Learn from your search. Change what you are searching for based on what you learn after you start searching.
- Be ready to stop a search if it is taking you in the wrong direction.

Source 21: Q-files is a great website to use when studying history and many other subjects at school.

Tips for searching using Google

- Every word matters.
- The order of the words matters.
- Capitalisation does not matter.
- Punctuation does not matter.
- Specific search terms are better.
- Use these terms to narrow your search: AND, OR, NOT.
- A search with 'filetype:' will find specific files. For example, 'Qin Shi Huangdi filetype:ppt' will find PowerPoint files about Qin Shi Huangdi.
- A search with 'site:' will find things *within* a website. For example, 'boomerang site:nma.gov.au' will find boomerang-related material from the National Museum of Australia website.
- Use the tabs along the top for different types of results such as images, news, videos, maps and books.
- Use a hyphen to exclude words and narrow your search. For example, 'Great Wall-takeaways' will find information about the Great Wall of China, not a fast-food outlet.
- Search for a range of numbers using two full stops between speech marks: '..' For example:
  - '2001..2004' searches between 2001 and 2004
  - '..2004' searches before 2004
  - '2004..' searches after 2004.
- An asterisk acts as a wildcard. For example, 'teen*' will return results with any of the words *teen, teens, teenager* in them.
- Use exact phrase searching by putting speech marks around a search phrase to find exact text.

I can extract information

This stage involves the 'Excavation' and 'Discovery' steps in the 'Developing a historical inquiry' section (see pages 221 and 222). You need to gather your evidence and then form and answer your 'big' question.

I can organise and present information

This is when you communicate your findings to your audience. Refer to the 'Curation' section on page 223 for guidance.

I can evaluate my research

You can improve every time you conduct research by asking yourself these questions after you finish:

- What worked? What did not work?
- How could I work smarter next time?
- Can I apply what I have learned to other situations?
- How could I have improved:
  - the project?
  - the way I worked on my project?
  - the way I managed my time?

Geo Overview

Geography has its own set of concepts and skills to help us study our world and its characteristics, patterns and changes over time. Understanding geographic concepts will help you think like a geographer. Learning the skills to use maps, images, graphs and other sources of data will enable you to explore patterns and conduct fieldwork to answer important questions.

GO

Why does geography matter?

Geography is the study of our world and its characteristics, patterns and changes over time. In geography, we focus on two main ideas: human activity and natural processes. We are interested in how humans influence the *space* in which they live and, in return, how the natural *environment* influences how we as humans live. Geographers are respectful of different people's perspectives, values and connections to place. Geographers use ethical practices to conduct fieldwork and analyse observations, maps, information, photographs and other data to understand patterns and answer questions. Geography is key to understanding the world around us, because without geography, you are nowhere!

Thinking like a geographer

Geography is not just about reading and memorising capital cities and flags. Begin by developing knowledge about people and places, and then conducting inquiries to learn new things about the world. You have most likely already been practising many geographic skills in your day-to-day life.

If you enjoy travelling or nature, geography helps you navigate and understand natural processes. If you're into music or movies, you might already be familiar with different countries through artists or film locations. You might have used a map to find your way to a friend's house or used apps like Google Maps or TripAdvisor to discover the best cafe or skate park nearby.

Source 1: As a geography student, you are a trainee geographer! The knowledge and skills you develop through your geography education will help you make informed decisions and real changes in the world.

Source 2: Developing skills in geospatial technology opens doors to a wide range of jobs and career opportunities in a range of sectors, including renewable energy development.

Four reasons why geography matters

1 Exploring geography will help you develop powerful skills

To help you complete your learning, you will develop a new set of skills. These skills will remain with you and will help you in many aspects of your life. Some of these valuable new skills are:

- asking questions
- planning investigations
- working as a team
- critical thinking and problem-solving
- reading maps and navigating
- interpreting data
- creating visual representations
- understanding how other people experience the places they live.

2 Exploring geography lets you see the world (sometimes without leaving your desk!)

Do you dream of hiking to the top of Mount Everest? Are you curious about the effects of climate change on polar ice caps? Do you ever wonder what it would be like to live in a city built entirely on canals?

The study of geography allows you to access every corner of the world: either on a fieldtrip, or at your desk using geographical information systems (GIS) such as Esri or Google Earth. Through this process you will come to understand the *interconnected* nature of our world and the roles we all play as custodians of our planet.

3 Exploring geography makes us informed global citizens

Studying geography helps us to understand ourselves and our planet. It helps us develop respect for social and cultural diversity and develops an understanding of environmental sustainability. You will explore:

- physical (natural) geography
- human (built) geography.

Physical geography is the study of the Earth's landscapes, landforms and natural processes, some which have been occurring for hundreds of thousands of years. **Human geography** is the study of how we interact with this natural world.

You might investigate how we change environments; how we use the environment; how different cultures, languages or religions are spread around the world; or even how we break up the world into land masses called continents and countries with political borders. The study of geography will empower you to be an active global citizen who makes informed decisions.

4 Future careers and pathways

Studying geography doesn't mean you have to become a cartographer (someone who draws maps). Geography opens doors to a huge range of potential study and career options, from climate change analyst to sociologist!

Where can geography take me?

Studying geography opens a wide range of career pathways because it combines elements of social science, environmental science, biology, mathematics, outdoor education and spatial analysis. You may be surprised at where a geographical career could lead you!

Source 1: Geography can lead to a large range of career possibilities.

Changing nations

Urban planner:
Design and develop plans for land use in urban areas, focusing on sustainable growth and liveability.

Geographic information systems (GIS) specialist:
Analyse spatial data to study urbanisation patterns and migration trends.

Environmental consultant:
Advise on managing the environmental impacts of urban development and climate change.

Climate change analyst:
Study the effects of urbanisation on climate change and develop adaptation strategies.

Sociologist:
Study the social dynamics of urbanisation and migration, focusing on community impacts.

Community development officer:
Focus on enhancing community engagement and addressing the needs of diverse populations in urban settings.

Demographer:
Analyse population trends, migration patterns and their implications for urban areas.

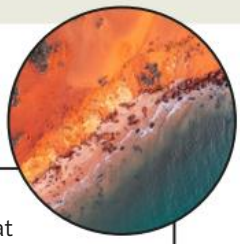
Transportation planner:
Work on improving public transport systems in urban areas to enhance connectivity and sustainability.

Public policy analyst:
Research and develop policies related to urban development, migration and sustainability.

Geographical careers

Landforms and landscapes

Environmental scientist:
Analyse and manage natural landscapes and their ecological health.

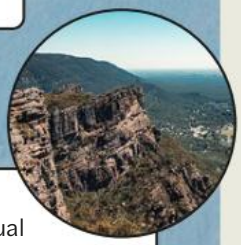


Cartographer:
Create maps that illustrate various landforms and landscapes, emphasising spatial relationships.

Landscape architect:
Design outdoor spaces, considering the aesthetic, environmental and cultural value of landscapes.

Geologist:
Study earth materials and processes that shape landforms, including geomorphology.

Conservation biologist:
Focus on protecting and managing natural landscapes and ecosystems.



Cultural heritage officer:
Work to preserve the spiritual and cultural significance of landscapes, especially for Indigenous communities.

Disaster management specialist:
Focus on managing the risks of geomorphic hazards and develop response strategies.

Hydrologist:
Study the distribution and movement of water in landscapes, including the impacts of landforms on water flow.

Wildlife biologist:
Study the impact of landscapes on local wildlife populations and their habitats.

Soil scientist:
Examine soil types and their relationship to landforms and landscape health.

How do I think like a geographer?

Geography has its own set of concepts and skills to help us study our world and its characteristics, patterns and changes over time. Understanding geographical concepts will help you think like a geographer, and learning the skills to use maps, images, graphs and other sources of data will enable you to explore patterns and conduct **fieldwork** to answer important questions.

Geographic concepts

Thinking geographically involves using the concepts of geography to look at the world in a particular way. As a geographer, you will analyse the world using seven geographical concepts. The concepts are geographic ideas that you can apply to the topics you study to deepen your understanding and help you create geographic questions that will guide your investigations.

Use the acronym **SPICESS** to help you remember the seven geographic concepts:

1. **S**pace
2. **P**lace
3. **I**nterconnection
4. **C**hange
5. **E**nvironment
6. **S**cale
7. **S**ustainability.

You may often use these concepts without even realising; for example, by thinking, 'Now the new freeway is built, how far is it to my best friend's house?' you can start exploring the concepts of space, place, change and scale.

As you get more confident and build your skills in geography, these seven concepts will help frame your thinking and understanding of the world around you.

Source 1: Mt Fuji, Japan

S Space

In a geographical context, *space* refers to the way that we use, *change*, manage and distribute things on the Earth's surface. For example, this *environment* can be broken up into key spaces: the natural mountain spaces and the human urbanised space.

P Place

The concept of *place* can be described using location, characteristics and human meaning. Mt Fuji is Japan's highest peak and a UNESCO World Heritage Site. The mountain is also a sacred site in Shinto beliefs.

I Interconnection

Interconnection is the idea that two things or phenomena are related, interact or are linked in some way. For example, there is a strong interconnection between the Japanese people and Mt Fuji. Many people climb the mountain as a spiritual journey, stopping to pray at temples along the way.

C Change

Change refers to how a *place* is altered due to shifts in the environment or to meet the needs of humans. Change can be positive or negative, and can occur over short or long time periods. In this place, we can observe a change between the seasons through the vegetation. In spring, beautiful pink and white cherry blossoms bloom throughout Japan.

E Environment

An *environment* can be defined by its **geographical characteristics**. Some environments are largely natural and are untouched by humans, such as coastlines, islands and forests. Other environments have undergone significant change and are largely unnatural, such as cities and other urban areas. Within environments we can observe processes, interconnections between **phenomena** and change over time. This is an example of both a natural and a human environment.

S Scale

Scale usually refers to the size of something. Scale can be literal, such as a scale on a map using data to show you how big something is in real life. It can also be used as a word when describing a region. For example, patterns can exist on a local, regional, national or global scale. Mt Fuji is Japan's tallest peak at 3776 metres.

S Sustainability

Sustainability is the concept of maintaining and preserving resources and environments for future generations, by using sustainable, **renewable energy**, for example. Mt Fuji is a major tourist attraction in Japan and therefore this place is subject to a lot of foot traffic and rubbish dumping. A range of groups and organisations have been developed over time to help sustain the natural environment surrounding Mt Fuji to ensure it remains beautiful for future visitors. Mt Fuji was listed as a World Heritage Site in 2013.

Space

The concept of space involves looking at the way things are arranged on Earth. The study of space has two key components:

1 location – where a space is found on Earth
2 spatial distribution – the arrangements and patterns of natural and human features on the surface of the Earth.

Understanding location

Location is recognising where a space is found on Earth. When you are trying to recognise location, ask: How can I describe the location? Where on Earth is it found? What does the environment look like?

Location can be relative or absolute. A **relative location** is a description of where a place is in comparison to another place. You may describe a relative location using characteristics of the land, political territories (such as countries) and the points of a compass. For example, Source 2 shows the megacity of Tokyo, Japan. Tokyo is located to the north of Australia, around a 10½-hour flight from Melbourne Airport.

A more accurate way to pinpoint the location of a place is to use a grid. On maps of large areas, such as countries of the world, we use the lines of latitude and longitude to give the **absolute location** of places. Detailed topographic maps also use a grid system to find the absolute location of places (discussed on page 451). For example, the famous red and white Tokyo Tower is located at 35.6586° N, 139.7454° E.

Absolute location can also be an address or other fixed-point reference on Earth. For example, you may live at 1 Sunhill Avenue in Ringwood North, Victoria, Australia.

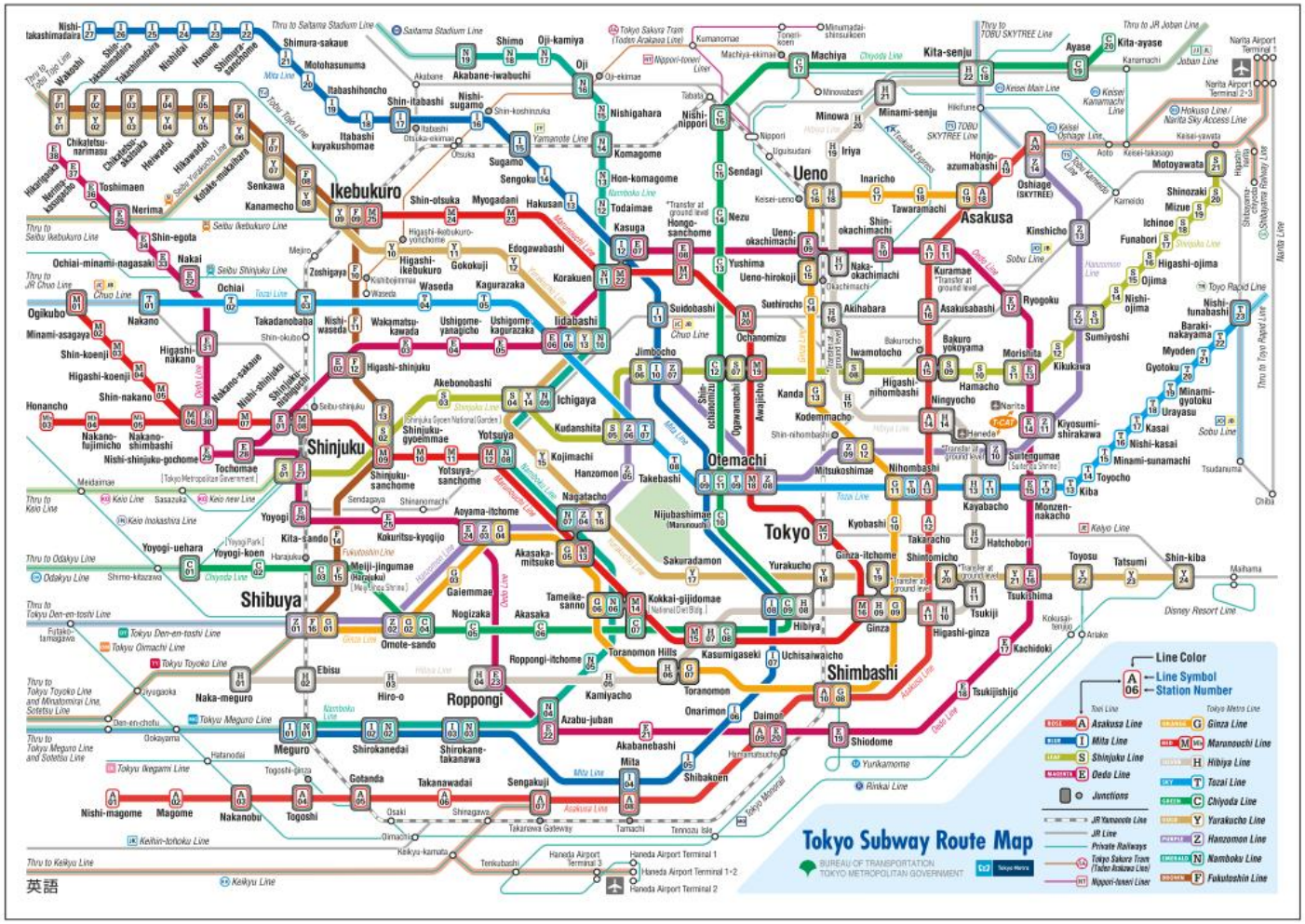
Understanding spatial distribution

When you describe a spatial distribution, ask: Can I see a pattern? Is the feature I am looking at spread out in a line or bunched together? Can I see any patterns? Are there any examples or data to help quantify what I see?

Spatial distributions can help us develop strategies for action to improve or manage a situation. For example, Tokyo's high population density means that it requires a connected and reliable subway network. The stations are distributed around Tokyo and surrounding regions, connecting people to facilities, services and economic hubs. The complex subway network is evidence of the economic and social consequences of Japan's high level of urban concentration.

Source 2: Aerial view of Tokyo, Japan, a megacity that is home to more than 37.8 million people

Tokyo subway



Source: Bureau of Transportation Tokyo Metropolitan Government

▲ **Source 3:** Tokyo's subway system helps connect places in the largest city in the world.

Place

The concept of place can be described using characteristics and human meaning. Places can range in size. The Sahara Desert, the world's largest hot desert, is a place that covers 9.2 million square kilometres. Your home is also a place. Places can be natural (shaped by the environment) or built (made by humans).

Characteristics of a place

Describing the characteristics of a place means recognising features in the landscape and detail in them. Satellite images such as Source 5 show physical features such as the desert, creeks and the gulf; and human features such as buildings, roads and reclaimed land. Map legends may also help identify the physical and human features of a place.

Places have meaning

A location becomes a place when humans attach emotion or meaning to it. People have different experiences in places and feel connections to them. Consider the sense of security you have when visiting a close relative's house or the sense of belonging you feel when attending your church or local sporting club. We describe this connection to a place in geography as 'sense of place'. A person's attachment to a place helps form their identity and can connect them to other people, their ancestors or culture.

In Source 4, the relationship between the human and physical characteristics is a close one. For First Nations Peoples, Country is much more than a place. People are a part of their Country and their Country is part of them.

Places can be as small as your bedroom or as big as a country or region. Places are dynamic and are constantly changing due to environmental processes and human influences.

Source 4: Place has a much deeper meaning for First Nations peoples. They have a deep spiritual, physical, social and cultural connection to the land, often described as **Connection to Country**. Palyku woman Ambelin Kwaymullina explains: 'For Aboriginal peoples, Country is much more than a place. Rock, tree, river, hill, animal, human – all were formed of the same substance by the ancestors who continue to live in land, water, sky. Country is filled with relations speaking language and following Law, no matter whether the shape of that relation is human, rock, crow, wattle. Country is loved, needed and cared for, and Country loves, needs and cares for her peoples in turn. Country is family, culture, identity. Country is self.'

Places are connected

It is difficult to study one place in isolation. Places are connected through social, economic, environmental and political factors. For example, the coastal positioning of Dubai (Source 5) provides opportunities for trade with other places. It also is a good place to travel to take advantage of the warm climate and expansive beaches.

Places can also be compared, and similarities and differences can be studied. You might compare Dubai to Singapore, which has also reclaimed land to increase rates of urbanisation. You could compare Dubai to other desert cities such as Las Vegas, United States, to analyse how and why these places have developed rapidly over time.

Source 5: Dubai is located within the Arabian Desert, on the coast of the Persian Gulf. The centre of Dubai is dominated by multistorey skyscrapers, including the Burj Khalifa, the world's tallest building. To create more usable space, land has been reclaimed from the Persian Gulf in the shape of palm trees and a world map.

United Arab Emirates

Source: Getty images/ Satellite Earth Art

Interconnection

The concept of interconnection helps geographers understand the connections between two or more things and how these interactions affect environments and the way we live. Interconnection is the idea that two things, or phenomena, are related, interact or affect one another. For example, heavy rainfall in one area may impact people who live on floodplains hundreds of kilometres away.

Describing interconnection

The first step in understanding interconnection is to recognise that things are connected. For example, imagine you have bought new jeans made in China. There are links between the farms that grow the materials, the company that designs the jeans and the manufacturer in China. A further connection happens when the jeans are transported from China to where you buy them in Australia.

Phenomena are things we observe happening in an environment. A change or action of one phenomenon can affect another. For example, an earthquake under the sea can create a tsunami that threatens coastal communities. In Source 7 we can ask why did 35 000 people die in Sri Lanka, when it is 1600 kilometres away from the source of the earthquake? The earthquake pushed up the water above it to set a tsunami in motion. Tsunamis can travel at up to 800 kilometres per hour, so in about two hours, the tsunami travelled 1600 kilometres to Sri Lanka, killing 35 000 people. Block diagrams (see page 437), such as the one in Source 6, can show interconnections between phenomena in an environment.

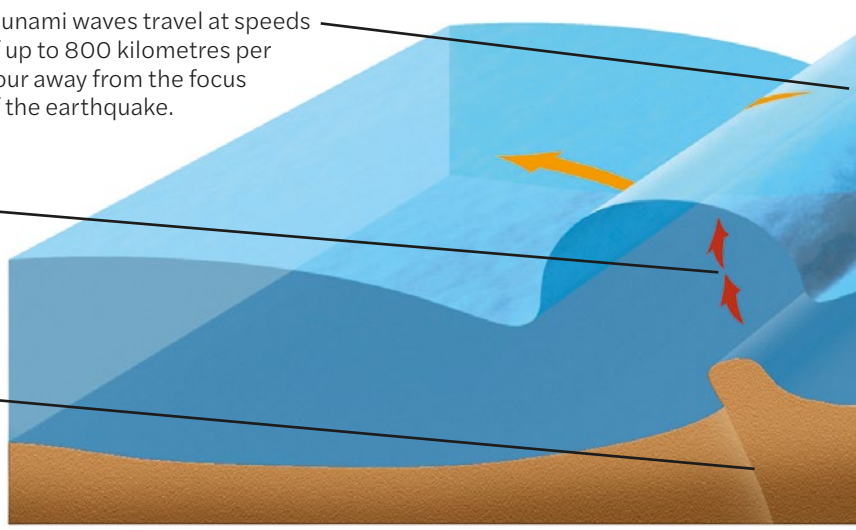
Interconnections and taking action

Understanding interconnections can help you answer questions about geographical challenges and consider strategies for action. For example, for Source 7 you could ask the following questions:

- How can we use our understanding of interconnections to help prepare for geographical challenges in Sri Lanka?
- How can governments help to respond to tsunami events?

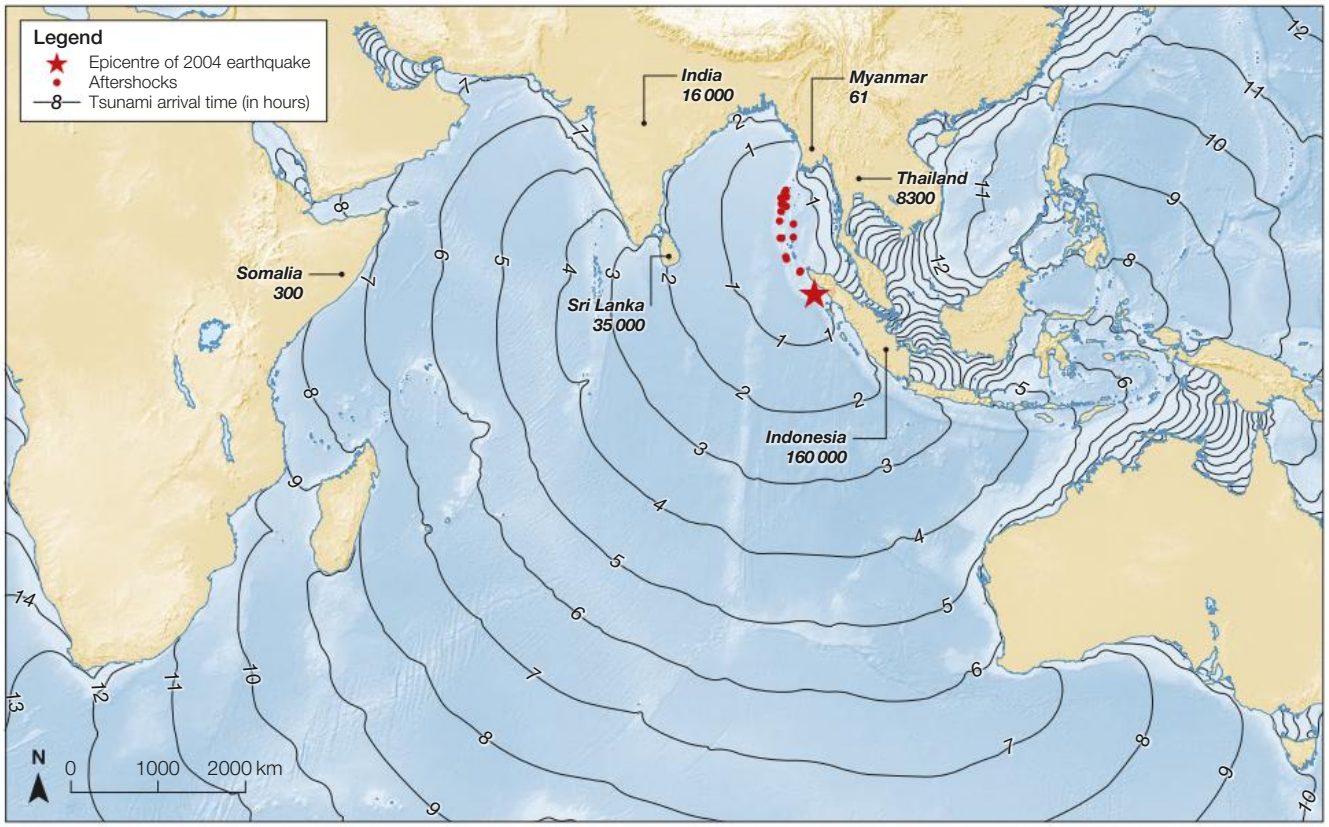
Recommendations for improved tsunami mitigation and responses may include:

- **warning systems:** advanced technologies, such as seismometers, satellites and buoys, detect tsunami risks, allowing for evacuations within 15 minutes of an earthquake.
- **coastal defences:** protective structures and nature-based solutions, such as sea walls, coral reefs and forests, help reduce the impact of tsunamis.
- **aid responses:** international aid provides financial support, supplies and infrastructure rebuilding to help communities recover after a tsunami.
- **international monitoring:** global organisations like the Pacific Tsunami Warning Centre monitor tsunamis and coordinate timely evacuations.



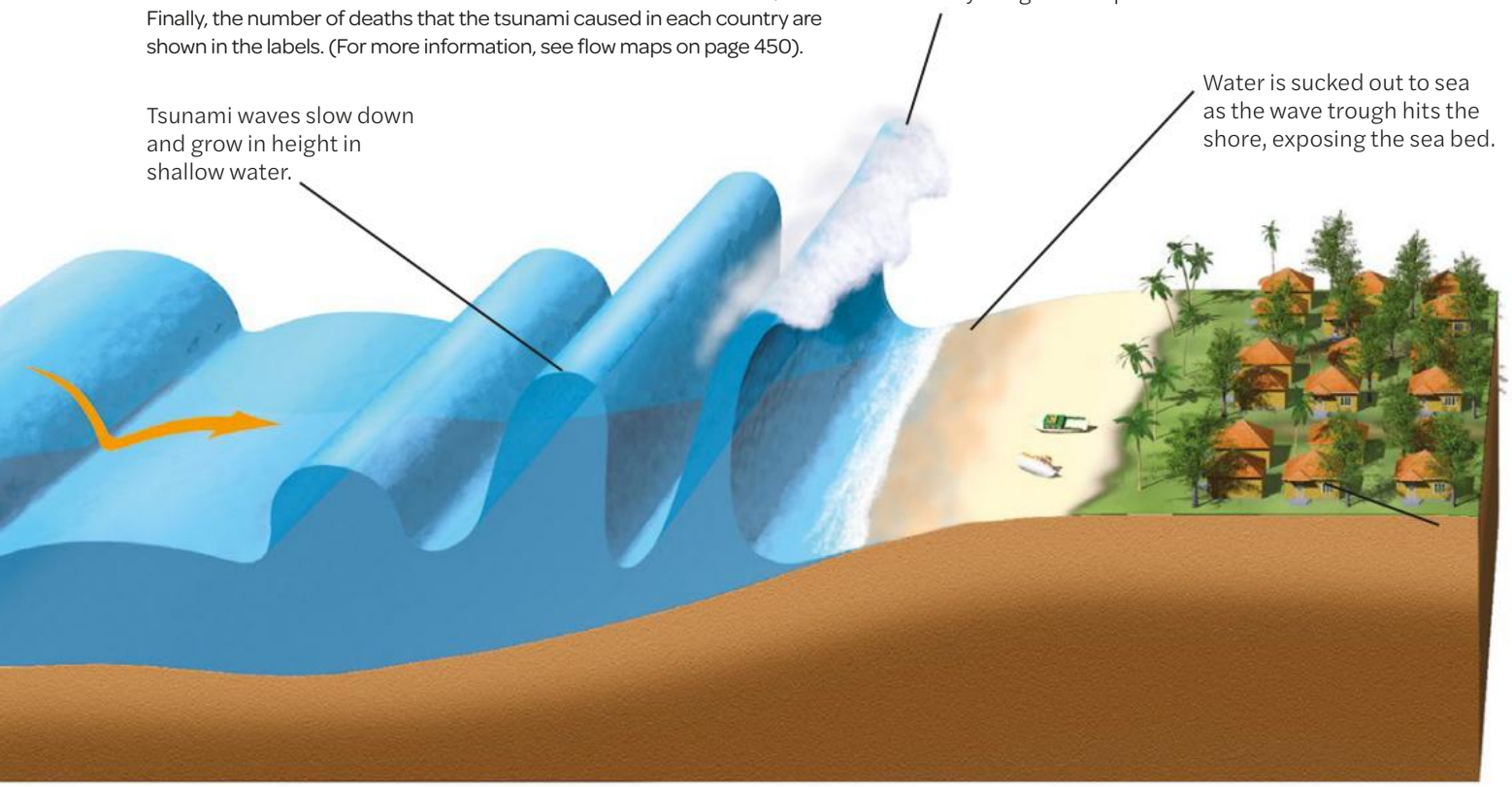
Source 6: Formation of a tsunami

Indian Ocean earthquake and tsunami travel times



Source: Matilda Education Australia

Source 7: This flow map shows the movement and interconnection between two or more places on the map. The red star shows the location of the earthquake that occurred on 26 December 2004. The red circles show the aftershocks felt on the day after the earthquake and the numbered lines show the hours taken for the tsunami to travel from the focus of the earthquake. Finally, the number of deaths that the tsunami caused in each country are shown in the labels. (For more information, see flow maps on page 450).



Change

Change refers to how a place is altered due to shifts in the environment or to meet the needs of humans. Change is easy to see when it occurs rapidly, such as a flood, a landslide or clearing a forest. Changes over a long period of time, such as climate change or the movement of landmasses, are more difficult to observe. Change can be positive or negative, and geographers play a role in helping to manage change.

The scale of change

Change occurs all around us and on different scales. You might notice a new building or road in your area, or you could see a seasonal change such as blossoms appearing on trees. Maps and graphs can help us identify change across larger areas.

Change can also occur over different time scales. Identifying short-term change is usually easier than recognising changes over the longer term. We can usually see the results of a landslide, flood or building on land immediately. Source 8 shows the change that occurred in Nepal over a short period of time in September 2024. After three days of monsoon weather, Bagmati River flooded, resulting in landslides cutting off access to three main highways out of Kathmandu. Longer-term changes, such as movements in the earth or weathering of the land, are harder to observe as they can take place over hundreds, thousands or millions of years. Geographers look for evidence of change, such as the shapes of features in the landscape, to understand how things have altered.

Changes and taking action

Explaining how change occurs requires a higher level of understanding. You need to ask 'why' the change is occurring. For example, in Source 8 we can ask: 'Why do landslides occur in Nepal?'

The monsoon season in Nepal brings seasonal heavy rains from June until mid-September. Excessive rainfall causes local river systems to overfill and land to become saturated. Nepal's steep terrain makes it prone to landslides, especially during these seasonal heavy rainfall periods or earthquakes. Human processes such as deforestation have removed stabilising vegetation, and the rapid development of infrastructure in natural drainage basins has meant that people are vulnerable to landslide and flooding events.

Once you explain why a change has occurred, you can analyse the implications of the change. Analysis involves further research and thought about how to manage the change sustainably. For example, an analysis of the flood event shown in Source 8 might involve asking:

- Which areas of Nepal are prone to flooding?
- What warning system is in place to measure the height of the water upstream? When have landslides occurred in the past?
- What action do residents of Kathmandu need to take? Where is a safe place of refuge for the community?

Source 8: Monsoonal weather resulted in landslides in Nepal in 2024. These short-term changes to the environment cut off access to Kathmandu, the main economic hub of Nepal.

Environment

Environments are defined by their geographical characteristics. Natural or physical environments are those that are largely untouched by humans, such as forests, deserts and mountains. Human or built environments have undergone significant change, such as cities, towns, mines and farms. Studying the concept of environment helps geographers understand the processes driving the formation of natural environments and manage changes humans are making to it.

Describing environments

Environments can be described as physical (natural) or built (human) environments. The topographic map in Source 9 shows a range of physical and built environments in the region around Darwin in the Northern Territory. The city of Darwin is a built environment that has been changed by humans for the purpose of settlement and economic activity. The physical environments on the map are the natural areas that are largely untouched by humans, such as forests, mangroves (shrubs and trees that grow in salt water) and swamp land.

Value and impacts

The physical and built characteristics of environments help provide humans with resources; for example, providing a place to live, grow food, access water, collect materials and recycle waste. Environments also provide cultural, spiritual and aesthetic value. Technology helps us change our surroundings to allow for growing populations, and changing needs and economies, but it also brings new problems. To manage changes in the environment effectively, we need to understand how both nature and human activities influence it, and apply geographical knowledge to handle risks and build stronger, safer communities.

Each environment presents some risk or hazards to humans such as floods, drought or bushfire. Human actions like deforestation and poor infrastructure can worsen these impacts. While we can reduce risks of hazards through prevention and preparedness, we cannot eliminate them.

A topographic map of Darwin, NT and surrounds

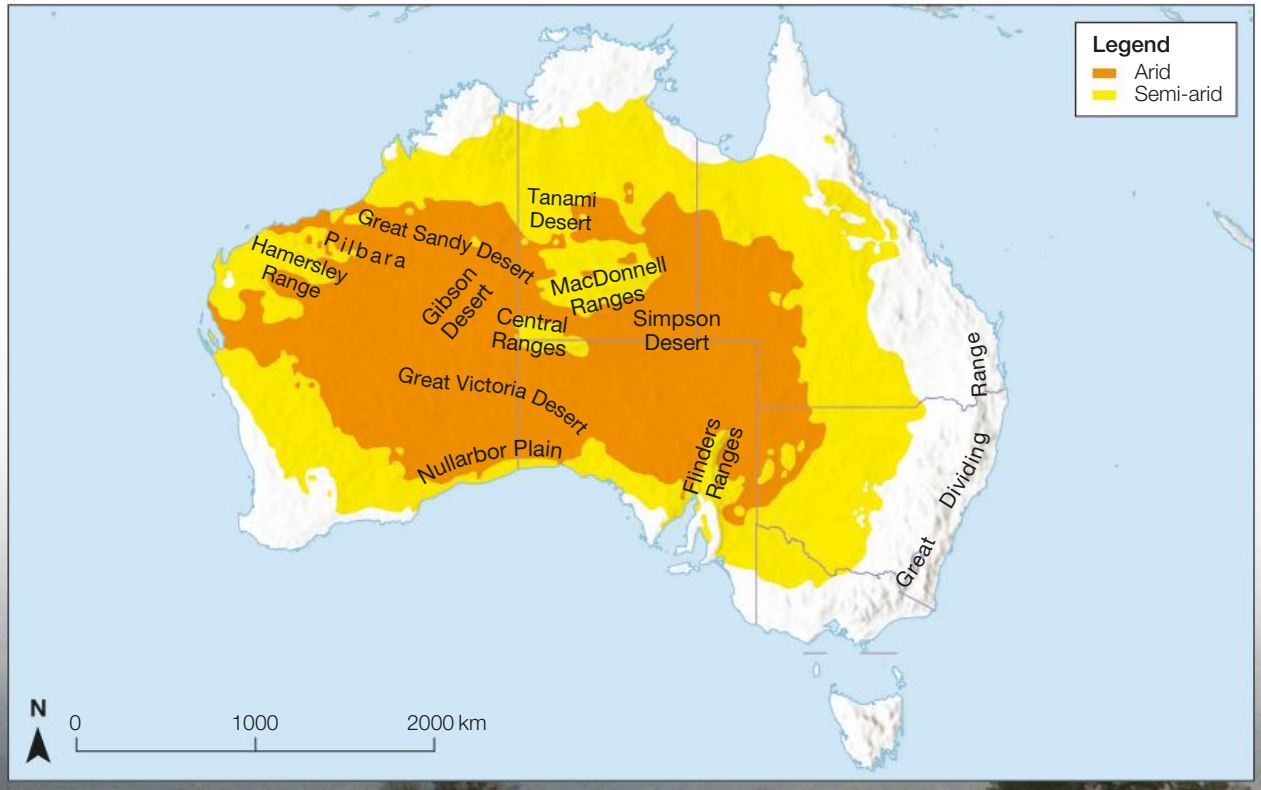
Source 9: Topography is the study of the surface of the land. Topographic maps show the different environments present on the Earth's surface. This topographic map is of the tropical region around Darwin. It shows few contour lines, indicating the land is very flat. Built environments shown include the cities of Darwin and Palmerston (shown in pink) and the suburban areas of Howard Springs and McMinnis Lagoon (black squares). Natural environments include forests (light green), mangroves (dark green) and swamp (blue dashed lines).

Source: Commonwealth of Australia (Geoscience Australia)

Scale

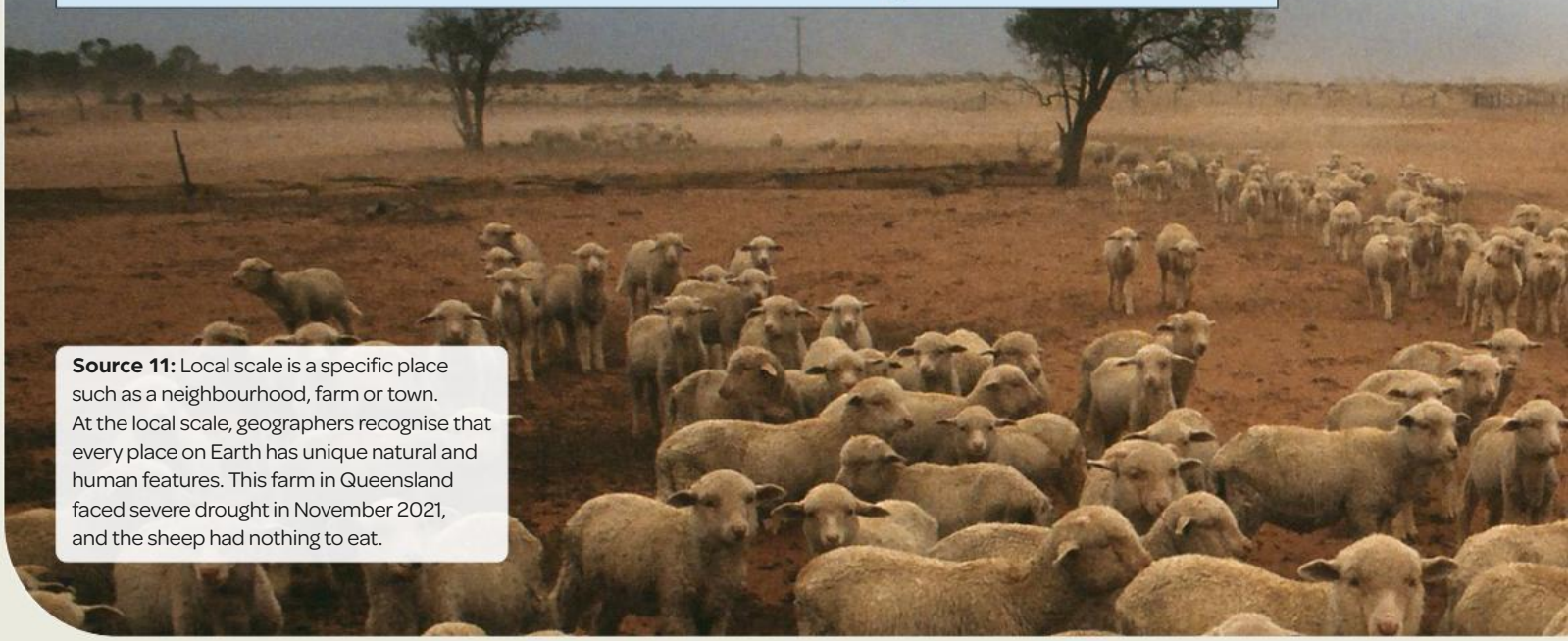
Physical scale relates to the size of an area. Geographers study phenomena and patterns at a range of different scales. Different outcomes and explanations can be achieved at local, regional, national or global scales. For example, migration rates may be influenced by local employment opportunities, national policies or global issues such as climate change. Geographers also consider time scale (whether changes happen over days, years or centuries) to understand and describe phenomena such as short-term events and long-term changes.

Arid and semi-arid regions in Australia



Source 10: Arid and semi-arid regions in Australia

Source: Matilda Education Australia



Source 11: Local scale is a specific place such as a neighbourhood, farm or town. At the local scale, geographers recognise that every place on Earth has unique natural and human features. This farm in Queensland faced severe drought in November 2021, and the sheep had nothing to eat.

Geographers explain four different levels of scale to help guide their investigations:

Local scale is a small space on Earth such as a community, town or house. Studying a geographical theme at the local scale helps identify outcomes for people. For example, the farmer in Source 11 had to purchase grain and hay to feed his sheep because the drought destroyed the pasture on the farm.

Regional scale refers to spaces that are larger than a local scale, but smaller than a national (whole country) scale. Examples of regional scales studied in geography include the states of Australia; large natural areas such as deserts, forests and alpine areas; and large administrative areas such as the Australian Antarctic Territory or the Murray–Darling Basin. Source 10 shows the locations of arid and semi-arid regions in Australia. Each state in Australia is an example of a regional scale.

National scale refers to a country or nation. Geographical issues at a national scale affect the entire country. Changes in rainfall patterns across Australia were interconnected with the drought conditions that occurred on a national scale in Australia in 2017–20, exacerbating the already arid conditions of some regions. Australia's government had to help farmers during this period and ration the water available in regions suffering drought. During periods of drought, countries also produce less crops and reduce livestock, which impacts the national economy.

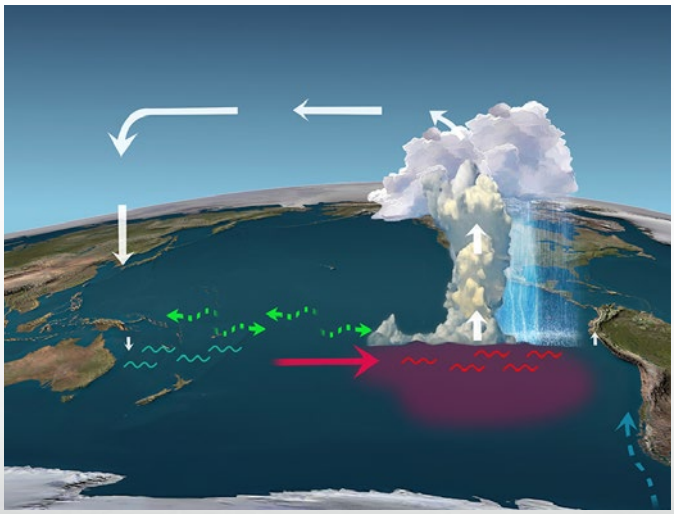
Global scale studies patterns that occur across the whole world. Global phenomena and issues can help explain conditions occurring at other scales. Source 12 shows that Australia's drought in 2017–20 was driven by a global climate phenomenon known as El Niño.

Impacts across scales

Often geographers need to ask 'why' an event or pattern is occurring and compare its effects at a range of scales.

At the global scale, the El Niño climate pattern delivered high rainfall in the Americas in the Eastern Pacific and low rainfall to Australia in the Western Pacific. At a national scale, Australia had to deal with drought conditions impacting the south-east of the nation. Intense drought was particularly felt throughout eastern New South Wales, where water supplies were threatened. At the local level, residents had their water rationed and farmers lost crops and had to buy feed for livestock.

Source 12: Global scale refers to broad patterns that occur across the world. This diagram shows the impact of the global climate system known as El Niño. It sometimes occurs in the Pacific Ocean, but El Niño affects weather all over the world. In El Niño years, very high rainfall is experienced in the Americas while Australia and other parts of the world suffer drought.



Sustainability

Sustainability is the concept of maintaining and preserving resources and environments for future generations. Living in a sustainable way means that we meet our current needs without compromising the needs of future generations. Geographers use the concept of sustainability to investigate how resources can be carefully managed to ensure they will still be available in the future.

The first step in understanding the concept of sustainability is to recognise resources as renewable or non-renewable. **Renewable resources** will naturally renew themselves if we do not use them too quickly. We need to manage renewable resources to ensure they have a chance to regenerate. Examples of renewable resources include water, trees and solar energy. **Non–renewable resources** are resources that are only available in limited amounts. If we overuse them, they will run out. These resources include the fossil fuels: oil, natural gas and coal, which take millions of years to form inside the Earth. Source 14 shows that in 2020, most of the energy used around the world came from fossil fuels.

Source 13: Tesla is a US electric vehicle and alternative energy company. The company's mission is to speed up the world's transition to clean, sustainable energy resources. Tesla designs and manufactures electric vehicles, battery energy storage and solar panels.

Sustainable practices

We need to ensure there will be adequate resources left for future generations. Some examples of sustainable practices include:

- Reduce, reuse, recycle: Reduce the amount of waste by reusing bags for shopping and refilling drink, soap and shampoo bottles rather than disposing of them; and using washable cloth wipes and nappies in place of disposable nappies and paper towels.
- Use renewable energy: Use renewable energy such as hydroelectricity and wind power. Install solar panels on the roof to provide renewable energy to your home and choose an electric car that uses fewer fossil fuels (see Source 14).
- Use fewer resources: Reduce your impact by changing your everyday choices: turn off appliances when you are not using them, dress warmly rather than using heating, and walk, cycle or use public transport when you can.

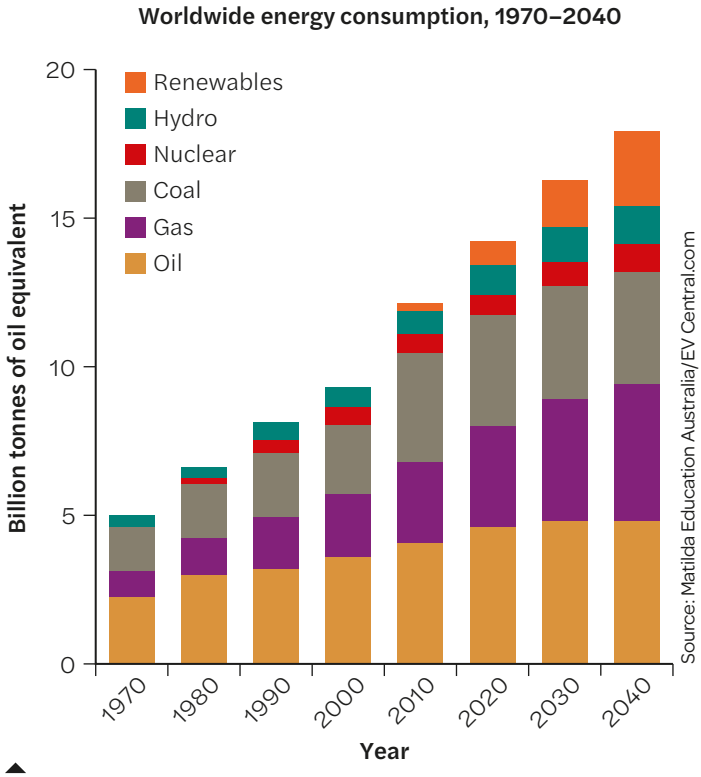
Source 13 shows a sustainable home that uses special solar roof tiles to capture energy from the sun. The solar power is stored in batteries and means the home and car can run on electricity without using non-renewable resources such as coal.

Importance of sustainability

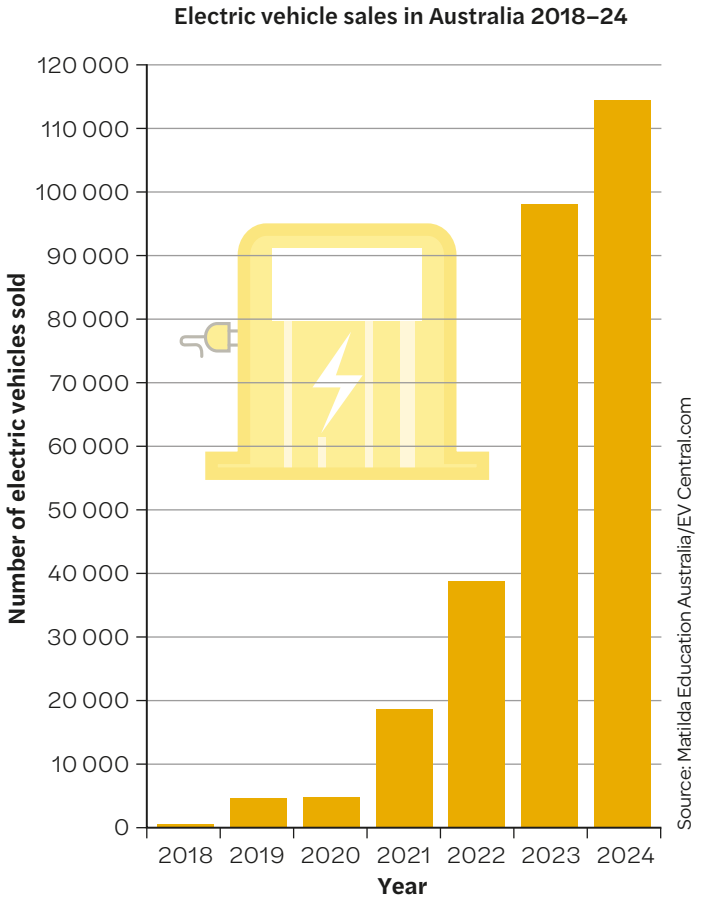
Explaining the importance of sustainability requires you to ask 'why' the sustainability practice is a good thing and link it to outcomes at different scales. For example, in Source 15 we can ask why an increase in electric car sales is a good thing for the world.

An advantage of electric cars is that they do not consume as much non-renewable energy as cars with petrol engines. A further advantage is that electric cars don't release carbon dioxide (CO_2) that contributes to global warming. A disadvantage of electric cars is that the electricity may have been produced from a non-renewable resource such as by burning coal.

People with different environmental worldviews can disagree on how sustainability issues such as climate change and renewable energy should be managed. Pro-environment and pro-development worldviews need to be considered when framing solutions.

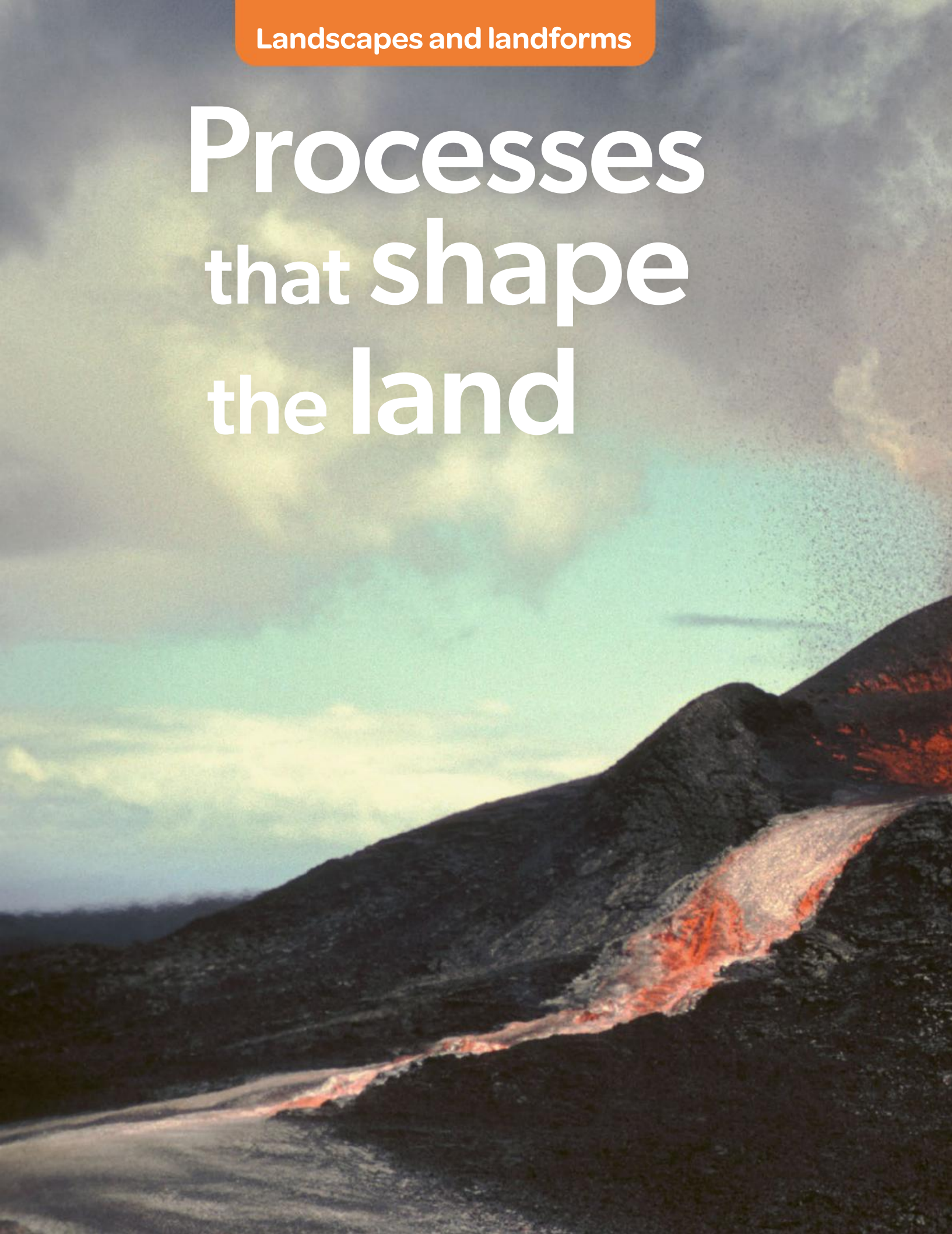


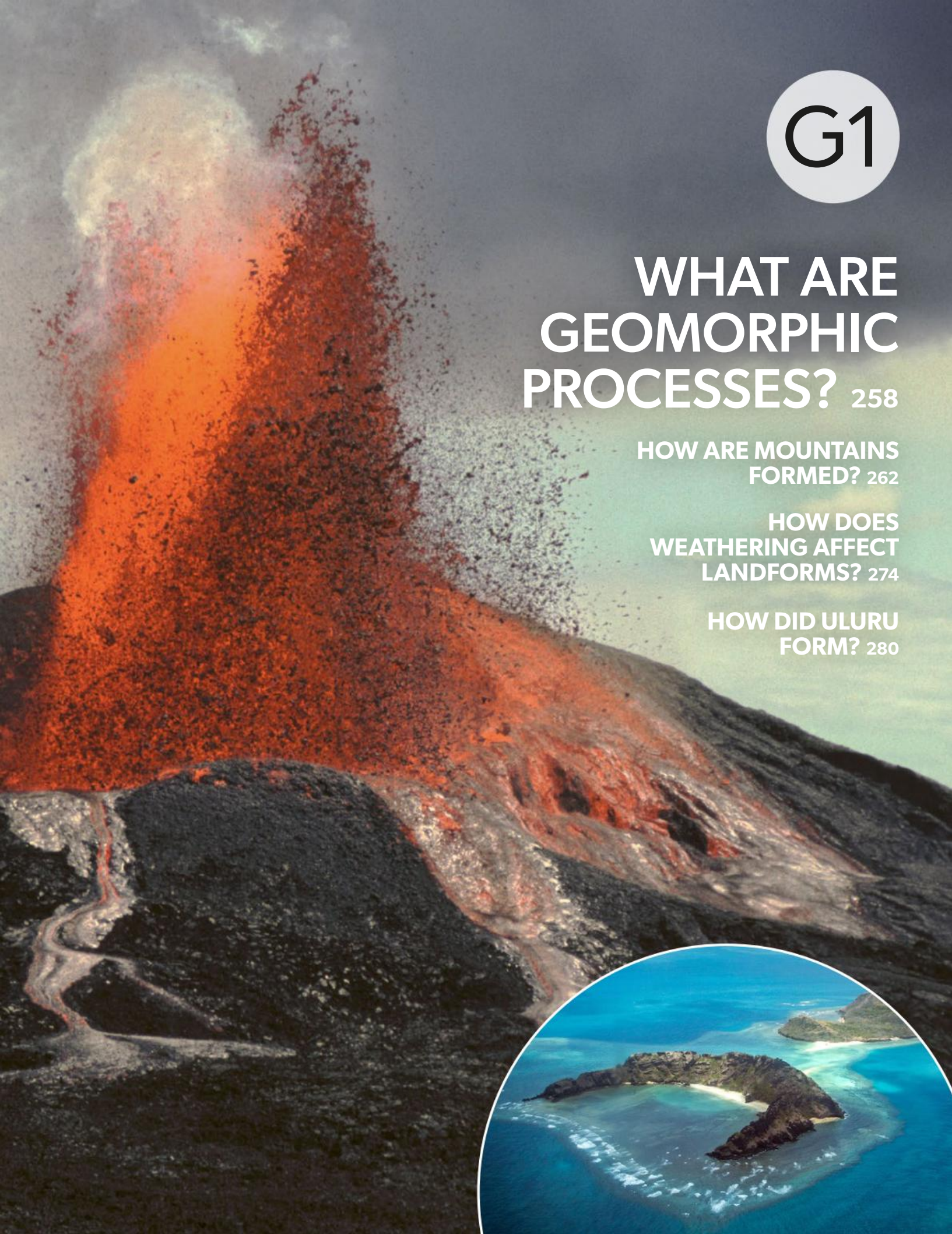
Source 14: This graph shows global energy consumption by energy type (projected to 2040).



Source 15: The number of electric vehicles sold in Australia has increased a lot in recent years.

Processes that shape the land





G1

WHAT ARE GEOMORPHIC PROCESSES? 258

HOW ARE MOUNTAINS FORMED? 262

HOW DOES WEATHERING AFFECT LANDFORMS? 274

HOW DID ULURU FORM? 280

G1.0

How can I understand landscapes and landforms?

Mountains, glaciers, valleys, plateaus and many other natural features that we see on the surface of the Earth are called landforms. Landforms are produced by natural processes. Similar landforms are grouped together as landscapes.

Learning ladder

The Learning ladder lists the knowledge and skills you will learn. Each has five levels of difficulty. Learning skills at the bottom of the ladder will help you to master the skills at the top of the ladder.

Steps in knowledge progression	Landscapes and landforms	Processes	Interconnections	Planning and collecting	Representing information
				Processes that shape the land	**Geographical inquiry**
5	I can analyse landscapes.	I can assess the interaction of processes.	I can analyse the consequences of interconnections.	I can use geospatial technology to record data.	I can follow ethical practices when working with data.
4	I can compare landscape distributions.	I can explain the impacts of processes on places.	I can explain causes and effects of interconnections.	I can gather primary data.	I can use geospatial technologies to create maps.
3	I can explain landscape distribution.	I can explain processes.	I can explain interconnections.	I can gather information from secondary sources.	I can use geographical conventions to construct maps.
2	I can describe landforms and landscapes.	I can describe processes.	I can describe interconnections.	I can plan an inquiry.	I can represent data and information.
1	I can identify landscapes and landforms.	I can identify geomorphological processes.	I can identify interconnections.	I can ask open-ended questions.	I can select data relevant to a question.

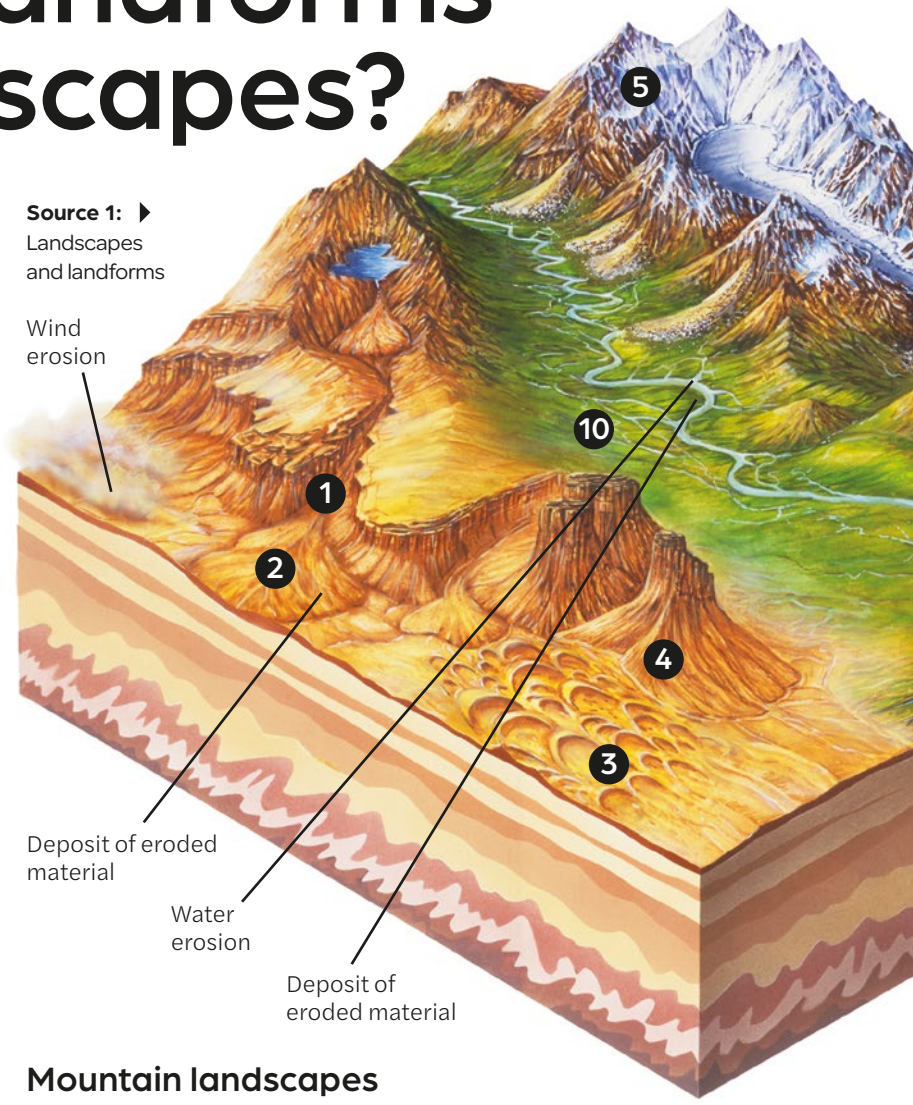
Source 1: Horse Head Rock near Bermagui in New South Wales is a natural arch landform caused through wave erosion.

	Interpreting information	Making conclusions	Strategies	Presenting ideas
		Concluding and decision-making		Communicating
5	I can use geographical concepts to structure data analysis.	I can evaluate ethical considerations.	I can consider perspectives to evaluate strategies.	I can analyse the implications of phenomena.
4	I can predict change to patterns.	I can assess the reliability of data.	I can design strategies.	I can explain interconnections with data.
3	I can explain distributions and patterns.	I can write evidence-based conclusions.	I can predict the impact of a strategy.	I can support explanations with data.
2	I can describe distributions and patterns.	I can describe the impact of geographical phenomena.	I can explain a strategy.	I can explain the relevance of information.
1	I can read graphs and maps.	I can answer geography questions.	I can describe a strategy.	I can describe phenomena using geographical terms.

Steps in skills progression

What are landforms and landscapes?

Earth contains many different types of natural landscapes. Each landscape features unique landforms created by natural forces, such as the movement of tectonic plates.



Source 1: ▶ Landscapes and landforms

Landforms and landscapes

A **landscape** is comprised of the visible features of an area. Landscapes can be natural, such as deserts, or human, such as cities. Natural landscapes are made up of different **landforms**. Landforms are shaped over time by **weathering** and **erosion**. Weathering wears them down and breaks them apart and erosion removes the weathered material. The growth of human settlement and activities such as farming, mining, logging and tourism can change and sometimes degrade landscapes.

Desert landscapes

Deserts are dry environments. They can be hot or cold and can be rocky, sandy or even covered in ice. Rocky deserts can be weathered and then eroded by water and wind into amazing shapes. Use the numbers for each landform below to locate them in Source 1.

Desert landforms

1. **Wadi:** Dry watercourse in a deep, narrow valley that divides a **plateau**.
2. **Alluvial fan:** Semicircular build-up of eroded material deposited by water and wind at the end of a **wadi**.
3. **Barchan dune:** A crescent-shaped **dune** formed by the wind blowing from one direction. They are a common landform in sandy deserts.
4. **Butte:** Isolated, steep, flat-topped hill of resistant rock (rock that does not erode easily).

Mountain landscapes

Mountain landscapes sit high above the surrounding land. They are formed by movements in Earth's crust, which also cause earthquakes and volcanoes. Use the numbers for each landform below to locate them in Source 1.

Mountain landforms

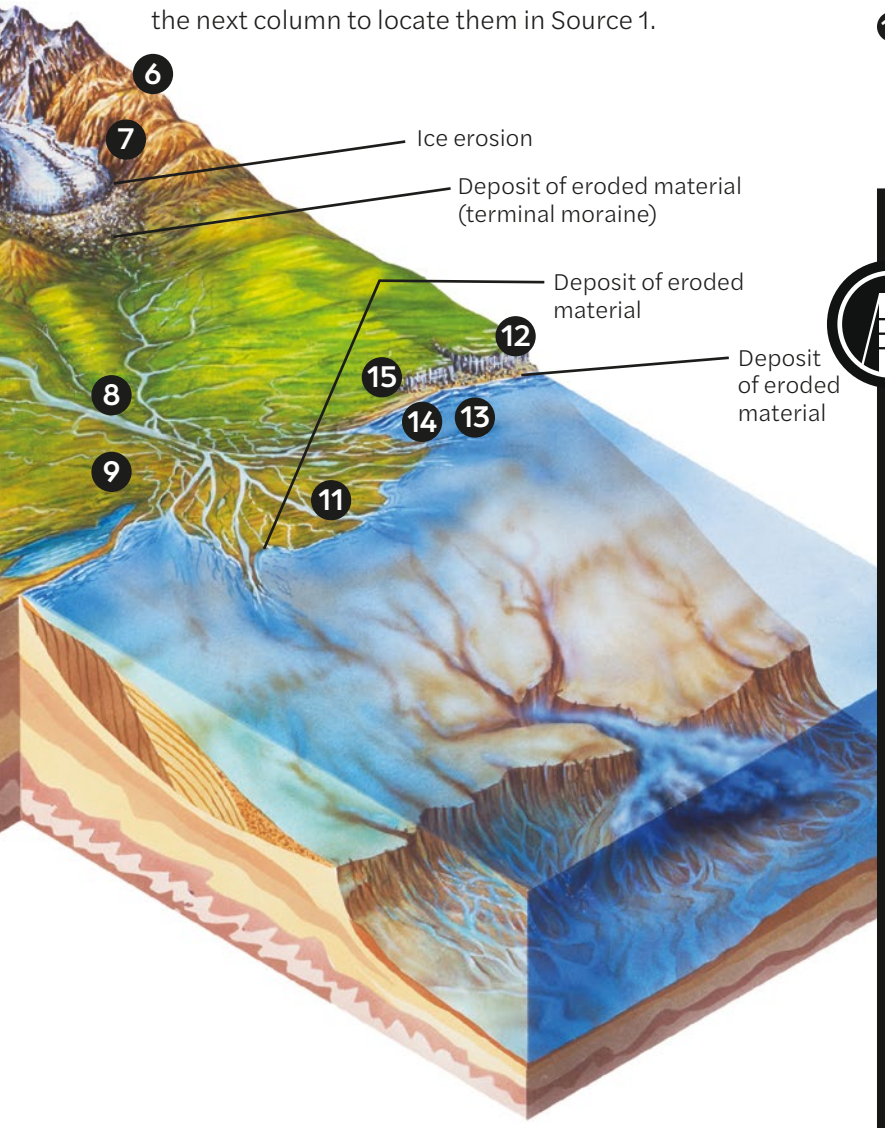
5. **Mountain:** Steep-sided, lone peak rising above the surrounding land.
6. **Fold mountains:** Formed when two tectonic plates collide and the crust folds and is pushed upwards.
7. **Glacier:** River of ice that moves downhill in response to gravity.

Riverine landscapes

Riverine landscapes are formed by the natural movement of a network of rivers in a **drainage basin**. These landscapes attract farming because they contain fresh water and fertile land from deposited silt. Use the numbers for each landform on the next page to locate them in Source 1.

Coastal landscapes

The coast is where the land meets the sea. Coastal landscapes are shaped by wind and waves that erode and deposit materials to create landforms that are constantly changing (see Chapter 2, Coastal landscapes). Use the numbers for each landform in the next column to locate them in Source 1.



Riverine landforms

8 **River:** A natural waterway that carries water downhill by gravity.

9 **Floodplain:** Flat land that water spills onto in flood conditions.

10 **Meander:** Loops in a river when it slows on flatter land. The river erodes the outside and deposits on the inside of the meander.

11 **Delta:** Deposited sediment at a river's mouth, which causes the river to block its own exit. The river splits into a number of finer channels that erode a path to the sea.

Coastal landforms

12 **Headland:** Narrow, high land jutting out into the sea, formed of harder rock that resists erosion.

13 **Bay:** Curved indentation in the coastline.

14 **Beach:** Deposited rock particles, such as sand or gravel, along the coastline.

15 **Coastal dune:** Mound or ridge of wind-blown sand at the back of the beach.

Learning ladder G1.1

Processes

1. Source 1: Name a landform that fits each of the following descriptions:
   - **a** eroded by glaciers
   - **b** deposited by water
   - **c** caused by movement of the Earth's crust.
2. Source 1: Describe how meanders change the path of a river.
3. Source 1: Explain how erosion and deposition are key processes in the formation of a delta.
4. Explain the impacts of natural processes on places.

Planning and collecting

1. Discuss your favourite landscapes as a class. What landforms make up these landscapes?
2. Choose one of the landscapes listed on the spread.
   - **a** What do you know already about this topic?
   - **b** What would you like to know more about?
   - **c** Where could you find that additional information?

   Create a list of websites that would be useful in finding out more information about your selected landscape.
3. For one selected landscape, use secondary sources to:
   - **a** find three real-world examples
   - **b** find photographs of the examples listed.
4. Create a field sketch of one landscape in your local area. Annotate the landscape's characteristics.

Make it spicy

Source 1: Select one landscape or landform that may *change* the most dramatically due to global warming. Suggest what action that could be taken to reduce its impact.

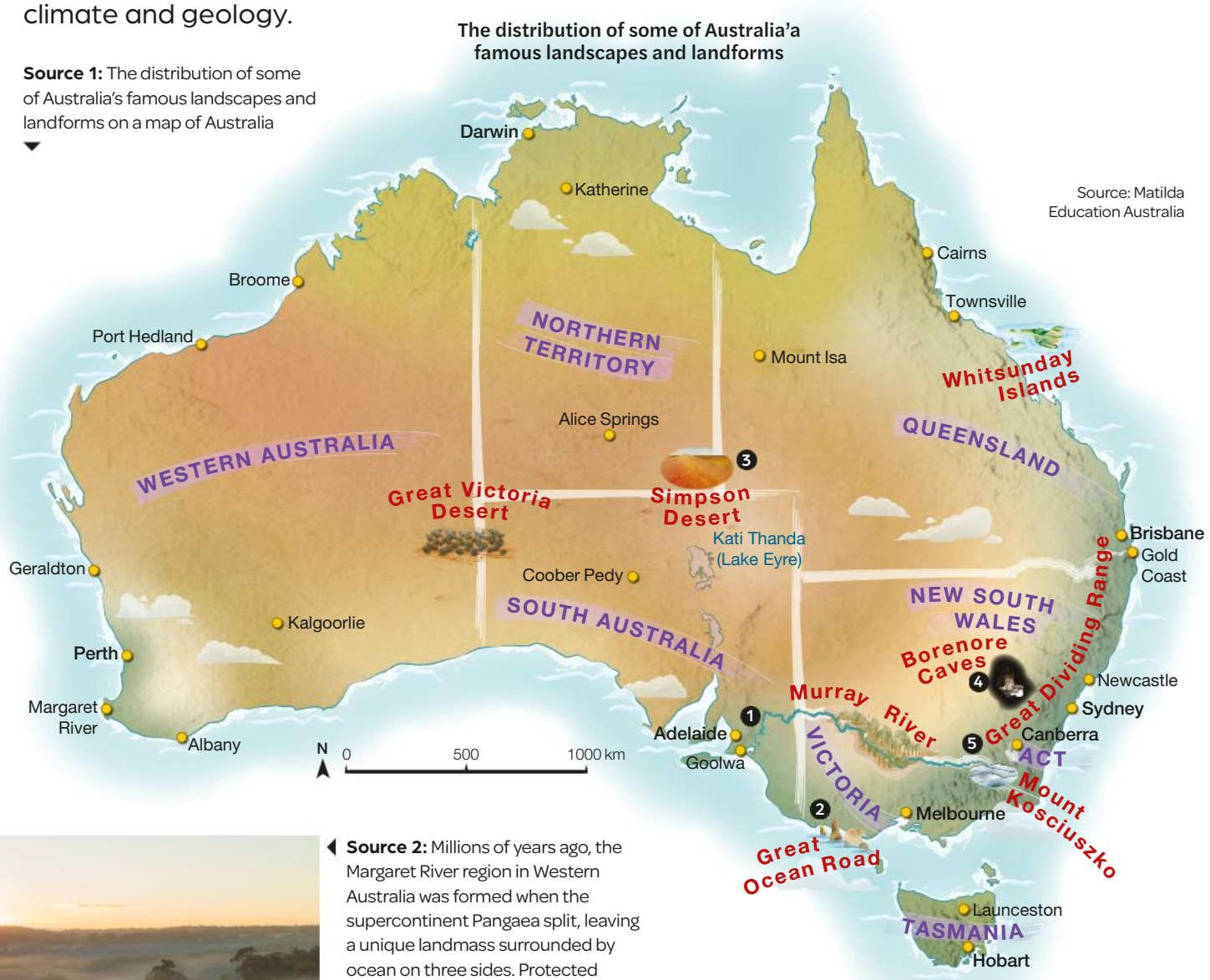
HOW TO

Planning and collecting, page 426; block diagrams, page 437; change, page 240

What are Australia's distinctive landscapes?

As the Australian continent separated from Antarctica around 30 million years ago, the country became isolated from other continents, allowing it to develop its own unique ecosystems. Today, Australia's landscapes are influenced by regional climate and geology.

Source 1: The distribution of some of Australia's famous landscapes and landforms on a map of Australia



Source 2: Millions of years ago, the Margaret River region in Western Australia was formed when the supercontinent Pangaea split, leaving a unique landmass surrounded by ocean on three sides. Protected from changes in climate, it became home to a diverse range of plants and animal species. For over 60 000 years, the Wadandi people have lived in the region, fostering a deep cultural connection to the land. Today, Margaret River is famous for its world-class surf beaches and wine production, attracting over 500 000 tourists annually.

1 Riverine landscapes

Riverine landscapes are shaped by Australia's many rivers and their floodplains. The Murray River, Australia's longest river at 2530 kilometres long, connects people and places from the Snowy Mountains, through New South Wales, Victoria and South Australia to the Murray Mouth near Goolwa.

2 Coastal landscapes

Australia is well known for its coastal landscapes, including sandy beaches and rocky shorelines. The Great Ocean Road in Victoria is characterised by steep coastal cliffs, while the Whitsunday Islands in Queensland are home to biodiverse coral reefs.

Source 3: The Whitsundays consist of 74 islands that form Australia's largest offshore island chain. The islands formed when rising sea levels separated a coastal mountain range after the last ice age. The Whitsundays are part of the Great Barrier Reef World Heritage Area. The islands are renowned for their turquoise waters, white sands, and rich biodiversity, with many protected as national parks. Today, visitors can enjoy activities like sailing, snorkelling, and exploring this stunning ecosystem, famous for its vibrant marine life and breathtaking scenery.

3 Deserts

Central Australia is known for its arid climate and extensive deserts, including the Great Victoria Desert and the Simpson Desert. These arid regions are characterised by sandy dunes, sparse vegetation and extreme temperatures.

Source 4: The Simpson Desert features vast stretches of linear sand dunes, 20–30 metres high, shaped by prevailing winds. Despite its extremely dry climate, with less than 125 mm of annual rainfall, the desert occasionally experiences temporary flooding from distant rainfall.

4 Karst landscapes

These include caves, sinkholes and limestone formations, and are formed by the dissolution of soluble rocks. The Borenore Caves in New South Wales are a collection of limestone caves famous for the numerous fossils found there from the Silurian period.

5 Mountain ranges

The Great Dividing Range stretches from Queensland to Victoria. This range is characterised by steep terrain and unique ecosystems. The Snowy Mountains within this range are Australia's highest peaks, including Mount Kosciuszko (2228 metres).

Learning ladder G1.2

Landscapes and landforms

1. Source 1: Identify two Australian landscapes.
2. Describe the characteristics of a coastal landscape you have visited in Australia.
3. Consider your learning from Year 7, Water in the World. Explain why the centre of Australia is dominated by arid landscapes.
4. Compare Australia's distinctive landscapes with another country. What natural and human factors influence the landscapes in these regions?

Planning and collecting

1. Why is understanding Australian landscapes important?
2. Write a list of qualitative and quantitative data required to understand the question 'How do Australian landscapes differ from those in the UK?'.
3. Create a photo essay illustrating Australia's various landscapes. For each photo, annotate any landforms and write why these landscapes are important.
4. Survey your year level to identify the most visited landscape in Australia.

Make it spicy

Research how Australia's landscapes have *changed* over time.

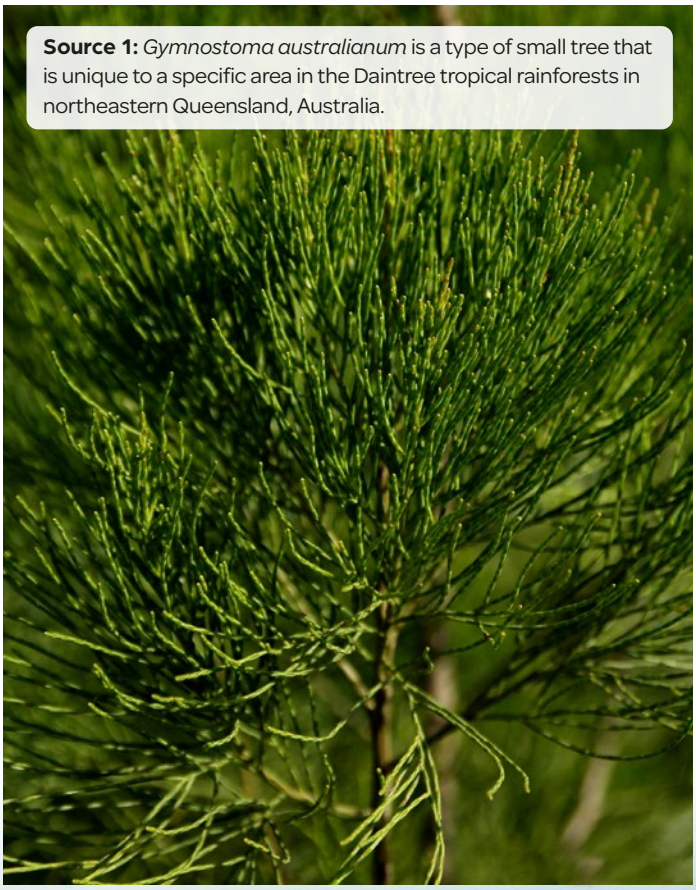
HOW TO
Planning and collecting, page 426; change, page 240; photo essays, page 439

G1.3

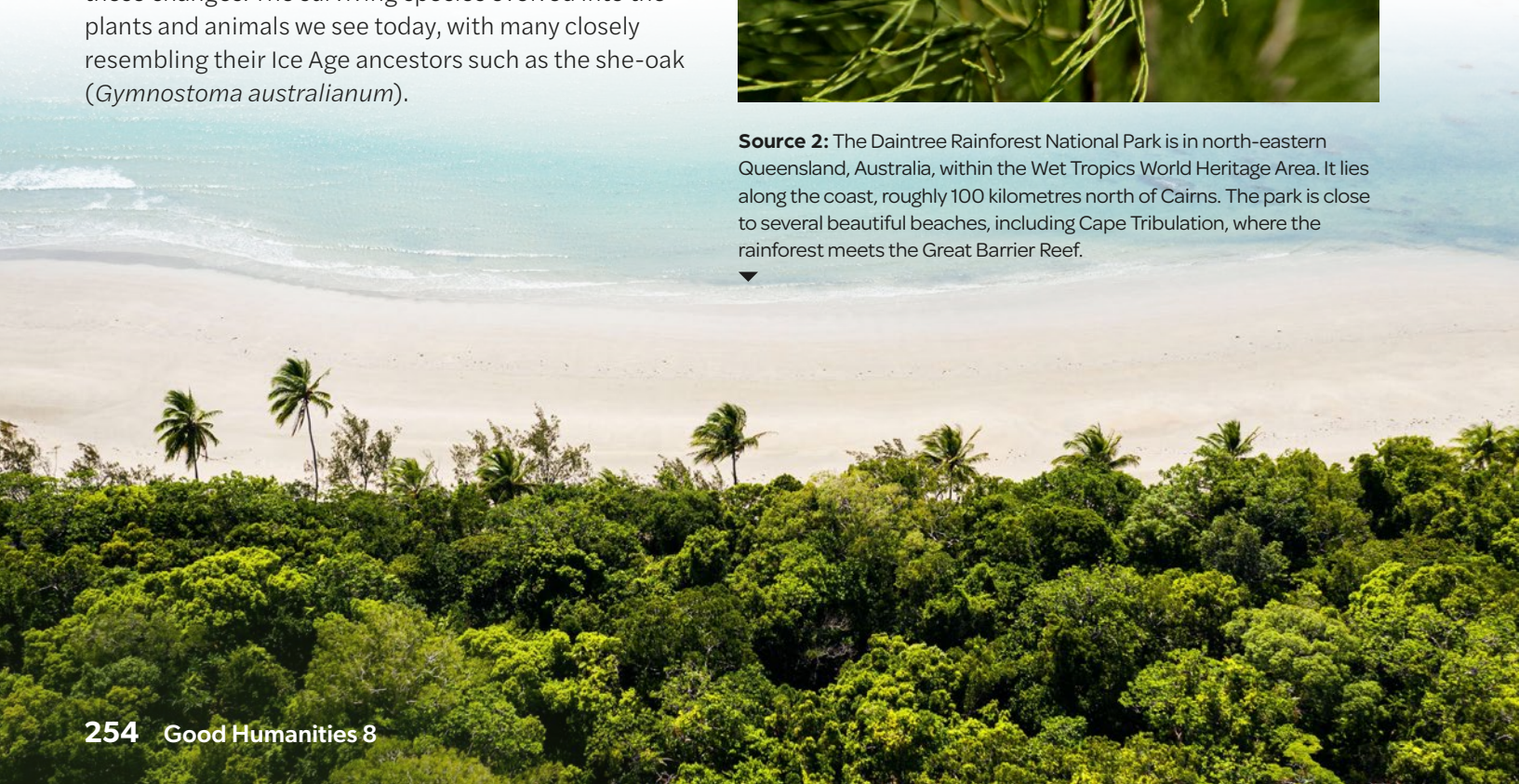
How do Australia's rainforests compare to other countries?

Australia is known for its unique and diverse landscapes. It has a wide distribution of rainforests, ranging from the **tropical** rainforests in the north, to warm-temperate rainforests in New South Wales and Victoria, and cool-temperate rainforests in Tasmania.

The Daintree Rainforest in Queensland formed underwater around 400 million years ago when Australia was part of the super-continent Gondwana. Ancient rivers **deposited** sediments that were later lifted by the movements of Earth's crust. As the softer rock wore away through erosion, the tough granite rock beneath was exposed, forming the coastal mountains. Over 200 million years, long-term changes to global climate caused many plant and animal species to become extinct, but the Daintree's rainy, cloud-covered mountains and valleys protected some species from these changes. The surviving species evolved into the plants and animals we see today, with many closely resembling their Ice Age ancestors such as the she-oak (*Gymnostoma australianum*).

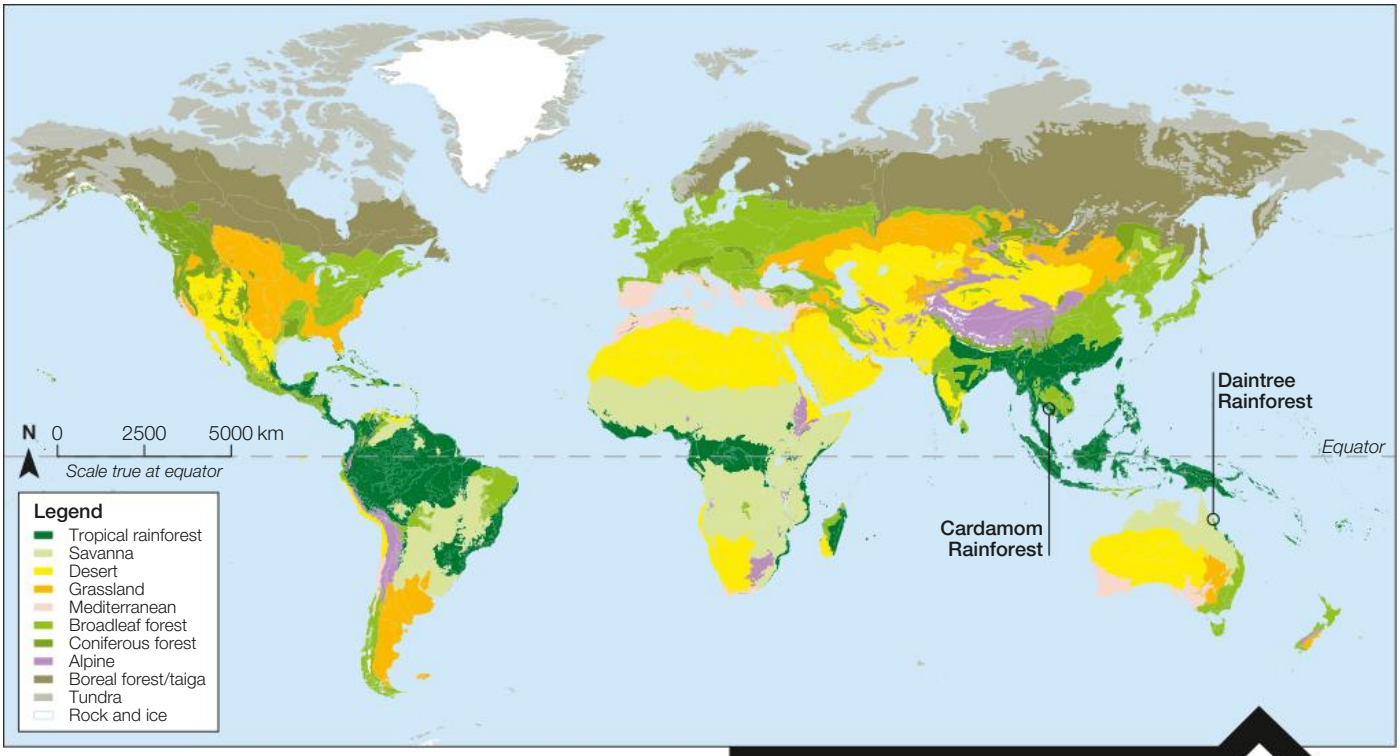


Source 1: *Gymnostoma australianum* is a type of small tree that is unique to a specific area in the Daintree tropical rainforests in northeastern Queensland, Australia.



Source 2: The Daintree Rainforest National Park is in north-eastern Queensland, Australia, within the Wet Tropics World Heritage Area. It lies along the coast, roughly 100 kilometres north of Cairns. The park is close to several beautiful beaches, including Cape Tribulation, where the rainforest meets the Great Barrier Reef.

The distribution of different landscapes on a global scale



Source: Matilda Education Australia

Source 3: The equatorial region (0 degrees latitude) experiences high rainfall and consistently warm tropical temperatures, creating ideal conditions for rainforests to grow and thrive in.

The Cardamom Rainforest in Cambodia features unique plant species such as the cardamom tree (*Amomum* spp.) and various hardwoods. This 44 288.8-square-kilometre rainforest was formed by tectonic uplift (see G1.16) and erosion over time. The Cardamom Rainforest is characterised by steep mountains and slopes. As one of South-East Asia's largest remaining rainforests, the Cardamom Rainforest is important for protecting biodiversity, including endangered species like the Asian elephant.

Source 4: The Cardamom Rainforest is located in south-western Cambodia and is part of the larger Cardamom Mountains range. This area is one of South-East Asia's last remaining rainforests and covers about 4500 square kilometres. The Cardamom Mountains reach heights exceeding 1800 metres.

Learning ladder G1.3

Landscapes and landforms

1. Identify the main landforms present in the Daintree National Park and describe their characteristics.
2. How did erosion shape the landscapes of both the Daintree and Cardamom Rainforests?
3. What geological processes contributed to the formation of the Daintree Rainforest compared to the Cardamom Rainforest?
4. What factors influence the distribution of rainforests in Australia versus Cambodia?

Making conclusions

1. In what ways have historical climate changes affected the plants and animal species in the Daintree Rainforest?
2. Describe the characteristics of both forests.
3. Based on the evidence presented, why do you think these rainforests should be protected?
4. How can you determine whether the statistics on biodiversity in the Daintree Rainforest are reliable?

Make it spicy

Describe the key differences between these *places*.

HOW TO

Making conclusions, page 464; place, page 236

First Nations Peoples

How were landscapes and landforms created?

Dreaming stories of First Nations Peoples help inform a deeper understanding of the creation of landscapes and landforms and the peoples' spiritual link to a place.

Creation stories

Landscapes contain many landforms that are sites of spiritual importance, particularly for Indigenous Peoples. For the First Nations Peoples of Australia, landscapes and landforms were formed by the Ancestors who continue to live in the land, water and sky. Aboriginal spirituality draws on the stories of the Dreaming, while Torres Strait Islander spirituality is based upon the stories of Tagai.

The Dreaming gives meaning to everything and establishes the rules for relationships between people, the land, all living things and the more-than-human realms for Aboriginal peoples. The Dreaming tells about the creation of the world by Ancestor Spirits who came from the earth and sky to create and shape landforms and all life.

Torres Strait Islands creation

The islands and waters of the Torres Strait are important to its peoples, who identify themselves by their home islands. Each island has its own creation story.

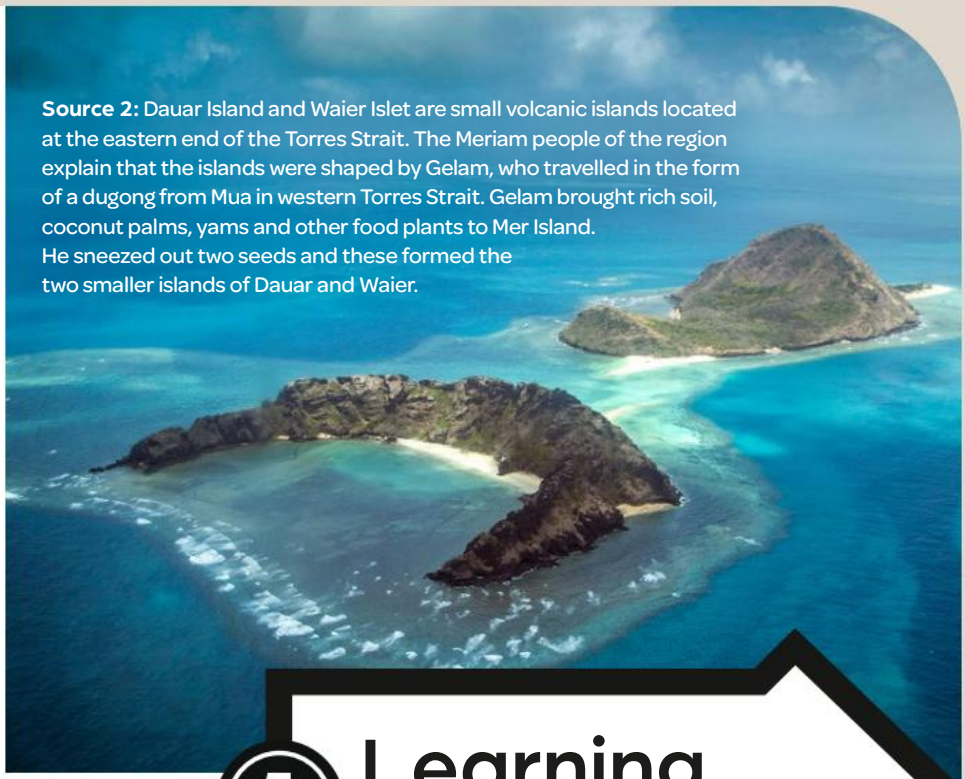
Torres Strait Islander Peoples are sea travellers, traders, fishers and gardeners. Their culture is unique to the region and often mixes with neighbouring cultures including from Cape York, Papua New Guinea and the surrounding region. The spirituality of Torres Strait Islander Peoples is linked to life on their home islands and surrounding waterways.

A widely held belief is that all natural features and living things were created by ancestral beings. A key creator being in Torres Strait Islander culture is Tagai, a great sea hero. Tagai is represented in the sky by several constellations of stars. These constellations are used as a guide for the seasonal cultivation of crops and gardens.

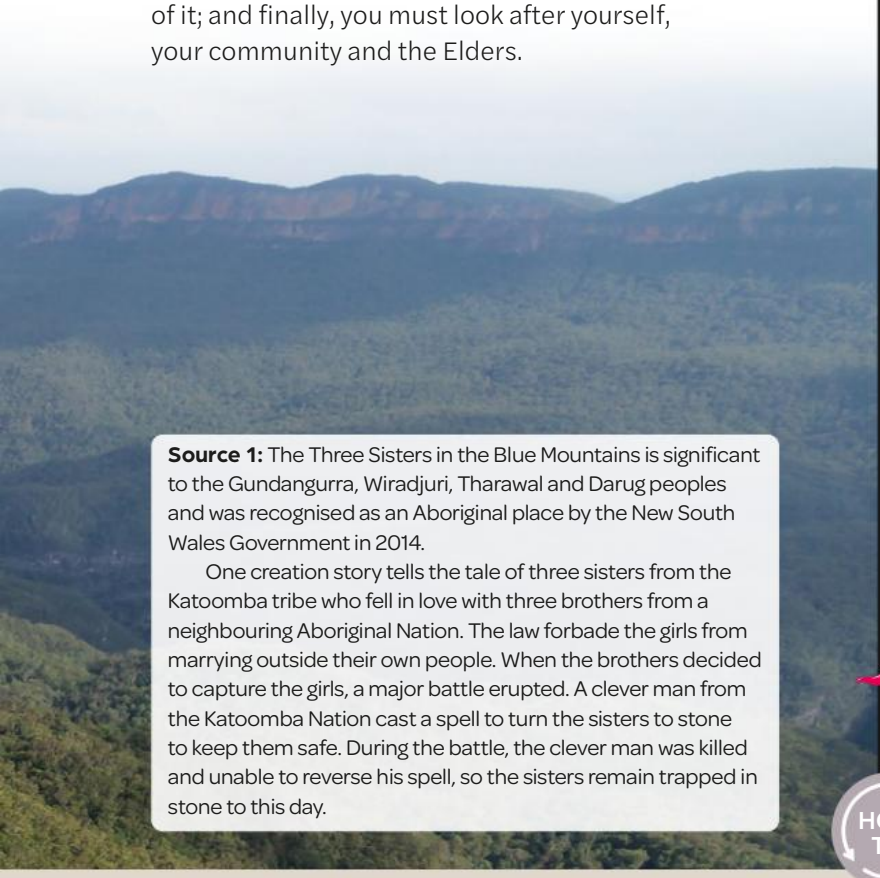
The Story of Bunjil

For the Kulin Nations in Central Victoria, Bunjil, the wedge-tail eagle, is an important creator spirit. There are several different stories about Bunjil creating the world and everything in it, but some common elements involve Bunjil coming from the sky and creating parts of Country which made it look beautiful; this included the earth, plants and waterways. After a short time, Bunjil decided to create things to move around the beautiful landscape. He then created the animals including the emu and kangaroo, the goanna, wombat and echidna, and many others including the birds.

After a while, the newly created animals were in conflict, so Bunjil created humans to care for the animals and ensure that they all were able to live together. To help this Bunjil also gave all his creations rules to live by: take parts of the plant, but leave enough for it to keep growing; you can kill an animal, but you must honour it by performing ceremony and using all parts of it; and finally, you must look after yourself, your community and the Elders.



Source 2: Dauar Island and Waier Islet are small volcanic islands located at the eastern end of the Torres Strait. The Meriam people of the region explain that the islands were shaped by Gelam, who travelled in the form of a dugong from Mua in western Torres Strait. Gelam brought rich soil, coconut palms, yams and other food plants to Mer Island. He sneezed out two seeds and these formed the two smaller islands of Dauar and Waier.



Source 1: The Three Sisters in the Blue Mountains is significant to the Gundangurra, Wiradjuri, Tharawal and Darug peoples and was recognised as an Aboriginal place by the New South Wales Government in 2014.

One creation story tells the tale of three sisters from the Katoomba tribe who fell in love with three brothers from a neighbouring Aboriginal Nation. The law forbade the girls from marrying outside their own people. When the brothers decided to capture the girls, a major battle erupted. A clever man from the Katoomba Nation cast a spell to turn the sisters to stone to keep them safe. During the battle, the clever man was killed and unable to reverse his spell, so the sisters remain trapped in stone to this day.

Learning ladder G1.4

Processes

1. Identify natural processes mentioned in Torres Strait Islander creation stories that relate to changes in the landscape over time.
2. Describe the processes involved in the creation of landscapes as depicted in Torres Strait Islander stories, particularly in relation to Tagai.
3. How do the creation stories of the Dreaming explain the processes by which landforms were shaped and created by Ancestor Spirits?
4. Explain the impacts of the processes described in the Creation Stories on people and place.

Making conclusions

1. How do these stories help us understand the important features of a place?
2. What processes contribute to the diversity of landscapes described in the creation stories of Aboriginal and Torres Strait Islander Peoples?
3. How do the teachings of Tagai inform our understanding of sustainable practices among Torres Strait Islander Peoples?
4. Why are Creation Stories important for cultural preservation? How do they help people form a connection to place?

Make it spicy

Explain why landscapes are more than just *environments* to Aboriginal and Torres Strait Peoples.

HOW TO Making conclusions, page 464; environment, page 241

G1.5

What are geomorphic processes?

Geomorphic processes are natural processes that shape Earth's surface. Key processes include plate tectonics, chemical weathering, physical weathering, erosion, transportation and deposition.

Geomorphic processes

Earth is made up of many layers. At the very centre of the planet is the **core**. The core is extremely hot at an estimated 5200°C. The next layer is the **mantle**, the largest internal layer. The upper mantle floats on top of the lower mantle, which is made up of dense rock. The outer layer of Earth is known as the **crust**. The crust is broken up into a series of **tectonic plates**.

How do tectonic plates move?

Earth's mantle is very hot (around 1000°C near the crust) and a range of processes, including convection currents, gravity and other mechanisms, cause the fluid molten mantle to 'flow'. The tectonic plates that are on top of this mantle move as a result of this fluidity. When these plates collide or pull apart, they create landforms such as mountains and ocean trenches.

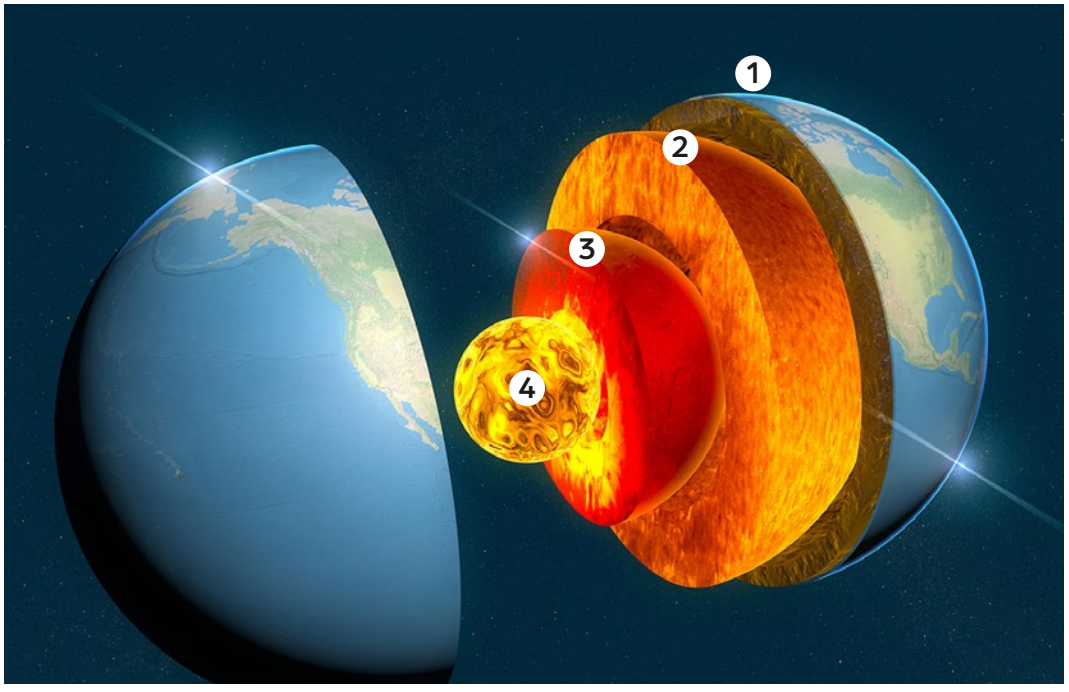
Processes we can see

Tectonic plate movement and the formation of new landscapes happens over an extremely long time period. While humans are able to observe the results of these processes, we cannot watch a mountain form in one lifetime. There are a number of other geomorphic processes that alter landscapes and landforms, which can be observed and influenced by humans.

Weathering breaks down rocks into smaller pieces. **Chemical weathering** changes the minerals in rocks through chemical reactions, while **physical weathering** involves breaking rocks apart, often due to temperature changes or ice formation, without changing their chemical composition.

Erosion is the process where weathered materials are removed from their original location, often by water, wind or ice. **Transportation** is how these materials are moved to new locations, and deposition occurs when they settle in a new place, creating new landforms.

▼ **Source 1:** Structure of Earth

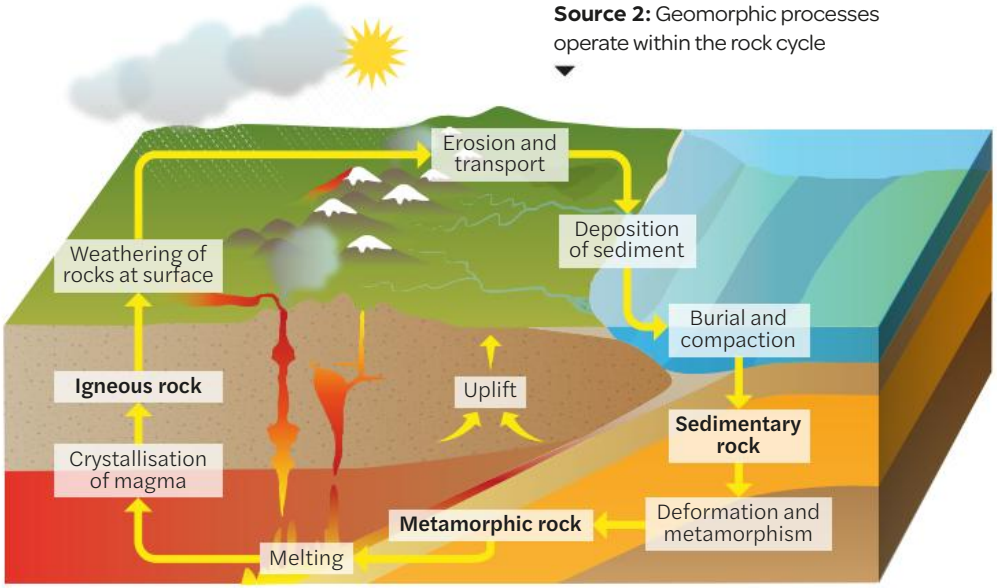


1. The crust is broken into tectonic plates that form mountains and cause earthquakes.
2. Parts of the solid mantle can melt into magma and move to the surface through volcanoes.
3. With temperatures up to 6000°C, the outer core is the only completely liquid layer.
4. Earth's inner core is solid iron and nickel with temperatures up to 10 000°C.

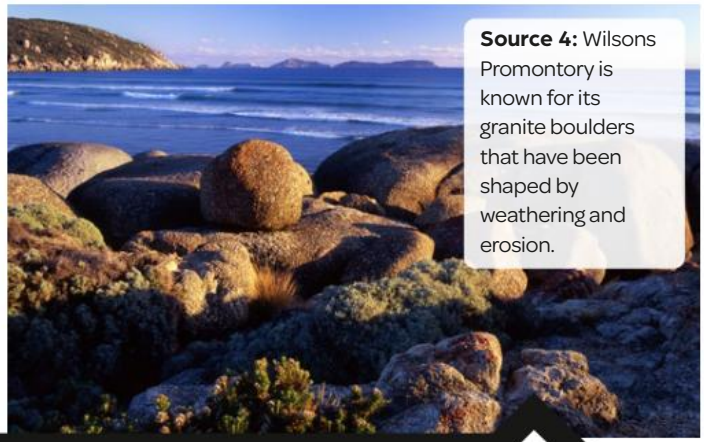
The rock cycle

Just like water cycles through the environment, rocks also have a cycling process that constantly recycles Earth's materials. The rock cycle starts with **magma** (molten rock found beneath the Earth's surface). Magma cools into igneous rocks, which then break down into sediments, forming sedimentary rocks. These transform into metamorphic rocks under heat and pressure, eventually melting back into magma, restarting the cycle.

Source 2: Geomorphic processes operate within the rock cycle



Source 3: Gariwerd (Grampians) National Park was shaped by ancient volcanic eruptions and erosion of sandstone.



Source 4: Wilsons Promontory is known for its granite boulders that have been shaped by weathering and erosion.

Learning ladder G1.5

Processes

1. What process involves the movement of rock materials?
2. Describe how rocks break down through weathering.
3. What is the difference between erosion and deposition?
4. What impact does erosion have on landscapes, such as rivers and coastlines?

Representing information

1. What information would you need to map the effects of plate tectonics on the Grampians' landscape?
2. You have recently been conducting field research on the impacts of weathering in a local rocky landscape. How can you represent the process of weathering to illustrate your findings?
3. What symbols would you use on a map to represent:
   - **a** mountains and valleys
   - **b** ocean trenches
   - **c** volcanoes
   - **d** weathered rocks
   - **e** plate boundaries
4. Access: https://mea.digital/ud6

   Select 'Layers' and 'Base layers'. In the drop-down menu select 'World terrain'.
   - **a** What is a base layer?
   - **b** What does the world terrain layer illustrate? Why would this data be represented on a map?

Make it spicy

How do rocks *change* as they move through the rock cycle?

Representing information, page 436; change, page 240

HOW TO

G1.6

What is the theory of plate tectonics?

The Earth's surface is made up of huge tectonic plates, much like a big jigsaw puzzle. These rigid plates move on top of a molten layer of the crust's mantle. Tectonic plates are always moving, but usually by only a few centimetres per year. At the boundaries of the plates, they collide, move away or move laterally with other tectonic plates, Where they collide, mountains form and volcanoes and earthquakes are generated. When plates move apart, ocean trenches can form.

How do mountains form?

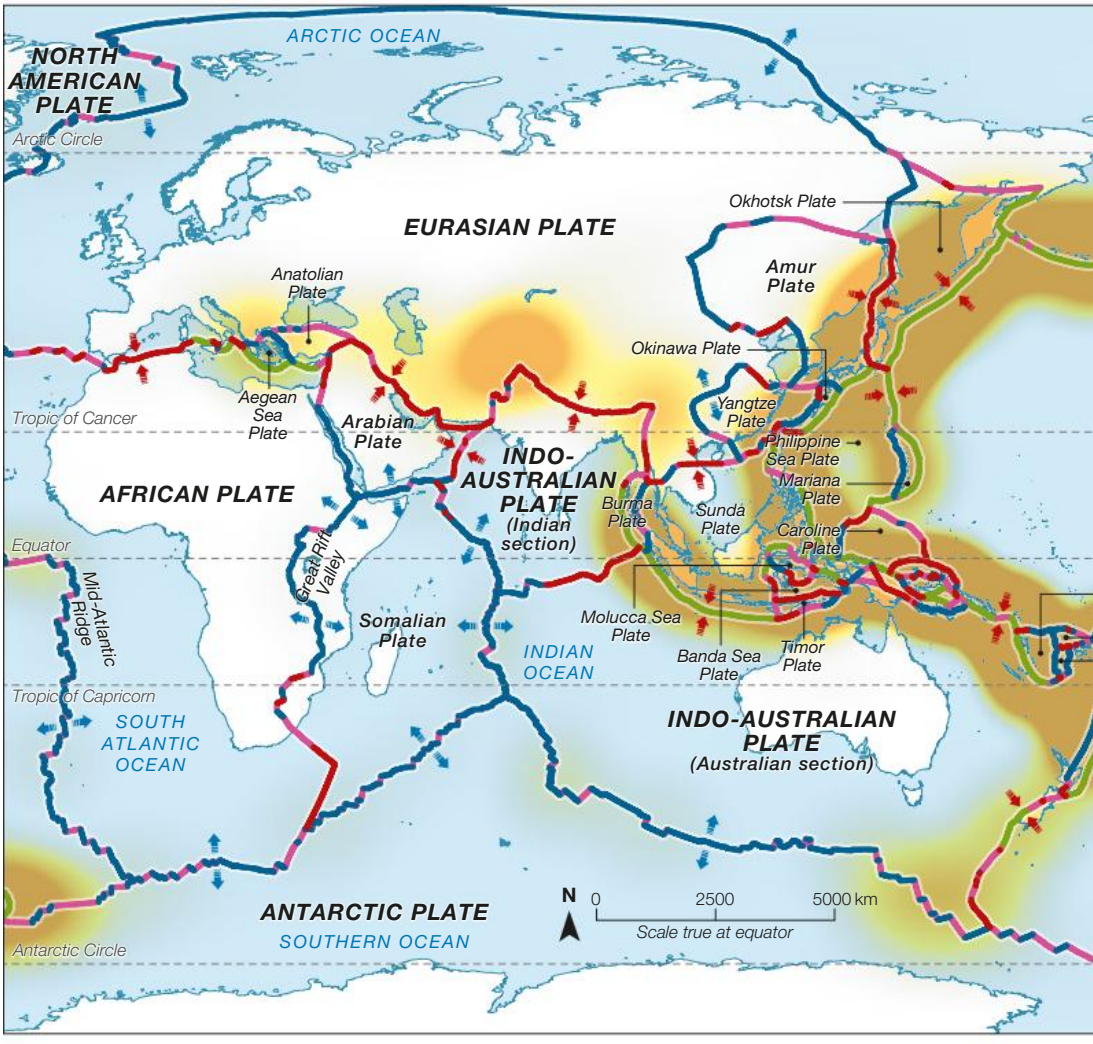
Earth's crust is made up of seven major tectonic plates that move on the semi-molten rocks in the mantle. As the plates move apart (**diverging margins**) or collide (**converging margins**), landforms such as mountains, ridges and ocean trenches are created.

Mountains are pushed up when two continental tectonic plates push against one another. Mid-ocean ridges form at a diverging margin as the space is filled with new material sources from molten magma.

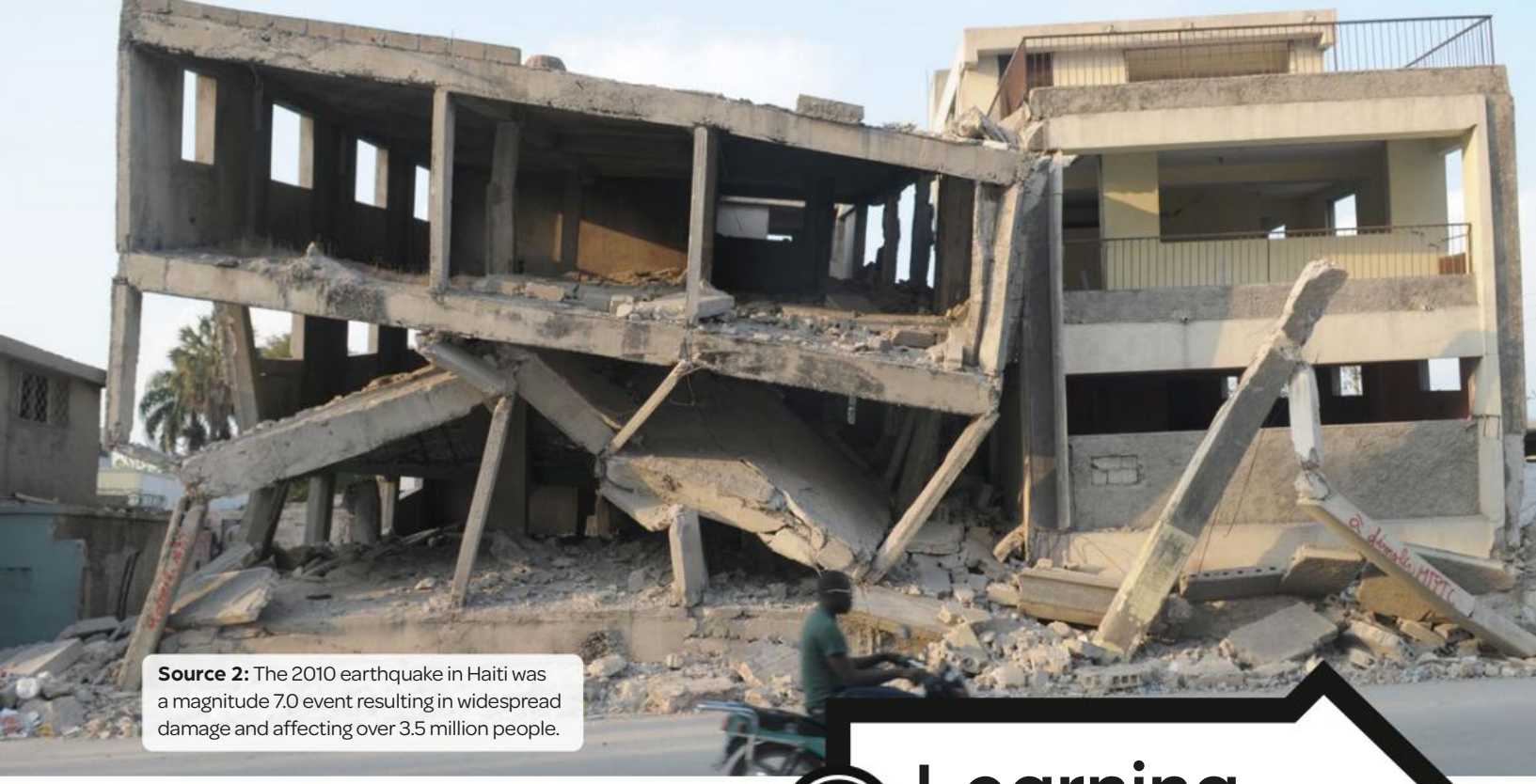
Why do earthquakes occur?

Most earthquakes occur near the edges of converging plates or along transform margins, which is where the plates slide past one another. Here the plates can become stuck and then break free with a sudden movement that triggers an earthquake. California's San Andreas Fault is a transform margin between the North American and Pacific plates that suffers many earthquakes.

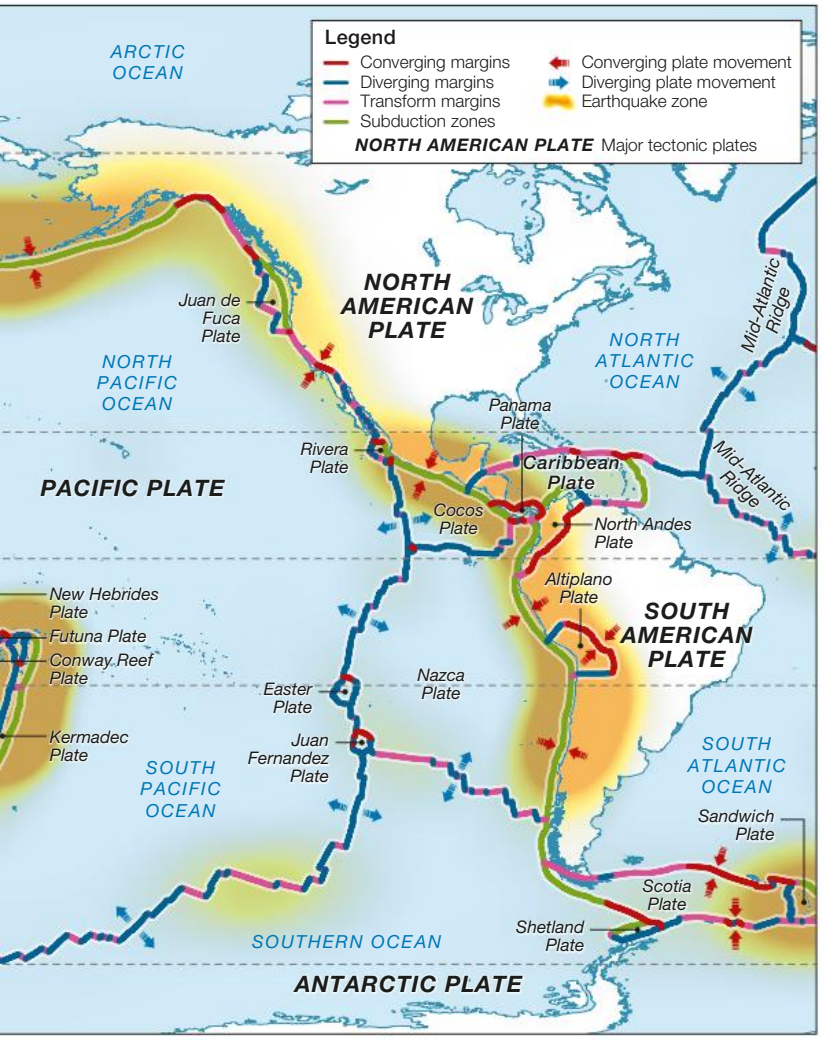
World tectonic plates



Source 1: The world's tectonic plates: the seven major plates and some of the minor plates



Source 2: The 2010 earthquake in Haiti was a magnitude 7.0 event resulting in widespread damage and affecting over 3.5 million people.



Source: Matilda Education Australia

Learning ladder G1.6

Interconnections

1. How are mountains and converging margins interconnected?
2. Describe how mid-ocean ridges form at diverging margins.
3. Source 1: The Mid-Atlantic ridge is the longest mountain range in the world. It runs under the Atlantic Ocean between South America and Africa. Explain why it is located here and how it formed.
4. Provide examples of how plate movements create and modify Earth's surface features.

Interpreting information

1. Source 1: What do the arrows on the map represent?
2. Source 1: Describe the distribution of earthquake zones.
3. Source 1: Explain why Japan experiences frequent earthquake activity.
4. Conduct some research and then predict how tectonic plates may alter landscapes in the future.

Make it spicy

Describe the *interconnection* between plate tectonics and the formation of landscapes.

HOW TO Interpreting information, page 446; interconnection, page 238

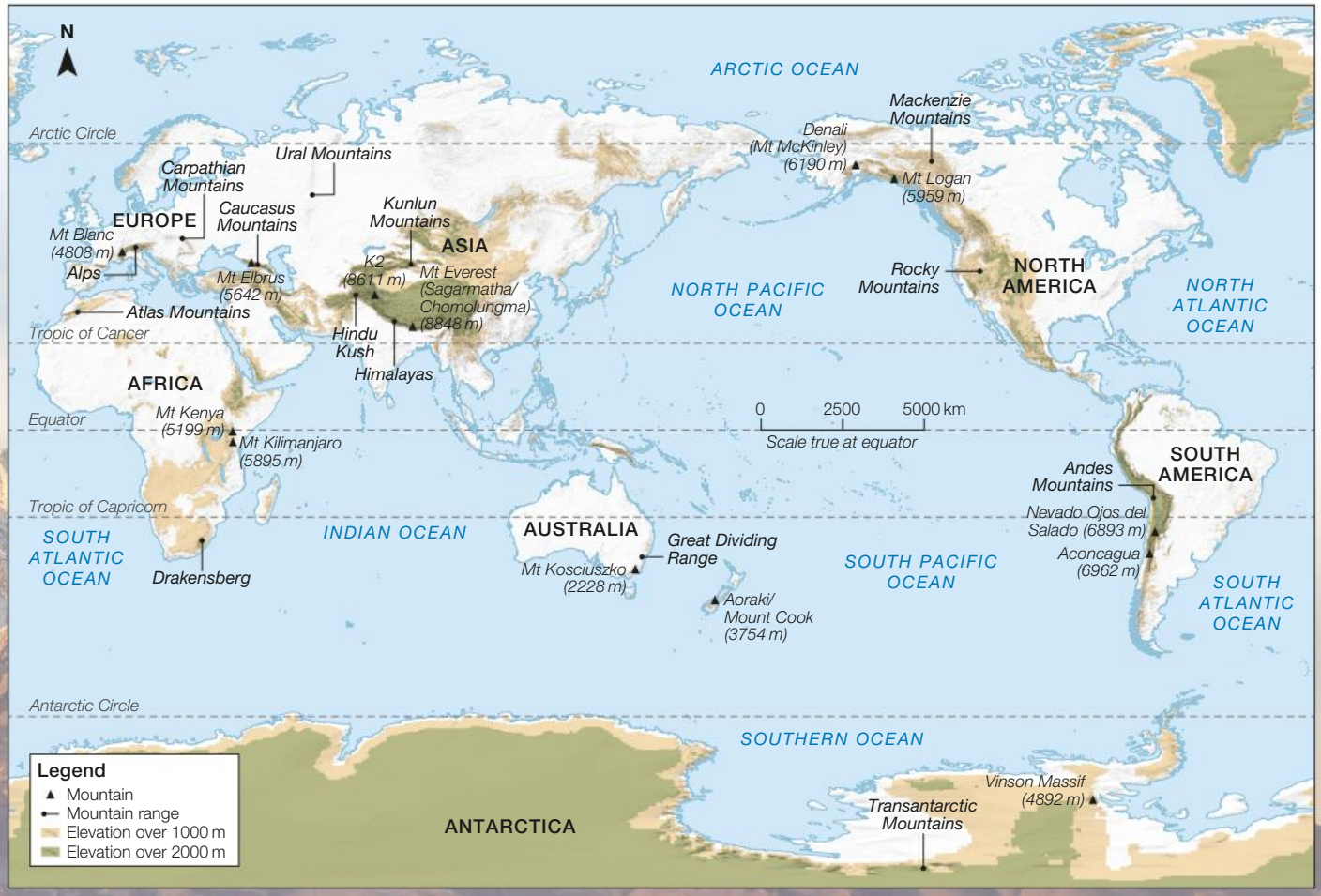
G1.7

How are mountains formed?

Mountains are landforms that rise high above the surrounding land. They are formed when tectonic plates in the Earth's crust collide. The land crumples and folds until the rocks are pushed upwards to form a mountain range. Mountains become taller as the tectonic plates continue to collide.

Source 1: At 5895 metres above sea level, Mount Kilimanjaro is Africa's highest mountain and the tallest freestanding mountain in the world. It is a volcanic mountain formed over a hot spot in the Earth's crust. The top is covered in ice and snow even though the mountain is located near the equator.

World mountain landscapes



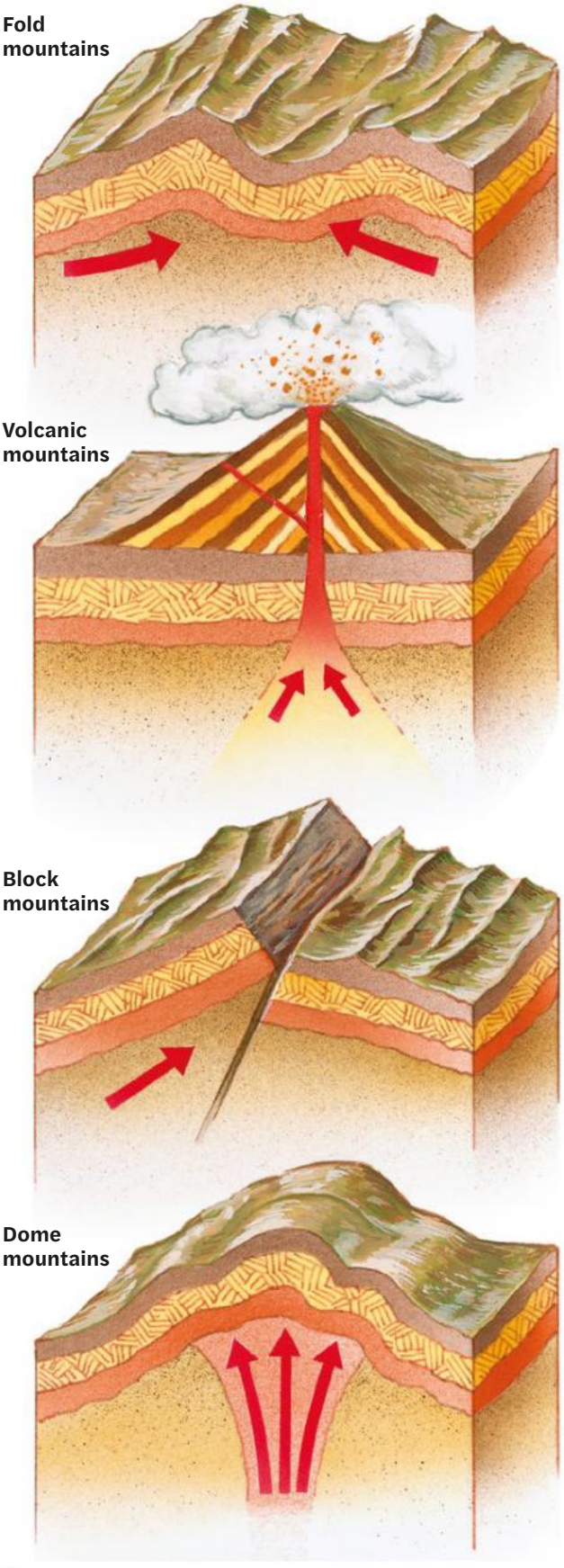
Source: Matilda Education Australia, Natural Earth, European Environment Agency

▲ **Source 2:** World mountain landscapes

A mountain is a large landform that sits above the surrounding land, usually in the form of a peak. A mountain is steeper and higher than a hill. One measurement given to mountains is land higher than 600 metres above sea level.

A few mountains, such as Mount Kilimanjaro in Africa, are isolated, but most are part of a series of mountains called a **mountain range**. Earth's highest mountain is Mount Everest in Asia's Himalayan mountain range. Its summit is 8848 metres above sea level. Australia's highest mountain, Mount Kosciuszko, is just 2228 metres tall.

The world's longest above-water mountain range is found in South America. Known as the Andes, this mountain range is 7000 kilometres long and travels through seven countries. Australia's longest mountain range is the Great Dividing Range, stretching more than 3500 kilometres through Victoria, New South Wales, the Australian Capital Territory and Queensland.



Source 3: Different mountain formations: fold, volcanic, block and dome

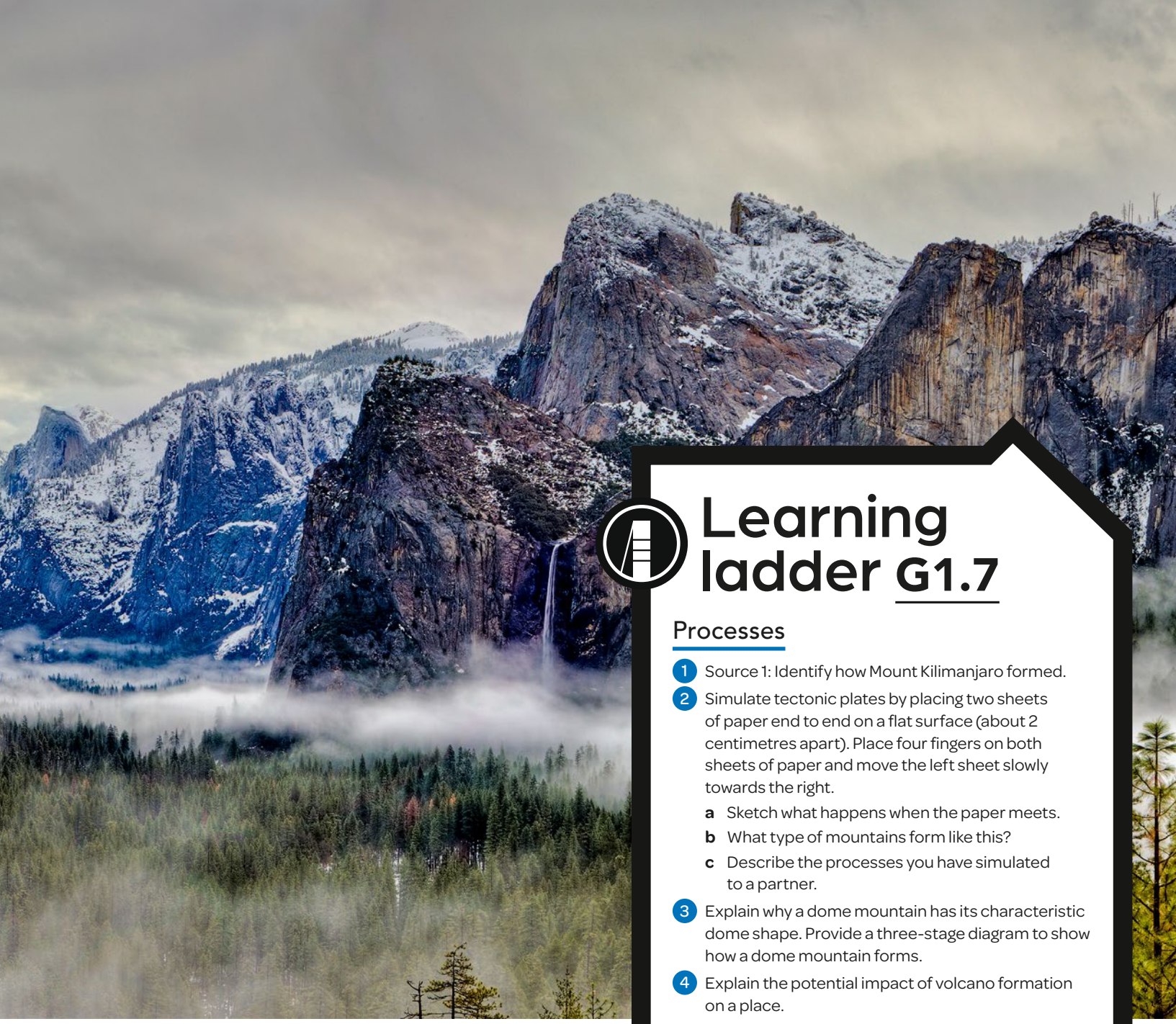
Source 4: The eastern edge of the Sierra Nevada range in the western United States consists of block mountains. They formed along the Sierra Nevada Fault, where tectonic forces have pushed up sections of rock.

How do mountains form?

Mountains are formed through earth movements or volcanic action. Strong forces inside the Earth can push up the surface into long mountain chains or punch through the surface at **hot spots** to create **volcanoes** such as Kīlauea in Hawaii and Mount Kilimanjaro in Tanzania.

Fold mountains

Fold mountains are pushed upwards where two continental tectonic plates (see pages 260–1) collide. Layers of rock are bent and pushed upwards to create the fold mountains. The world's largest fold mountains are found in the Himalayan mountain range, with over 50 peaks more than 7200 metres high.



Volcanic and dome mountains

Volcanic mountains form when magma from below the Earth's surface is pushed through an opening in the Earth's crust. This material can build up to form a cone-shaped mountain known as a volcano (see pages 268–9). **Dome mountains** form when magma is injected beneath layers of **sedimentary rock**, causing the top layer to bulge upwards forming the dome shape.

Block mountains

Block mountains form when blocks of rocks are forced upward or downward along faults or cracks in the Earth's crust. The uplifted blocks are block mountains or **horsts**. Dropped blocks are called **graben**, which can form **rift valleys**.

Learning ladder G1.7

Processes

1. Source 1: Identify how Mount Kilimanjaro formed.
2. Simulate tectonic plates by placing two sheets of paper end to end on a flat surface (about 2 centimetres apart). Place four fingers on both sheets of paper and move the left sheet slowly towards the right.
   - **a** Sketch what happens when the paper meets.
   - **b** What type of mountains form like this?
   - **c** Describe the processes you have simulated to a partner.
3. Explain why a dome mountain has its characteristic dome shape. Provide a three-stage diagram to show how a dome mountain forms.
4. Explain the potential impact of volcano formation on a place.

Interpreting information

1. Source 2: Look at the map of world mountain landscapes. Name two of the highest mountain ranges using the legend and annotations.
2. Source 2: Describe the location of the world's mountainous regions.
3. Source 2: Explain the distributions described in question 2.
4. How might climate change alter mountain landscapes?

Make it spicy

Describe the characteristics of mountainous *environments*.

HOW TO

Interpreting information, page 446; block diagrams, page 437; environment, page 241

Case study

What are the characteristics of the Dandenong Ranges?

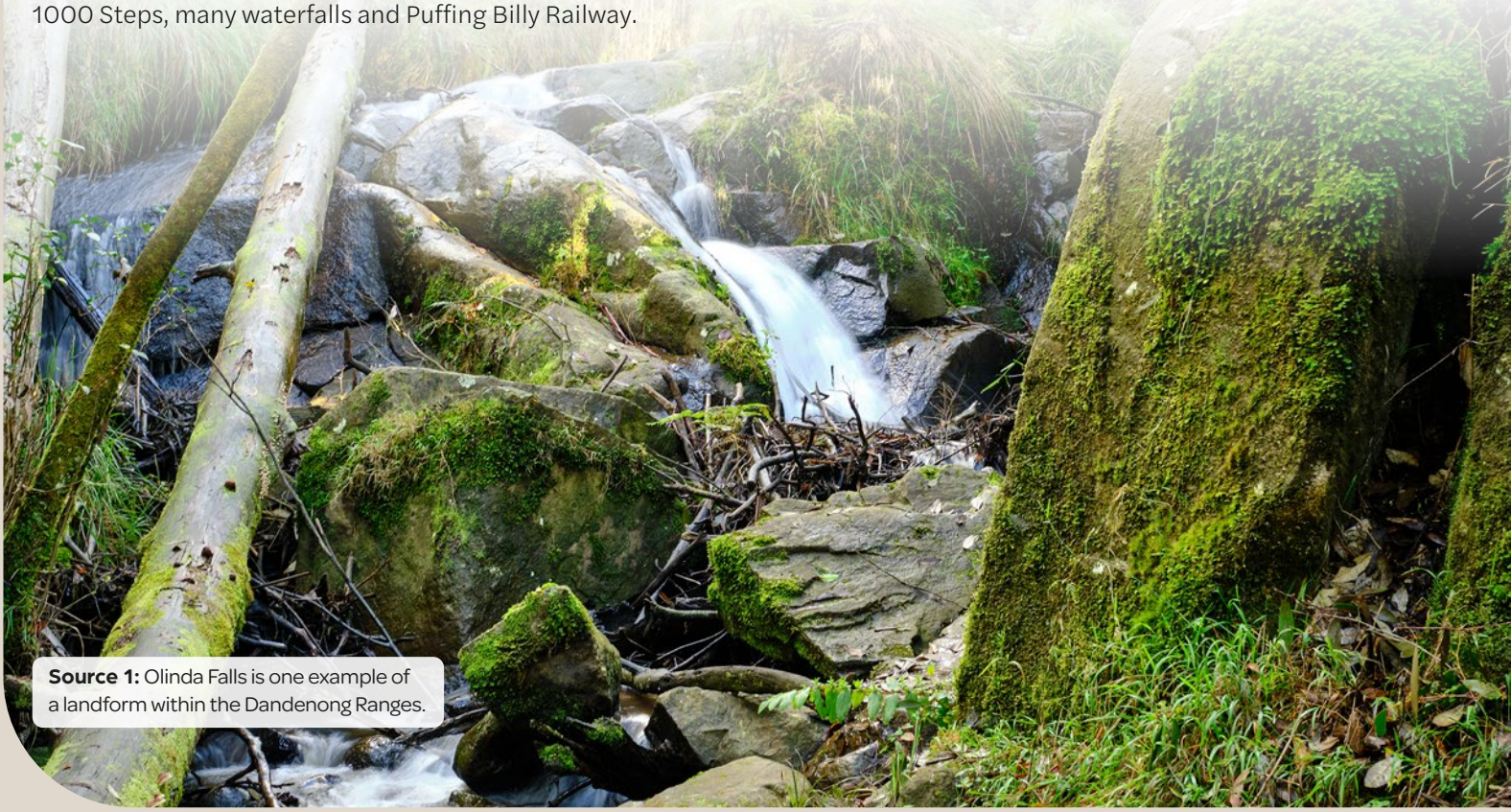
The Dandenong Ranges are located about 35 kilometres east of Melbourne. These ranges formed millions of years ago through volcanic eruptions and erosion, as lava cooled into solid rock.

Corhanwarrabul (Mount Dandenong) was formed by a volcanic rock known as rhyodacite. Rhyodacite is a naturally strong, erosion-resistant rock, meaning that Corhanwarrabul has remained elevated while the surrounding softer rocks have eroded over time. Dandenong Ranges National Park includes several peaks, the highest being Corhanwarrabul at 633 metres. The ranges receive nearly twice as much rainfall as the nearby coastal plains and so are characterised by cool, temperate rainforests, featuring tall mountain ash trees, ferns and various wildflowers. Corhanwarrabul served as a summer hunting ground for the Bunurong and Woi Wurrung peoples.

The Dandenong Ranges attract over 1 million visitors per year. They are famous for their walking tracks, the 1000 Steps, many waterfalls and Puffing Billy Railway.

As the local population of the Dandenong Ranges now exceeds 240 000 people, the local landscape has been altered over time to provide facilities and services to support communities and the strong tourism industry.

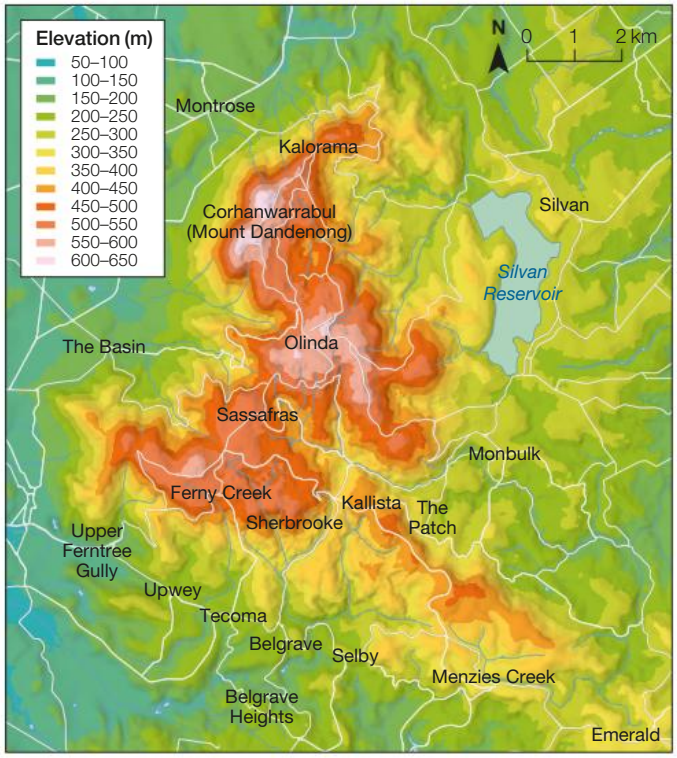
Hazards such as severe storms and bushfires pose constant threats for the people living in the Dandenong Ranges. Chemical weathering can also lead to landslides, as the minerals in the rhyodacite rock change into weaker clay, making slopes unstable. Corhanwarrabul has experienced landslides throughout its history, with the earliest recorded incidents dating back to the mid-1800s; however, records suggest that local soils have been impacted by landslides for hundreds of thousands of years.



Source 1: Olinda Falls is one example of a landform within the Dandenong Ranges.

Source 2: Puffing Billy is an iconic tourist attraction in the Dandenong Ranges. It is one way people can move around the ranges and view the various vegetation and townships including Belgrave and Emerald.

Topographic heat map of the Dandenong Ranges



Source: Matilda Education Australia

▲ **Source 3:** Topographical heat map showing the elevation of Corhanwarrabul (Mount Dandenong) and surrounding Dandenong Ranges

Learning ladder G1.8

Landscapes and landforms

1. Identify the key landforms present in the Dandenong Ranges.
2. Describe how the topography of the Dandenong Ranges affects both the natural environment and human activities like tourism.
3. In what ways may the volcanic origin of the Dandenong Ranges affect the distribution of its landforms?
4. Source 3: Compare the elevation of Corhanwarrabul (Mount Dandenong) to the surrounding region. How might this elevation impact the local characteristics of this place?

Presenting ideas

1. Describe what a 'temperate rainforest' is to a partner.
2. How does the cultural significance of Corhanwarrabul (Mount Dandenong) to the Bunurong and Woiworung peoples enhance our understanding of the area?
3. Use your learning from Year 7, Water in the World, to explain why the Dandenong Ranges would receive nearly twice as much rainfall as the nearby plain.
4. Explain the interconnection between geomorphic characteristics and vulnerability to hazard events.

Make it spicy

Identify some famous or significant *places* within your local region.

HOW TO Presenting ideas, page 472; place, page 236

How do volcanoes form?

Volcanoes form when magma from beneath the Earth's surface pushes through the crust along tectonic boundaries and at hot spots in the mantle.

Volcanoes

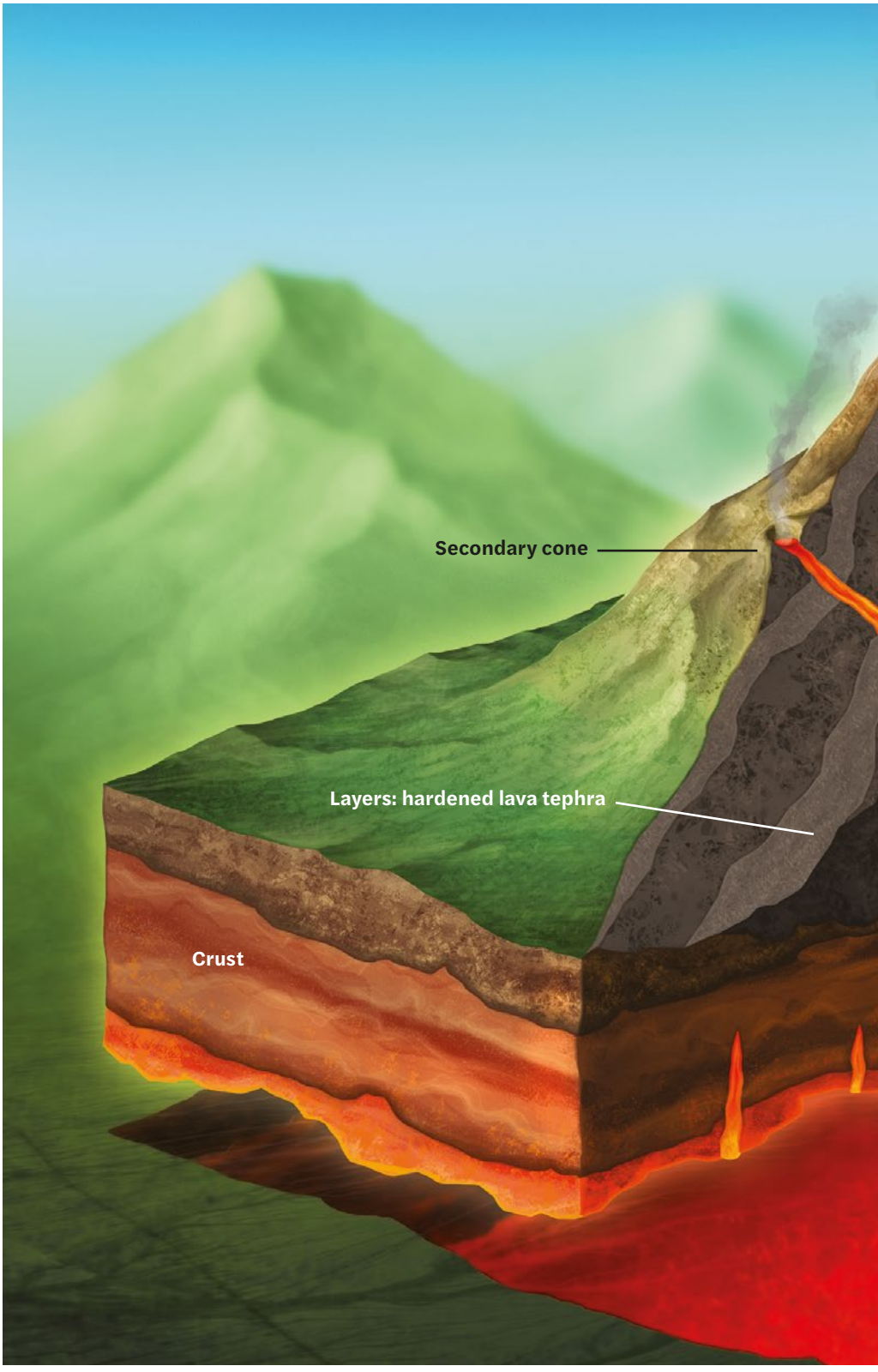
Volcanic mountains form when magma – melted rock from below the Earth's surface – is pushed through an opening in the Earth's crust. This material can build up to form a cone-shaped mountain known as a volcano.

Volcanoes are mainly found along tectonic plate boundaries where plates collide and one plate is forced downwards into the Earth's mantle in a process called **subduction**. The edge of the sinking plate melts into magma to feed the volcanoes along the plate boundary.

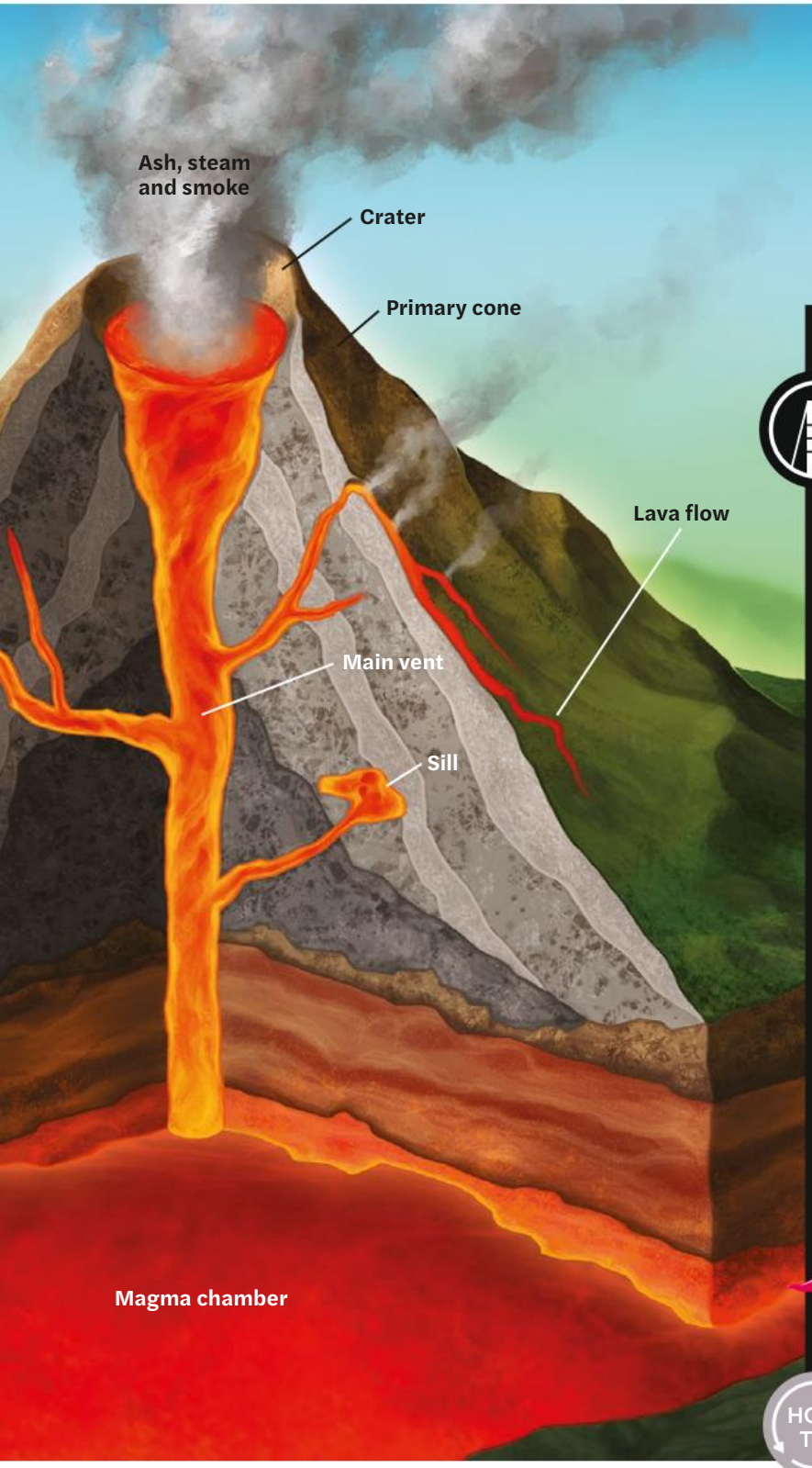
Hot spot volcanoes are found far from plate boundaries. They occur when particularly hot areas of the mantle burn through the Earth's crust, such as Mount Elephant in Victoria.

The material that spews from a volcano builds up the Earth's surface, creating new landforms. Each volcanic eruption brings new material to the surface as **tephra** (rocks and ash) or **lava** (magma that reaches the Earth's surface). Across the Earth's surface, lava flows cover material from previous eruptions to build the height of the land in layers.

Volcanoes are classified as active (erupting or likely to erupt), **dormant** (inactive but may erupt in the future) or extinct (unlikely to erupt again).



Source 1: A stratovolcano is a cone-shaped volcano built up by many layers of hardened lava, tephra, pumice and ash. Active stratovolcanoes are steep and can have explosive eruptions. The lava flowing from stratovolcanoes is usually thick and sticky, so it cools and hardens around the cone. Stratovolcanoes are also known as composite volcanoes because they are built up in layers from each eruption.



Source 2: Volcanic eruptions build cone-shaped mountains and new landforms as lava and ash layer over time.

Learning ladder G1.9

Processes

1. Where does magma that feeds volcanoes come from?
2. How do volcanic mountains form?
3. Explain how stratovolcanoes obtain their layered cones.
4. What is lava and how does it change the landscape in volcanic areas?

Representing information

1. Source 1: How do block diagrams help us understand the process of volcano formation?
2. Create a photo essay of different volcanoes around the world. For each photo, state the location and type of the volcano in that place, as well as whether it is active, dormant or extinct.
3. Using Source 1, G1.6, use tracing paper and a suitable legend to create a new map layer illustrating the location of five active volcanoes.
4. Access the interactive map by Volcano Discovery. Locate current eruptions and identify the corresponding tectonic plate line.

Make it spicy

How is volcano formation *interconnected* with tectonic plate movement?

HOW TO

Representing information, page 436; interconnection, page 238

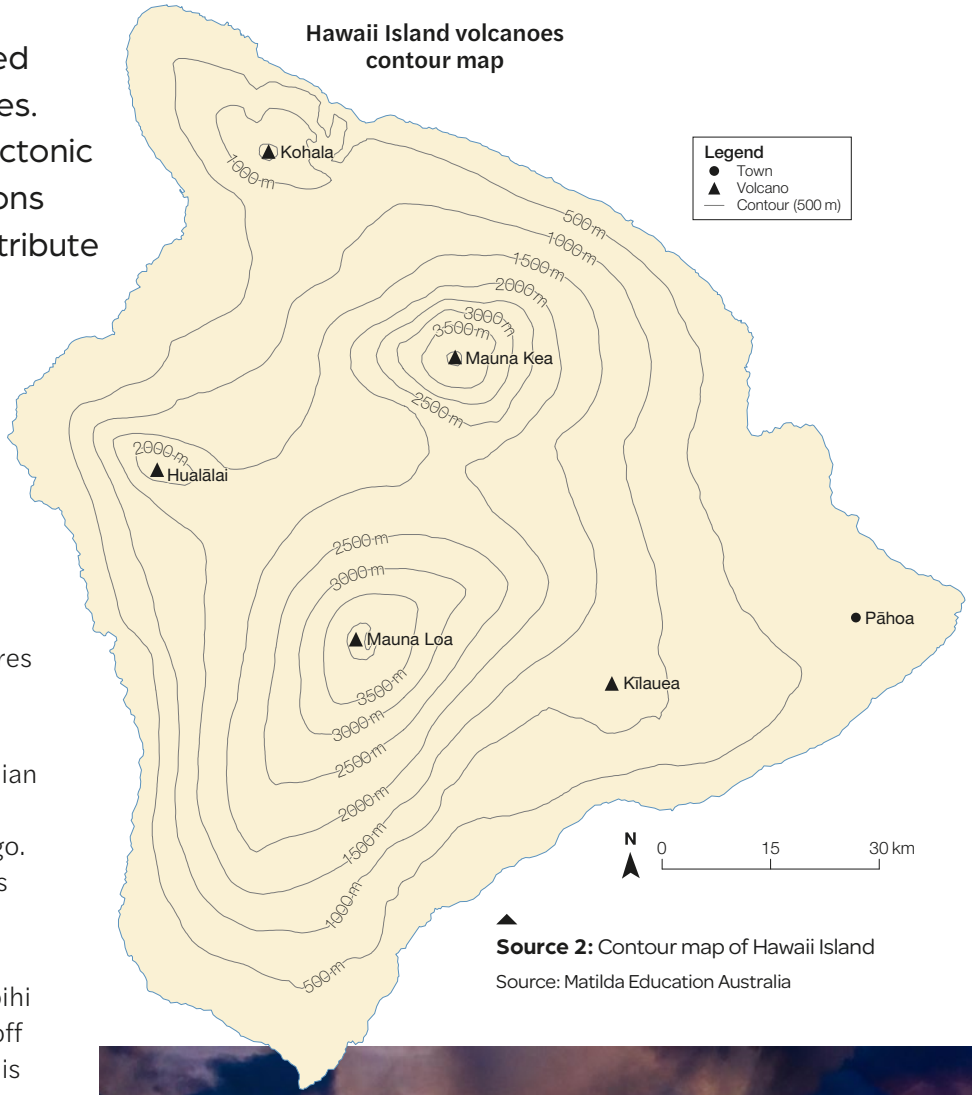
How are plate tectonics interconnected with landform change?

The movement of the Earth's plates is strongly interconnected with the alteration of landscapes. Most volcanoes occur along tectonic plate boundaries where eruptions and the movement of lava contribute to the creation of new islands and diverse landforms.

The Hawaiian Islands were formed as the Pacific Plate moved over a stationary hot spot of magma beneath the Earth's crust. This hot spot has been active for about 70 million years, slowly forming new islands by releasing lava. As the Pacific Plate shifts northwest at approximately 10 centimetres per year, new islands are formed from ongoing volcanic activity.

Kauai is the furthest inhabited Hawaiian island from the hot spot and is the most eroded, forming over 5.5 million years ago. In contrast, the 'Big Island' of Hawai'i has rocks that are less than 0.7 million years old (very young in rock years).

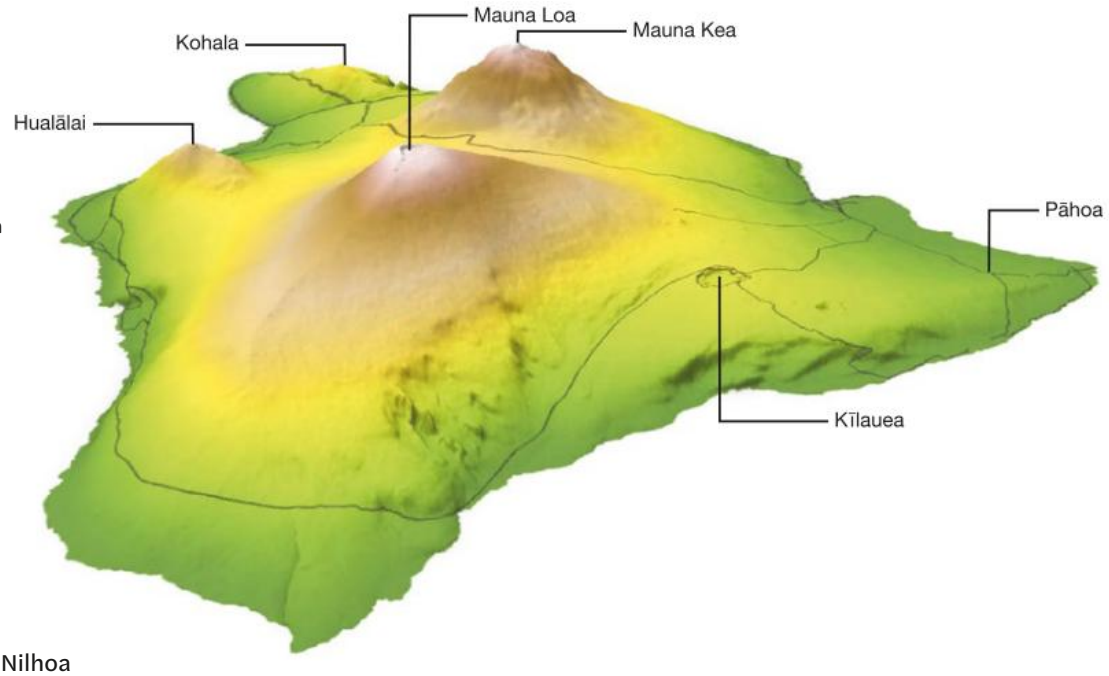
A new underwater volcano named Loihi is slowly emerging about 35 kilometres off Hawaii's southern coast. Currently, Loihi is about 1000 metres underwater, but scientists predict it will rise above sea level in 10 000 to 100 000 years, adding another island to the Hawaiian chain.



Source 2: Contour map of Hawaii Island

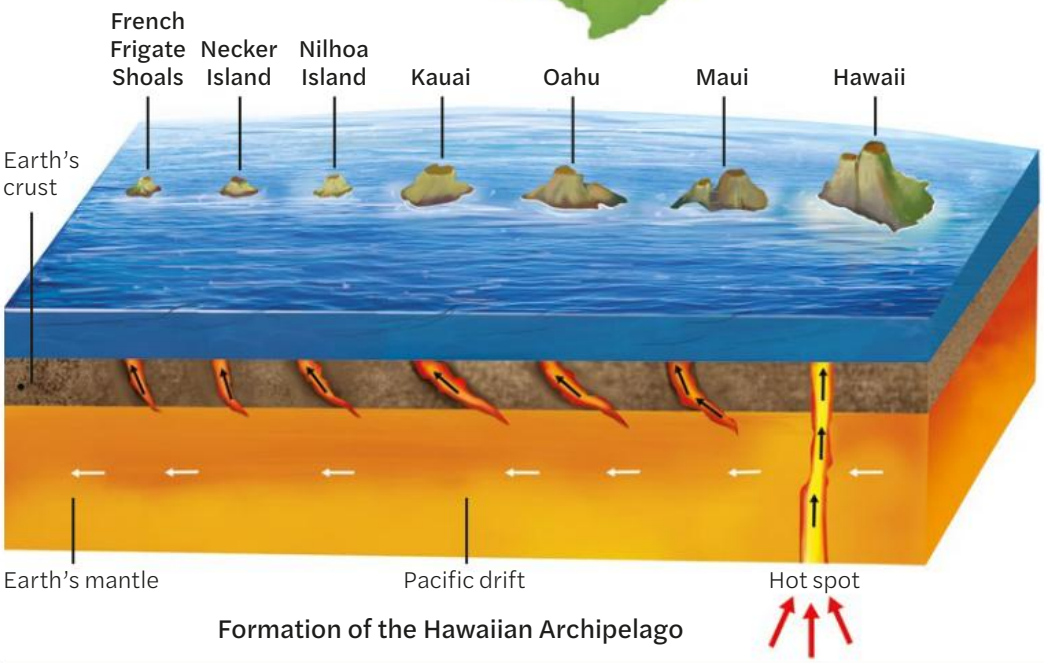
Source: Matilda Education Australia

Source 1: The Kilauea volcano on the Big Island erupted in 2018, covering over 30 square kilometres with lava. It reshaped the landscape and also posed challenges for nearby communities. Kilauea erupted again in 2025, with lava fountains spewing over 300 metres into the air. During this eruption, the volcano emitted around 75 000 tonnes of sulfur dioxide in a single day.



Source 3: Digital terrain model (DTM) of Hawaii Island created by combining elevation data with satellite imagery. The data is manipulated by computer programs to create a three-dimensional view of the island.

Source: Matilda Education Australia



Formation of the Hawaiian Archipelago

Source 4: Unlike other volcanoes, which are formed through subduction, hot spot volcanism occurs away from tectonic plate boundaries. Hot spot volcanoes form when a narrow stream of hot mantle rises and melts the Earth's crust, allowing magma to escape. Imagine a lava lamp, with the plumes of molten rock rising to the surface and pushing through cracks to form volcanoes.

Learning ladder G1.10

Interconnections

1. What interconnections exist between the age of volcanic rocks and the distance from the hot spot in Hawaii?
2. Source 4: Describe how the movement of the Pacific Plate is linked to the ongoing volcanic activity in Hawaii.
3. How does the process of hot spot volcanism differ from other volcanic activity at plate boundaries?
4. Source 4: How will Hawaii continue to change over time?

Presenting ideas

1. Source 1: Describe the landscape changes caused by the Kilauea eruption.
2. How does knowing the age of the rocks on the Big Island help us understand the geological history of the area?
3. What evidence from volcanic eruption events can you provide to support the claim that tectonic activity reshapes landscapes?
4. How does the 70 million years of volcanic activity at the hot spot demonstrate the connection between plate tectonics and landform creation?

Make it spicy

Sources 1 and 3: Describe the topography of this *environment*.

Presenting ideas, page 472; environment, page 241

HOW TO

G1.11

Case study

Does Victoria have any volcanoes?

The Western Victorian Volcanic Plains stretch more than 400 kilometres from Melbourne in the east to Mount Gambier in the west. They comprise the third-largest area of volcanic plains in the world, with more than 400 volcanoes and extensive lava flows.

Western Victorian Volcanic Plains

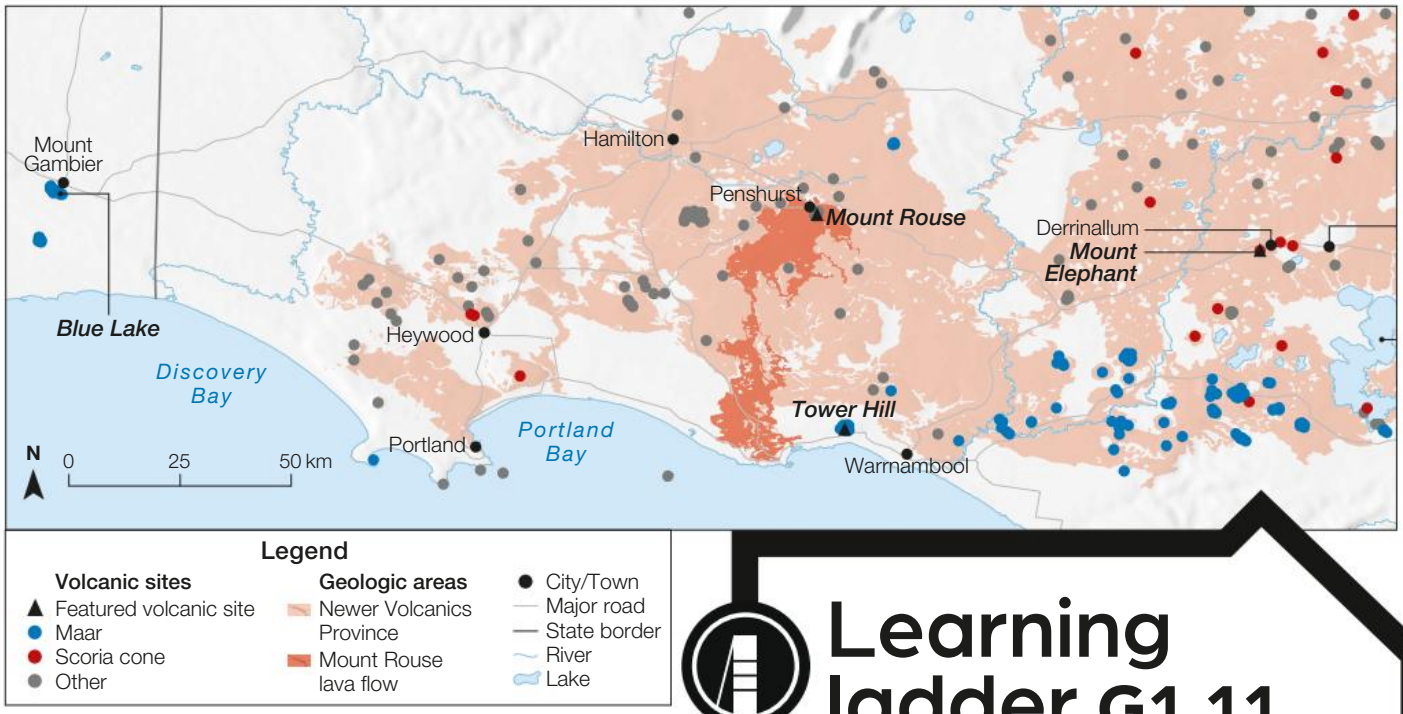
The Western Victorian Volcanic Plains cover more than 10 per cent of the state of Victoria. These basalt plains were formed by volcanic eruptions over the past 6 million years; the most recent eruption was 5000 years ago at Mount Gambier.

Volcanoes such as Mount Elephant and Tower Hill erupted explosively with a huge ash cloud and fire fountains creating volcanic cones. Tower Hill is actually a group of scoria cones in a large maar crater. Maar craters are formed by the explosive interaction between magma and groundwater; they are usually shallow, with steep sides, and often fill with water.

Source 1: Lake Bullen Merri near Camperdown is a shallow maar volcanic crater formed by a volcanic eruption with little lava.

Western Victorian volcanic plains

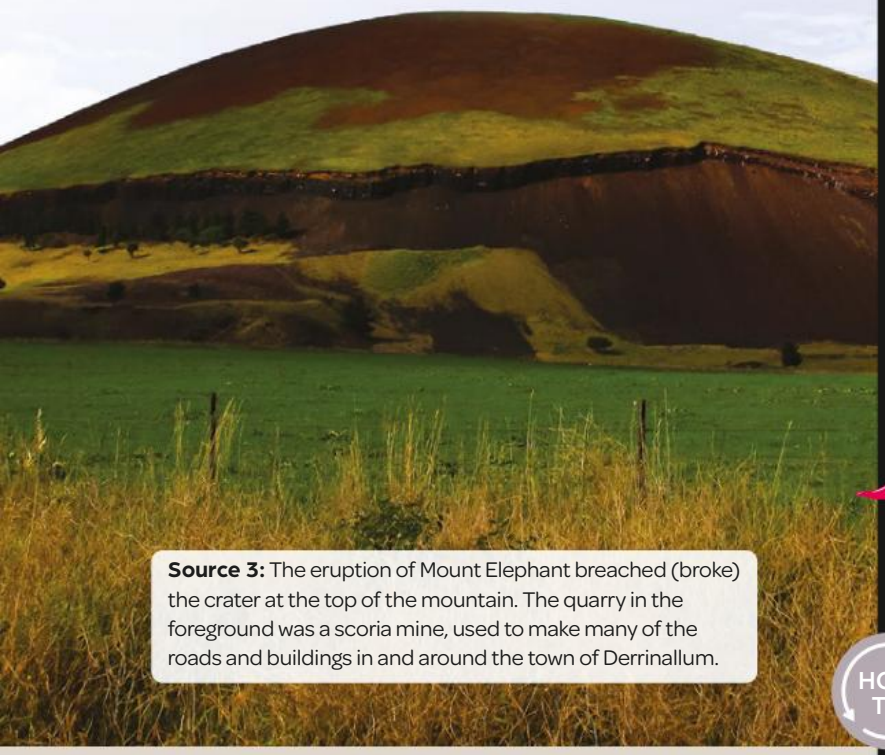
Source: Matilda Education Australia



Source 2: The Western Victorian Volcanic Plains are the third-largest volcanic plains in the world, with an average lava depth of 60 metres. More than 400 volcanic sites have been identified in this region.

Mount Elephant

Mount Elephant at Derrinallum in Victoria is a 240-metre scoria cone formed by a dormant volcano. Recent scientific testing estimated that it last erupted 550 000 years ago. Scoria cones are small volcanoes with relatively steep sides, usually formed as the result of a single volcanic eruption.



Source 3: The eruption of Mount Elephant breached (broke) the crater at the top of the mountain. The quarry in the foreground was a scoria mine, used to make many of the roads and buildings in and around the town of Derrinallum.

Learning ladder G1.11

Landscapes and landforms

1. Make a sketch of Mount Elephant from Source 3 and include these labels:
   a scoria **b** cone **c** breach
   d crater **e** quarry.
2. Source 1: Describe the landscape pictured in this source.
3. Explain the interconnection between historic volcanic activity and the formation of present-day freshwater lakes.
4. Compare the distribution of Victoria's volcanoes with another state in Australia.

Interpreting information

1. Source 2: Where are the volcanic plains located in Victoria?
2. Source 2: Describe the location of the greatest concentration of scoria cones in relation to Melbourne.
3. Source 2: Explain why Victoria doesn't have any active volcanoes.
4. Suggest how volcanoes may have changed Victoria's landscape over time. Will they have any influence in the future?

Make it spicy

Source 2: The concept of *space* describes the distribution of phenomena. Where is the greatest concentration of maar craters? What other volcanic feature is also found in this location?

HOW TO Interpreting information, page 446; space, page 234

How does weathering affect landforms?

When rock is exposed on the Earth's surface it can be broken down by water, temperature and the roots of plants. Moving ice, water and wind can further wear down rock and carry it away.

Weathering and erosion

Landforms change because of weathering and erosion. Weathering is the first stage of the process, where rock is worn away, broken down or dissolved into smaller and smaller pieces by water, heat and cold. Erosion is the second stage, where the weathered material is transported away by agents of erosion such as water, ice, wind and waves.

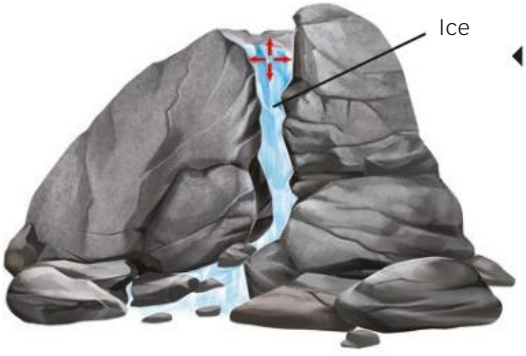
Weathering involves two processes that work to break down rocks on the surface of the Earth. Chemical weathering is a chemical change in a rock, while **mechanical weathering** involves rocks being broken into pieces.

A weathered rock particle is loosened but stays in its place. When the particle begins moving, we call this erosion, or **mass wasting**. Mass wasting is simply the movement of rocks downhill due to gravity, such as rock falls and landslides. Erosion is where rock particles are moved by flowing air (wind), water (rivers, sea and rain) or ice (glaciers). Erosion acts more quickly on softer rocks. Harder rocks remain as landforms such as mountains or **headlands**.

Mechanical weathering

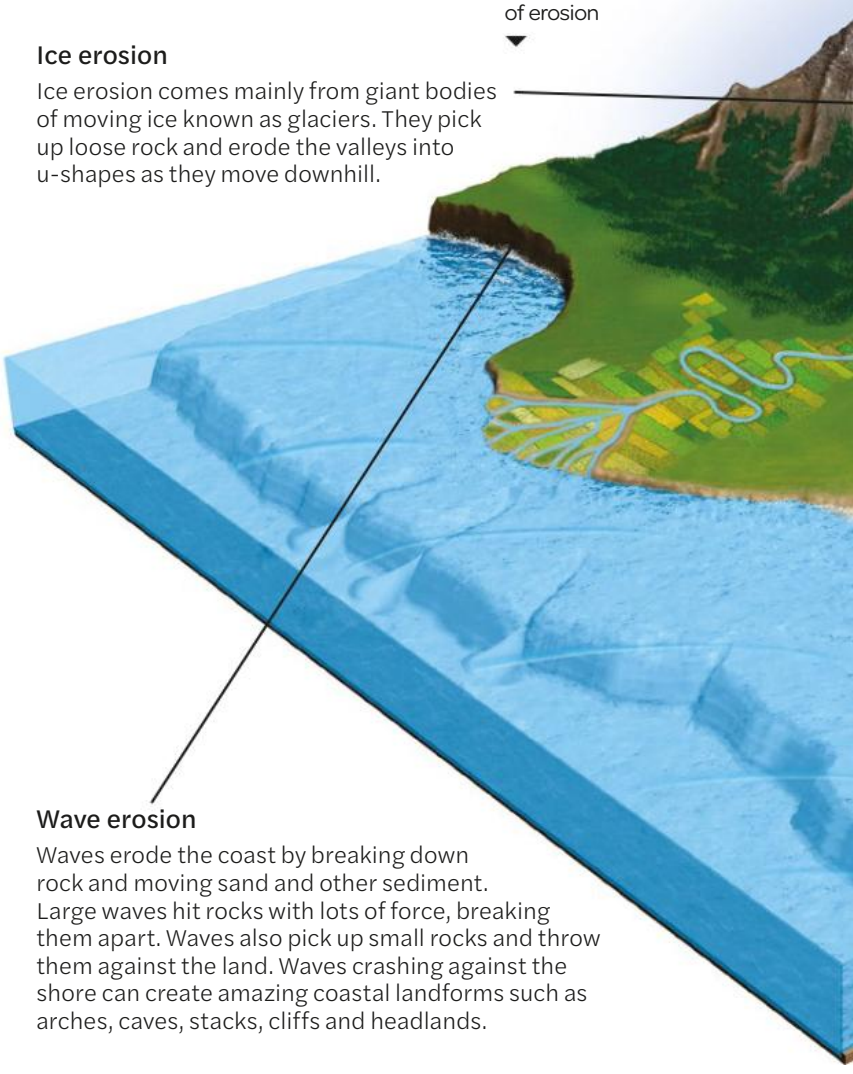
Mechanical (or physical) weathering is where large rocks on the Earth's surface are broken down into smaller ones. Mechanical weathering is caused by:

- **Temperature**: Cold nights and hot days cause rocks to expand and contract, which makes them crack and break apart.
- **Ice**: Water seeps into cracks in rocks. When the water freezes it expands by nine per cent, splitting the rocks.
- **Roots and plants**: Vegetation pushes into rocks and acts as a wedge to push the rocks apart. This is sometimes categorised as biological weathering.



Source 1: Frost wedging is a form of mechanical weathering that occurs when water freezes and expands in a crack in a rock.

Source 2: The process of erosion

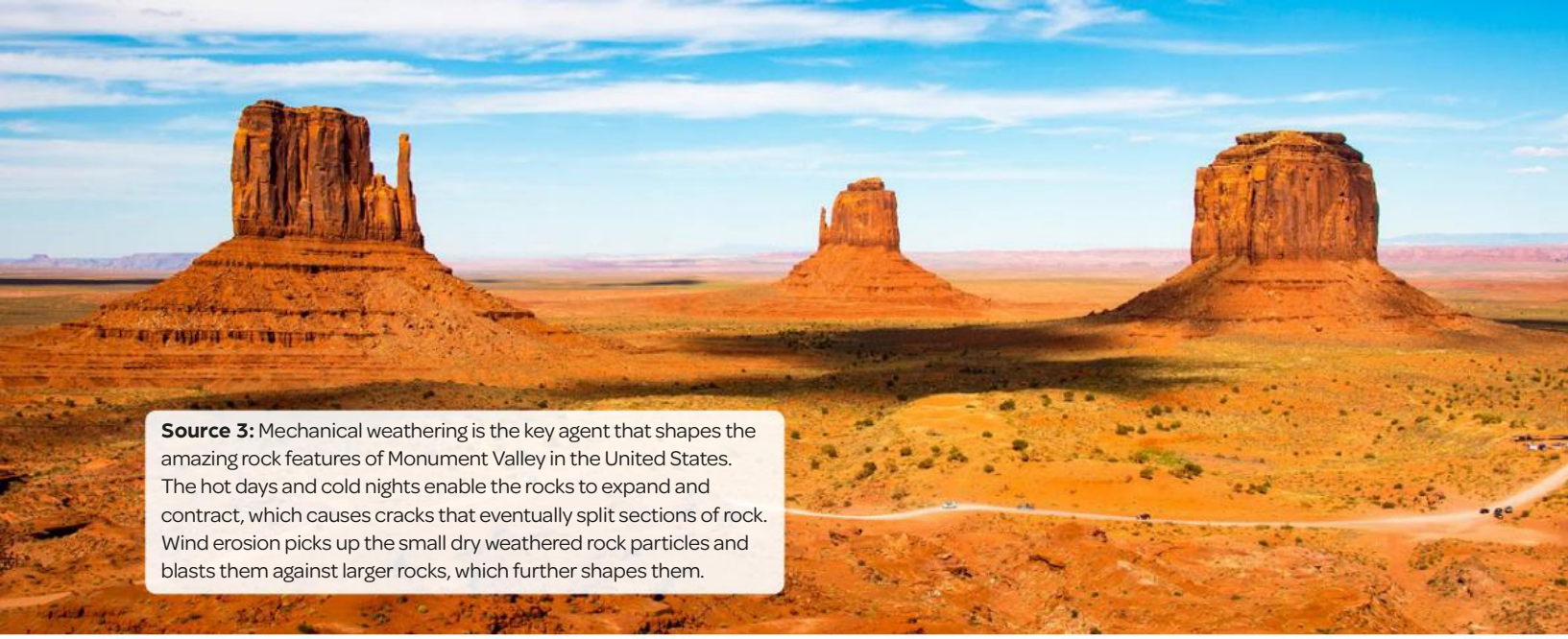


Ice erosion

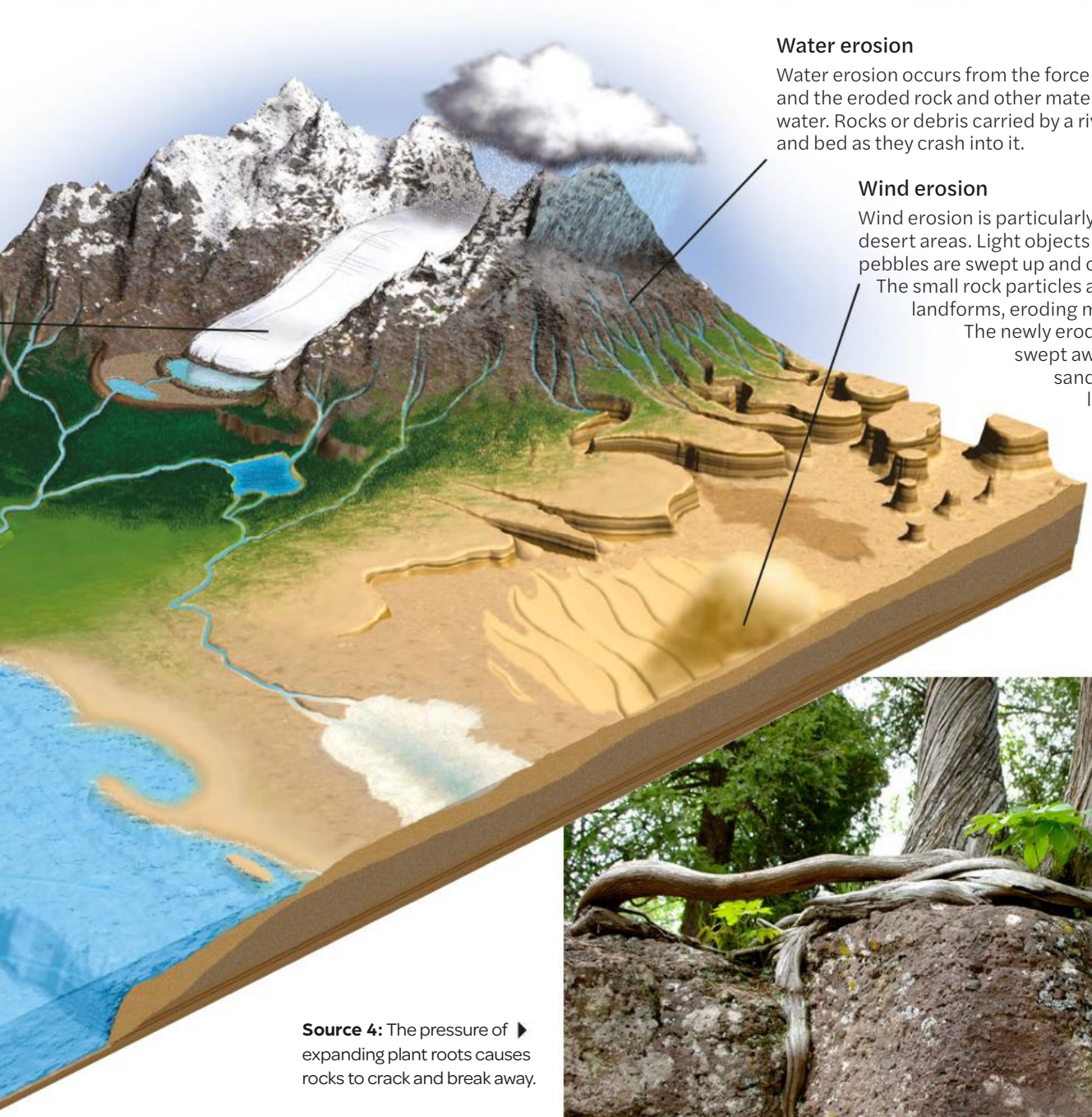
Ice erosion comes mainly from giant bodies of moving ice known as glaciers. They pick up loose rock and erode the valleys into u-shapes as they move downhill.

Wave erosion

Waves erode the coast by breaking down rock and moving sand and other sediment. Large waves hit rocks with lots of force, breaking them apart. Waves also pick up small rocks and throw them against the land. Waves crashing against the shore can create amazing coastal landforms such as arches, caves, stacks, cliffs and headlands.



Source 3: Mechanical weathering is the key agent that shapes the amazing rock features of Monument Valley in the United States. The hot days and cold nights enable the rocks to expand and contract, which causes cracks that eventually split sections of rock. Wind erosion picks up the small dry weathered rock particles and blasts them against larger rocks, which further shapes them.



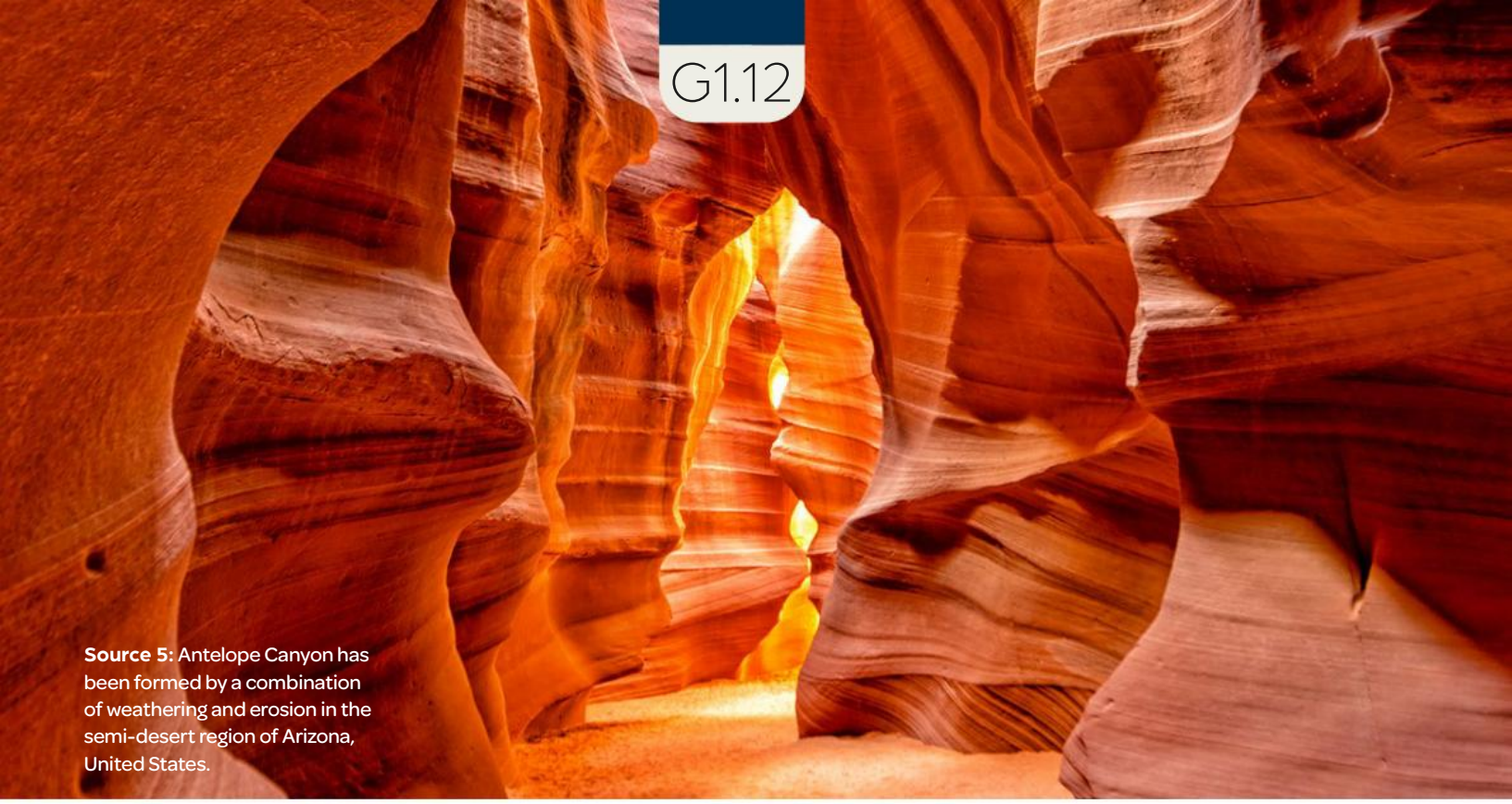
Water erosion

Water erosion occurs from the force of the flow of water and the eroded rock and other material carried in the water. Rocks or debris carried by a river erode its banks and bed as they crash into it.

Wind erosion

Wind erosion is particularly active in dry desert areas. Light objects such as sand and pebbles are swept up and carried by the wind. The small rock particles are thrown against landforms, eroding materials off them. The newly eroded material is also swept away by the wind to sandblast the desert landscape into amazing shapes.

Source 4: The pressure of expanding plant roots causes rocks to crack and break away.



Source 5: Antelope Canyon has been formed by a combination of weathering and erosion in the semi-desert region of Arizona, United States.

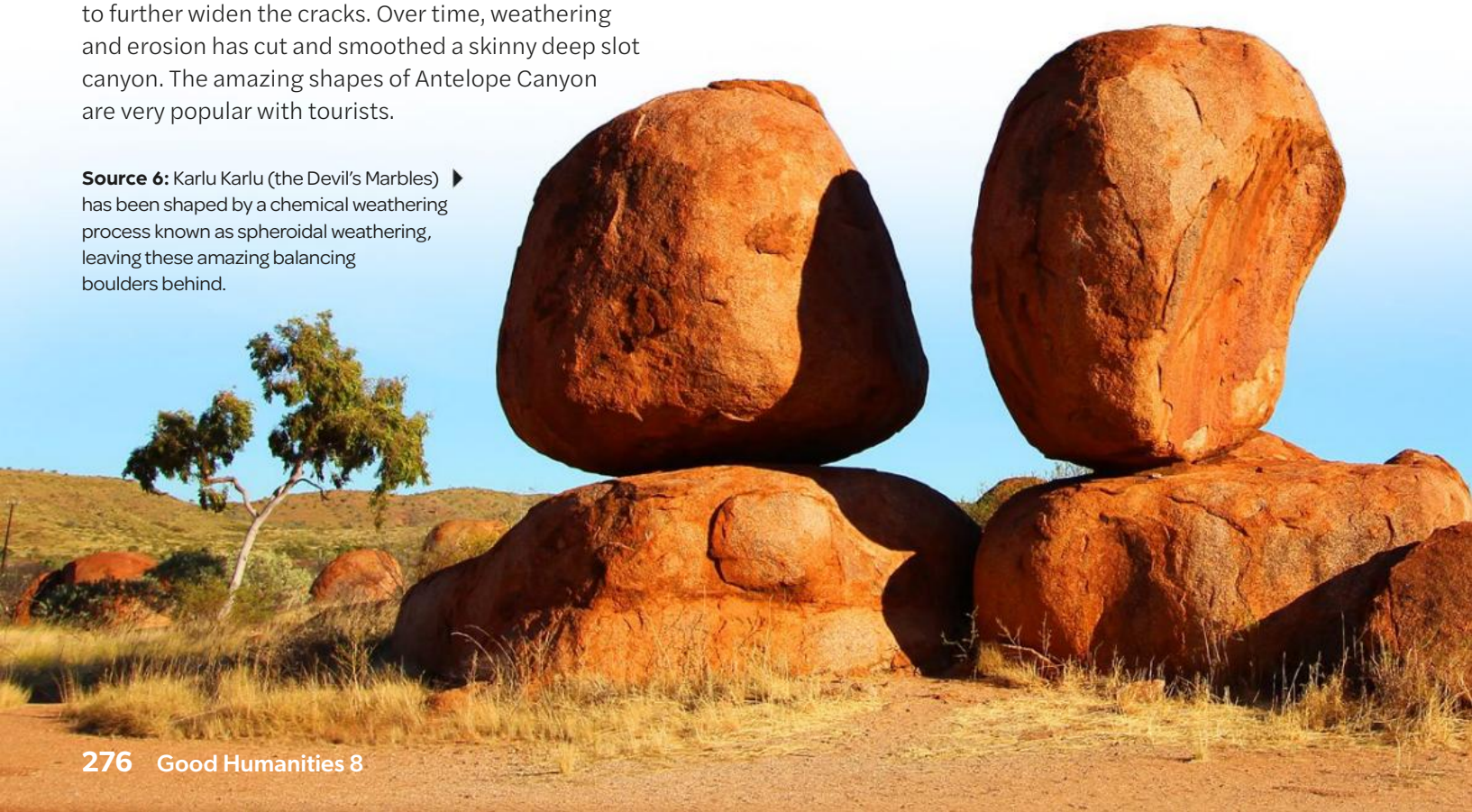
Antelope Canyon

Mechanical weathering is very effective in deserts where there is a large temperature range. Mechanical weathering processes such as temperature change and frost wedging opened wide cracks in the soft sandstone rock of Antelope Canyon in the desert region of Arizona in the United States. Flash floods carrying sand, rocks, logs and other debris eroded large amounts of rock to further widen the cracks. Over time, weathering and erosion has cut and smoothed a skinny deep slot canyon. The amazing shapes of Antelope Canyon are very popular with tourists.

Chemical weathering

Chemical weathering decomposes rocks and minerals. Chemicals in water or the reaction of water with minerals in rocks either form or destroy minerals in the rock, breaking down the bonds holding rocks together. This weathering is common in locations where there is a lot of water to help the chemical reactions take place.

Source 6: Karlu Karlu (the Devil's Marbles) has been shaped by a chemical weathering process known as spheroidal weathering, leaving these amazing balancing boulders behind.

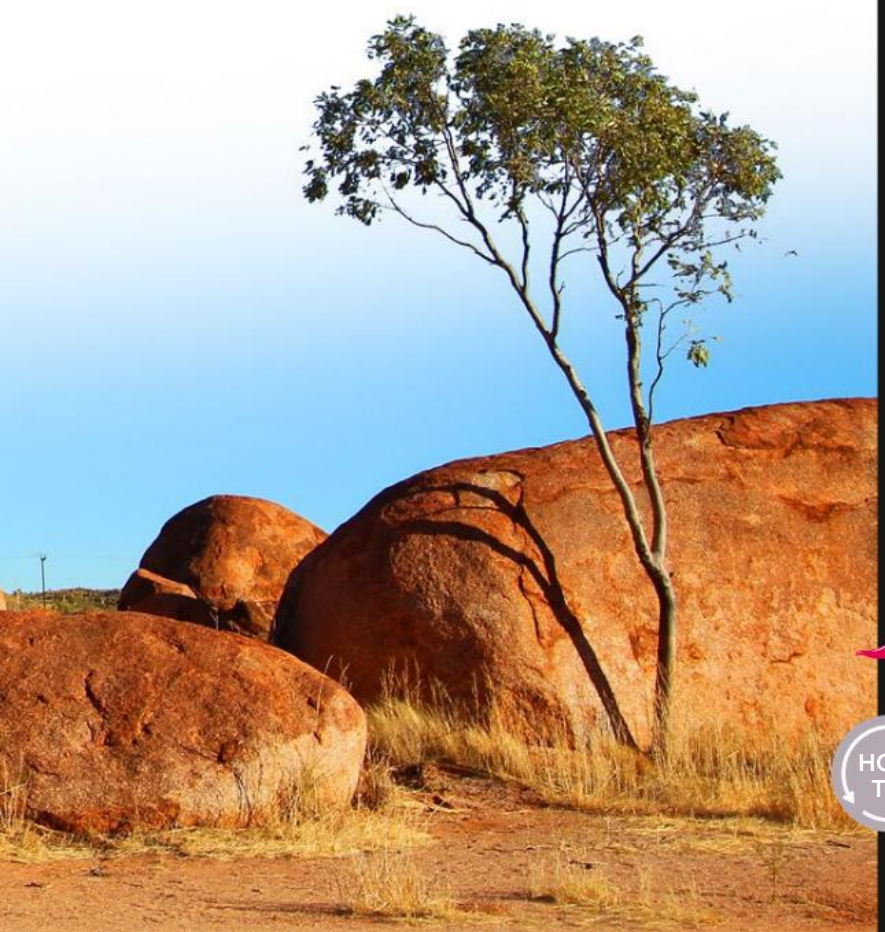


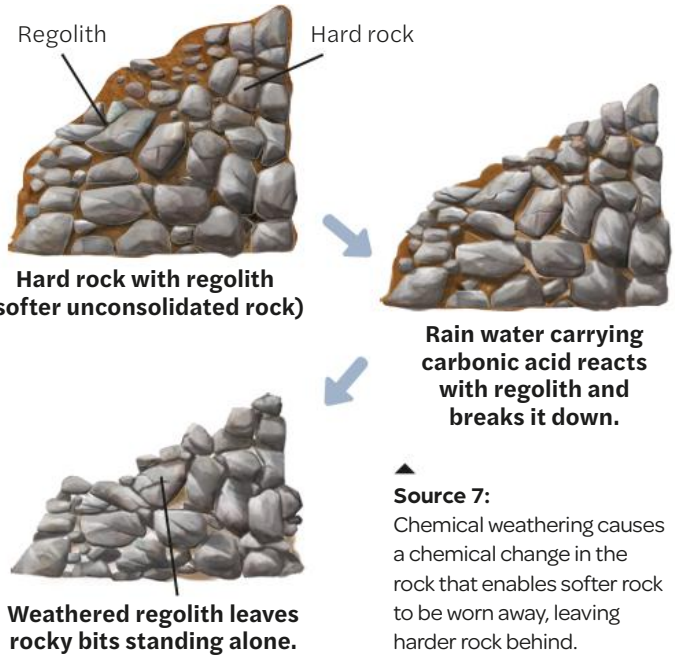
The most common types of chemical weathering are:

- **Hydrolysis**: Hydrogen in water reacts with minerals in the rocks to form new minerals; for example, hard granite rock changes to softer clay through hydrolysis. Clay is more prone to mechanical weathering and erosion than granite.
- **Carbonation**: Rainwater contains carbonic acid because carbon dioxide in the atmosphere dissolves in it. This carbonic acid reacts with minerals in some rocks, causing the rocks to weather.
- **Oxidation**: When oxygen combines with other elements in rocks, new types of rock are formed. As with hydrolysis, these new rocks are generally softer and easier for mechanical weathering to break apart.

Karlu Karlu

Karlu Karlu (the Devil's Marbles) in the Northern Territory is a local example of chemical weathering. The granite rock has been shaped into round boulders by a chemical weathering process known as **spheroidal weathering**. Water seeps into cracks, and chemical reactions cause the rocks to disintegrate along the edges. The cracks are opened wider, allowing even more water to reach the surfaces. Corners are attacked by water from more than one direction and wear away more rapidly. The sharp corners are rounded, forming spherical rocks.





Source 7: Chemical weathering causes a chemical change in the rock that enables softer rock to be worn away, leaving harder rock behind.

Learning ladder G1.12

Processes

1. Identify the different types of weathering.
2. Describe mechanical weathering in desert regions.
3. Source 6: Explain how Karlu Karlu formed.
4. Using one place as an example, explain the impact of weathering.

Representing information

1. What change does chemical weathering cause?
2. Source 4: Draw a two-stage flow diagram to show how plants can cause mechanical weathering.
3. Draw a sketch map of a local environment that has undergone weathering, e.g. Black Rock Beach, Black Rock. Annotate the sketch with key weathering processes occurring in this location.
4. Using Google Earth, locate Karlu Karlu (the Devil's Marbles) and annotate the map with the key processes that formed and changed this place over time.

Make it spicy

Describe how weathering and erosion are *interconnected*.

HOW TO Representing information, page 436; interconnection, page 238

What are deserts?

Deserts are dry environments where evaporation is higher than precipitation. They receive less than 250 millimetres of precipitation per year. Deserts are found on every continent except Europe and cover nearly one-third of the Earth's land surface. Deserts can be hot or cold and can be rocky, sandy or even covered in ice. Rocky deserts can be weathered and then eroded by water and wind into amazing shapes.

Different desert landscapes

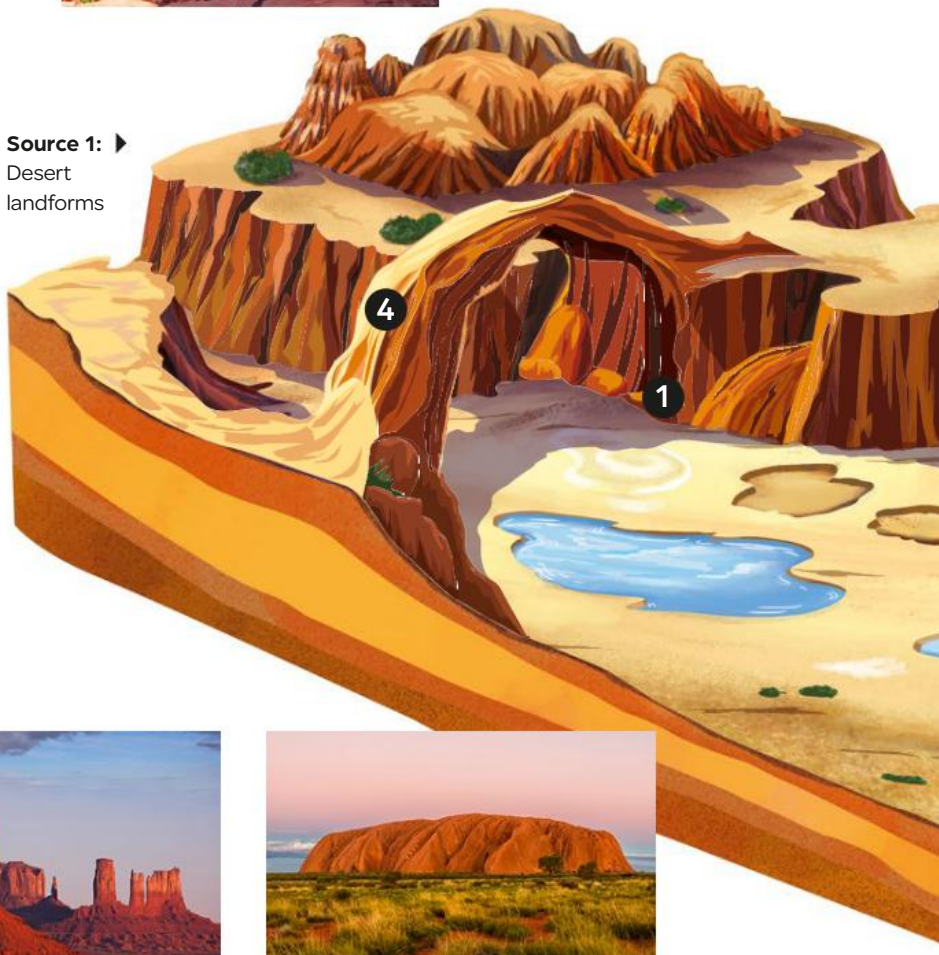
Deserts cover about 30 per cent of the Earth's surface and receive less than 250 millimetres of rain per year. Most are hot deserts that lie between the latitudes of 15 and 30 degrees north and south of the equator. Cold deserts such as the Gobi and Atacama Deserts have warm dry summers and cold winters. Cold deserts are are found in temperate areas or high plateaus, while polar deserts are localised at the North and South poles.

Desert landscapes can vary greatly. Some deserts are seas of sand; others are vast, stony plains; others have spectacular rock formations shaped by weathering and erosion. Plateaus of rock weather and erode into isolated **mesas**, **buttes** and chimney rocks. Natural arches form from weathering along joints that leave narrow walls of rock. When the lower wall erodes, an arch results. **Inselbergs** such as Uluru (see page 280) are islands of rock that remain after a long period of erosion of the surrounding soft rock.

The world's deserts are expanding through a process known as **desertification**. This occurs when land along the edge of a desert becomes damaged by drought and overuse by humans.

4 **Arch**: A natural bridge weathered and eroded through a solid rock cliff over time

Source 1: Desert landforms

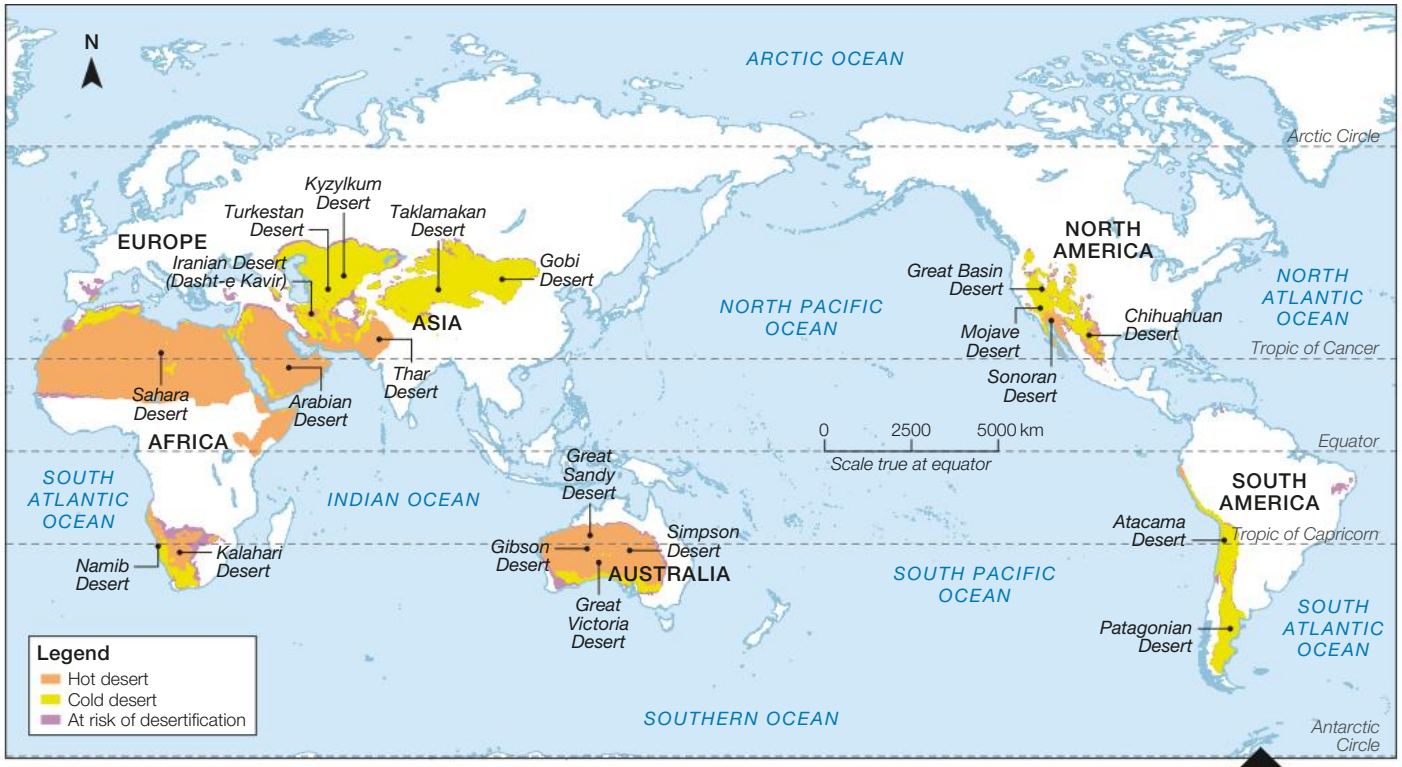


1 **Alluvial fan**: Semicircular build-up of eroded material deposited by water and wind at the end of wadis (desert valleys)

2 **Butte**: An isolated hill with vertical sides and a small flat top. Buttes are smaller than mesas

3 **Inselberg**: An isolated steep-sided mountain, uncovered as the softer land around it is eroded away

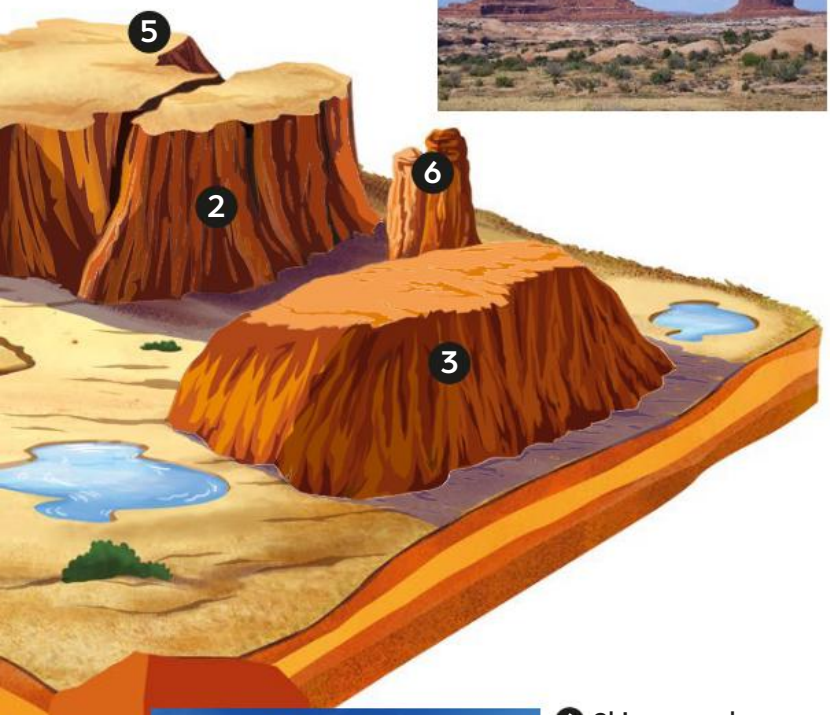
World deserts



Source: Matilda Education Australia; Beck, Zimmerman, McVicar, Vergopolan, Berg, Wood

Source 2: World deserts

5 Mesa: A broad, isolated flat-topped landform found in desert areas that are the eroded remains of a wide plateau



6 Chimney rock: Thin pillars of rock that are the remains of buttes; evaporating water creates a hard crust on top, protecting it from chemical weathering as the column wears away

Learning ladder G1.13

Landscapes and landforms

1. What is a desert?
2. Source 1: Describe the geographical characteristics of this desert.
3. Source 1: Look at the photographs of the mesa, butte and chimney rocks. Explain the relationship between these landforms.
4. Why does the distribution of landforms in desert landscapes vary between places?

Interpreting information

1. Source 2: What is meant by a cold desert?
2. Source 2: Describe, using PQE, the distribution of deserts on a global scale.
3. Source 2: Explain the distribution of hot and cold deserts.
4. Source 1: Predict what will happen to the pictured arch landform with further weathering.

Make it spicy

Source 1: Draw a two-stage diagram with labels to show how a chimney rock is formed and *changes* due to weathering.

HOW TO

Interpreting information, page 446; change, page 240

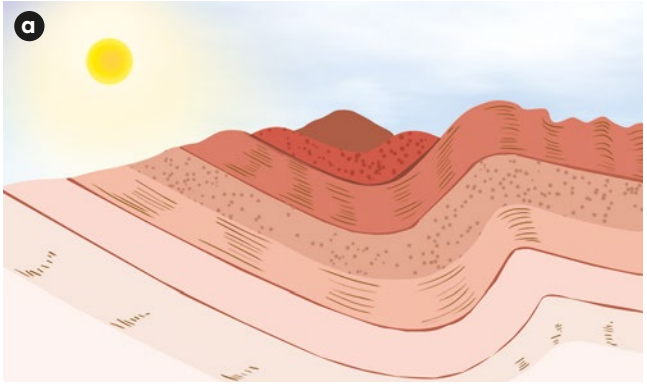
Case study

How did Uluru form?

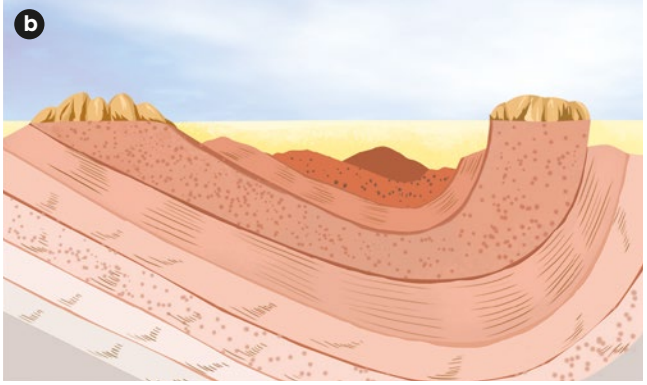
Uluru and nearby Kata Tjuta are inselbergs that were uncovered as the land around them eroded away.

The region was once covered by sea and over time it was covered with marine sediment. About 500 million years ago, pressure from beneath the crust caused the land in Central Australia to fold and be pushed upwards. The layers of sedimentary rock were gradually worn away by weathering and erosion (page 274), leaving only the hardest rocks showing as the inselbergs (isolated hills) of Uluru and Kata Tjuta on the surface. Uluru is the largest surface rock in the world. It rises 348 metres above the surrounding land and covers an area of 3.3 square kilometres.

Uluru and Kata Tjuta are sacred to the Pitjantjatjara Anangu. Their understanding of how the rocks formed has been passed down over thousands of years through stories, songs, ceremonies, dances and art. For the Anangu people, Uluru isn't just a rock, it's a living place – with the marks of the creation beings shown everywhere.



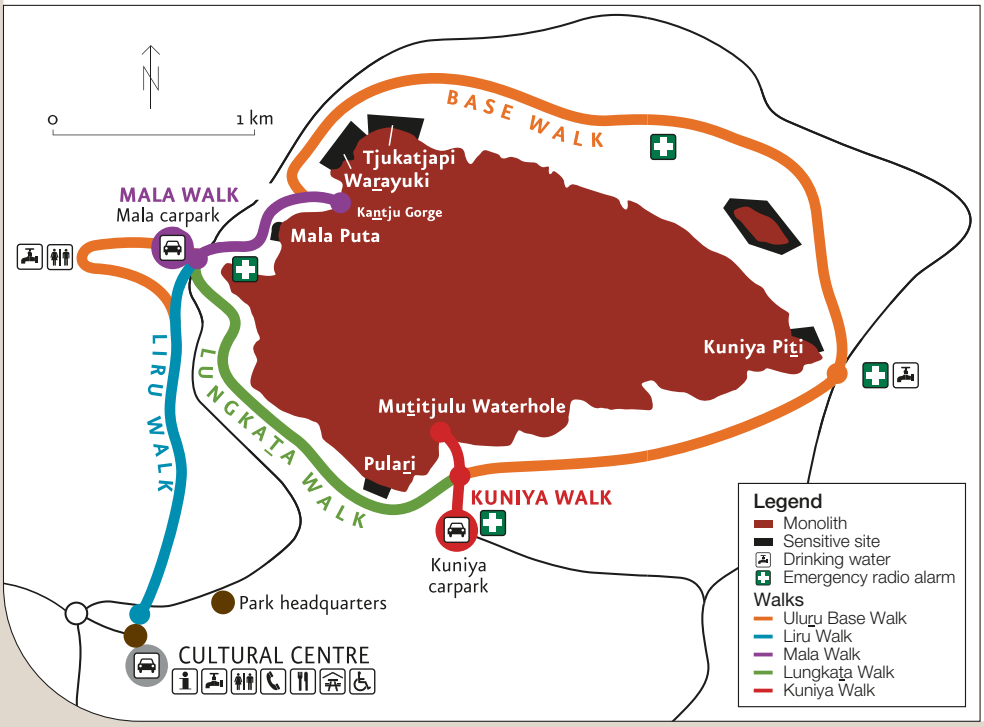
Fold mountains are pushed upwards due to pressure in the Earth's crust. Layers of sedimentary rock are bent and pushed upwards to create fold mountains.



Over time, the processes of weathering and erosion wear away the softer rock, leaving only the harder rocks showing on the surface of the land.

Source 1: The formation of Uluru and Kata Tjuta

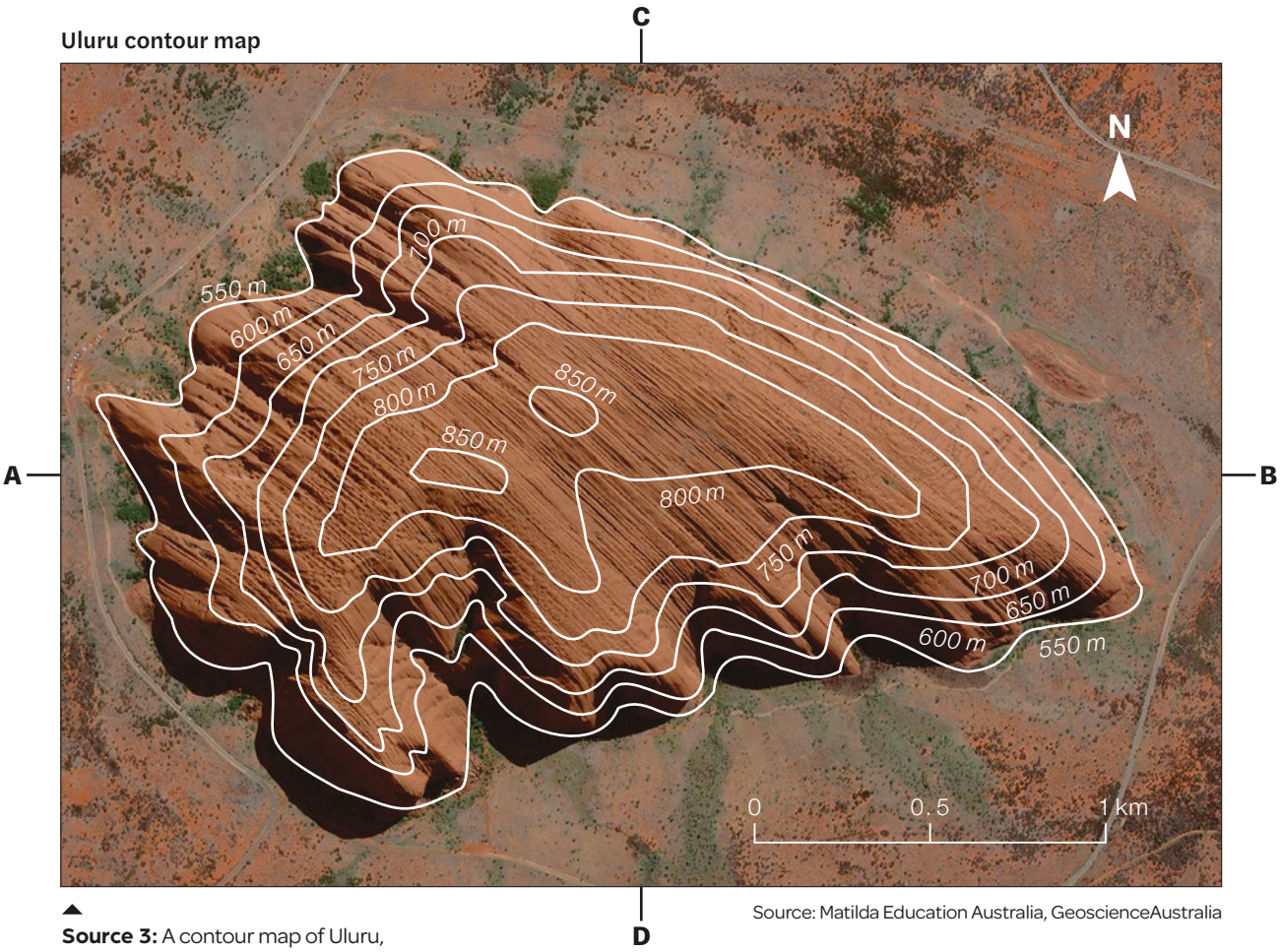
Uluru walking tracks and facilities



Source 2: This is a *plan* view of Uluru as seen from directly above. Maps are drawn from the plan view because the scale is constant over the area shown. There is no foreground or background in plan-view images and maps.

Source: Matilda Education Australia; Parks Australia

Uluru contour map



Source: Matilda Education Australia, GeoscienceAustralia

Source 3: A contour map of Uluru, overlaid on an aerial photo

Learning ladder G1.14

Interconnection

1. Source 1: How is the process of folding interconnected with the formation of Uluru and Kata Tjuta?
2. Source 1: Describe the role of weathering and erosion in the formation of Uluru and Kata Tjuta.
3. Explain why Uluru is a unique place.
4. Create a flow diagram explaining the interconnecting processes that formed and changed Uluru over time.

Representing information

1. Source 3: Outline the advantages and disadvantages of using oblique aerial views to study landforms.
2. Source 1: Create a flow diagram that shows what the region looked like before the sedimentary rock and how it pushed up through the process of folding.
3. Source 3: Create a cross-section of Uluru, illustrating how the elevation of the landform changes along the line between points A and B.
4. Access Google Earth. Search for 'Uluru'. Using the 'Layer' menu, turn on 'Additional layers', 'Photos'. Explore the sites of Uluru. What are the implications of change to Uluru, such as climbing on the rock and graffiti, for the Pitjantjatjara Anangu people?

Make it spicy

What are the characteristics that make this *place* unique?

Representing information, page 436; cross-sections, page 453; place, page 236

HOW TO

How do waves shape landforms?

Waves are one of the strongest forces shaping coastal landforms. Waves can be generated by wind or movements on the Earth's surface. They can travel for thousands of kilometres through water, before breaking in shallower water near coasts, building or scouring away the coastline in the process.

How do waves begin?

Waves travel through water. The water moves up and down but does not actually travel with the wave. It is the energy that travels with the wave. The energy required to create waves most commonly comes from wind, but may also come from earthquakes or volcanic eruptions. The size of a wave depends on wind speed, the distance travelled by wind over the ocean and the amount of time the wind blows.

When wind blows across water it creates ripples on the surface. The wind forces the water to rise and gravity pulls it back down again. Water rising and falling creates a circular movement of water particles beneath the surface. On the surface, we see the top of this orbit, known as the **crest**, and the zone where it falls, called the **trough**.

The orbiting waves can travel for long distances as **swells** through the ocean. A swell is a collection of waves formed by winds. The size of the swell is measured from the crest to the trough. The largest swell ever measured in the **southern hemisphere** was a 23.8-metre swell off New Zealand's Campbell Island in May 2018.

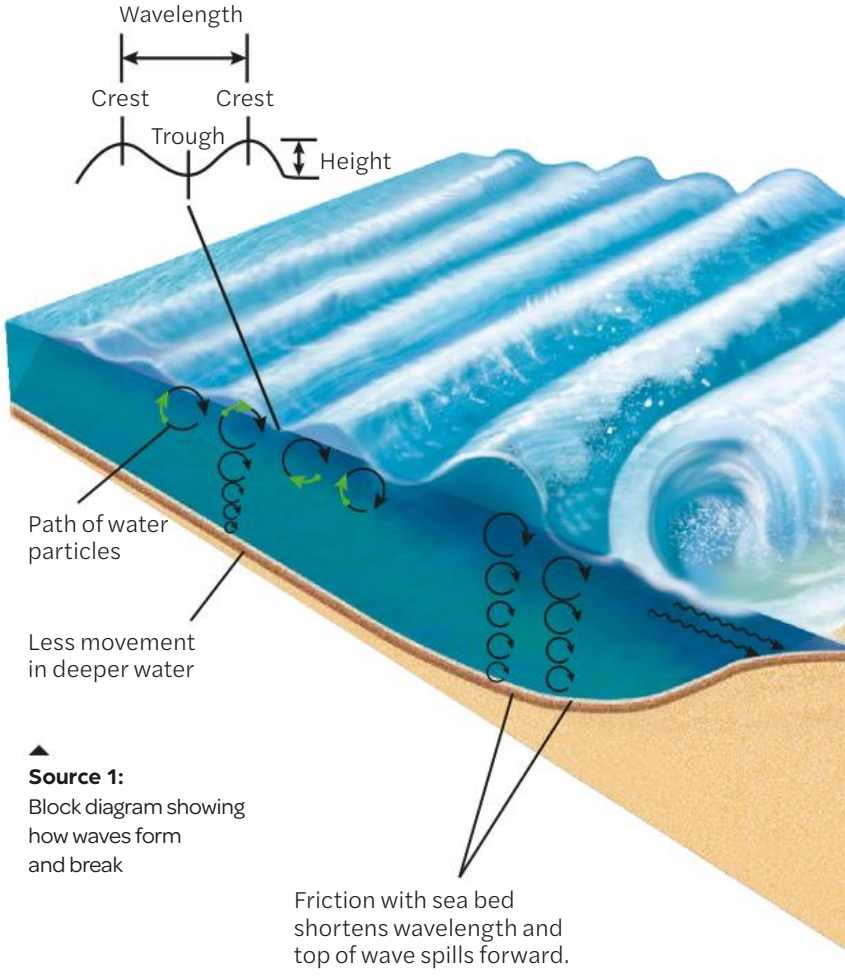
Why do waves break?

As waves move into increasingly shallow water near the coastline or offshore **reefs**, the bottom of the wave orbit comes into contact with the sea floor and slows down. The wavelength is shortened and the crest of the wave overtakes the bottom of the wave. It spills forward as a **breaking wave**. Waves will generally start to break when they reach a water depth of 1.3 times the wave height.

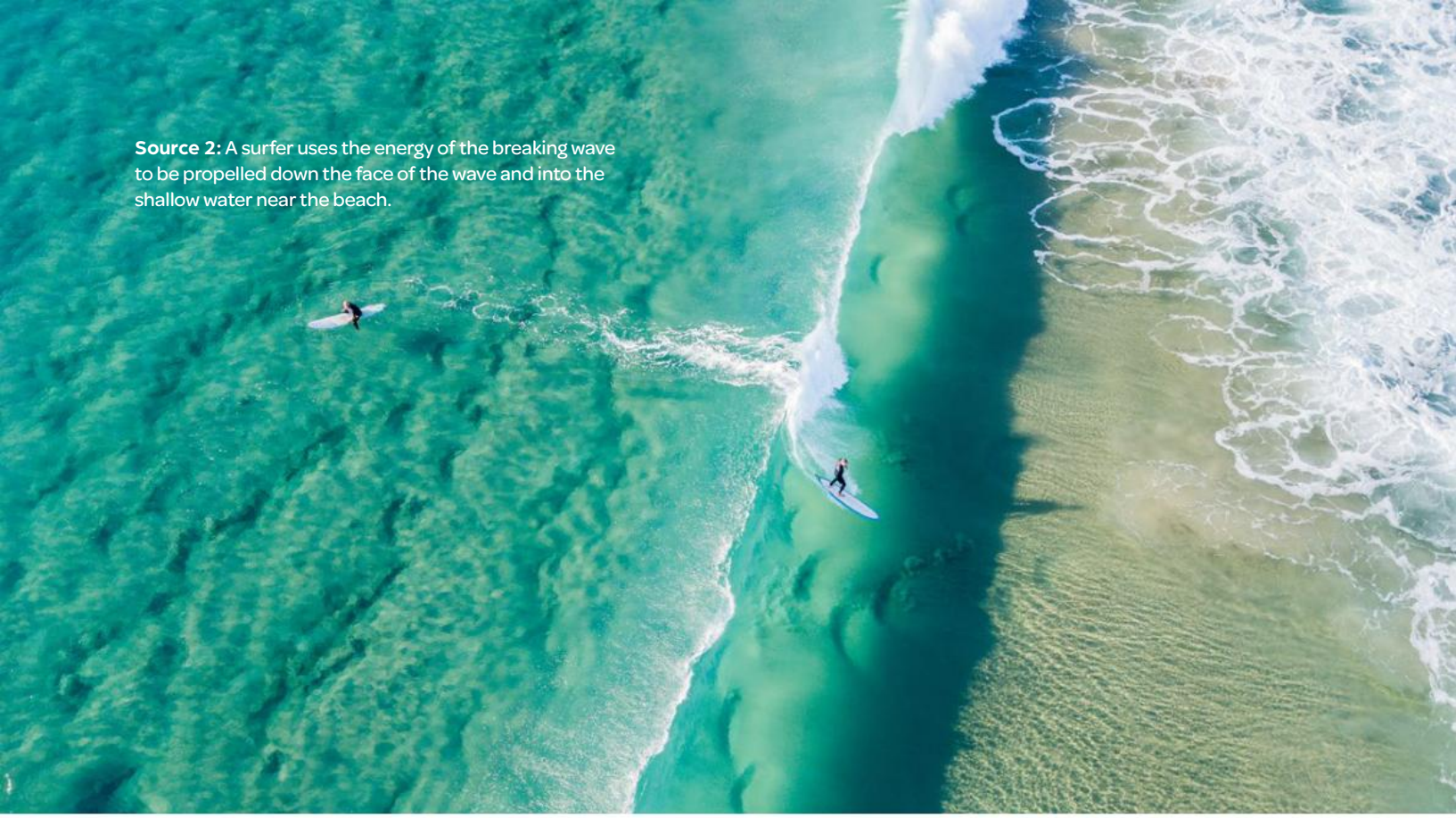
What conditions do surfers look for?

Groundswell waves are steeper and faster. They are the result of strong wind storms in the open ocean that create longer wavelength waves that move quickly into shallow water before breaking. Wind swell waves are the smaller, less powerful waves formed by local winds.

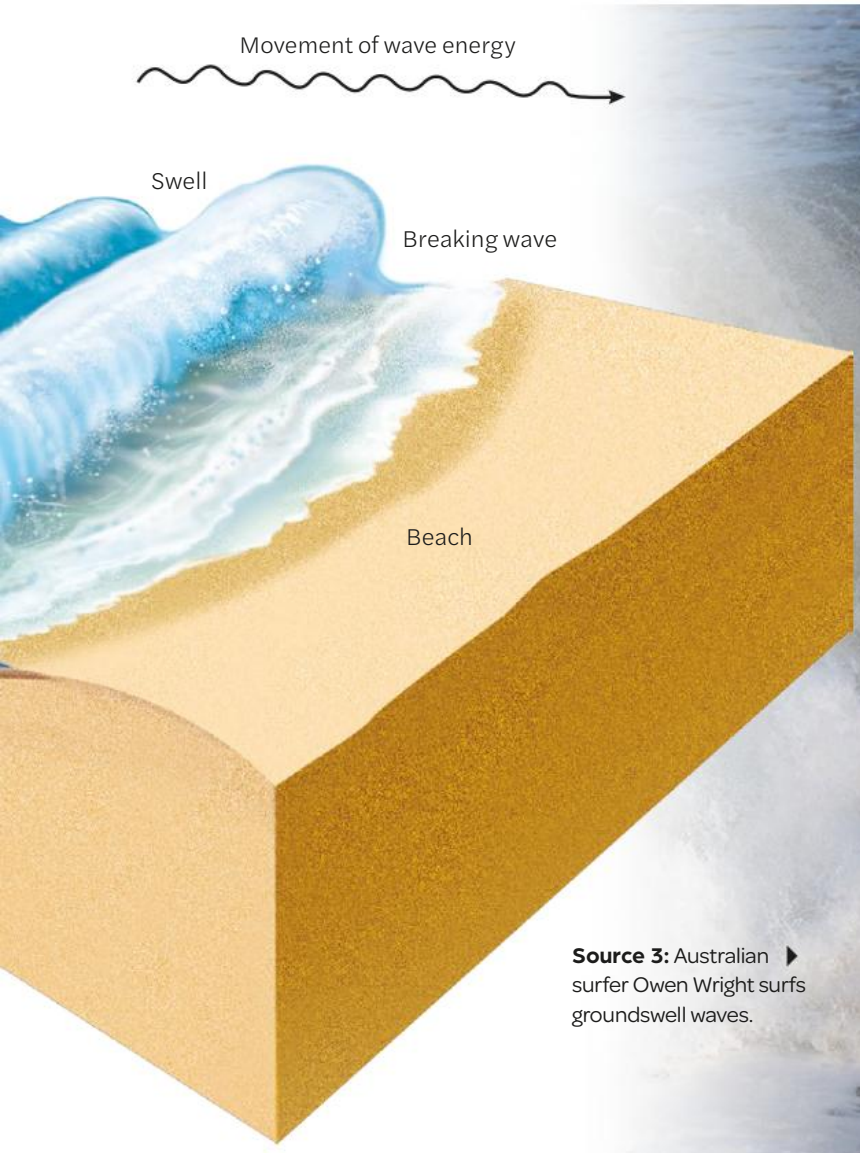
Offshore winds create the best waves as wind blows against the top of the wave to delay it from breaking. Onshore winds push the top of the wave forwards, causing the wave to break before the usual breaking depth is reached.



Source 1: Block diagram showing how waves form and break



Source 2: A surfer uses the energy of the breaking wave to be propelled down the face of the wave and into the shallow water near the beach.



Source 3: Australian surfer Owen Wright surfs groundswell waves.

How do different waves shape landforms?

Coastal landforms are both created and worn away by wave action. **Destructive waves** destroy and erode the coastline. Destructive waves are large and powerful; they constantly crash onto the coastline, wearing away cliffs and digging out areas of **beach**.

Destructive waves travel across open ocean and build a significant amount of energy that hits coastal cliffs and beaches with great force. Cliffs can be carved into amazing erosional landforms such as headlands, caves, arches and **stacks**.

Constructive waves are smaller and less frequent. They deposit sand on the beach rather than scouring it away. Constructive waves are responsible for creating depositional landforms such as beaches, **sand dunes**, **sand bars**, **spits** and **tombolos**.

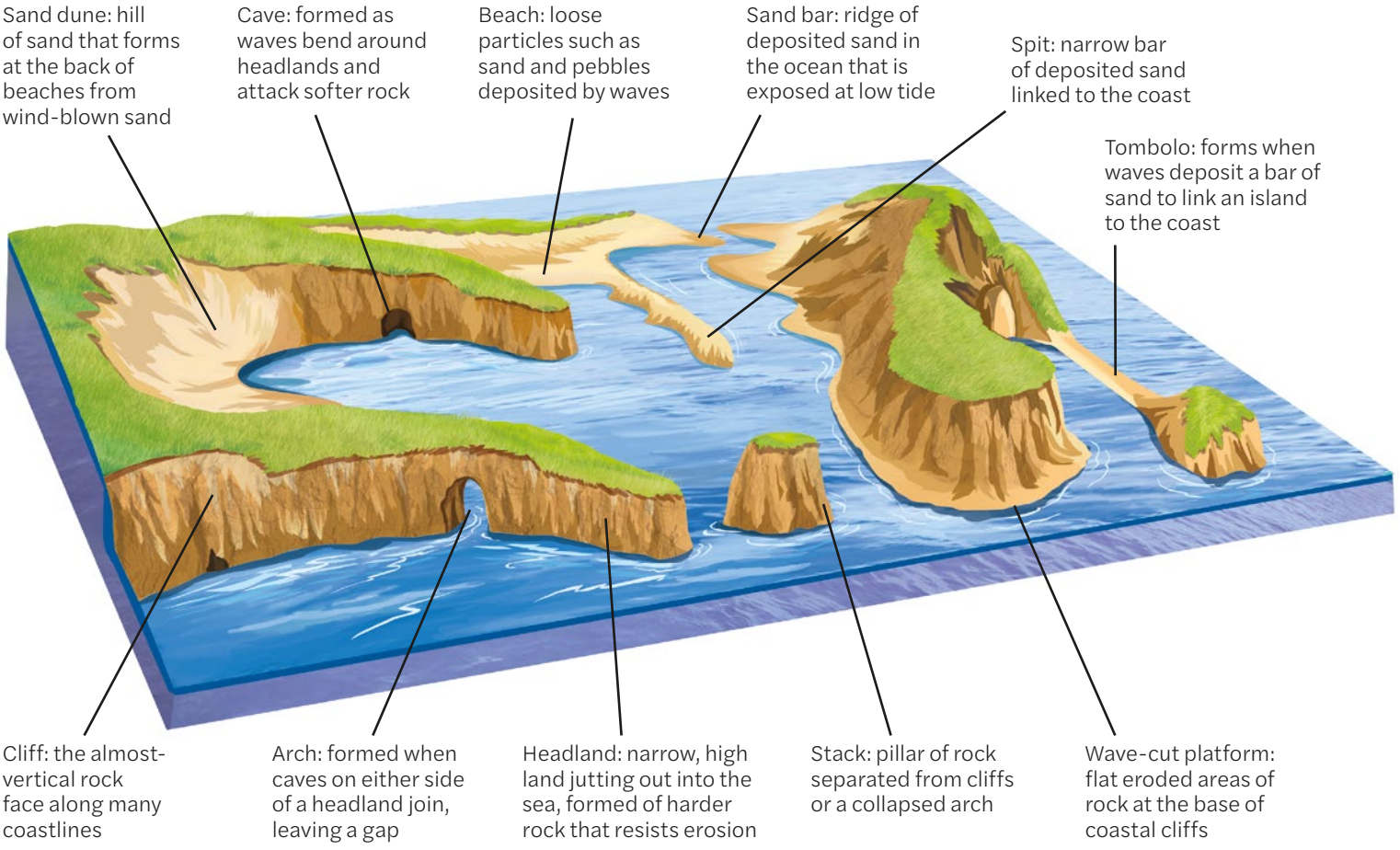
The amount of eroded material taken away or deposited on the coastline depends on the water flowing onto the beach (**swash**) and returning to the sea (**backwash**). Destructive waves have weak swash, but strong backwash that removes material. Constructive waves have strong swash and weak backwash, helping it to build up sand.

Erosional landforms

Destructive waves create erosional landforms, including:

- **cliffs:** the almost-vertical rock face along many coastlines
- **headlands:** narrow, high land jutting out into the sea, formed of harder rock that resists erosion
- **caves:** formed as waves bend around headlands and attack softer rock
- **arches:** formed when caves on either side of a headland join, leaving a gap
- **stacks:** pillars of rock separated from cliffs or a collapsed arch
- **wave-cut platforms:** flat eroded areas of rock at the base of coastal cliffs.

Source 4: Destructive waves create erosional landforms such as cliffs, headlands, caves, arches, stacks and wave-cut platforms. Constructive waves cause depositional landforms in coastal areas such as beaches, sand dunes, bars, spits and tombolos.



Source 5: The action of waves and other erosional forces, such as wind, ice and rain, are continually shaping and reshaping our coastlines. The famous Elephant Rock sits on the Tongaporutu coastline in New Zealand. It was a double arch in the shape of an elephant until continued erosion and an earthquake removed the elephant's trunk in 2016. Elephant Rock sits alongside the Three Sisters stacks in the same location. One of the Three Sisters disappeared following a storm in 2003, but it was replaced with another sister that became separated from the Tongaporutu cliff face in 2013.

Depositional landforms

Constructive waves, tides and **longshore drift** (page 286) transport sediment to form sand bars, and wind moves sediment to form sand dunes. Depositional landforms in coastal areas include:

- **beaches:** made up of loose particles such as sand and pebbles deposited by waves
- **sand dunes:** hills of sand that form at the back of beaches from wind-blown sand
- **sand bars:** ridges of deposited sand in the ocean that are exposed at low tide
- **spits:** narrow bars of deposited sand linked to the coast
- **tombolos:** formed when waves deposit a bar of sand to link an island to the coast.

Learning ladder G1.15

Processes

1. Identify the processes that form wave-cut platforms.
2. Source 5: What type of landform is this and how was it created?
3. Source 4: Draw a three-stage diagram to explain how a cave can form an arch, and an arch can form a stack.
4. Source 1: What is the difference between destructive and constructive waves, and the landforms they help create and shape?

Planning and collecting

1. Source 5: Complete a 'See, think, wonder' activity for this image, creating three open-ended questions that could form a future inquiry investigation.
2. List some primary and secondary data collection methods that would be suitable for investigating how waves impact coastal landform creation.
3. Research the importance of coastal landscapes.
4. Research and design a data collection method to investigate the impacts of destructive waves on places.

Make it spicy

Source 5: What are some unique features of a coastal *environment*?

HOW TO

Planning and collecting, page 426; environment, page 241

How does sand move?

As waves hit beaches, the waves move sand along the coast. Constructive waves deposit sand to form other beaches, as the sand builds up against obstacles such as headlands or groynes. Dry sand on the beach can be blown by onshore winds to the back of the beach, where it forms sand dunes.

What is a beach?

A beach is an accumulation of sand deposited by waves. Beaches constantly change due to the processes of erosion, transportation and deposition. Sand moves along coastlines through waves moving sand to form sand bars, and wind moves sediment to the rear of the beach to form sand dunes.

How is sand moved by waves?

Most constructive waves hit the coast at an angle because of the direction of the wind and the shape of the land. Strong swash from the waves picks up grains of sand and moves them along the beach. Gravity takes the weak backwash and some sand directly back into the ocean ready for the next wave to move the sand further along the beach.

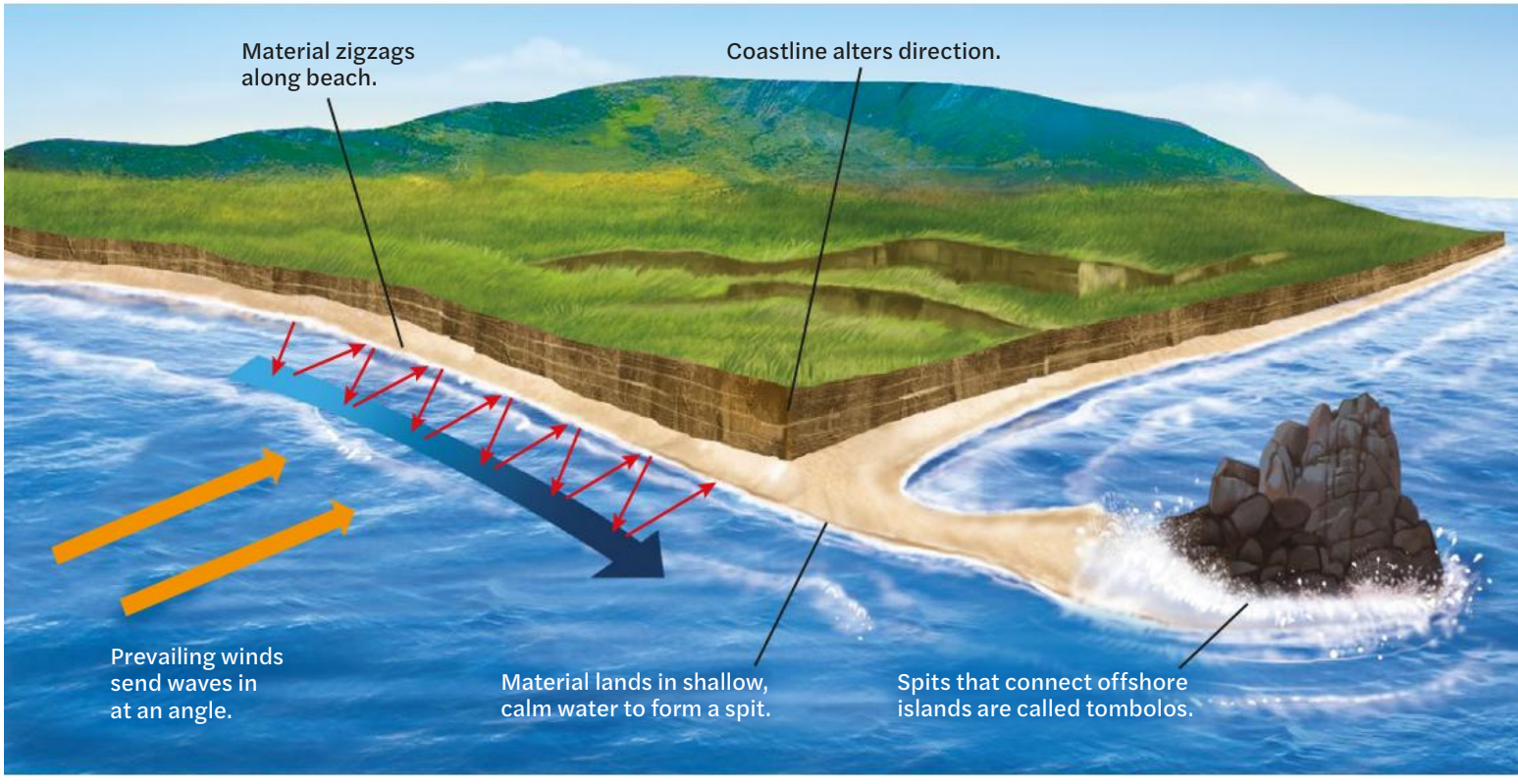
Along the beach, the sand moves in this zigzag fashion, known as longshore drift, until it meets an obstacle such as a headland, rocks or human constructions such as **groynes**. The sand builds up against the obstruction, widening the beach.

Longshore drift is also responsible for forming narrow bars of sand, called spits, that jut out into the ocean. Spits occur when the coastline changes direction or the beach meets the mouth of a river. The sand is deposited and builds up on itself to form a spit. Sometimes the spits join an island to form a tombolo.

How does wind move sand?

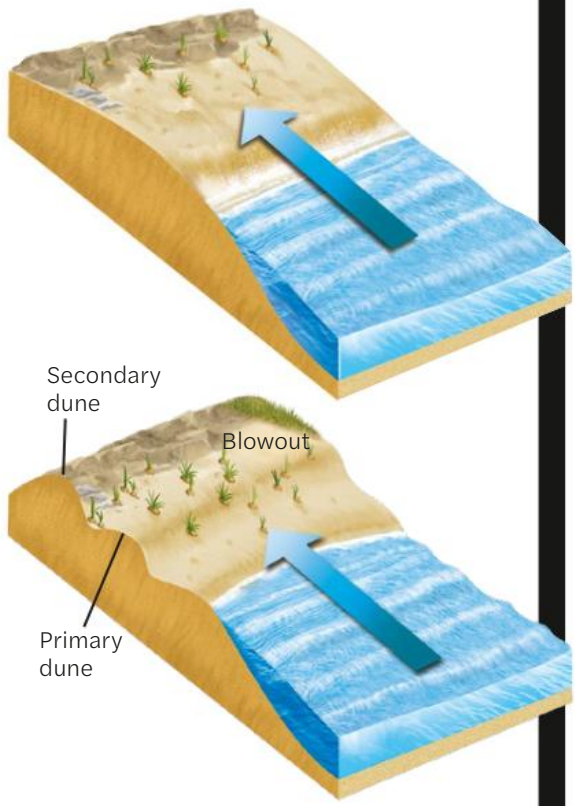
At low tide, sand particles on the beach dry out and can be picked up by onshore winds and moved further inland. The moving sand grains may be trapped by obstructions such as plants and mounds at the rear of the beach to form a **primary dune**.

Source 1: Longshore drift



▲ **Source 2:** How waves move sand

There is little soil in a primary dune, so plants find it difficult to take root. Some grasses with shallow roots, such as marram grass, can grow in this very salty environment. Plants hold the sand dunes together and allow the dune to grow larger.



▲ **Source 3:** Formation of sand dunes

Learning ladder G1.16

Processes

1. Which two key processes move sand on beaches?
2. Source 3: Describe how a sand dune forms.
3. Source 2: Explain how the processes of swash and backwash operate to enable the longshore drift of sand.
4. Investigate how humans build structures to control longshore drift. Provide a diagram to show how it works.

Representing information

1. Is longshore drift the only natural process that influences sand movement?
2. Source 1: Use a diagram with labels to describe how sand is moved along a beach through the process of longshore drift.
3. Imagine you are in the conservation team for local council. Source 1: Using BOLTSS, construct a sketch map of longshore drift in this place. Place a 'groyne' along the beach and illustrate how it would alter the process of longshore drift. Would you recommend groynes being used along this beach?
4. Explore: https://mea.digital/ep3
   - **a** Based on the map showing longshore drift direction along the south coast of England, what is the general direction of sand movement at Chesil Beach?
     - **A** from west to east
     - **B** from east to west
     - **C** from south to north
     - **D** from north to south
   - **b** Refer to the map of Happisburgh. What coastal feature is formed by the deposition of sediment moved by longshore drift at this location?
     - **A** spit
     - **B** headland
     - **C** stack
     - **D** arch

Make it spicy

How does sand movement *change* an *environment*?

Representing information, page 436; change, page 240; environment, page 241

HOW TO

G1.17

Case study

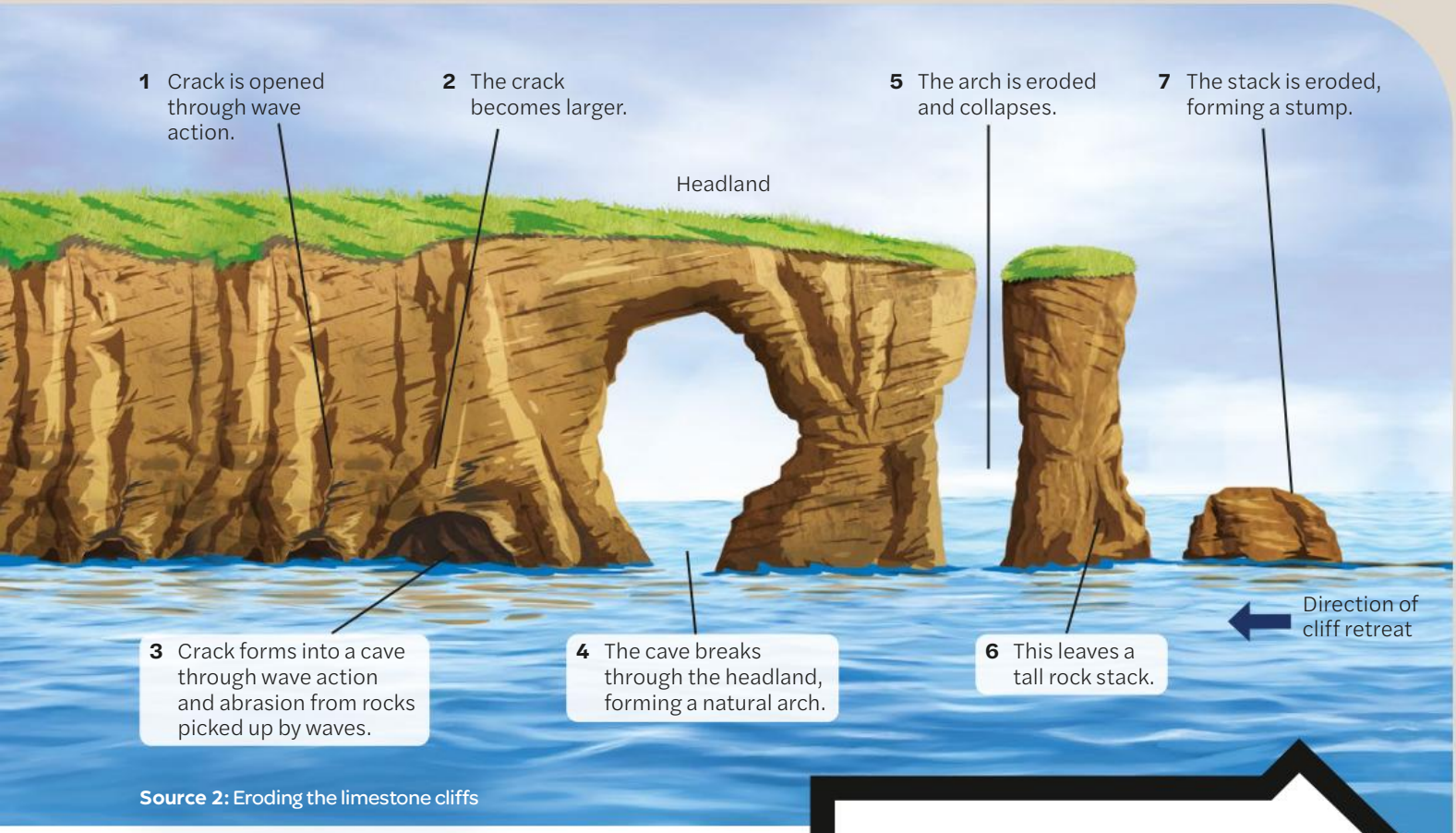
How are waves eroding Loch Ard Gorge?

Loch Ard Gorge is located along the Shipwreck Coast in Port Campbell, on the Great Ocean Road in Victoria. The gorge is named after the *Loch Ard*, a ship that sank nearby in 1878, leaving only two survivors.

Loch Ard Gorge is affected by powerful, destructive waves that travel long distances over the ocean. The soft limestone cliffs have been eroded into erosional landforms such as gorges, headlands, caves, arches, stacks and blowholes. Salt spray and strong winds weaken the rock and contribute to the weathering and erosion of the steep, exposed cliffs along this coast.

The sea stacks in Loch Ard Gorge, such as Mutton Bird Island, were formed due to wave and wind erosion. Sea stacks form when waves erode the base of a headland, etching out caves and arches. These eventually collapse, leaving isolated columns of rock or 'stacks'. Over time, these stacks will erode and fall, further altering the characteristics of the coastline.

▼ **Source 1:** Oblique aerial view of Loch Ard Gorge



Source 2: Eroding the limestone cliffs

Learning ladder G1.17

Interconnection

1. Describe what is meant by 'interconnection' using the changes at Loch Ard Gorge as examples.
2. In June 2009 an arch collapsed, leaving two stacks. Explain the processes that led to this arch collapsing.
3. Source 2: In which direction is the cliff retreating? Why do you think this is the case?
4. Source 2: How are caves, arches and stacks interconnected?

Making conclusions

1. Source 1: Describe the features of the landscape.
2. Why is Loch Ard Gorge so prone to erosion?
3. Write a conclusion for the following inquiry question: 'How do stacks tell the story of wave erosion?'
4. If people were not present during the formation of these coastlines, how do we know about their formation and change over time?

Make it spicy

Source 1: Give three examples of *change* at Loch Ard Gorge.

HOW TO Making conclusions, page 464; change, page 240

How do I conduct a good inquiry?

Throughout the chapter you have developed knowledge and understanding of processes that shape the land. Background knowledge is important as it helps you make connections to new information, ask better questions, and consider different perspectives. As you were progressing through the chapter you have been gathering information through highlighting, note taking, or responding to the Learning ladder. It is now time to start planning your inquiry! Refer to pages 476–82 for a step-by-step guide to this process.

Throughout this chapter, a range of case studies were presented to apply your learning to real-life events. Review these pages and select a case study to build your inquiry around.

- How were landscapes and landforms created?, page 256
- What are the characteristics of the Dandenong Ranges?, page 266
- Does Victoria have any volcanoes?, page 272
- How did Uluru form?, page 280
- How are waves eroding Loch Ard Gorge?, page 288

For your selected case study, complete a 'see, think, wonder' to help build curiosity and develop ideas you may cover in your inquiry.

Remember: A good inquiry will be focused on an aspect of the topic that interests you. It is more than just a research task that you present as a PowerPoint, it is a genuine investigation into something you are wondering about.

See
What do you see?
What are the human and physical characteristics?

Think
What do you think about that?
Where is it?
Why is it there?
When did it occur?

Wonder
What questions does this raise in your mind?
What else do you need to know to understand what is happening here?
What are other people saying about this?

Write down five observations you make when viewing the data presented.

The following is a list of example open-ended questions which may help you develop your inquiry.

Processes that shape the land

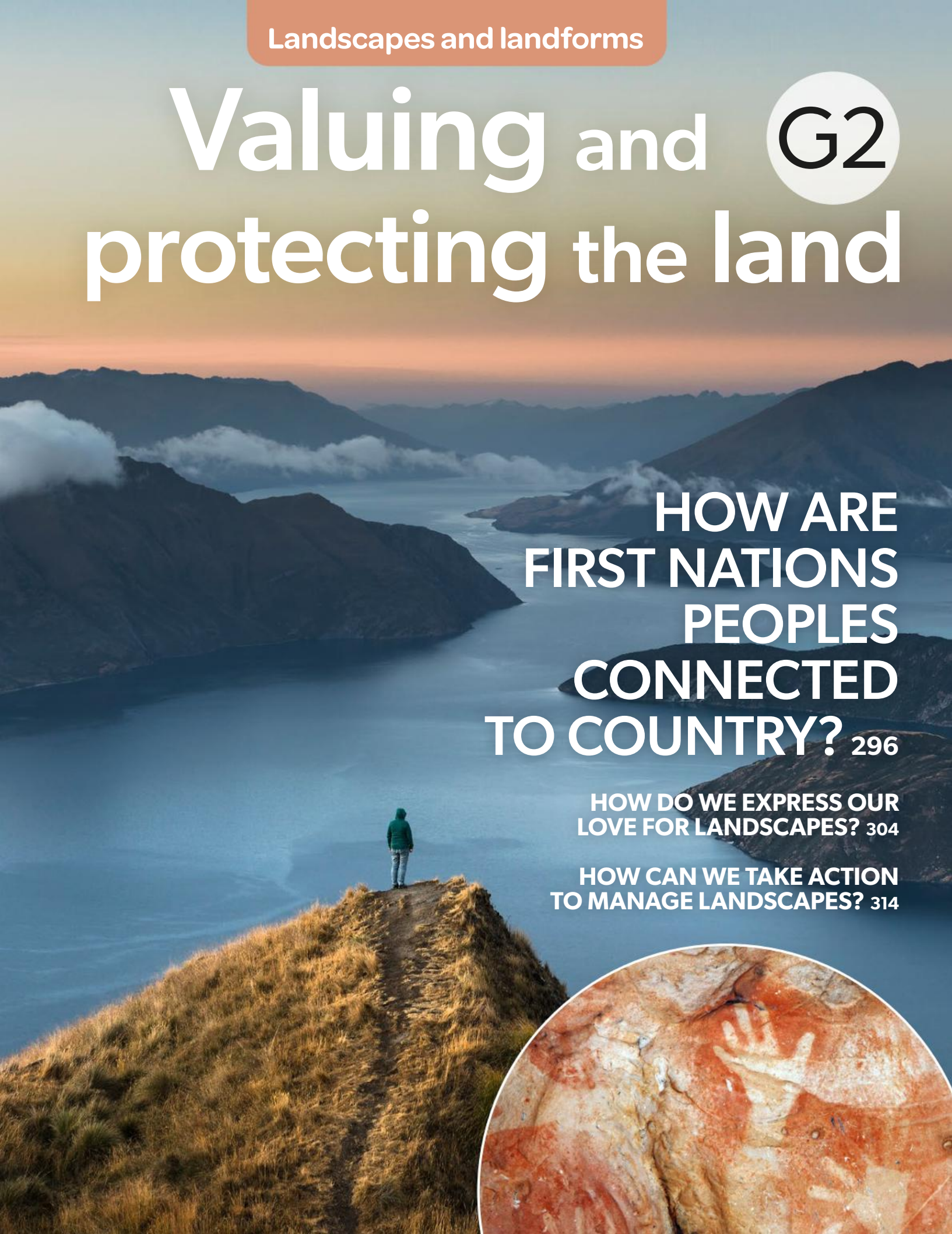
- **Descriptive question:** *What are the main processes that shape landforms over time?*
- **Procedural question:** *How does erosion work to shape coastlines?*
- **Comparative question:** *How do the processes of erosion and deposition differ in how they change landscapes?*
- **Evaluative question:** *How important is it to protect areas affected by erosion from further damage?*

Level up!

Throughout the chapter you have been working to move up the Learning ladder. An inquiry investigation is a great opportunity to practise these skills in context. When planning your inquiry consider how you may integrate geospatial technology into your fieldwork or how you may explore a range of perspectives. Use the How-to chapter to support you in planning and research.

Valuing and protecting the land

G2



HOW ARE FIRST NATIONS PEOPLES CONNECTED TO COUNTRY? 296

HOW DO WE EXPRESS OUR LOVE FOR LANDSCAPES? 304

HOW CAN WE TAKE ACTION TO MANAGE LANDSCAPES? 314

How can I understand valuing and protecting the land?

Landforms and landscapes are valued for their environmental, economic, aesthetic, recreational and cultural value and need to be managed and protected in a sustainable way, including community-led initiatives and national and global strategies.

Learning ladder

The Learning ladder lists the knowledge and skills you will learn. Each has five levels of difficulty. Learning skills at the bottom of the ladder will help you to master the skills at the top of the ladder.

Steps in knowledge progression	Landscape value	Landscape change	Landscape management	Planning and collecting	Representing information
5	I can explain different interpretations of landform creation.	I can assess changes to local landscapes.	I can evaluate management practices.	I can use geospatial technology to record data.	I can follow ethical practices when working with data.
4	I can compare the value of landscapes.	I can explain the consequences of landscape changes.	I can compare management practices.	I can gather primary data.	I can use geospatial technologies to create maps.
3	I can explain the value of landscapes to Aboriginal and Torres Strait Islander Peoples.	I can explain how humans change landscapes.	I can explain Aboriginal and Torres Strait Islander Peoples' management of landscapes.	I can gather information from secondary sources.	I can use geographical conventions to construct maps.
2	I can describe how landscapes are culturally represented.	I can describe how humans change landscapes.	I can describe management practices.	I can plan an inquiry.	I can represent data and information.
1	I can identify the value of landscapes.	I can identify human changes to landscapes.	I can identify management practices.	I can ask open-ended questions.	I can select data relevant to a question.
	Valuing and protecting the land			Geographical inquiry	

Source 1: First Nations Peoples have a deep connection with the land and responsibility to care for Country.

	Interpreting information	Making conclusions	Strategies	Presenting ideas
5	I can use geographical concepts to structure data analysis.	I can evaluate ethical considerations.	I can consider perspectives to evaluate strategies.	I can analyse the implications of phenomena.
4	I can predict change to patterns.	I can assess the reliability of data.	I can design strategies.	I can explain interconnections with data.
3	I can explain distributions and patterns.	I can write evidence-based conclusions.	I can predict the impact of a strategy.	I can support explanations with data.
2	I can describe distributions and patterns.	I can describe the impact of geographical phenomena.	I can explain a strategy.	I can explain the relevance of information.
1	I can read graphs and maps.	I can answer geography questions.	I can describe a strategy.	I can describe phenomena using geographical terms.
		Concluding and decision-making		Communicating

Steps in skills progression

How are we connected to landscapes?

Landscapes and landforms around the world are valued in different ways. Some people may have a cultural, spiritual or aesthetic connection to a particular landscape, while others are more interested in the economic value of the place.

Aesthetic values

The aesthetic value of a landscape is linked to its uniqueness and its perceived beauty. People are drawn to a place for many reasons, including how it looks, how it makes them feel or through a personal connection with the place.

Mountains are among the most aesthetic landscapes (see pages 302–3). The beauty of mountains goes beyond an appreciation of the landscape and the landforms within it. It also includes concepts such as wilderness and adventure, and emotions such as excitement, anticipation and even fear.

In Nepal, exploration and appreciation of the Mount Everest region is something that began when the peak was first climbed in 1953. Since then, more than 6000 people have climbed to the peak of the world's tallest mountain. Recently, mountaineers have complained that the crowds climbing Mount Everest are taking away from its aesthetic appeal.

As people come to value landscapes for their beauty and recreational opportunities, they often become more invested in conserving them. This stewardship can lead to community involvement and efforts to maintain or restore natural environments.

Source 1: The aesthetic value of Mount Everest goes beyond the beauty of this mountain region. It includes its uniqueness and majesty as the world's highest mountain, along with the achievement of climbing it.

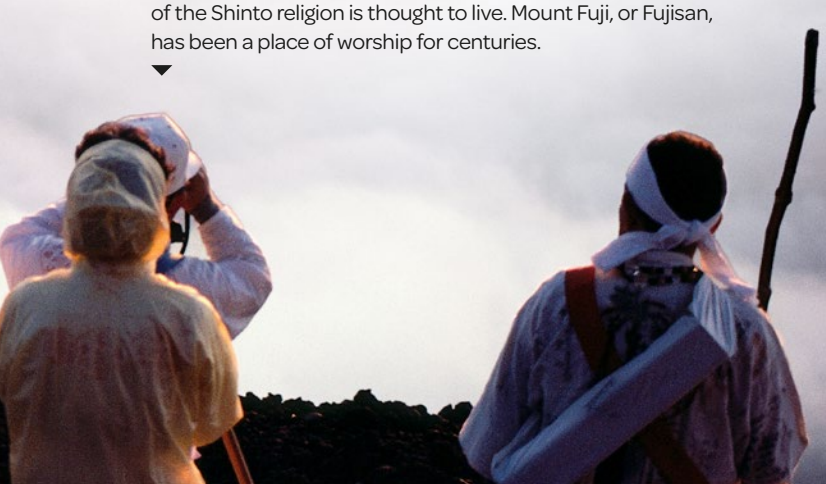
▲ **Source 2:** Mount Fuji in Japan is revered for its aesthetic, cultural and spiritual value. It has an important influence on Japanese people's view of nature and is a site of worship.

Spiritual and cultural values

The cultural value of landforms and landscapes is expressed by people through creative means such as literature, art and film. Spiritual value refers to beliefs about the land and how landforms were shaped by spiritual forces.

At 3776 metres, Mount Fuji is Japan's highest mountain. Mount Fuji is an active volcano, once feared for its frequent eruptions. Today Mount Fuji is revered as an object of worship and source of artistic inspiration. In 2013, Mount Fuji was given World Heritage status and is listed as 'Fujisan – Sacred Place and Source of Artistic Inspiration'. Climate change may impact the way people interact with and value landscapes over time. In 2024, Mount Fuji didn't have snowfall until November, which is the latest arrival of snow for 130 years.

Source 3: Pilgrims overlook Mount Fuji's crater, where a god of the Shinto religion is thought to live. Mount Fuji, or Fujisan, has been a place of worship for centuries.



Learning ladder G2.1

Landscape value

1. What is the aesthetic value of a landscape?
2. Source 1: What are the cultural, aesthetic and economic values of this landscape?
3. Why do landscapes and landforms have cultural significance?
4. How might perceptions of Mount Everest change as tourism increases to the region?

Planning and collecting

1. Source 2 and 3: Complete a 'See, think, wonder' activity for these photographs. Create two open-ended questions exploring the value of this place which could later help form an inquiry investigation.
2. Create a survey of your class or a large group of students asking them their favourite type of landscape and how they are connected to it.
3. What is your favourite landform or landscape? Create and deliver a short presentation on this place. Consider the following:
   - **a** the location of the landform or landscape
   - **b** how it was formed
   - **c** why you have a connection to that place.
4. Conduct the survey you designed in question 2.

Make it spicy

How do the *environmental* values of landscapes connect *places*?

HOW TO
Planning and collecting, page 426; environment, page 241; place, page 236

How are First Nations Peoples connected to Country?

Connection to place has always been an important part of First Nations identity and cultural belonging. For many First Nations people, the relationship with Country is different from non-Indigenous people and goes beyond thinking about land as something to be exploited. Rather, First Nations people are in a relationship with Country.

What Country is not

Country is not a commodity; that is, something to be bought, sold, developed or mined, or take resources from. Country is not something that can be owned, or something used to divide people with and without wealth. It is not something to be exploited. These are all ways that the land has been used by non-Indigenous people since colonisation and the declaration of Australia as ***terra nullius***.

What Country is

Country is an important part of everyday life. Country is food, medicine, building materials and other everyday items. Country goes beyond the immediate need to thrive in Australia, and Country for many First Nations people also represents lore, and law, responsibilities, stories and languages, community, songs and songlines, dances, ceremony and culture. Country represents sacred places, ancestors and spirits, the past, present and future. Finally, Country also represents learning, growth, memory, Dreaming and much more.

Relationships with Country

For many First Nations people, Country represents so much more than many Western experiences of land. Rather than land or Country being owned by people, as it is in non-Indigenous cultures, for First Nations people, the Country or land also owns the people. As such, it is understood that there is a reciprocal relationship with Country. This means that as people have a responsibility to care for Country, Country also has a responsibility to care for the people.

For some First Nations people, Country is experienced as part of an extended family or kinship network. This often includes the plants and animals that live on Country, but it also can include the earth, rocks, waterways and other landmarks. The relationships with the more-than-human aspects of Country are shared and celebrated through ceremony, song, dance, story and ritual. Engaging with Country through these methods not only builds relationships with Country, but also supports the ongoing health and wellbeing of First Nations people.

An outcome of connection to Country is that many First Nations people have a totem. This is often a plant, animal or insect that lives on Country that individuals and groups have a specific responsibility to care for. First Nations people are often responsible for caring for their totem to ensure that it remains healthy and in turn helps to keep Country healthy.

First Nations agricultural and land management practices have always included sustainable ways of caring for Country. This means that Country is cared for in the present, and in turn Country will care for future generations.

Relationships with Country disrupted

The arrival of the British and declaration of terra nullius (nobody's land), and subsequent colonisation of Australia, meant that many First Nations people were forced from their Country to live in Missions and Reserves and on the outskirts of British colonial centres. Because of this, many First Nations people have been forced to grow up, live and work away from their ancestral Country. Despite this disruption, many First Nations people recognise that it does not matter whose Country you live on, you still have a responsibility to care for it.

By studying core soil samples, scientists have been able to observe the impact of colonisation through the different colours of the soil. These indicate that removing First Nations people from Country has significantly changed the landscape and has contributed to more frequent bushfires during the hot months, because there have not been people caring for Country to effectively manage the land. This is definitive proof that unlike European myths that the landscape was 'pristine' and 'untouched', which were used to justify colonisation, it had actually been managed by First Nations Peoples for millennia.

There can be an expectation today that, since the colonisation of Australia, Country is now shared between First Nations people and non-Indigenous people, and we are all responsible for caring for Country to ensure that Country can care for us all.

Source 1: Manja Shelter at Gariwerd in Victoria contains rock art of hand stencils. It is believed that the stencils record visits to the site and renew a person's ties to Country.

Learning ladder G2.2

Landscape value

1. What is Country not?
2. Give three different examples of the relationship with Country for First Nations Peoples.
3. What 'more-than-human' relationships do First Nations Peoples have with Country? How does this encourage caring for Country?
4. Compare how different Australians value local landscapes.

Presenting ideas

1. Source 1: Describe why visitors stencilled their handprints at Manja Shelter.
2. Why do First Nations Peoples have a duty to respect and look after their Country?
3. How have core soil samples provided evidence of First Nations Peoples' land management practices?
4. Explain the relationship between connection to Country and perceptions of place.

Make it spicy

What are totems and how are they *interconnected* with Country?

HOW TO

Presenting ideas, page 472; interconnection, page 238

G2.3

First Nations Peoples

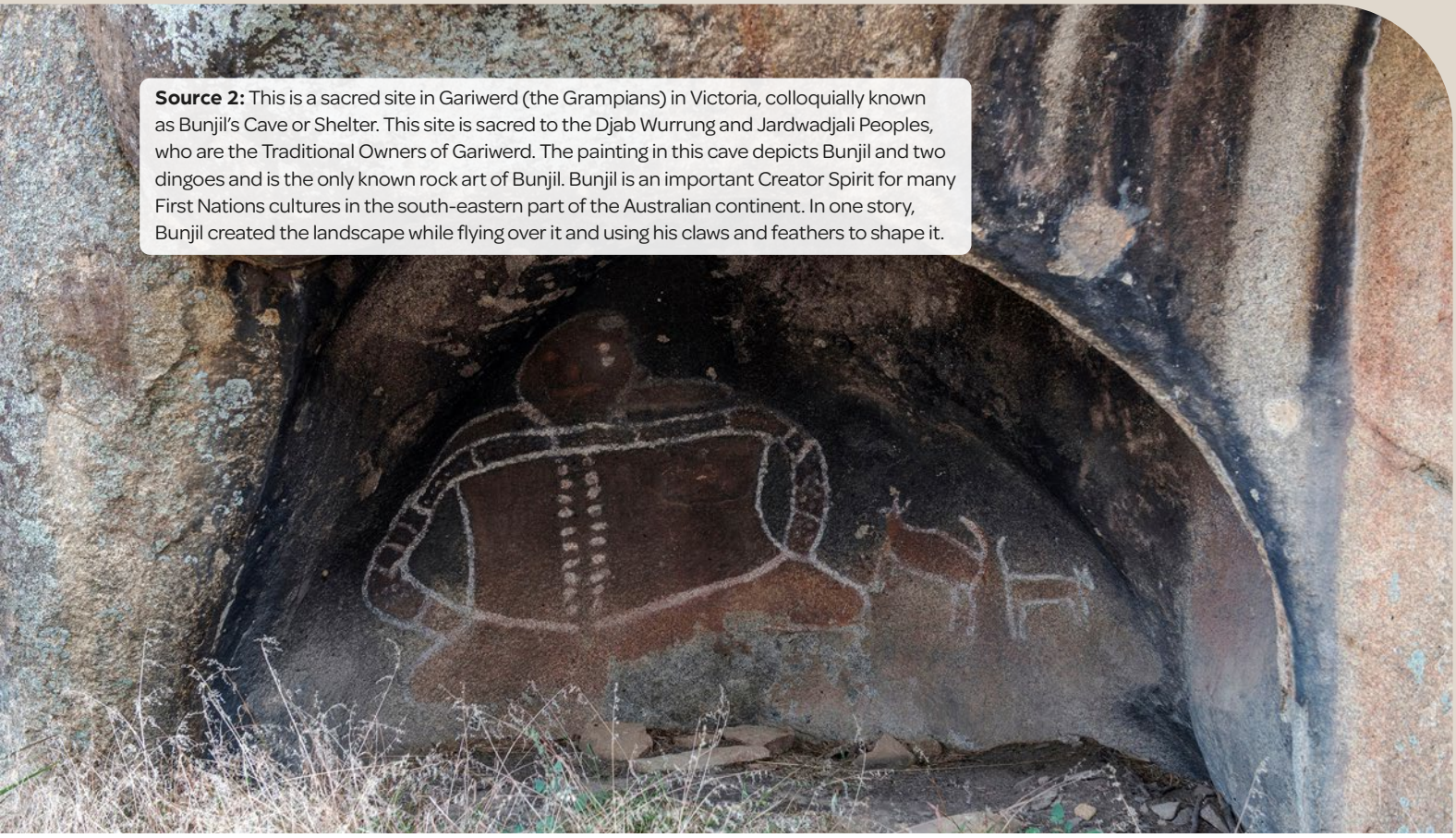
How is the Dreaming linked to landscapes?

The concepts of Country and Place are central to belonging for many Aboriginal and Torres Strait Islander Peoples. This relates to First Nations concepts of ownership where people own both Country and Place, but at the same time, they themselves are also owned by Country and Place. This is known as a reciprocal relationship, where each element has a responsibility to the other.

Throughout history humans have been changing the landscapes that we inhabit to our benefit, from small impacts like building structures to live in, to much larger projects like hydroelectric dam systems. In many cases, this has only been done from a perspective of extracting resources from Country.

Source 1: This is an aerial photo of an eel trap at Budj Bim located on Gunditjmara Country in south-western Victoria. This is an extensive aquacultural precinct that is estimated to be over 6600 years old. This area has been used to farm eels, which were often smoked and traded great distances across Australia. It is a sacred site that holds many thousands of years of cultural knowledge and heritage. In 2019, Budj Bim was listed as a World Heritage site and as such now has special protections against extractive practices. For the Gunditjmara people, a Dreaming story associated with this place tells of how the Creation Being revealed itself in the landscape. Budj Bim is its body, the mountain its head, and the rocks are its teeth.

© Gunditj Mirring Traditional Owners Aboriginal Corporation



Source 2: This is a sacred site in Gariwerd (the Grampians) in Victoria, colloquially known as Bunjil's Cave or Shelter. This site is sacred to the Djab Wurrung and Jardwadjali Peoples, who are the Traditional Owners of Gariwerd. The painting in this cave depicts Bunjil and two dingoes and is the only known rock art of Bunjil. Bunjil is an important Creator Spirit for many First Nations cultures in the south-eastern part of the Australian continent. In one story, Bunjil created the landscape while flying over it and using his claws and feathers to shape it.

In a First Nations context, the landscapes have also been modified across the Australian continent and the adjacent islands for many tens of thousands of years. However, instead of seeking to extract from Country, First Nations Peoples have managed Country in the best interests of the landscape. This is because it has always been recognised that when Country is cared for, it is better able to care for the people in return.

To help care for Country, there are many Dreaming stories and songlines that explain how Country was created, why we should care for Country and the best ways to manage Country. This has allowed First Nations Peoples to thrive for tens of thousands of years. Some notable examples of these stories include the creation of the landscape and the people by Bunjil, a Creator Spirit that took on the form of a wedge-tail eagle in Victoria, and the creation stories about the Rainbow Serpent from northern parts of the Australian continent.

Learning ladder G2.3

Landscape value

1. Why is Bunjil's Cave an important place?
2. What kind of relationship do many First Nations people have with Country?
3. What are two reasons why landscapes are important?
4. How did Bunjil create the landscape?

Making conclusions

1. What is meant by 'the Dreaming'?
2. Source 2: How are cultural knowledge and heritage interconnected with place?
3. Source 1: How can cultural knowledge such as Dreaming stories be used as evidence to understand people's connection to landscapes?
4. Do photographs provide reliable data for understanding cultural histories and perspectives?

Make it spicy

Explain how the Dreaming connects people to *place*.

Making conclusions, page 464; place, page 236

HOW TO

G2.4

First Nations Peoples

What's in a name?

A significant part of the colonisation of Australia was the erasure of First Nations Peoples' connections to the entirety of the Australian continent and the adjacent islands. One of the ways of doing this was to claim and rename many places. This means that most places in Australia have multiple names: the original pre-colonial name, and the name given to it by the colonisers.

Source 1: Wurdi Youang from the pointed end; this is the position of the setting sun. The sun's alignment with the straight edges of the rocks indicated what time of the year it was.

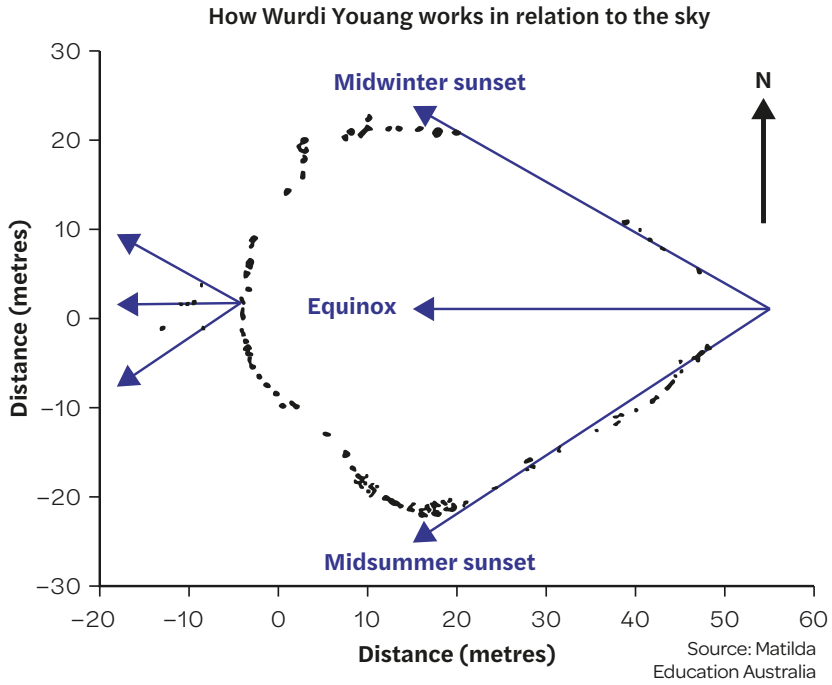
Wurdi Youang (Station Peak/ Flinders Peak)

Wurdi Youang is the Wadawurrung name for an important human-made rock formation to the west of Naarm (Melbourne). Its name translates as 'big hill' and it is the site of a rock arrangement thought to have been used as a calendar.

The rocks have been arranged at one end like a triangle and the other like a semi-circle. Where the edges of the triangle and the semi-circle meet relates to the position of the sun when it sets, indicating midwinter on one side, midsummer on the other, and the equinox is measured in the middle with three prominent stones at the apex.

The date when this astronomical observatory was created is unknown, but other nearby sites have been carbon dated to close to 11 000 years old. If Wurdi Youang was built at the same time, this would make it the oldest known site of its kind anywhere in the world.

Beyond the astronomical measurements taken at this site, there would have undoubtedly been important knowledge and Dreaming stories related to this place. By changing the name of this place, the colonists failed to recognise its importance to the Wadawurrung Traditional Owners and instead sought to extract from Country for European agriculture. In this way, the naming of this place was directly related to those who believed they had ownership of it.



Source 2: This is a diagram of how Wurdi Youang works in relation to the sky. The straight edges relate to the winter and summer solstices and the three stones in the centre of the semi-circle correspond with the equinox. This was made many thousands of years before telescopes and other astronomical measuring tools and is incredibly accurate given how old it could be.

Learning ladder G2.4

Landscape value

1. Why did the colonists rename all the landmarks in the environment?
2. Source 1: What are the two different names for the rock formation shown? How does the name change the meaning of the place?
3. Source 1: How is it thought that Wurdi Youang was used?
4. Source 1: What are the two competing values of the Wurdi Youang landscape?
5. How was Wurdi Youang created? What makes this place so special compared to the rest of the world?

Planning and collecting

1. Write a sample inquiry question and two associated sub-questions that would frame an inquiry into the cultural importance of naming landscapes.
2. Create a fieldwork itinerary for a investigating your inquiry question (question 1). Where should you go? What should you do in each place?
3. What secondary sources could you use to gather information about the history of Wurdi Youang, its cultural significance, and the impact of colonisation on the naming of the site?
4. Write five interview questions for a local Wadawurrung Elder to investigate the site's cultural meaning and use.

Make it spicy

Why are names so important for describing our connection to *place*?

Planning and collecting, page 426; place, page 236

HOW TO

G2.5

Case study

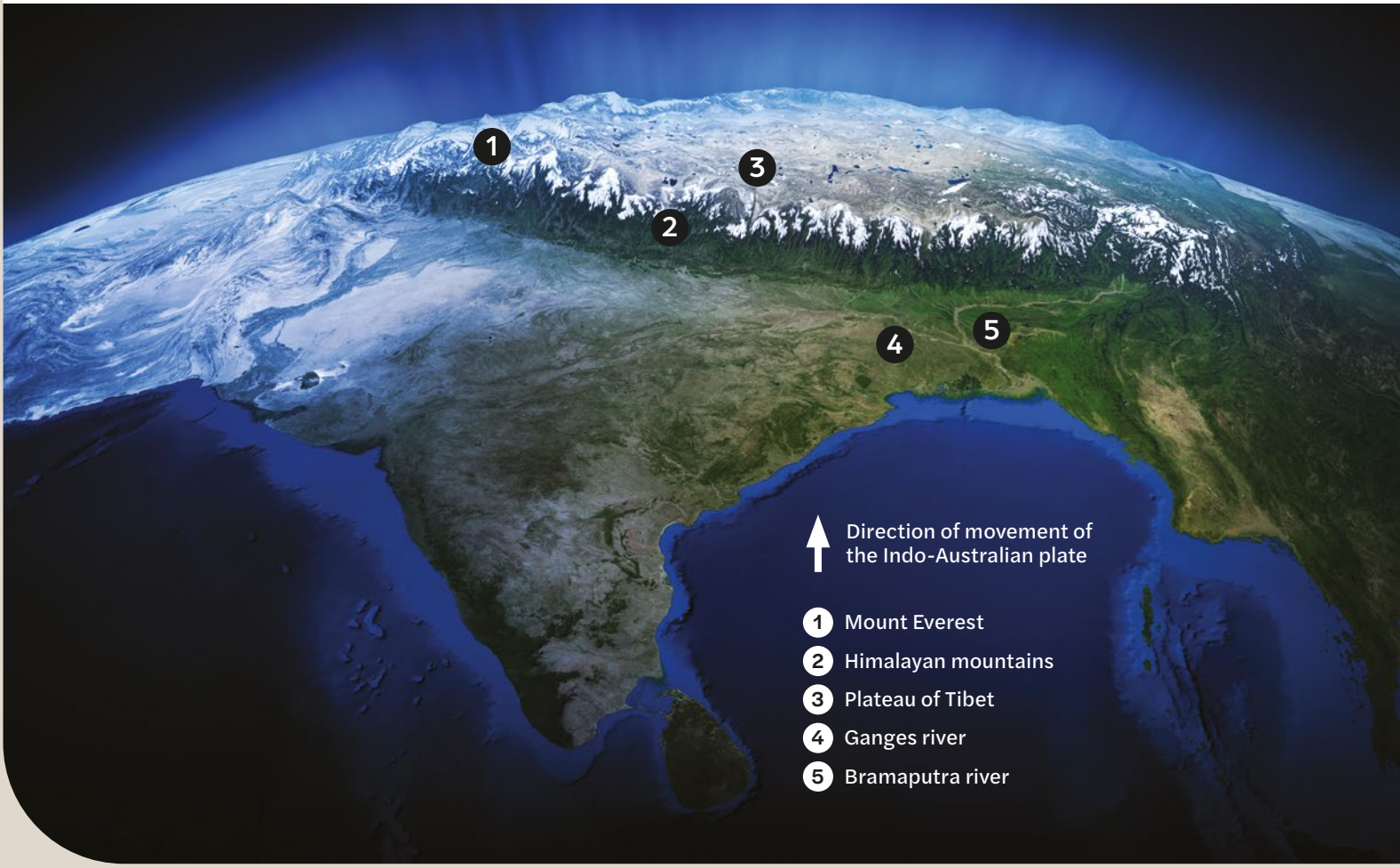
Why are the Himalayas significant?

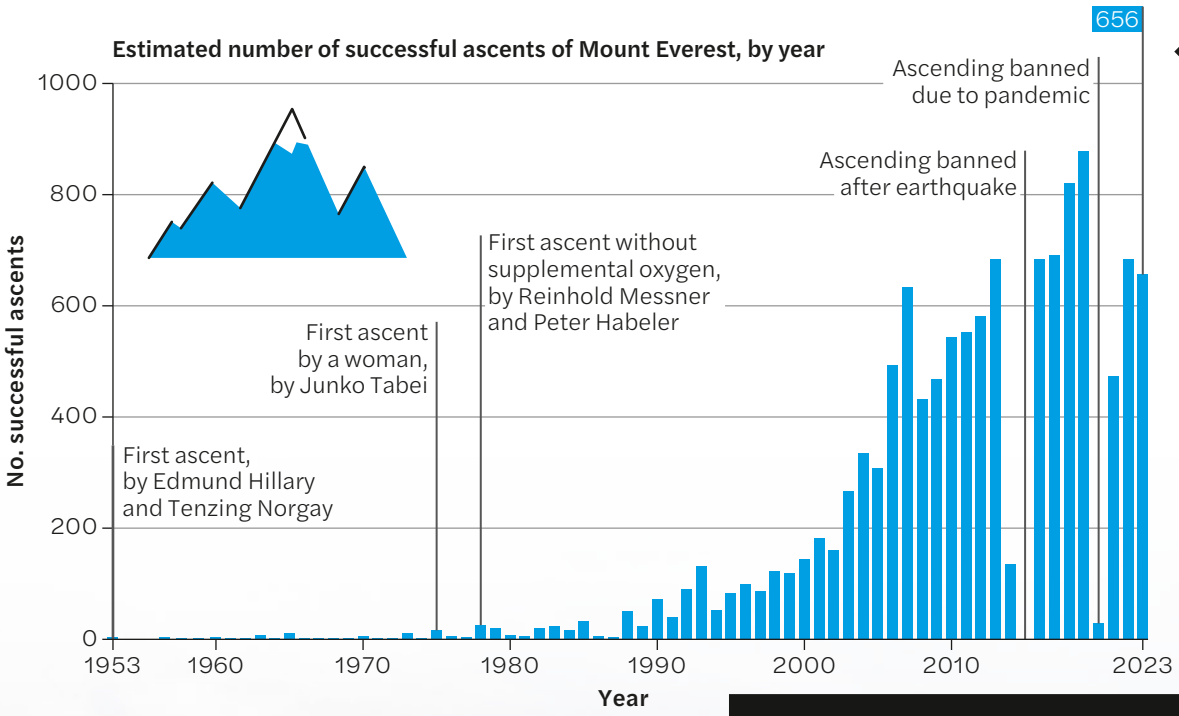
Central Asia is dominated by the highest land on Earth: the Plateau of Tibet and the Himalayan mountains. This area is home to 90 of the world's 100 highest peaks, including Mount Everest, the world's highest mountain at 8848 metres above sea level.

Lumbini is in the Terai plains of southern Nepal at the foothills of the Himalayas. It is the birthplace of Hindu prince Siddhartha Gautama Buddha. Better known as the Buddha, according to legend he renounced his position and money in search of enlightenment, founding Buddhism in India in the 6th–5th centuries BCE. As a result, many Himalayan peaks, especially Mount Everest (Sagarmatha) and Kanchenjunga, are considered sacred in Hinduism and Buddhism. They are often seen as houses of gods and are sacred pilgrimage sites.

Some Buddhists believe Mount Kailash to be the centre of the universe. Many Hindus believe the holy water of Lake Manasarovar, the highest freshwater lake in the world, can cleanse the sins of a hundred lifetimes.

Source 1: The Himalayan Mountains were formed by the collision of the IndoAustralian and Eurasian tectonic plates. As the IndoAustralian plate moved north, it bumped into the southern edge of the Eurasian plate. The land crumpled and was pushed upwards. In just 50 million years, the Himalayan Mountains have risen from sea level to nearly 9 kilometres high.





Source 2: Previously focused on farming, sherpas shifted to tourism-related jobs as the industry flourished on Mount Everest.

Source: Matilda Education Australia

Source 3: The Chiu Monastery is located near the sacred Lake Manasarovar in West Tibet. Buddhist prayer flags are believed to encourage peace, strength and wisdom. Monasteries and stupas in the Himalayas are vital for Buddhist practice and education.

Learning ladder G2.5

Landscape value

1. What are the spiritual values associated with Mount Kailash and Lake Manasarovar in Hinduism and Buddhism?
2. How does the presence of monasteries and prayer flags reflect the cultural significance of the Himalayas?
3. Explain how landscape use impacts the livelihoods of local people.
4. Brainstorm the ways in which the Himalayas are valued by humans. How can governments manage these different values, while also protecting the natural environment?

Planning and collecting

1. What stories or legends do people share about the sacred sites within the Himalayas?
2. What qualitative data might be relevant for a geographer researching the cultural value of the Himalayas?
3. How can you use documentaries or films to understand the history and formation of the Himalayan mountains?
4. What primary methods might you use to document the impact of tourism on the landscapes of the Himalayas?

Make it spicy

What stories do people share about the sacred *environments* within the Himalayas?

HOW TO

Planning and collecting, page 426; environment, page 241

How do we express our love for landscapes?

Australia is a unique country with varied landscapes and iconic landforms. It has been an inspiration to artists for generations. Poems, paintings and songs have been created to reflect people's feelings and connections towards this place.

Lyrics and poems

There are many songs and poems written about Australia's famous landscapes. Songs are often used in media and movies to trigger emotional responses from the audience. Songs such as 'I still call Australia home' by Peter Allen have been used by the airline Qantas in their advertising campaigns for over 30 years. This song is often used during the Olympics and other international competitions to show patriotism. In its iconic advertisement, Qantas depicts the Australian Girls Choir and National Boys Choir singing the song on and around various iconic Australian landforms, including Uluru.

I love a sunburnt country,
A land of sweeping plains,
Of ragged mountain ranges,
Of droughts and flooding rains.
I love her far horizons,
I love her jewel-sea,
Her beauty and her terror –
The wide brown land for me!

Source 2: The poem 'My Country' by Dorothea Mackellar references the variety of Australian landscape. She writes about the bush, the beauty of the 'sunburnt country', and the 'wide brown land' that suggests a sense of belonging and connection to place.

© The Estate of Dorothea Mackellar, c/- Curtis Brown (Aust) Pty Ltd

Source 1: Albert Namatjira's landscapes are an example of how art can illustrate a strong sense of cultural belonging and understanding. Namatjira was awarded the Queen Elizabeth II Coronation Medal in 1953 for his art.

Palm Valley
1940s
Albert Namatjira
Art Gallery of New South Wales
© Namatjira Legacy Trust. Copyright Agency

Artworks

Artwork is another powerful way for people to express their love of landscapes. Sidney Nolan's 1946 painting of Ned Kelly, held in the National Gallery of Australia, is one example. The painting shows Kelly on horseback, dressed in his iconic armour, showing his sense of freedom. The empty desert landscape around him, with blue open skies, is said to highlight the vastness of the Australian outback.

Albert Namatjira was an Arrente man from the MacDonnell Ranges in the Northern Territory who became one of Australia's most celebrated artists. He painted his surrounding landscape in a naturalistic style, combining Western and Aboriginal influences. He chose subtle colours and soft contours and shapes to depict the landscape, conveying a majesty and sympathy for the land, especially its trees and deserts, and his deep connection to Country (Source 1). This was in contrast to artworks by some European artists, who depicted the landscape as a harsh environment to be overcome.

Living in the landscape

Art is not the only way that people express their connection to landscapes. Activities that connect us to nature and taking steps to protect environments are also ways we show love for landscapes. Bike riding along bush trails in the Grampians, surfing along Australia's surf coast or visiting national parks like Kakadu are all opportunities to build a sense of place, learn about cultures and histories, and raise awareness about the importance of conservation. People dedicate their lives to educating others and caring for local landscapes.

Source 3: Tim Flannery has dedicated his life to protecting environments. An Australian scientist and environmentalist, Flannery is best known for his 2005 book *The Weather Makers*, which called for urgent action on climate change. Flannery is critical of Australia's energy policies and co-founded the Climate Council in 2013 where he currently serves as its Chief Councillor. Flannery has worked as a professor, researcher and author, describing 29 new kangaroo species and expanding Australia's mammal fossil record. Named Australian of the Year in 2007, he is currently a professor at RMIT University and serves on various boards, including the World Future Council and Tata Power's Sustainability Advisory Board.

Learning ladder G2.6

Landscape value

1. What values do Australian landscapes hold as expressed through poetry, music and art in the text?
2. Look up the lyrics to Peter Allen's song 'I still call Australia home'. What imagery is used to convey feelings about Australian landscapes?
3. Art is a way of expressing different connections to place.
   - **a** Source 1: In what ways does Albert Namatjira's artwork express cultural connections to the land?
   - **b** What similarities and differences can be observed in how various artists depict the significance of the Australian environment?
4. 'I Am Australian', written in 1987 by Bruce Woodley and Dobe Newton, is a patriotic song filled with cultural references. It's popular in schools and has been suggested as an alternative national anthem. How do songs explore multiculturalism in Australia? Explain how different people may connect with these art forms and the landscapes they represent.

Making conclusions

1. What are the key geographical features of Australia that inspire artistic representations and text?
2. In what ways do the landscapes described affect the cultural identity of the people who live there?
3. 'This is Australia', written by Mark Callaghan, was a single from GANGgajang's debut album. It tells the story of the culture shock of moving from England to Bundaberg, Queensland. What evidence can be used to conclude that landscapes inspire a sense of belonging among Australians?
4. How do your own perspectives on Australian landscape influence your interpretations of art?

Make it spicy

How does art represent *places*?

Making conclusions, page 464; place, page 236

HOW TO

How do humans cause landscapes and landforms to change?

Human activity impacts landscapes and their distinctive landforms in various ways. Urbanisation, agriculture and development of infrastructure cause changes in places over time.

Large-scale changes

While physical processes such as weathering, erosion (page 274) and tectonic movements (page 260) shape landscapes over long periods of time, human activities often accelerate or intensify these processes, sometimes leading to long-term negative impacts for natural environments. We often refer to changes brought about by humans as 'human-induced changes'.

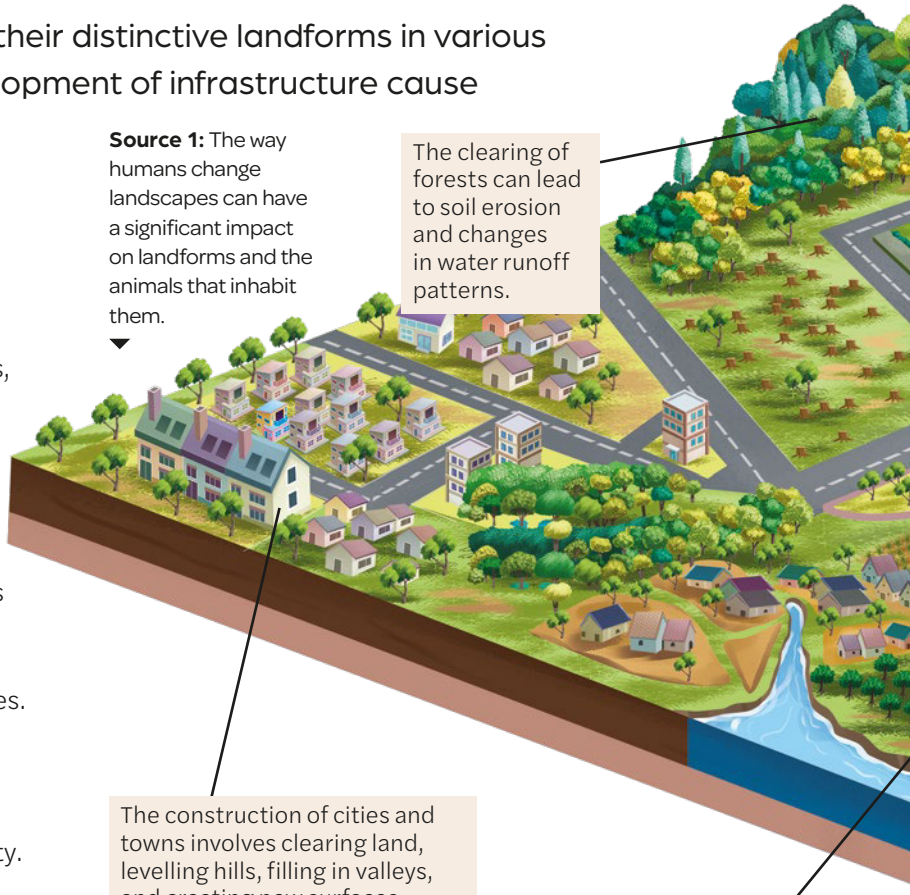
Urbanisation is one of the most obvious ways in which humans change landscapes. As cities and towns grow and expand, humans need to clear large areas of trees and native vegetation and replace it with built environments, including parks, roads and artificial lakes. This landscape change can lead to loss of biodiversity and changes in local habitats.

Another major influence on landscapes is climate change, which is made more extreme by human activity. While some of the impacts are less obvious and occur over longer time scales, rising temperatures, changing rainfall patterns and more extreme weather events like floods and droughts are leading to increased rates of erosion. These changes disrupt natural processes, making landscapes more vulnerable to damage. For example, in some regions such as the Philippines, increased rainfall and expanding urbanisation have led to increased rates of landslides. The combination of heavy rainfall and deforestation due to urban expansion destabilises hillsides, making them more prone to collapse.

Small-scale changes

Even seemingly small human activities can have a big impact on a landscape. For example, on the Murray River, boats that create large eddies and waves form 'notches' in the riverbank, which weaken it and may lead to collapse (Source 2).

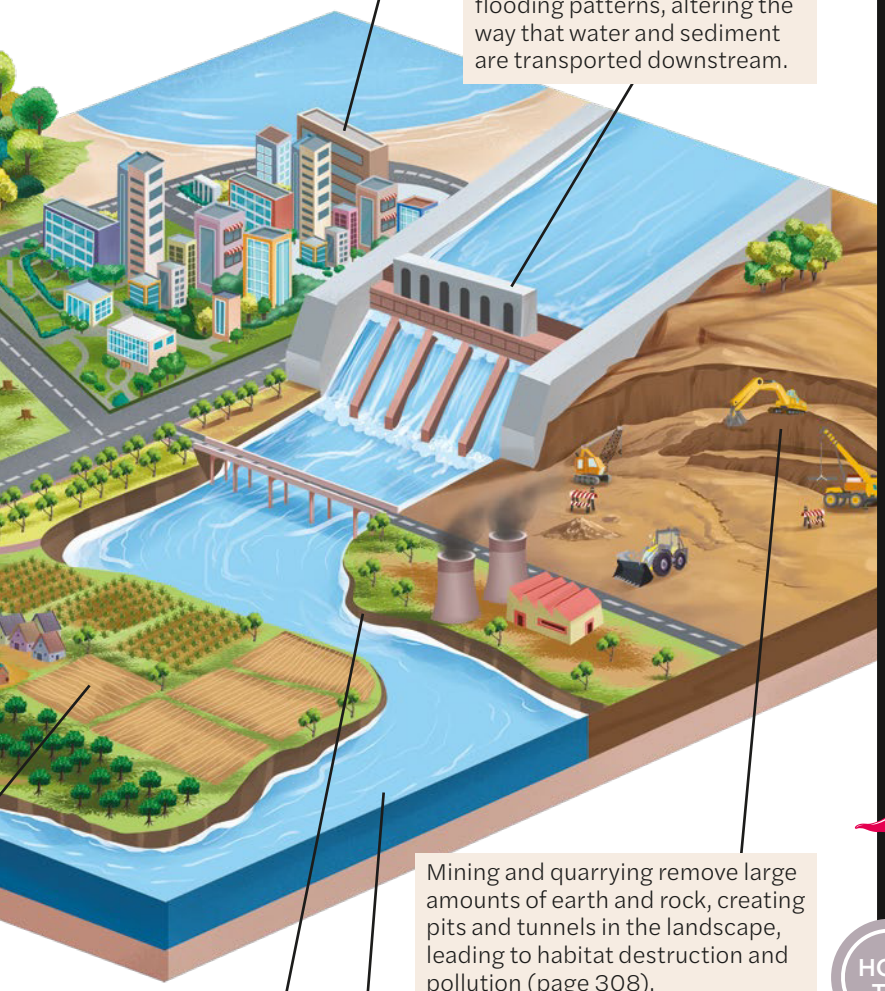
Source 1: The way humans change landscapes can have a significant impact on landforms and the animals that inhabit them.



Trees and vegetation play an important role in holding the soil together. When trees are removed for recreation or agriculture, the bank becomes less stable, leading to increased erosion. Additionally, removing fallen trees from the river speeds up water flow, causing more soil to be washed away. These actions, although small, can have lasting effects on the river landscape's health and stability.

Building ports, marinas and coastal resorts (page 310) can cause beach erosion by disrupting the natural flow of sand and water. Dredging and hard structures like sea walls can block or change currents, leading to sand being washed away and altering the coastline (page 312).

The construction of dams changes river flows and natural flooding patterns, altering the way that water and sediment are transported downstream.



Mining and quarrying remove large amounts of earth and rock, creating pits and tunnels in the landscape, leading to habitat destruction and pollution (page 308).

Human-induced climate change is interconnected with rising sea levels, increased flooding and more intense weather events, such as bushfires and storms (page 312).

As the use of high-powered boats for recreation becomes more popular, fragile riverbanks are at risk of collapse, altering the river landscape.

Learning ladder G2.7

Landscape change

1. How do agricultural practices, like ploughing, change the landscape?
2. Describe how urbanisation can contribute to changes in landscape characteristics.
3. Explain how the construction of coastal infrastructure may impact beach erosion and sediment movement.
4. What effects might mining have on biodiversity and habitat destruction in an area?

Planning and collecting

1. Brainstorm some specific examples of human-induced landscape change in your local area.
2. Design an inquiry project to investigate the impact of mining on surrounding landscapes.
3. What secondary sources, such as research articles or case studies, can you find to understand the impact of urbanisation on landscapes?
4. How could you observe and document changes in soil erosion on a nearby farm due to agricultural practices?

Make it spicy

What specific *changes* occur to coastlines due to human activity?

HOW TO

Planning and collecting, page 426; change, page 240

Source 2: Notches are grooves in the riverbank created by the force of water, such as waves from boats, which erode the soil or rock along the edge of the river. Over time, these points weaken the stability of the bank.

G2.8

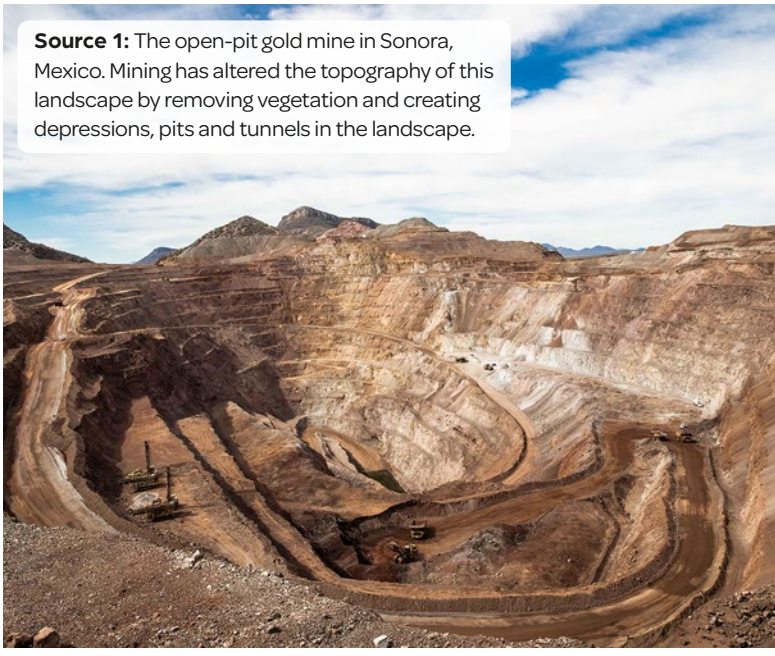
How is mining interconnected with changing landscapes?

Mining is the process of extracting valuable minerals or materials from the Earth's crust to produce metals, building materials and energy resources. As new products and technologies develop, mining activities have increased around the world. A single lithium electric-vehicle battery-pack requires the mining of 16 kilograms of lithium and over 43 kilograms each of nickel, cobalt and manganese. Mining can significantly alter landscapes through processes such as excavation, deforestation and waste disposal, causing changes to the natural environment.

Changing landscapes

There are different types of mining activities, all of which have an impact on landscapes. Surface mining involves creating large open pits and quarries to extract minerals from the ground. Subsurface mining requires the development of deep underground tunnels to extract minerals from deep under the Earth's surface. There is also mountaintop removal mining, which involves removing the tops of mountains to access coal seams, and placer mining, which involves extracting minerals from surface deposits such as riverbeds and beaches. These processes alter the topography of the land, creating landscape features and landforms such as:

- **plane mountaintops:** flat or levelled mountaintops as a result of removing large quantities of soil and rock from the surface
- **sculpted mountainsides:** sculpted and reshaped mountains, to enable access to mineral deposits by miners
- **canals and ponds:** created by surface mining operations as part of water management systems for collecting and managing runoff and wastewater generated during mining activities
- **alluvial fans and terraces:** created when surface mining activities disturb natural drainage patterns and alter the transportation of sediments in the surrounding environment
- **debris aprons:** loose rock and soil materials deposited at the base of slopes or excavation sites from surface mining
- **conical mounds and towering piles:** created when excavated materials are piled or stockpiled on the surface



Source 1: The open-pit gold mine in Sonora, Mexico. Mining has altered the topography of this landscape by removing vegetation and creating depressions, pits and tunnels in the landscape.

Source 2: Polluted orange-coloured river and dying trees in Karabash, Urals, Russia. The orange water is the result of acid runoff by abandoned copper-sulphide mines.

Source 3: An aerial view of China's 'Emerald Lake' in Qinghai Province. The Emerald Lake is an abandoned mining zone, where salts and minerals left behind created giant emerald coloured lakes covering 6 square kilometres.

- **deep pits:** created by surface mining, altering the topography of the land and increasing erosion, as there are generally more steep hills in a mining pit
- **wide, shallow depressions:** where soil and rock materials have been removed
- **settling ponds, levees or dams:** created by some mining companies to deposit excess waste and materials into, further transforming the land.

Impact of these changes

These modifications to landscapes have many environmental impacts:

- Biodiversity is reduced, as vegetation and habitats are removed.
- Topsoils often become degraded, increasing vulnerability to desertification.
- Air is polluted with sulfur dioxide and nitrogen oxides, reducing local air quality.
- Surface and groundwater sources are polluted with heavy metals, acids and sediments, impacting water quality for neighbouring ecosystems and downstream communities.

Mining generates waste rock, called overburden, and tailings, which are rock and chemical byproducts that are often disposed of in tailing dams and dumps. In addition to the mining activities themselves, other land use changes are made to accommodate the large mining workforce, including building roads, infrastructure and buildings.

Some non-government organisations are looking to rehabilitate old mining sites and reduce their environmental impact. Australia has over 80 000 old mining sites that are no longer in operation. Current environmental projects are using spatial technologies to monitor the growth of new vegetation in these sites and putting in strategies to support more biodiversity.

Learning ladder G2.8

Landscape change

1. Describe one way mining impacts landscapes.
2. Describe two different approaches to mining and how they each modify the landscape.
3. Explain how mining activities can contribute to changes in land use beyond the immediate extraction sites.
4. Explain the consequences of mining on environments at both local and regional scales.

Presenting ideas

1. Source 3: Describe what you see in this aerial photograph.
2. Explain why studying the impacts of mining is important.
3. Using examples, explain the positive and negative impacts of mining for people and place.
4. Explain the interconnection between mine rehabilitation and changing people's perceptions of place.

Make it spicy

Discuss this statement: Mining activities have a significant impact on *environments*, but economic importance often outweighs landscape degradation.

HOW TO

Presenting ideas, page 472; environment, page 241

How do tourists change coastal landscapes?

Australia's coastline is the number-one attraction for international visitors. The aesthetic values of Australia's coastal landscapes are advertised to international and domestic tourists. Each year, Australia's coastal environments attract millions of overseas visitors and domestic tourists, and earn billions of dollars in local and international tourism.

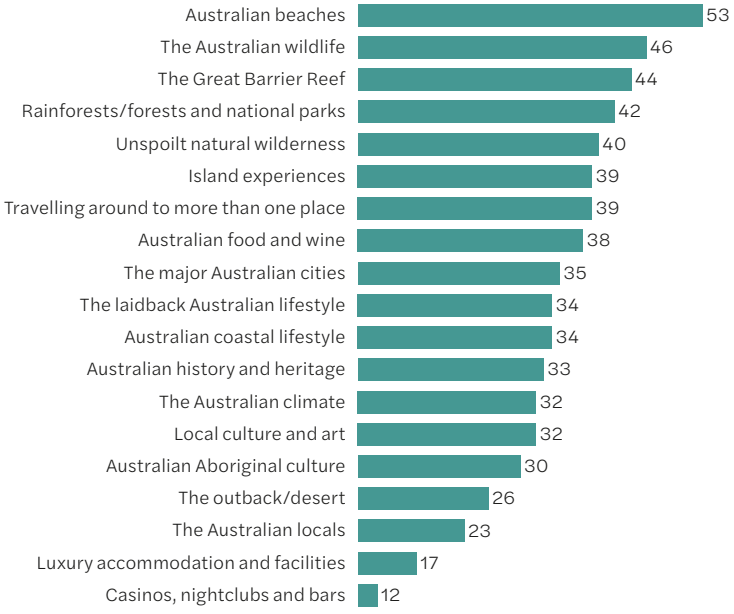
Tourism's economic significance

Tourism contributes 3.2 per cent of Australia's total wealth, also known as the country's gross domestic product (GDP). Tourism also employs nearly 5 per cent of all Australians. Tourism Australia's research shows that 70 per cent of our international visitors enjoy aquatic and coastal experiences as part of their trip to Australia. Approximately 7 million international visitors enjoy Australia's coastline each year and they contribute $35 billion to the Australian economy.

Impacts of tourism

While the economic benefits of coastal tourism are significant, tourism also poses challenges to fragile coastal ecosystems. Popular tourist spots often experience high foot traffic and habitat degradation from mismanagement. The introduction of pollutants from boats, cruise ships, and coastal resorts further threatens marine life and water quality.

What attracts international visitors to Australia (percentage)

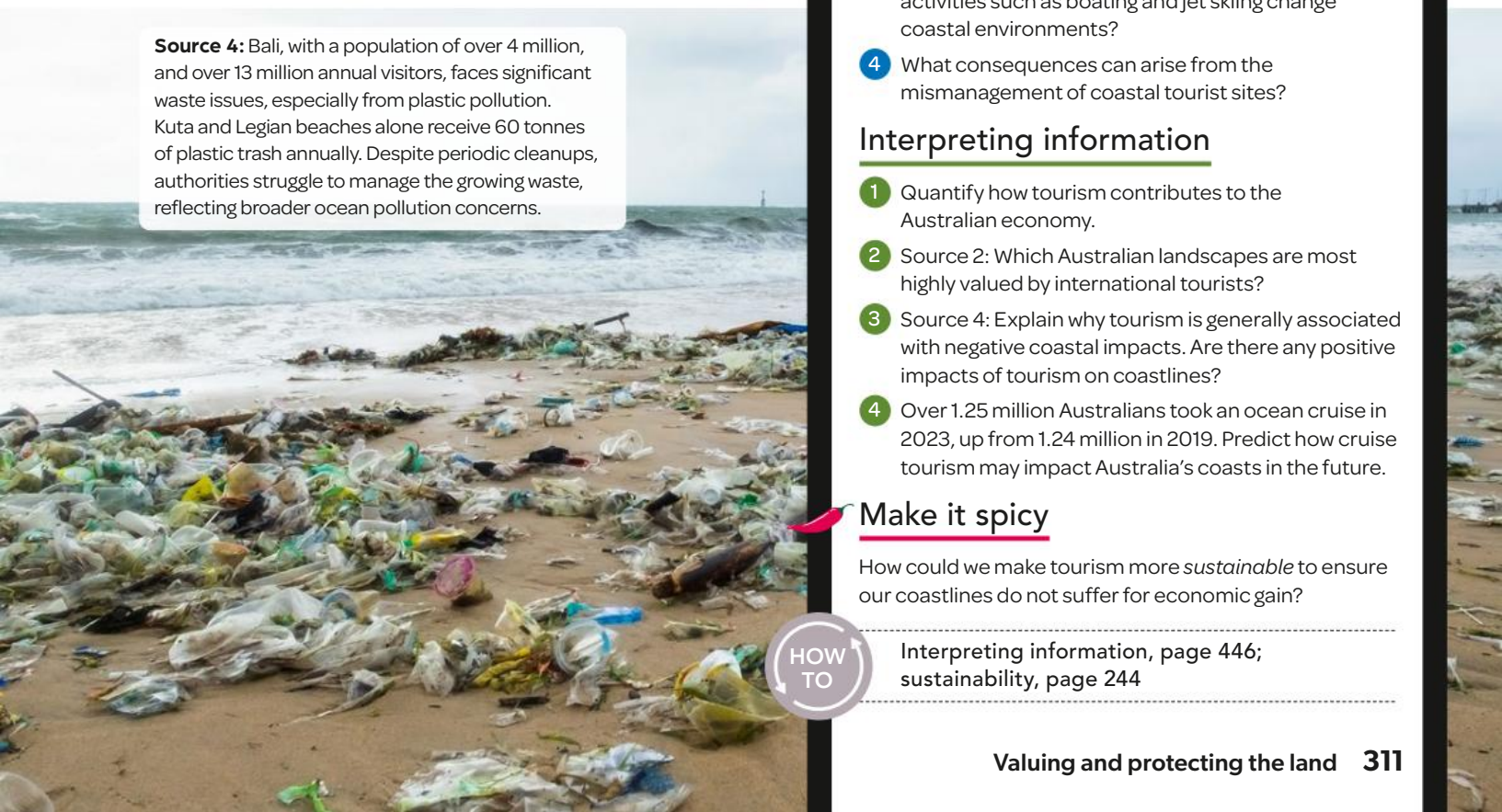


▲ **Source 2:** What attracts international visitors – Tourism Australia 2020 report

Source: Tourism Australia

◀ **Source 1:** Tourism Australia's research shows that the Australian coastline is very popular with international visitors.

Source 3: Cruise ships contribute to pollution, posing waste management issues to places they visit. In 2019, Sydney welcomed over 100 cruise ships, bringing approximately 400 000 passengers and crew. This influx has led to concerns about wastewater discharge, with a single large cruise ship producing on average of 50 tons of sewage (black water) per day.



Source 4: Bali, with a population of over 4 million, and over 13 million annual visitors, faces significant waste issues, especially from plastic pollution. Kuta and Legian beaches alone receive 60 tonnes of plastic trash annually. Despite periodic cleanups, authorities struggle to manage the growing waste, reflecting broader ocean pollution concerns.

Learning ladder G2.9

Landscape change

1. How has tourism altered coastal ecosystems and landforms?
2. Describe the impact of cruise ships on the physical characteristics of coastal areas.
3. How does the introduction of recreational activities such as boating and jet skiing change coastal environments?
4. What consequences can arise from the mismanagement of coastal tourist sites?

Interpreting information

1. Quantify how tourism contributes to the Australian economy.
2. Source 2: Which Australian landscapes are most highly valued by international tourists?
3. Source 4: Explain why tourism is generally associated with negative coastal impacts. Are there any positive impacts of tourism on coastlines?
4. Over 1.25 million Australians took an ocean cruise in 2023, up from 1.24 million in 2019. Predict how cruise tourism may impact Australia's coasts in the future.

Make it spicy

How could we make tourism more *sustainable* to ensure our coastlines do not suffer for economic gain?

HOW TO

Interpreting information, page 446; sustainability, page 244

G2.10

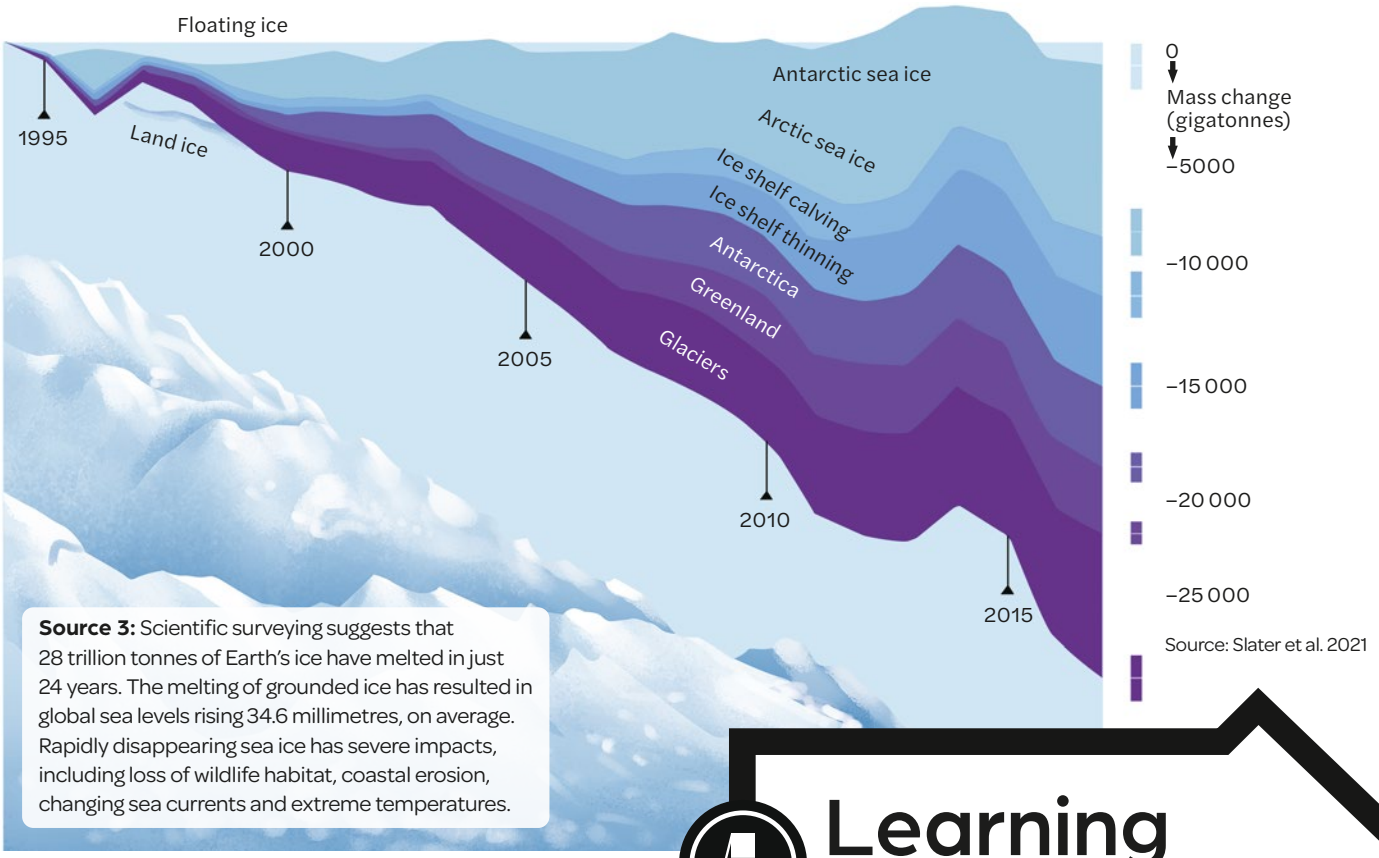
Case study

How is climate change interconnected with landscape change?

There is a strong interconnection between climate change and alterations to natural landscapes and their distinctive landforms.

Source 1: Change in glacier ice mass of the Muir Glacier in Alaska between 1941 and 2004

Source 2: Coastal erosion is increasing because of rising sea levels, coastal inundation and storm surges.



Source 3: Scientific surveying suggests that 28 trillion tonnes of Earth's ice have melted in just 24 years. The melting of grounded ice has resulted in global sea levels rising 34.6 millimetres, on average. Rapidly disappearing sea ice has severe impacts, including loss of wildlife habitat, coastal erosion, changing sea currents and extreme temperatures.

Changes in precipitation patterns and rainfall intensity can lead to increased erosion of riverbanks, coastal areas and slopes. In contrast, more intense drought events because of climate change can cause the increased evaporation rates, resulting in the drying up of lakes and streams.

As global temperatures rise, polar ice sheets melt into the surrounding ocean, increasing sea levels. Low-lying areas are at risk of flooding, and freshwater resources such as groundwater and low-lying lakes can become salty as ocean water inundates inland areas. There is also some evidence that the melting of glaciers could lead to the exposure of historically dormant volcanoes. While dormant volcanoes have not erupted in a long time, they have the potential for future eruptions. The melting of the thick ice covering these landforms can cause uplift at the surface and reduce pressure on the mantle, increasing magma production by up to 135 per cent. This may result in the dormant volcanoes becoming active and increased eruption rates around the world.

In mountainous regions, warmer temperatures are causing glaciers to **retreat**. Glaciers retreat when more ice is melting than being added to the glaciers, meaning they reduce in size and mass. Glaciers move down slopes carving out valleys and troughs in the landscape. As they retreat, previously covered land is exposed and river systems fed by seasonal glacial meltwater are altered, impacting ecosystems and communities downstream.

Learning ladder G2.10

Landscape change

1. What examples of human-induced changes to landscapes can you identify in your local area?
2. Describe the impact sea-level rise has on low-lying areas and freshwater resources.
3. Explain why climate change and the associated changes to landscapes are interconnected with human activity.
4. It is predicted that by 2050, 92 per cent of Australians will live in coastal regions. How might climate change influence coastal landscapes and communities over time?

Interpreting information

1. Source 1: What are these photographs showing?
2. Source 1: Describe the change over time in this place.
3. Source 3: Explain why land ice mass has changed so significantly over time.
4. Source 2: Predict how coastal erosion may impact beach-side living in the future.

Make it spicy

Source 3: Explain how glacial melt is *interconnected* with landscape *change*.

HOW TO

Interpreting information, page 446; change, page 240; interconnection, page 238

How can we take action to manage landscapes?

To help improve a landscape or stop its degradation, management strategies are employed at a variety of scales – local, regional, national and global. Often the need to protect and manage an environment is brought to the attention of governments by people protesting or lobbying members of parliament.

Direct action

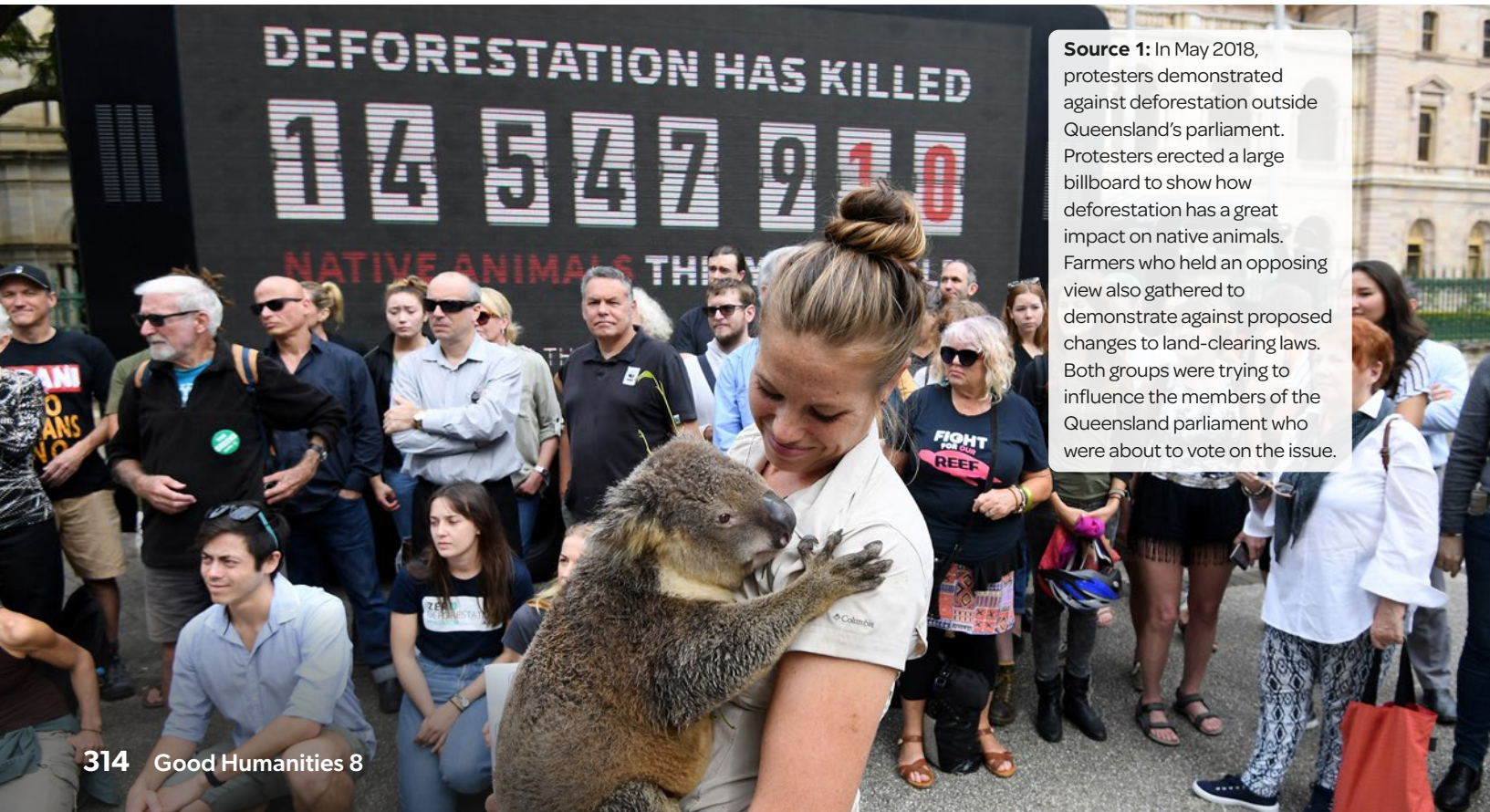
People raise awareness about environmental and other issues through direct action. Direct action is an effective way of raising awareness about issues. Today, people use social media to quickly spread messages about direct action events and bring issues to people's attention.

Protests are an effective form of direct action where protesters march or hold a demonstration at the site of an issue, such as a deforested area or the steps of parliament. Protests can attract large numbers of people with placards, T-shirts and badges showing slogans to get their message across. Protest organisers invite the media to their demonstrations to record speeches and beam the protest to a wider audience in Australia and around the world.

Lobby groups

Lobbying is any attempt by individuals or groups to influence the decisions of government. Lobby groups work on behalf of a particular cause to influence political decisions. In Australia, there are many conservation organisations that work to influence public and government opinions on issues such as deforestation, pollution and the impact of introduced species.

The World Wildlife Fund (WWF) is a lobby group that works around the world to protect endangered species and habitats. It tries to influence political decisions about the environment through media campaigns or speaking directly with federal or state members of parliament. The WWF website gives interested people the chance to email a message to members of parliament on issues such as protecting koalas from **deforestation**.



Source 1: In May 2018, protesters demonstrated against deforestation outside Queensland's parliament. Protesters erected a large billboard to show how deforestation has a great impact on native animals. Farmers who held an opposing view also gathered to demonstrate against proposed changes to land-clearing laws. Both groups were trying to influence the members of the Queensland parliament who were about to vote on the issue.

Landscape management strategies

A management strategy is a plan to achieve goals and objectives. Managing landscapes involves approaches with different levels of environmental protection.

Preservation

Preservation is a management strategy that plans to protect an environment in its existing form. The environment is untouched and people are denied access. Management of the Great Barrier Reef Marine Park defines preservation zones as 'no go' areas. No one can enter these zones without written permission.

Conservation

A conservation management strategy involves active management to reduce environmental damage of a landscape. Human activities are allowed, but are strictly controlled, and other uses of resources are limited to reduce impact on ecosystems. Ecotourism at Seal Bay on Kangaroo Island is an example of a conservation management strategy where the natural habitat of a colony of Australian sea lions is protected, while still allowing tourists to learn about the importance of conserving this endangered species and their habitat.

Utilisation

Utilisation is a management strategy that involves alteration of the landscape to allow human activities such as farming to occur. This land management approach usually involves damage to natural environments. For example, mountain graziers took stock into the mountains each summer to feed on the lush pastures, causing great damage to the fragile environment. Grazing leases were terminated in Kosciuszko State Park in 1944 and all grazing had ended by 1970.

Exploitation

Ecosystems are destroyed, degraded or reduced in extent as a result of exploitation, which is when a landscape is used with little regard for the impact.

Source 2: Seal Bay Conservation Park on Kangaroo Island in South Australia uses a conservation management strategy approach to allow visitors to witness the Australian sea lion colony, but protect the environment. A fenced boardwalk behind the beach has been built to allow tourists to view the sea lions on the beach, but restrict access to them.

Learning ladder G2.11

Landscape management

1. Which landscape strategy has the potential to do the greatest harm to the natural environment?
2. Source 2: How sustainable is the management approach used at Seal Bay on Kangaroo Island?
3. In what ways could integrating Aboriginal and Torres Strait Islander knowledge enhance current landscape management practices, such as those used for ecotourism?
4. What is the difference between preservation and conservation? Using examples, which do you think would be more successful in managing a local place in your community?

Strategies

1. Source 1: What change are these protesters attempting to stop?
2. Why have preservation zones been established in the Great Barrier Reef Marine Park?
3. Source 2: What changes have been made to this landscape and why? What are the likely impacts of this strategy?
4. Rank the four management strategies from the potential to have the greatest benefit to the environment down to the potential to have the least benefit to the environment. For the strategy ranked as the least beneficial, design a new response that aims to improve outcomes.

Make it spicy

Source 2: How *sustainable* is the management approach used at Seal Bay on Kangaroo Island?

HOW TO

Strategies, page 468; sustainability, page 224

How can we manage landscapes on an international scale?

Many landscapes and their processes do not stop at country borders and can be shared between neighbouring countries. As an example, the Mekong River transports eroded sediments and pollution from upstream countries like China and Myanmar to downstream countries such as Laos, Thailand, Cambodia and Vietnam. This can affect river dynamics, sedimentation patterns and ecosystem health across the entire basin. This interconnectivity of landscapes makes it important for countries to work together on an international scale through agreements and cooperation.

International agreements and treaties

International agreements are formal agreements or treaties between two or more countries that cover a wide range of topics, including environmental protection and human rights. By signing an international agreement, countries agree to work together towards common goals to protect landscapes. This can include agreeing to conserve environments, implement laws to prevent their degradation, share knowledge and allocate funding to environmental protection. These international agreements are often facilitated by international organisations, such as the United Nations or the World Bank.

World Heritage Sites

The United Nations Educational, Scientific and Cultural Organization (UNESCO) oversees an international agreement known as the World Heritage Convention. This convention has created criteria that are used to identify places in the world that have outstanding universal value to humanity, referred to as World Heritage Sites. These sites encompass natural wonders, cultural landmarks and significant historical locations. Through this agreement, UNESCO collaborates with nations to recognise and protect these sites, ensuring their conservation and sustainable management for future generations.

Source 1: The Mekong River requires international agreements to effectively conserve and protect, as it flows through six countries in South-East Asia. This requires all countries to have the same goals for protecting the quality of the water, to prevent pollution and disease from travelling downstream into other countries.

Source 2: Annual migration of over 1 million white bearded (or brindled) wildebeest and 200 000 zebras across the Serengeti-Mara Ecosystem. International agreements are important at establishing the conservation efforts of this large ecosystem that goes across two countries.

Serengeti–Mara National Park

The Serengeti-Mara ecosystem, in Tanzania and Kenya, is protected by many international agreements. Containing the Serengeti National Park World Heritage Site, it meets criteria of the convention due to its exceptional biodiversity, including the largest annual wildebeest migration, where over 1 million wildebeests and hundreds of thousands of hoofed mammals engage in a 1000-kilometre circular trek across Kenya and Tanzania. It also meets criteria by containing a wide variety of aquatic and terrestrial habitats with diverse ecosystems, including grasslands, plains and forests. Due to its important World Heritage Site status, international organisations, such as the United Nations Development Programme (UNDP) and the Global Environment Facility (GEF), provide funding to the Kenyan and Tanzanian governments to implement conservation projects, regulate human activities and reduce habitat loss in the Serengeti-Mara Ecosystem.

International agreements between Tanzania and Kenya have also been crucial to ensure the implementation of wildlife conservation strategies, monitoring programs, methods to combat the illegal wildlife trade, and land use planning rules to reduce the habitat fragmentation and implement vegetation planting projects.

World Heritage status and effective international agreements have resulted in effective laws against hunting in the ecosystem, developing conservation areas, establishing land use planning rules to reduce habitat fragmentation and implementing vegetation planting projects. It has also led to increases in tourism and scientific research in the ecosystem, resulting in increased funding and knowledge about ecosystem processes to improve conservation efforts. Through these efforts, elephant numbers have grown in parts of the ecosystem, and this has also had positive ecological effects, such as shaping vegetation dynamics and creating habitat for other wildlife species.

The course of the Mekong River

Source: Matilda Education Australia

Source 3: The Mekong River requires international agreements to effectively conserve and protect, as it flows through six countries in South-East Asia. This requires all countries to have the same goals for protecting the quality of the water, to prevent pollution and disease from travelling downstream.

Learning ladder G2.12

Landscape management

1. What is a World Heritage Site?
2. Describe the role of UNESCO in overseeing World Heritage Sites and how countries collaborate to protect them.
3. How could integrating Indigenous peoples' perspectives on sustainable land use improve the outcomes of international landscape management agreements, like those in the Mekong River basin?
4. How do international treaties, like the one protecting the Mekong River, compare with local conservation efforts, such as those seen in national parks or World Heritage Sites?

Strategies

1. Identify two ways in which international agreements can address environmental challenges in the Mekong River basin.
2. Explain how international agreements have improved the sustainability of the Serengeti-Mara ecosystem.
3. How does the Mekong River exemplify the need for international cooperation in managing landscapes? Provide specific examples.
4. Design a strategy or policy that aims to manage the illegal wildlife trade in Australia.

Make it spicy

What significance does the World Heritage Convention hold for *environment* conservation?

HOW TO

Strategies, page 468; environment, page 241

How do First Nations Peoples care for Country?

First Nations people have been connected to Country and caring for Country for more than 60 000 years. There are many ways that First Nations people continue to care for the diverse landscapes that Australia presents. First Nations people live in all parts of Australia, and each cultural or language group holds knowledge about their unique landscape.

Caring for Country

'Caring for Country' is about knowing and understanding the delicate ecosystems within the environment. Animals, plants, waterways and landforms are all connected through creation stories, as oral traditions and individually as 'being and living as part of Country'. **Elders** and knowledge holders teach particular ways of caring for Country to younger generations. Knowledge holders and cultural obligations still guide communities through deeply understood principles of **sustainability**. Caring for Country also requires an understanding of the bond between people, place and knowledge of Country. The ways that Country is described and cared for are different between First Nations and non-Indigenous people; however, all of us are responsible for Country as it sustains us all.

Where saltwater meets freshwater

Many First Nations communities are located on or near coastal and or river regions. These communities benefited from a sustainable landscape that enabled them to feed and nourish their communities and trade with neighbouring communities. Most First Nations people did not travel vast distances as there was a ready-made infrastructure and economic trade system built within Country. D'harawal (Tharawal) and Gandangara peoples still share specialist knowledge in a variety of ways. These urban coastal and river communities are still transmitting and teaching this knowledge to future generations.

Caring for these environments requires an understanding of both Dreaming and the interconnectedness Country has with the living and non-living worlds. Understanding and caring for Country involves cyclical seasonal knowledge, such as breeding cycles and plant life cycles, and associated knowledge such as insects that thrive on native plants, tidal and moon connections to water and seasonal migrations, and the healing and medicinal links to water, animals and plants.

Rivers and mountains

First Nations Peoples have creation stories about rivers and the mountains. This relationship with the natural world comes from the belief that all the elements of the universe, including humans, plants, animals, landforms and waterways as well as the sun, moon and stars, were created by Ancestral (spirit) beings. These exist as connected entities and they form the guiding knowledge that supports First Nations communities to remain sustainable.

The story of Yeperenye the caterpillar and the formation of mountainous landforms located at Mparntwe (Alice Springs) demonstrates the interconnected stories the Arrernte community have transmitted for generations. This story shows why caring and understanding the cycles of the environment, rivers and mountains is so important. Yeperenye is the most important of three caterpillars in this region, and the Dreaming stories are about these caterpillars and a carab beetle creating parts of Tyerretye (MacDonnell Ranges). Included are stories about passes, rock piles, trees and woodlands in the Mparntwe region. There are also places in between like Ellery Creek Big Hole, which cuts through a gorge in Tyerretye, the West MacDonnell Ranges, and these require special care.

D'harawal

Seasons of the year

Compiled by Frances Bodkin
Illustrated by Lorraine Robertson

Time of Ngoonungi – Murrai'yonggory (Murrai'yunggory)

(cool, getting warmer) The time of the gathering of the flying foxes, when the flying foxes gather in the darkening skies over D'harawal Lands. They come in from the north-east, the north, the north-west and the west, and swirl over the Sydney area in a wonderful, sky-dancing display just after sunset, before setting off for their night-time feeding grounds to the south. But it is also a very important ceremonial time for the D'harawals, which begins with the appearance of the splashes of the bright red Miwa Gawaian (*Telopea speciosissima*) in the bushland.

Time of Parra'dowee – Goray'murrai

(warm and wet) This season begins with the Great Eel Spirit calling his children to him, and the eels that are ready to mate make their way down the rivers and creeks to the ocean. It is the time of the blooming of the Kai'arrewan (*Acacia binervia*) which announces the arrival of fish in the bays and estuaries.

Time of Burran – Gadalung Marool

(hot and dry) The behaviour of the male kangaroos becomes quite aggressive in this season, and it is a sign that the eating of meat is forbidden during this time. This is a health factor; because of the heat of the day, meat does not keep, and the likelihood of food poisoning is high. The blooming of the Weetjellan (*Acacia implexa*) is an important sign that fires must not be lit unless they are on sand only and well away from bushland, and that there will be violent storms and heavy rain, so camping near creeks and rivers is not recommended.

Time of Marrai'gang – Bana'murrai'yung

(wet, becoming cooler) The time when the cries of the Marrai'gang (Quoll) seeking his mate can be heard through the forests and woodlands, and when the lilly pillys ripen on the trees. However, when the lilly pillys start to fall, it is the time to mend the old warm cloaks from last cold season, or make new ones, and begin the yearly trek to the coastal areas.

Time of Burrugin – Tugarah Juli (Tugarah Tuli)

(cold, frosty, short days) This is the time when the male Burrugin (echidnas) form lines of up to ten as they follow the female through the woodlands in an effort to wear her down and mate with her. It is also when the Burringoa (*Eucalyptus tereticornis*) starts to produce flowers, indicating that it is a time to collect the nectar of certain plants for the ceremonies that will begin to take place during the next season. It is also a warning not to eat shellfish again until the Boo'kerrikin blooms.

Time of Wiritjiribin – Tugarah Gunya'marri

(cold and windy) The lyrebird calls ring out through the bushland as he builds his dancing mounds to attract his potential mates. It is the time of the flowering of the Marrai'uo (*Acacia floribunda*), which is a sign that the fish are running in the rivers. At the end of this time, the Boo'kerrikin (*Acacia decurrens*) flowers, which indicates the end of the cold, windy weather, and the beginning of the gentle spring rains.

▲

Source 1: 'The yearly calendar does not rely upon dates in months and weeks, or even an understanding of the solstices, but on key events that occur in the environment. These events involve specific plant flowerings and fruitings, and noticeable quirks of animal behaviour that occur only at certain times of the year. The calendar is not set rigidly in time, but responds to the triggers of the environment, a response to the Land of the D'harawal Peoples as they moved through the environment, observing the signs of these changes.' Frances Bodkin and Lorraine Robertson, *D'harawal Climate and Natural Resources*.

Knowing stories is another important feature of caring for Country. Many stories hold information to help understand key features and topographic knowledge of rivers and mountains.

Deserts

An Australian geographical feature that has changed dramatically is the desert region of Lake Mungo in New South Wales. It is the place where archaeological evidence of human occupation dating from 45 000 to 60 000 years ago is visible to the public. Mungo is part of the Willandra Lakes Region of NSW. The vast area is home to the Paakantji, Ngyiampaa and Mutthi Mutthi, and care for Lake Mungo is about maintaining not only the spiritual significance, but also its protection as a World Heritage Site. The site exemplifies major stages in the Earth's evolutionary history, direct links to long-held cultural traditions, archaeological significance and clear evidence of ongoing geological processes.

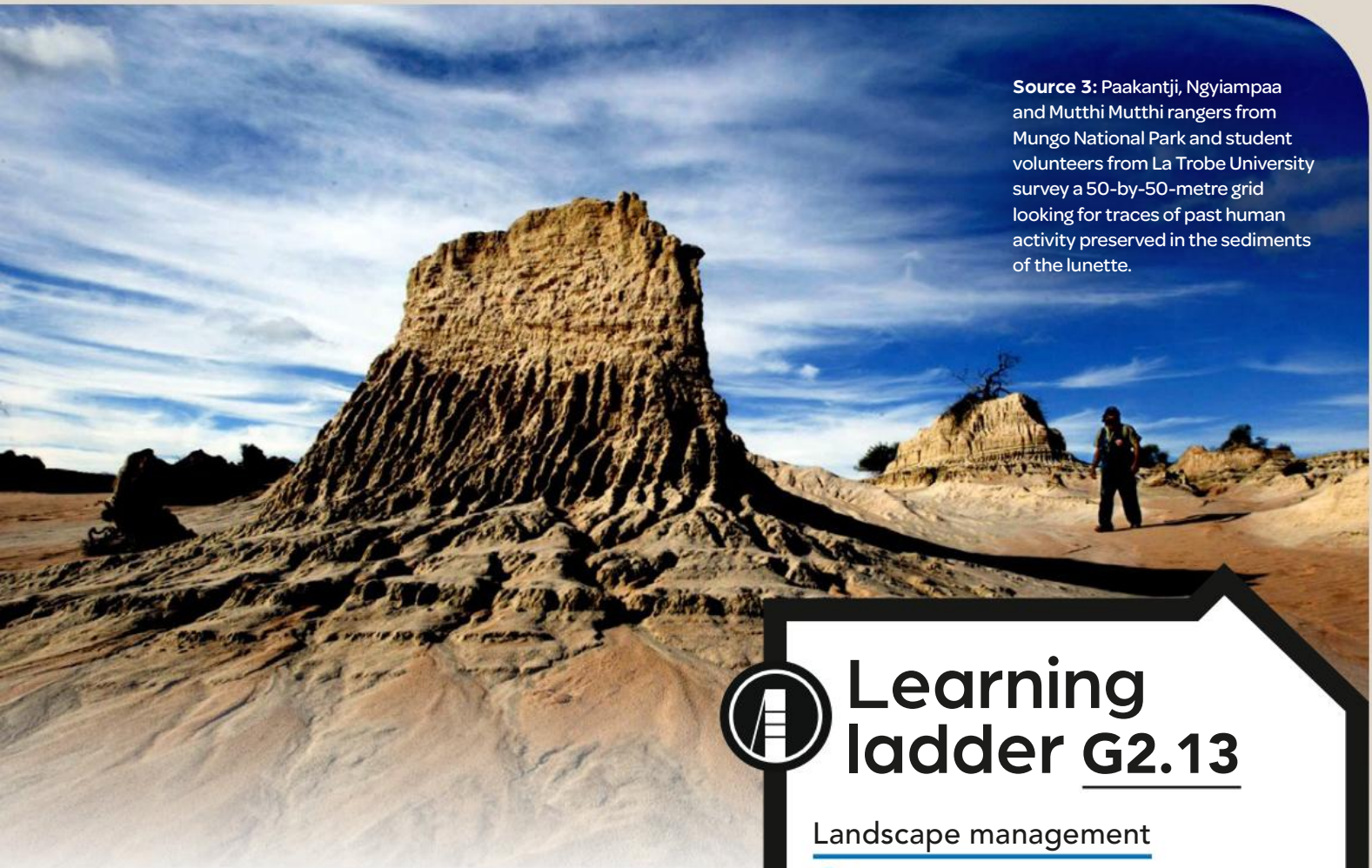
Representatives of the Paakantji, Ngyiampaa and Mutthi Mutthi work as rangers at Lake Mungo to share some of the cultural history and take part in the ongoing research and management of the Mungo National Park and the Willandra Lakes Region World Heritage Area.

Rainforests

There are many types of rainforests (subtropical, littoral, dry, warm and cool) and the First Nations communities that are entrusted to care for them have ongoing connections to the Dreaming stories and cultural knowledge that makes them continue to be part of Australia's unique landscape.

Dorrigo National Park, part of the Gondwana Rainforests of Australia, is a World Heritage Area located on the NSW mid-north coast region. Dorrigo National Park includes both temperate rainforest and subtropical rainforest. Traditional Custodians of this area are the Gumbaynggirr community. They care for unique plants, animals and rock formations in the region. Native marsupials, including the swamp wallaby, long-nosed potoroo and spotted-tail quoll, can be found in the area.

Source 2: Ellery Creek Big Hole (Udepata) is a permanent waterhole in the West MacDonnell Ranges in the Northern Territory. It is a special meeting place for the Arrernte people. The main Dreaming story at Udepata is Honey Ant Dreaming, and a Fish Dreaming story is also associated with the waterhole.



Source 3: Paakantji, Ngyiampaa and Mutthi Mutthi rangers from Mungo National Park and student volunteers from La Trobe University survey a 50-by-50-metre grid looking for traces of past human activity preserved in the sediments of the lunette.

Giinagay! My name is Uncle Mark Flanders and I'd like to welcome you to the Gumbaynggirr Aboriginal Country, my Country. We are saltwater–freshwater people. We are land and sea people. We are custodians of our lands and waters and we are caretakers of our lands and waters. This bush you're looking at, this is our calendar. This told us when the foods were available, when to move camp; the seasonal patterns determined what we were doing. At winter time, we travelled from the mountains down into the ocean because there's lots more food available. In the summertime, before the summer, we'd travel back up into the mountains here again. Come up here and visit this beautiful rainforest up here on the escarpment that we have. The foods are still here, our medicines are still here. Our culture is still strong in this area. Come up here and visit. You'll enjoy it.

Source 4: Uncle Mark Flanders shares his Gumbaynggirr Culture at Dorrigo National Park.

Learning ladder G2.13

Landscape management

1. Source 1: At what time of year do the D'harawal head to the coast?
2. Describe one method used by First Nations Peoples to care for Country.
3. Source 4: Explain how Gumbaynggirr use geographical knowledge to manage Country.
4. Source 3: Why were the Paakantji, Ngyiampaa and Mutthi Mutthi Peoples important in establishing the evolution of the Lake Mungo region and its cultural traditions? What role do they continue to play today?

Representing information

1. Source 2: What environment is shown here?
2. Give three examples of different environments that First Nations Peoples call Country.
3. Create a map illustrating the locations of the sites discussed.
4. Access the Bureau of Meteorology website, Indigenous Weather Knowledge. Compare how different communities interpret environmental changes to understand and care for Country.

Make it spicy

Source 1: How is the D'harawal calendar reliant on the *environment* as signals for action?

HOW TO

Representing information, page 436; environment, page 241

How do people manage coasts?

Natural processes such as longshore drift and events such as storms are constantly changing the shape of our coastlines. Settlements built in coastal areas are affected by these changes.

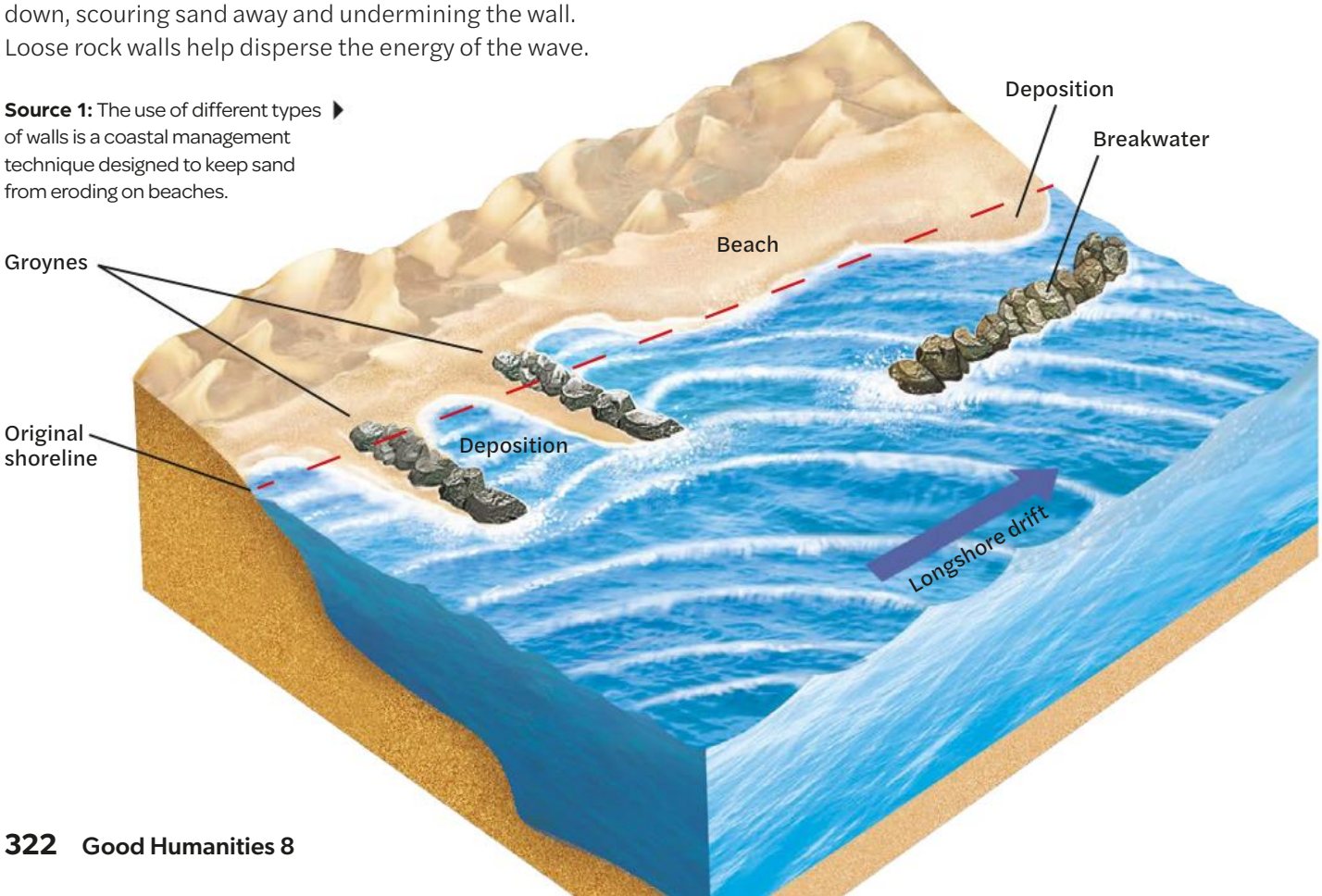
Managing coastlines

Humans have tried to manage coasts to ensure we have beaches to enjoy, that erosion doesn't threaten communities and that sand doesn't clog harbours. Longshore drift is a natural process where longshore currents (created when waves come to shore at an angle) move sand and other coastal sediment along the beach, parallel with the coastline. Longshore drift impacts coastlines by causing erosion and deposition, creating spits and barrier islands, and altering beach shape and slopes, depending on wave strength and coastal features like river mouths. It also impacts the aesthetic of the coastline for locals. To stop or slow the movement of sand from longshore drift and erosion, communities construct walls from concrete, rock, timber and sandbags. Solid **sea walls** deflect wave energy down, scouring sand away and undermining the wall. Loose rock walls help disperse the energy of the wave.

The different types of walls are as follows:

- **Sea walls** run parallel to the shore and are designed to stop erosion by waves and storms. They protect the paths, roads and houses built along the shore.
- **Breakwaters** are rock walls parallel to the beach and located in the water. They are designed to direct the force of the waves at the wall and not at the beach and sand dunes behind it.
- **Groynes** are walls that extend out from a beach into the sea. They are designed to trap the sand moving along the beach from longshore drift. Groynes also direct waves away from the shore, reducing erosion.
- **Training walls** are built on either side of a river mouth to stop sand from blocking it.

Source 1: The use of different types of walls is a coastal management technique designed to keep sand from eroding on beaches.



Source 2: A huge dredger pumps sand towards the Surfers Paradise coastline to replenish eroded beaches. Sand is dredged from kilometres offshore and pumped back about 50 metres away from the breaking waves to redistribute to the beaches.

Repairing damaged coastlines

Coastal engineers use a number of methods to repair damaged beaches. They can transport sand by truck or **dredge** it from offshore, and then pump it back just offshore to replenish eroded beaches. This process is known as **beach nourishment**. On the Gold Coast, millions of cubic metres of sand have been dredged from the sea floor or transported from other places to restock eroding beaches.

Sand dunes are stabilised and repaired by erecting fences and signs to keep people off the dunes. Replanting sand dunes with vegetation such as coastal grasses and native plants helps bind the sand together and holds it in place. Sand also mounds up against the plants.

Source 3: The North Cronulla sand dune revegetation program involved fencing and replanting.

Learning ladder G2.14

Landscape management

1. List three different techniques used to manage coastlines.
2. Source 1: Describe what coastal managers are attempting to do using these constructions.
3. Source 2: You work for a local coastal council and dredging has been raised as one possible strategy to manage the local beach erosion. Consider the perspectives of environmentalists and First Nations Peoples on this suggested approach.
4. Compare the processes of building seawalls and dredging. What are their main purposes and what techniques are used to achieve them?

Making conclusions

1. Source 2: What change is occuring here?
2. Source 3: What is the impact of coastal revegetation?
3. Do all coastal management practices benefit the environment?
4. Source 1: Explain why a block diagram was used to explain the different types of coastal management techniques here.

Make it spicy

How might the distribution of sand influence people's use of beach *environments*?

HOW TO

Making conclusions, page 464; block diagrams, page 437; environment, page 241

G2.15

Case study

How is human activity interconnected with changes at Hampton Beach?

Hampton is a bayside suburb located 15 kilometres south of Melbourne on Port Phillip Bay, between Brighton and Sandringham. Hampton Beach was nearly lost because of the construction of a local harbour.

For over a century, Sandringham Harbour has been a renowned yachting and boating hub in Port Phillip Bay. Built to support the growing local population, its construction altered the natural sand movement along the coastline. The harbour's design disrupted longshore drift, leading to significant erosion of Hampton Beach.

Longshore drift moves sand north-west towards Green Point in summer and south-east towards Picnic Point in winter, as shown in Source 2. However, the building of Sandringham Harbour trapped sand in the harbour. In summer, the waves couldn't move the sand back to Green Point so, by the 1970s, Hampton Beach was gone. Sand has been pumped back onto the beach and rock and timber groynes were built to keep it there. The groynes hold the sand in place as natural currents move sand between the groynes. The latest rock groyne was completed in 2017.

Hampton Beach re-nourishment began in 1997 after significant loss of foreshore and vegetation. Sand was pumped from offshore and spread using heavy machinery to create a new beach. Two groynes were built to stabilise the area. While beach nourishment efforts have been partially successful, erosion remains an issue, and sedimentation in Sandringham Marina continues.

Seasonal longshore drift at Hampton Beach, Port Phillip Bay

Source: Matilda Education Australia

▲ **Source 2:** Longshore drift at Hampton Beach, Port Phillip Bay

Source 1: Groynes on Hampton Beach help retain the sand and control longshore drift.

Source 3: A photo showing early attempts to protect the coastline at Hampton Beach, c. 1900

Source 4: Aerial view of Hampton beach in 2018

Learning ladder G2.15

Landscape management

1. Source 3: List the changes that were made to increase people's enjoyment of this coastal environment.
2. Sources 2 and 4: Describe one advantage and one disadvantage caused by the building of Sandringham Harbour.
3. Research and explain how this place has been managed over time.
4. Compare the management and care strategies used over time in Hampton Beach. Which strategies do you think have been most successful and why?

Representing information

1. Source 2: What do the arrows represent on the map?
2. Sources 2 and 4: The direction of longshore drift at Hampton Beach depends on the season. Using your knowledge of this natural process, identify whether the aerial image was taken in summer or winter.
3. Source 4: Trace or sketch the scene in the satellite image and annotate the following:
   - **a** the various ways humans have changed this place over time
   - **b** natural characteristics and features of the coastal landscape
   - **c** the coastal management strategies that have been implemented.
4. Look up Hampton Beach via Google Earth.
   - **a** Analyse changes in the coastline over the years, especially post-1997 beach re-nourishment.
   - **b** Annotate how the harbour may have impacted sedimentation and beach erosion.
   - **c** Zoom in on the location of groynes along Hampton Beach. Note their locations.

Make it spicy

Explain how the local *environment* at Hampton Beach has been both damaged and protected.

HOW TO
Representing information, page 436; environment, page 241

G2.16

Case study

How is Gariwerd National Park managed?

A new management plan for Gariwerd (Grampians) National Park supports the knowledge and science of Traditional Owners to provide better care and governance of the region's landscapes and their environmental and cultural values.

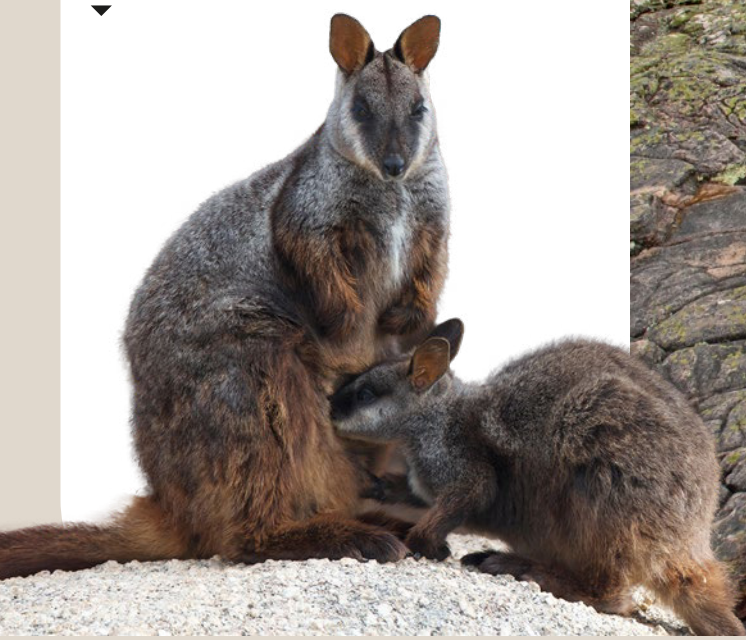
Management plan

A plan to manage the Gariwerd (Grampians) National Park and surrounding reserves was released in 2021. The plan outlines not only strategies for the protection of natural environments, but also its cultural values.

The Greater Gariwerd Landscape Management Plan was developed by Parks Victoria and Traditional Owners represented by the Gunditj Mirring Traditional Owners Aboriginal Corporation, the Eastern Maar Aboriginal Corporation and the Barengi Gadjin Land Council Aboriginal Corporation.

The plan is divided into three key sections to address the cultural values, the natural values and the recreational values of the region.

Source 1: The endangered brush-tailed rock-wallaby will be protected in seven Special Protection Areas called Rock-wallaby Country.



A living cultural landscape

The Grampians is known as Gariwerd in local Djab Wurrung and Jardwardjali languages. People of Gariwerd have managed the landscape for thousands of years and it retains significant cultural significance, including 200 rock art sites.

Source 2: View from the summit of Mount Abrupt, Gariwerd National Park

The management plan aims to support Traditional Owners to:

- make management decisions for Country
- protect cultural values through 50 Cultural Special Protection Areas where a high level of management and protection is required
- use Traditional Owner names for places
- access Country for cultural and economic purposes
- talk about Country with visitors.

Healthy Country

Country has been impacted by past land uses and natura disasters, and is now recovering under the guidance of its Traditional Owners. The Gariwerd landscape contains 30 per cent of Victoria's native flora species and 17 per cent of Victoria's wildlife species.

Natural Values Special Protection Areas have been designated in Gariwerd National Park and surrounding reserves to help the recovery of high-altitude vegetation and several threatened fauna, including the brush-tailed rock-wallaby, southern brown bandicoot, long-nosed potoroo and platypus.

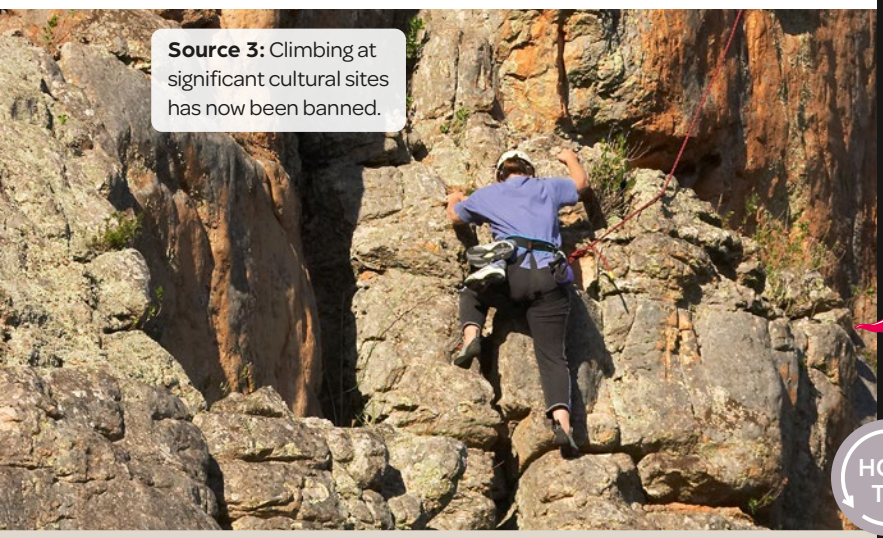
Experiencing Gariwerd

Gariwerd has been a tourism destination since the 1860s and today the landscape supports a range of recreational activities including hiking, camping, photography, picnicking, scenic driving, four-wheel driving and rock climbing.

Gariwerd's Traditional Owners welcome tourists to experience the aesthetic values of the landscape and to learn how their culture and Country are inseparable. A key strategy of park management is to provide an enjoyable visitor experience that is respectful of the cultural and environmental values of the landscape. Management is required for recreational activities that could harm the cultural, spiritual and natural values of the landscape through:

- damage to rock art, rock shelters and other areas of cultural significance to Traditional Owners
- soil disturbance, compaction and erosion
- vegetation damage and disturbance of wildlife
- spreading of weeds, viruses and bacteria
- bushfire risk from campfire escape.

On 6 January 2025, a bushfire in Gariwerd National Park was brought under control after 21 days. Lightning strikes had started the fire on 17 December 2024. The fire destroyed four homes and 40 sheds, and caused the loss of many farm animals, including 775 sheep and 1285 beehives. Firefighters used controlled burns to stop the fire from spreading and kept watch to prevent new fires.



Source 3: Climbing at significant cultural sites has now been banned.

Learning ladder G2.16

Landscape management

1. Why has climbing on significant cultural sites been banned?
2. What are some of the risks that recreation activities in Gariwerd can cause?
3. In what ways can the management of Gariwerd support the Traditional Owners?
4. What are some of the cultural values of Gariwerd? How can these be effectively managed?
5. Why is it important to combine non-Indigenous and First Nations management practices to manage Gariwerd?

Presenting ideas

1. Describe what is meant by 'healthy Country'.
2. Why is discussing tourism relevant when investigating management of landscapes?
3. Suggest what evidence may have been collected and presented to ban climbing at cultural sites.
4. Explain the interconnection between management of sites and the rate of landscape recovery.

Make it spicy

Why are management plans important for *environmental* conservation?

HOW TO
Presenting ideas, page 472; environment, page 241

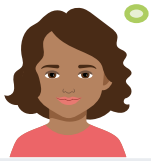
How do I conduct a good inquiry?

Throughout the chapter you have developed knowledge and understanding of valuing and protecting the land. Background knowledge is important as it helps you make connections to new information, ask better questions, and consider different perspectives. As you were progressing through the chapter you have been gathering information through highlighting, note taking, or responding to the Learning ladder. It is now time to start planning your inquiry! Refer to pages 476–82 for a step-by-step guide to this process.

Throughout this chapter, a range of case studies were presented to apply your learning to real-life events. Review these pages and select a case study to build your inquiry around.

- How are First Nations Peoples connected to Country?, page 296
- How is the Dreaming linked to landscapes?, page 298
- What's in a name?, page 300
- Why are the Himalayas significant?, page 302
- How is climate change interconnected with landscape change?, page 312
- How do First Nations Peoples care for Country?, page 318
- How is human activity interconnected with changes at Hampton Beach?, page 324
- How is Gariwerd National Park managed?, page 326

Remember: A good inquiry will be focused on an aspect of the topic that interests you. It is more than just a research task that you present as a PowerPoint, it is a genuine investigation into something you are wondering about.



For your selected case study, complete a 'see, think, wonder' to help build curiosity and develop ideas you may cover in your inquiry.

See
What do you see?
What are the human and physical characteristics?

Think
What do you think about that?
Where is it?
Why is it there?
When did it occur?

Wonder
What questions does this raise in your mind?
What else do you need to know to understand what is happening here?
What are other people saying about this?

Write down five observations you make when viewing the data presented.

The following is a list of example open-ended questions which may help you develop your inquiry.

Valuing and protecting the land

- **Descriptive question:** *What are some ways people use and value the land?*
- **Procedural question:** *How have land conservation practices changed over the years?*
- **Comparative question:** *How does the value placed on land differ between urban areas and rural areas?*
- **Evaluative question:** *To what extent should land development be limited to protect natural areas?*

Level up!

Throughout the chapter you have been working to move up the Learning ladder. An inquiry investigation is a great opportunity to practise these skills in context. When planning your inquiry consider how you may integrate geospatial technology into your fieldwork or how you may explore a range of perspectives. Use the How-to chapter to support you in planning and research.

Geomorphic hazards

G3

WHY DO PEOPLE LIVE NEAR VOLCANOES? 340

WHAT HAPPENS WHEN A VOLCANO ERUPTS? 334

HOW ARE TSUNAMIS INTERCONNECTED WITH EARTHQUAKES? 346

HOW DO LANDSLIDES OCCUR? 350

How can I understand geomorphic hazards?

Geomorphic hazards such as volcanic eruptions, earthquakes, tsunamis, landslides and avalanches occur across the Earth every day. A hazard becomes a disaster when it causes death, loss of livelihood and damage to property. As disasters are unpredictable, preventative measures from the local to the global scale aim to minimise losses.

Learning ladder

The Learning ladder lists the knowledge and skills you will learn. Each has five levels of difficulty. Learning skills at the bottom of the ladder will help you to master the skills at the top of the ladder.

Steps in knowledge progression	Hazard causes	Hazard impacts	Hazard responses	Planning and collecting	Representing information
5	I can analyse how hazard causes change.	I can predict changes to impacts.	I can evaluate responses.	I can use geospatial technology to record data.	I can follow ethical practices when working with data.
4	I can explain the interconnections between the causes of hazards.	I can compare impacts.	I can discuss government responses.	I can gather primary data.	I can use geospatial technologies to create maps.
3	I can explain how a hazard happens.	I can quantify impacts.	I can compare local scale responses.	I can gather information from secondary sources.	I can use geographical conventions to construct maps.
2	I can describe hazard distribution.	I can explain impacts.	I can explain responses.	I can plan an inquiry.	I can represent data and information.
1	I can identify physical causes of hazards.	I can describe impacts.	I can describe responses.	I can ask open-ended questions.	I can select data relevant to a question.
	Geomorphological hazards			Geographical inquiry	

Source 1: Following a 6.8-magnitude earthquake that struck Dingri County in Xizang Autonomous Region, south-west China, on 11 January 2025, rescuers transfer the personal belongings of earthquake-affected residents to a safe area in Xigaze City, Xizang, China.

	Interpreting information	Making conclusions	Strategies	Presenting ideas
5	I can use geographical concepts to structure data analysis.	I can evaluate ethical considerations.	I can consider perspectives to evaluate strategies.	I can analyse the implications of phenomena.
4	I can predict change to patterns.	I can assess the reliability of data.	I can design strategies.	I can explain interconnections with data.
3	I can explain distributions and patterns.	I can write evidence-based conclusions.	I can predict the impact of a strategy.	I can support explanations with data.
2	I can describe distributions and patterns.	I can describe the impact of geographical phenomena.	I can explain a strategy.	I can explain the relevance of information.
1	I can read graphs and maps.	I can answer geography questions.	I can describe a strategy.	I can describe phenomena using geographical terms.
		Concluding and decision-making		Communicating

Steps in skills progression

G3.1

What are geomorphic hazards?

Geomorphic hazards, or geohazards, are dangers that originate at or near the Earth's surface, such as volcanic eruptions, earthquakes and landslides. They pose a great threat to people and environments.

Volcanoes

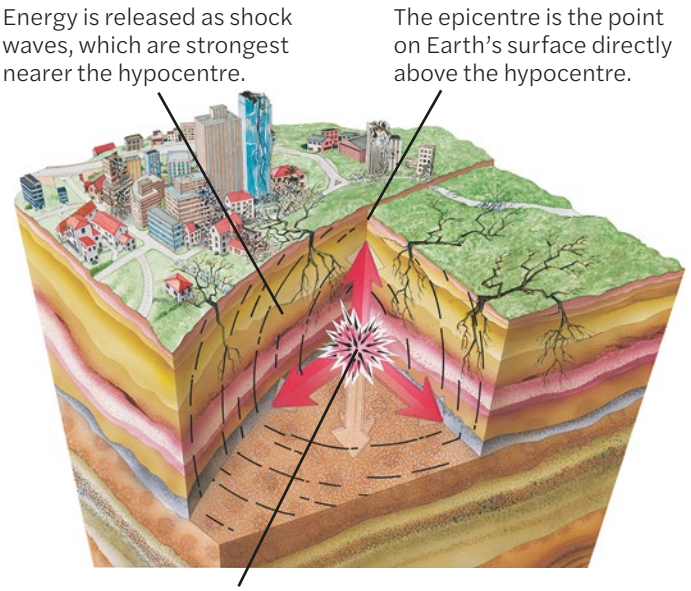
Volcanoes are a well-known geomorphic hazard. Dangerous **pyroclastic flows**, **volcanic bombs**, lava flows and volcanic gases pose a direct threat to people and the environment. Volcanic eruptions are interconnected with other **geomorphic hazards**, **lahars** (mudflows), **landslides** and even **tsunamis** caused by ocean-floor volcanic eruptions. However, not all the impacts of volcanoes on people and places are negative. Soil made from volcanic material is among the most fertile on Earth and humans value the minerals, gems and mud that come from volcanoes for their economic and health benefits. Volcanoes can also generate vast quantities of geothermal power.

Earthquakes

Earthquakes are one of the deadliest geomorphic hazards, with an estimated 10 000 people dying per year from earthquake events. An earthquake is caused when **seismic waves** shake the surface of the Earth. These waves are generated from the sudden release of energy in or beneath the Earth's crust. The shaking can impact the structural integrity of buildings and cause immediate widespread damage of infrastructure and high death tolls as people are hit by falling debris or are caught in building collapses. Earthquakes can also trigger landslides and tsunamis, which can have secondary impacts on people and place. The 1976 earthquake in Tangshan in China had the highest number of deaths to date, reaching over 240 000.

Source 1: Ash-covered Aeta people were forced from their villages on the slopes of Mount Pinatubo (see pages 334–5) following a volcanic eruption in 1991. More than 200 000 Aeta lost their homes and were forced into resettlement camps or moved to urban areas.

Source 2: Rescue workers digging in the rubble of a collapsed house following a 7.8-magnitude earthquake that hit Türkiye and Syria in 2023. More than 1.5 million people were left homeless and nearly 60 000 people died.



Source 3: An earthquake in action

A major earthquake struck Haiti's capital, Port-au-Prince, in January 2010, killing more than 200 000 people. Haiti is a low-income country where more than 24 per cent of the population lives in extreme poverty (less than $1.25 per day). The 1 million people left homeless by the earthquake could not afford to move elsewhere. In the devastated urban areas, more than 1.5 million displaced Haitians were forced into crowded and unsanitary camps in city parks, living in self-made structures or donated tents.

Humanitarian organisations such as the United Nations and the Red Cross supplied aid to Haiti. Countries sent doctors, relief workers and supplies in the wake of the disaster. Aid agencies struggled to supply the most basic needs, and 10 months after the earthquake, contaminated food and water caused an outbreak of cholera in the camps, claiming another 10 000 lives. Since the 2010 quake, more earthquakes have rocked Haiti, further compounding the humanitarian crisis.

Landslides

A **landslide** is the mass movement of soil, rock and debris down a slope. In most cases, landslides are caused by extended rainfall or flooding, where the soil becomes saturated and heavy. Landslides can also be triggered by earthquakes, volcanic eruptions or cutting into slopes for buildings and roads. In 1997, one of Australia's most devastating landslides occurred in Thredbo, New South Wales, destroying two buildings and killing 18 people. Miraculously, rescue workers pulled the sole survivor, Stuart Diver, from the rubble after he spent three days trapped there in sub-zero temperatures.

Learning ladder G3.1

Hazard causes

1. List one other geomorphic hazard that earthquakes can trigger.
2. Suggest why Haiti is vulnerable to earthquakes.
3. Explain why landslides happen.
4. Explain the interconnection between earthquakes and other geomorphic hazards.

Planning and collecting

1. Source 1: Write a question about this photograph that starts with 'how', 'why' or 'what'. Answer the question created by a partner.
2. Source 3: How might block diagrams be helpful when undertaking an inquiry?
3. Source 2: What rules need to be made for buildings in earthquake-prone areas? Research some examples.
4. Explain why photos can be a useful method of primary data collection when investigating the impacts of hazard events.

Make it spicy

Source 1: Evaluate the implications of *change* for the Aeta people and suggest actions that might have been taken to assist them.

HOW TO

Planning and collecting, page 426; block diagrams, page 437; change, page 240; photographs, page 456

What happens when a volcano erupts?

Volcanic eruptions are one of the most dangerous natural hazards on Earth. Explosive eruptions can completely destroy the surrounding area and ash clouds can travel for thousands of kilometres. Other eruptions may just produce small ash clouds or slow-flowing streams of lava.

Source 1: Calderón Hondo is a 278-metre-high volcano with a larger crater known as a caldera on top. Calderas are different from stratovolcanoes. When Calderón Hondo erupted, so much magma came to the surface that the surface sank to form a bowl shape called a caldera. The volcanic caldera, and one of eight volcanoes on the island of Fuerteventura, is part of the Canary Islands off the north-west African coast.

The main categories of volcanic eruptions are:

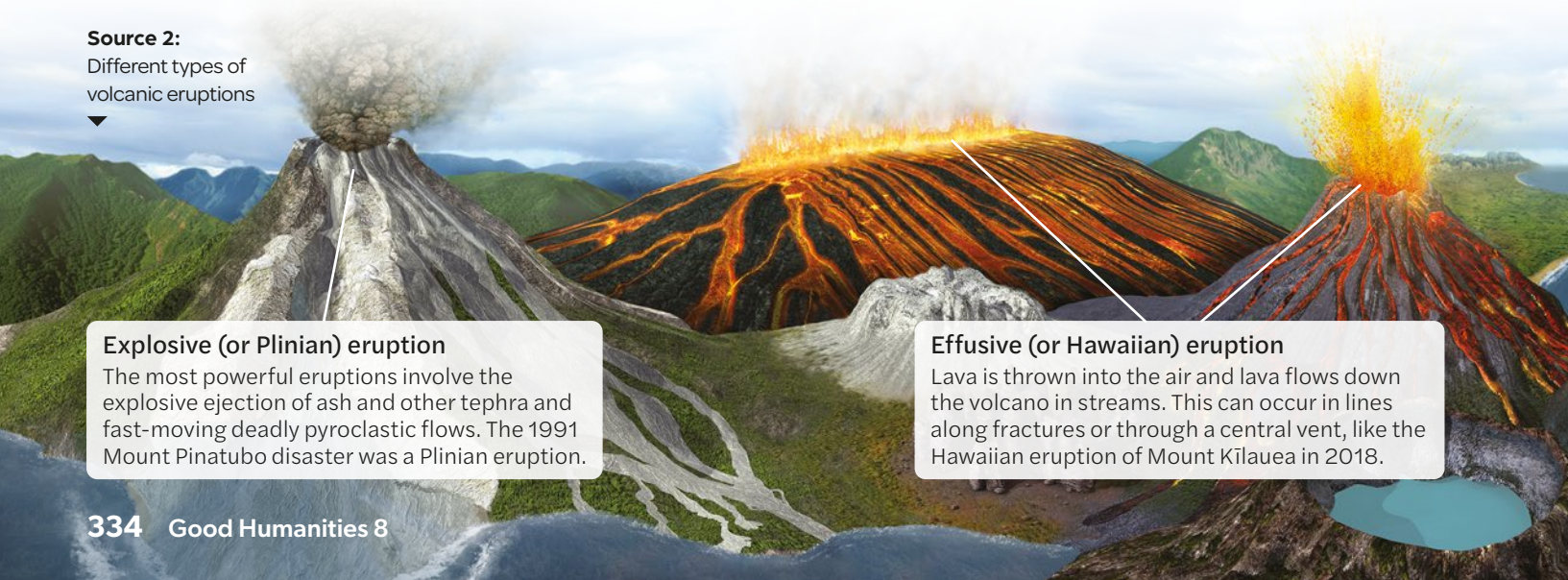
- **effusive eruptions** where magma flows out of the volcano as a lava, also known as Hawaiian eruptions
- **explosive eruptions** either where magma full of bubbling gas explodes as it reaches the surface, also called a Plinian eruption, or where magma reacts with water to create a steam-blast, also called a phreatic eruption.

The magma that feeds volcanoes along plate boundaries generally contains a lot of gas. If magma moves up through the volcano's vent slowly, the gases are released slowly and escape safely. However, if magma moves to the surface quickly, most gases are retained and will explode if there is enough pressure. Explosive volcanic eruptions push huge amounts of ash and gas high into the air. Powerful eruptions can launch large rocks, known as volcanic bombs, into the air.

Mount Pinatubo erupts

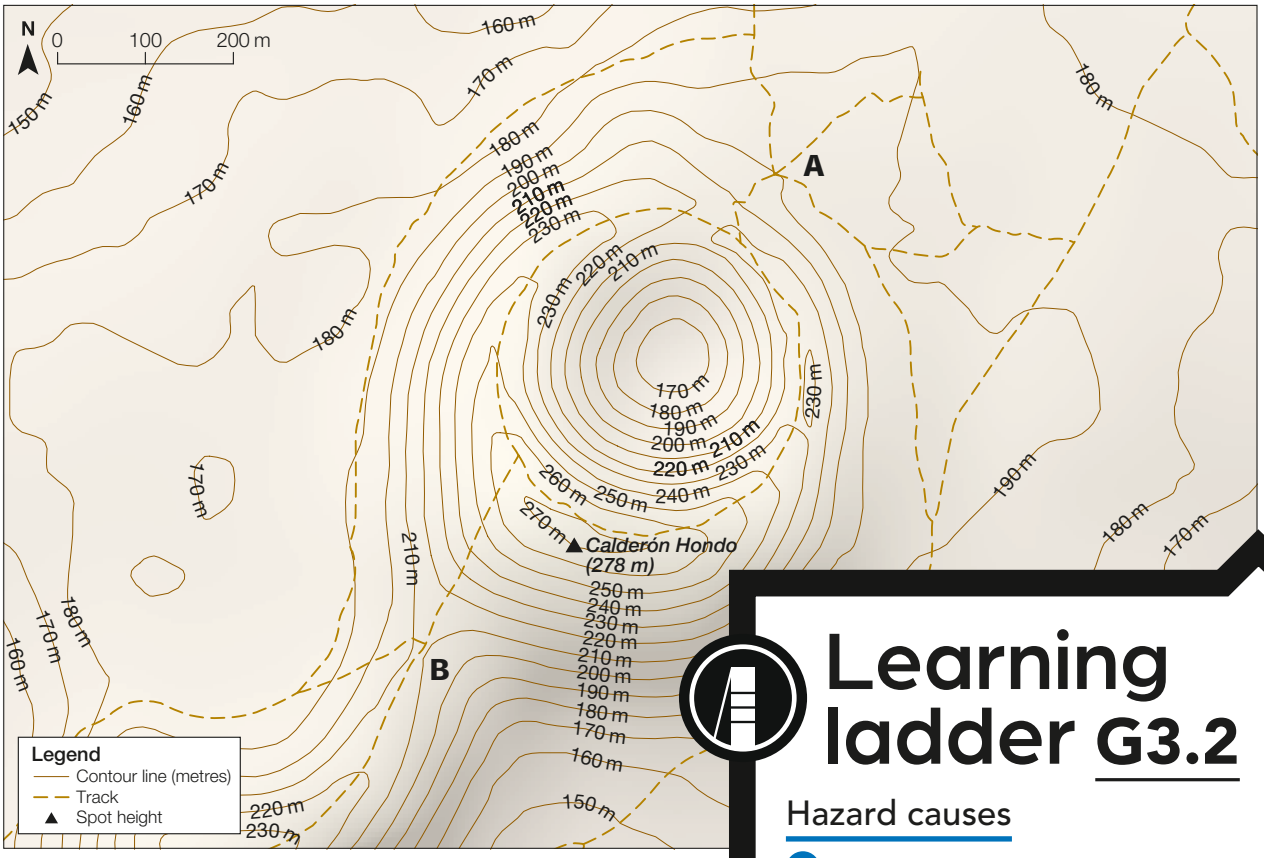
When Mount Pinatubo erupted in the Philippines in 1991, it ejected more than 5 cubic kilometres of material from its vent, and the ash cloud rose 35 kilometres into the air. An ash and sulfur-dioxide gas cloud travelled several times around the globe, blocking the sun and lowering world temperatures by 0.5°C for a year.

Source 2: Different types of volcanic eruptions



Contour map of Calderón Hondo

Source: Matilda Education Australia



Source 3: Calderón Hondo contour map

A pyroclastic flow raced down Mount Pinatubo, wiping out villages and everything else in its way. A pyroclastic flow is a huge avalanche of hot gas and rock particles, known as tephra, that can move at speeds of up to 700 kilometres per hour and heat to temperatures of 1000°C, destroying everything in its path. Near Mount Pinatubo, valleys were filled with ash and rock up to 200 metres thick. Heavy rains washed this material onto lowlands in fast-moving mudflows called lahars, creating even more damage than the eruption. More than 700 lives and 100 000 homes were lost in the Mount Pinatubo eruption.

Steam-blast (or phreatic) eruption
Steam-blast eruptions result from water or cold ground coming into contact with magma. Whakaari in New Zealand erupted in this way in 2019.

Learning ladder G3.2

Hazard causes

1. Source 2: What two environmental factors are present in a steam-blast eruption?
2. Where do volcanoes tend to occur?
3. Source 2: Explain the processes behind an effusive eruption.
4. Refer to G3.1: Explain the interconnection between volcanoes and other geomorphic hazards.

Interpreting information

1. Source 3: What are contour lines?
2. Source 3:
   - **a** What is the typical shape of a volcano on a contour map?
   - **b** Which two methods has the cartographer used to show the caldera on the map?
   - **c** What is the elevation of Point B?
   - **d** What is the distance between points A and B as the crow flies?
3. Sources 1 and 3:
   - **a** From which direction was the photograph in Source 1 taken; e.g. aerial, satellite or ground level?
   - **b** In which direction would you travel from point A to point B in Source 3?
4. Predict how volcanoes may impact people and place in the future as the world population continues to increase.

Make it spicy

What impact did Mount Pinatubo's eruption have on a local and global *scale*?

HOW TO

Interpreting information, page 446; scale, page 242

Case study

Why is Paricutín a natural wonder of the world?

Paricutín is a volcano located in Michoacán, Mexico. Paricutín offered humans the rare opportunity to witness not only the first eruption of a volcano, but also its extinction. Paricutín has provided geologists with invaluable insights into volcanic activity and its effects on the environment and communities.

1943 First eruption

Paricutín erupted for the first time on 20 February 1943, after many weeks of earthquakes. Dionisio Pulido, a farmer living near the village of Parícutin, was preparing his fields for spring sowing when he came across a small hill with a shallow crack in it approximately 2 metres wide.

As magma erupted, it released ash and small rocks, which dropped back to the ground around the vent of the volcano, creating the volcano's distinctive cone shape. Within 24 hours of Pulido's discovery, the volcano had grown 50 metres. The volcano was named Paricutín after the local village.

1944 The first year of Paricutín

Cinder cone volcanoes such as Paricutín are associated with dramatic and explosive eruptions. In its first year, the cinder cone of Paricutín ascended more than 450 metres from the base. Ash and lava buried the local village of Paricutín.

'Immediately more smoke began to rise with a hiss or whistle, loud and continuous; and there was a smell of sulphur.'
– Dionisio Pulido

1952 Continuous eruptions

Continuous eruptions caused the volcano to grow to over 400 metres high by 1952. Eruptions resulted in significant changes to the surrounding landscape, displacing local communities and altering agricultural outputs.

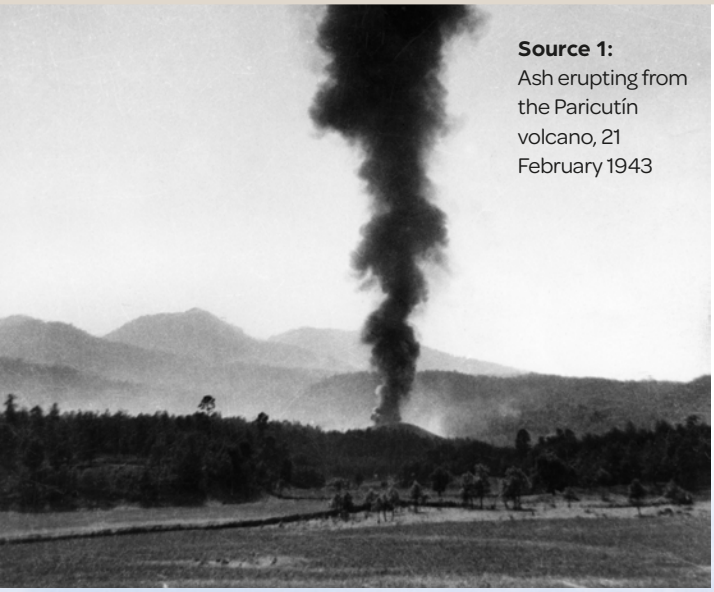
'When night began to fall, we heard noises like the surge of the sea, and red flames of fire rose into the darkened sky, some rising 800 metres or more into the air, that burst like golden marigolds, and a rain like artificial fire fell to the ground.'
– Celedonio Gutierrez

1953 Gradual decline

Slowly, the volcanic activity reduced to less frequent, minor eruptions that released more gas than significant lava flows.

1956 Extinction

By 1956, Paricutín's eruptions had ceased, marking the end of its active phase and allowing nature to gradually reclaim the area with new vegetation, creating a new ecosystem. Although no one died from lava or ash, three people were killed by lightning related to the eruption and thousands were displaced. The volcano is now a tourist attraction and a living laboratory for geologists.



Source 1: Ash erupting from the Paricutín volcano, 21 February 1943

Source 2: Ash and lava falling around the cone, causing the Paricutín volcano to grow quickly, October 1943

Source 3: Paricutín volcano and lava fields today

Learning ladder G3.3

Hazard impacts

1. Describe the formation of Paricutín. Describe the initial impacts to people and place.
2. Explain how Paricutín impacted the surrounding region.
3. Qualify the impact the ongoing eruptions had on people.
4. Compare the impacts of Paricutín to Mount Pinatubo (G3.2).

Planning and collecting

1. Imagine you had an opportunity to interview a Paricutín local in 1943. List two open-ended questions you might ask.
2. What data would geologists collect from the Paricutín site today?
3. Have human witnessed the formation of other volcanoes? Research this using a range of credible websites.
4. Would surveys be a useful primary method to use when studying the impact of Paricutín on communities in 1942? Justify your answer.

Make it spicy

How are landforms *interconnected* with landscape *change*?

Planning and collecting, page 426; change, page 240; interconnection, page 238

HOW TO

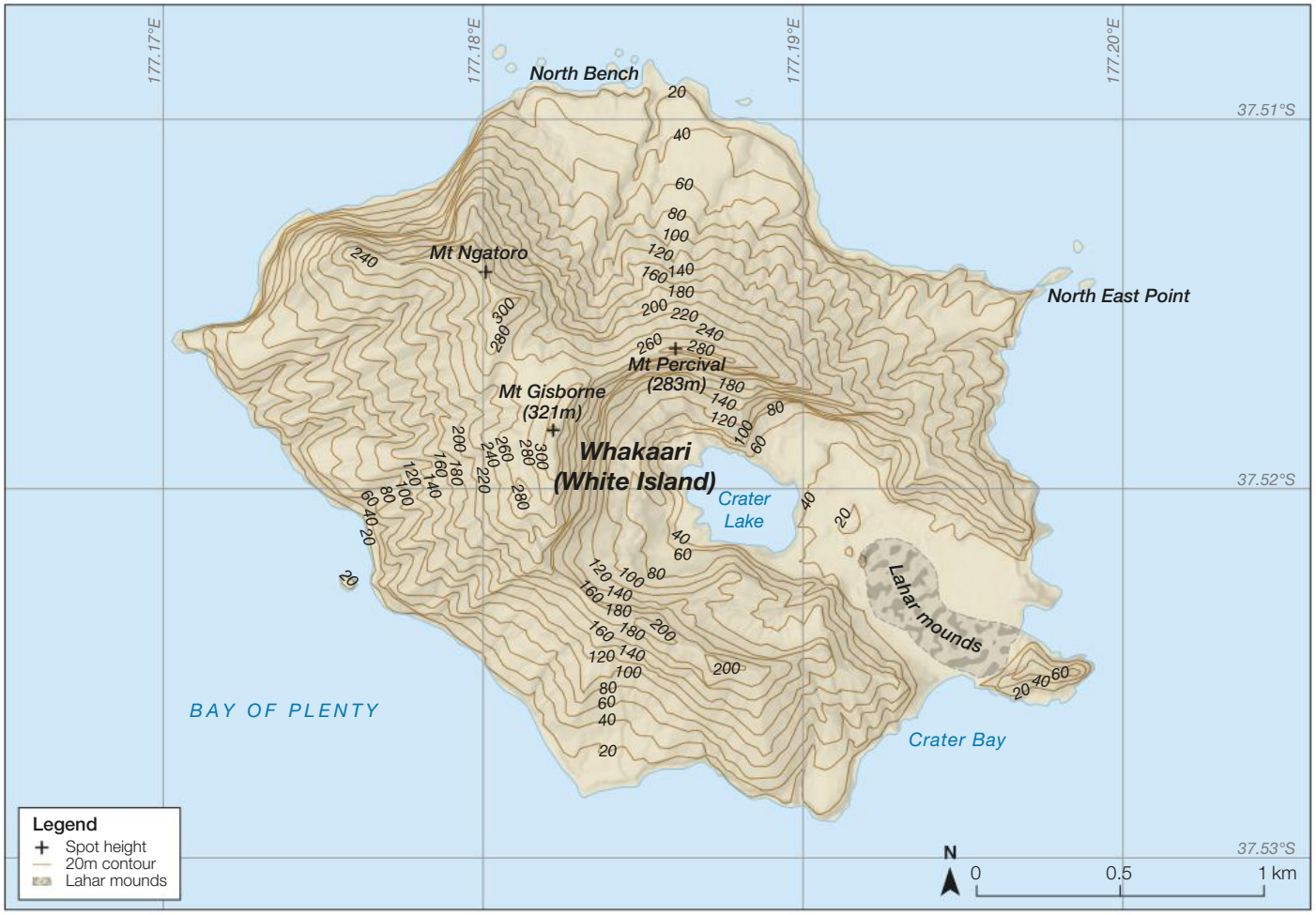
Case study

How did authorities respond to the Whakaari eruption?

In 2019, Whakaari (White Island) in north-eastern New Zealand exploded in a phreatic eruption – a steam-blast eruption resulting from water coming into contact with magma. The release of steam and volcanic gases launched rock and ash into the air.

Whakaari, an active stratovolcano located 48 kilometres off New Zealand's North Island, has erupted frequently in recent history, including in 2000, 2012, 2013, 2016 and 2019. In the weeks before the 9 December 2019 eruption, the island showed increasing signs of activity, with volcanic tremors and the highest sulfur dioxide levels recorded since 2016. On 24 November, a moment magnitude (Mw) 5.9 earthquake lasting about 1 minute occurred 10 kilometres north-east of the island. These factors indicated there was potential for an eruption.

Contour map of Whakaari



Source: Matilda Education Australia

Source 1: Whakaari contour map

Source 2: A phreatic volcanic eruption occurred on Whakaari (White Island) in 2019. The volcano is situated 48 kilometres from the east coast of the North Island of New Zealand.

Whakaari was a popular tourist destination with over 10 000 tourists visiting the privately-owned island annually. On 9 December 2019, 47 tourists (including 24 Australians) were visiting the island when, at 2.11 pm local time, a plume of ash exploded 3.7 kilometres into the air. Immediately following the eruption, emergency services launched search-and-rescue efforts. Local helicopter pilots who saw the eruption from the mainland aided in rescues. Police and military supervised the rescue operation. Tour operators leaving the island turned back to rescue people waiting on the jetty. Twenty-two of the tourists visiting the island died and survivors suffered severe burns and critical injuries.

Following the disaster, 13 parties, including tour operators and government agencies, were charged under New Zealand's *Health and Safety at Work Act*. The court awarded families of the victims $9.5 million in compensation. The island is now closed to tourists, but can be viewed from the air, and fishing is allowed nearby.

Source 3: In response to the tragedy, the New Zealand government announced a review of safety regulations for volcanic tourism. The report highlighted that around 10 000 tourists visited Whakaari annually.

Learning ladder G3.4

Hazard responses

1. How did people respond to the eruption emergency?
2. Suggest the challenges local authorities may have faced in managing the aftermath of the eruption.
3. Research another recent volcanic eruption. Compare the local responses to the Whakaari event.
4. Research and discuss the way the government responded to the Whakaari eruption. What lessons have been learnt from this event?

Making conclusions

1. Suggest why compensation was offered to the families of the victims of the eruption.
2. Describe the impacts of volcanic eruption on people and place using Whakaari as an example.
3. 'Tourists should not be allowed to visit Whakaari.' To what extent do you agree with this statement? Why?
4. Why is access to reliable data important when running tourist activities in high-risk areas?
5. Analyse the following statement, 'A disaster occurs when people's lives or money are impacted, so if no one had visited Whakaari on the day of the eruption, it would not have been a disaster.'

Make it spicy

Describe the characteristics of this *place*.

HOW TO

Making conclusions, page 464; place, page 236

Why do people live near volcanoes?

Around 800 million people live within 100 kilometres of active volcanoes across 86 countries. People living near volcanoes need to consider the trade-offs between the benefits, such as fertile land, and the dangers of eruption.

Agricultural benefits

It is estimated that volcanic soils cover around 1 per cent of land but grow food for over 10 per cent of the world's population. Over time, the physical and chemical weathering of volcanic rocks releases nitrogen, potassium, phosphorus and trace elements, which contribute to soil fertility. Volcanic rocks chemically weather faster into fertile soils in tropical climates like Indonesia, where there is a combination of high temperatures and high precipitation, compared to volcanoes located in cooler, drier environments like Iceland. Volcanic ash, known as tephra, is rich in nutrients, including calcium and potassium. In 2014, Mount Sinabung in Indonesia erupted, covering the village of Sigarang Garang with ash. While the immediate impacts of ash can be devastating for communities, as it breaks down and weathers, the ash from such an eruption is estimated to be equivalent to 10 million tonnes of fertiliser.

Cultural and spiritual connections

In the Hawaiian religion, the ancient fire goddess Pele, who lives in the crater at the top of the Kīlauea volcano, created Hawaii's landscape. When Kīlauea erupts, lava is the physical embodiment of Pele. She is known to be unpredictable, so Hawaiians traditionally provide gifts and offerings to keep her happy. During the eruption of Kīlauea in 2018, Hawaiians left leaves in front of their homes and flowers in cracks caused by the volcano for good luck.

Cost of land

In 2018, the eruption of Volcán de Fuego in southern Guatemala killed 109 people. Fast-moving lava flows devastated villages at the volcano's base, destroying entire communities. Many affected residents live in poverty and settle in hazardous areas due to cheap land prices. It is estimated that around 50 per cent of the population are internal migrants, displaced by poverty or political violence.

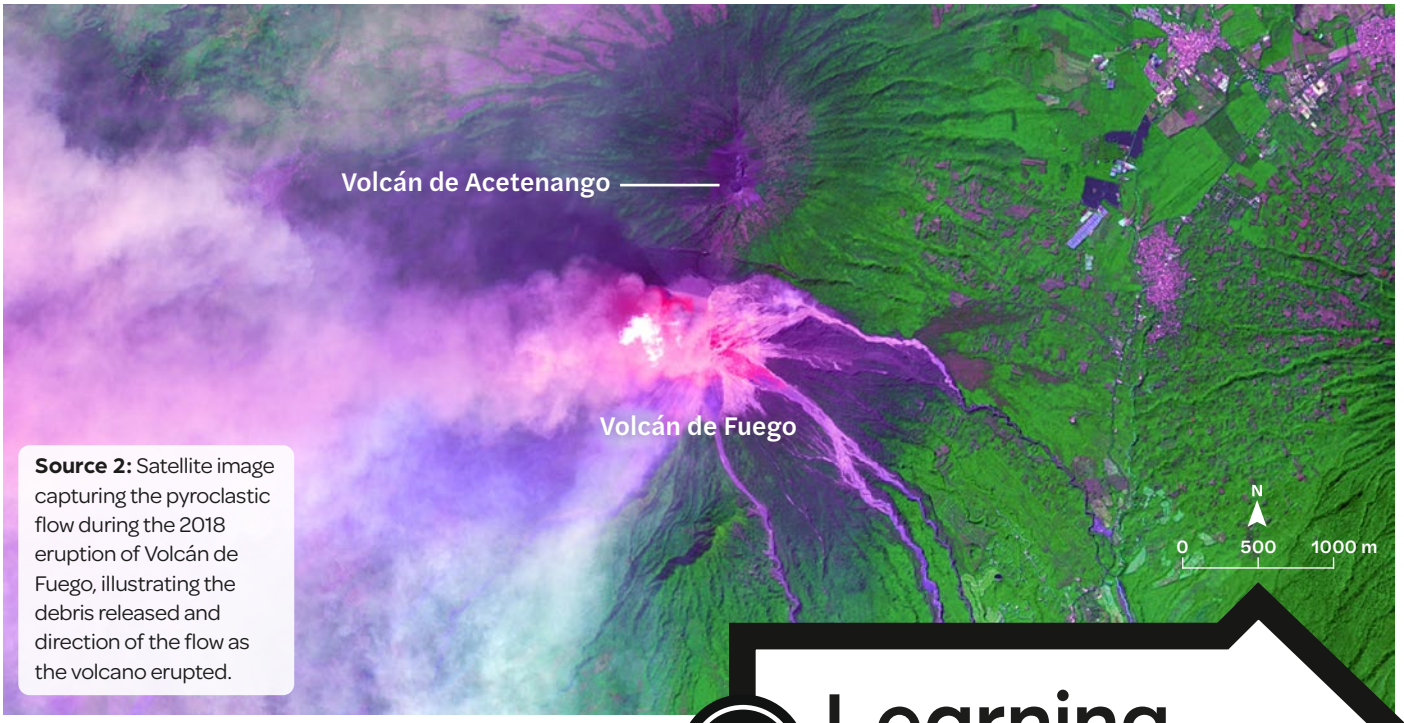
Eyjafjallajokull, Iceland
- Annual temperature range: 0–13° C
- Annual precipitation: 850 mm
- Extensive sheep grazing and pasture crops

Mount Taranaki, New Zealand
- Annual temperature range: 11–22° C
- Annual precipitation: >2000 mm
- Intensive dairying, sheep, beef and horticulture
- The plain surrounding Mount Taranaki was dubbed 'the garden of New Zealand' as early as 1840. It contains some of the deepest and richest soils in the world.

Mount Etna, Italy
- Annual temperature range: 20–21° C
- Annual precipitation: 800 mm
- Vineyards, citrus fruit, nuts

▲ **Source 1:** Farming volcanic soils in three locations

Pyroclastic flow of the 2018 eruption of Volcán de Fuego



Source 2: Satellite image capturing the pyroclastic flow during the 2018 eruption of Volcán de Fuego, illustrating the debris released and direction of the flow as the volcano erupted.

Economy and energy

Volcanoes can also contribute to energy production and economies through tourism. In Iceland, the active volcanic areas, particularly the Reykjanes Peninsula, are rich in geothermal resources. These resources heat about 90 per cent of Icelandic homes and supply 70 per cent of the nation's energy. Iceland is now a global leader in geothermal energy use, with innovations constantly being developed, such as drilling into magma to extract heat.

Tourism also thrives in Iceland, with tourists drawn to the volcanic landscape. Iconic attractions like the Blue Lagoon, located in a geothermal area surrounded by volcanoes, attract over 700 000 visitors per year. Tourism now accounts for over 8 per cent of Iceland's GDP. Volcanic tourism does have risks, however, with volcanic activity in 2024 resulting in the evacuation and closure of the Blue Lagoon and other major tourism hubs.

Source 3: In November 2024, the car park for Blue Lagoon in Iceland was completely inundated by lava from a nearby volcanic activity.

Learning ladder G3.5

Hazard impacts

1. What physical changes did the 2018 eruption of Volcán de Fuego cause in the surrounding landscape and communities?
2. Explain how cultural beliefs play a role in shaping the attitudes of communities towards living near volcanoes, such as in the case of Kīlauea.
3. How many people live within 100 kilometres of active volcanoes globally? Quantify the potential impacts of living in these regions.
4. Weigh up the potential benefits and costs of living near a volcano. Would you choose to live in a volcanic region? Justify your response.

Interpreting information

1. Source 2: What do the different colours on this satellite image represent?
2. Source 2: Which direction is the pyroclastic flow moving?
3. Source 2: What is a pyroclastic flow? Explain why the lava moved in this direction.
4. Predict how volcanic behaviour may influence people's decisions about where to live in the future.

Make it spicy

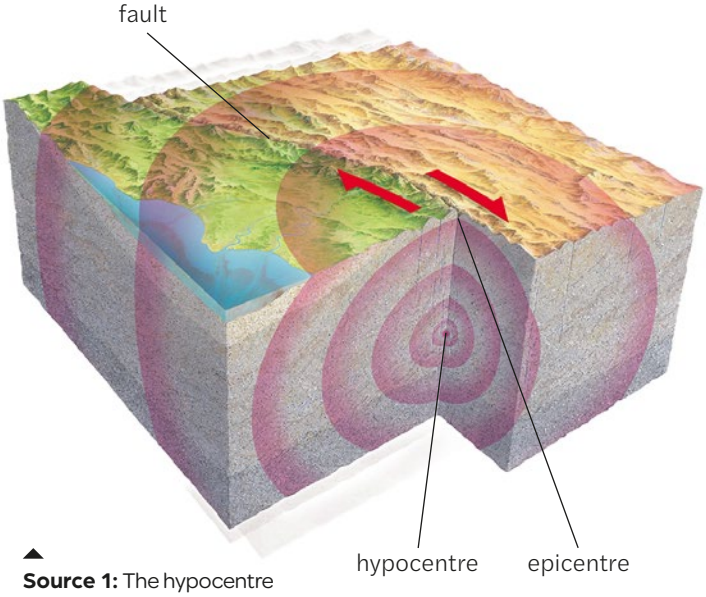
Source 1: Explain why agriculture is a common land use in volcanic *environments*.

HOW TO

Interpreting information, page 446; environment, page 241

How do earthquakes occur?

Earthquakes are natural events that occur when the Earth's surface suddenly shifts. These shifts can be so intense that they cause buildings to collapse, landslides, and even trigger massive waves called tsunamis, which can affect areas far from the earthquake's origin.



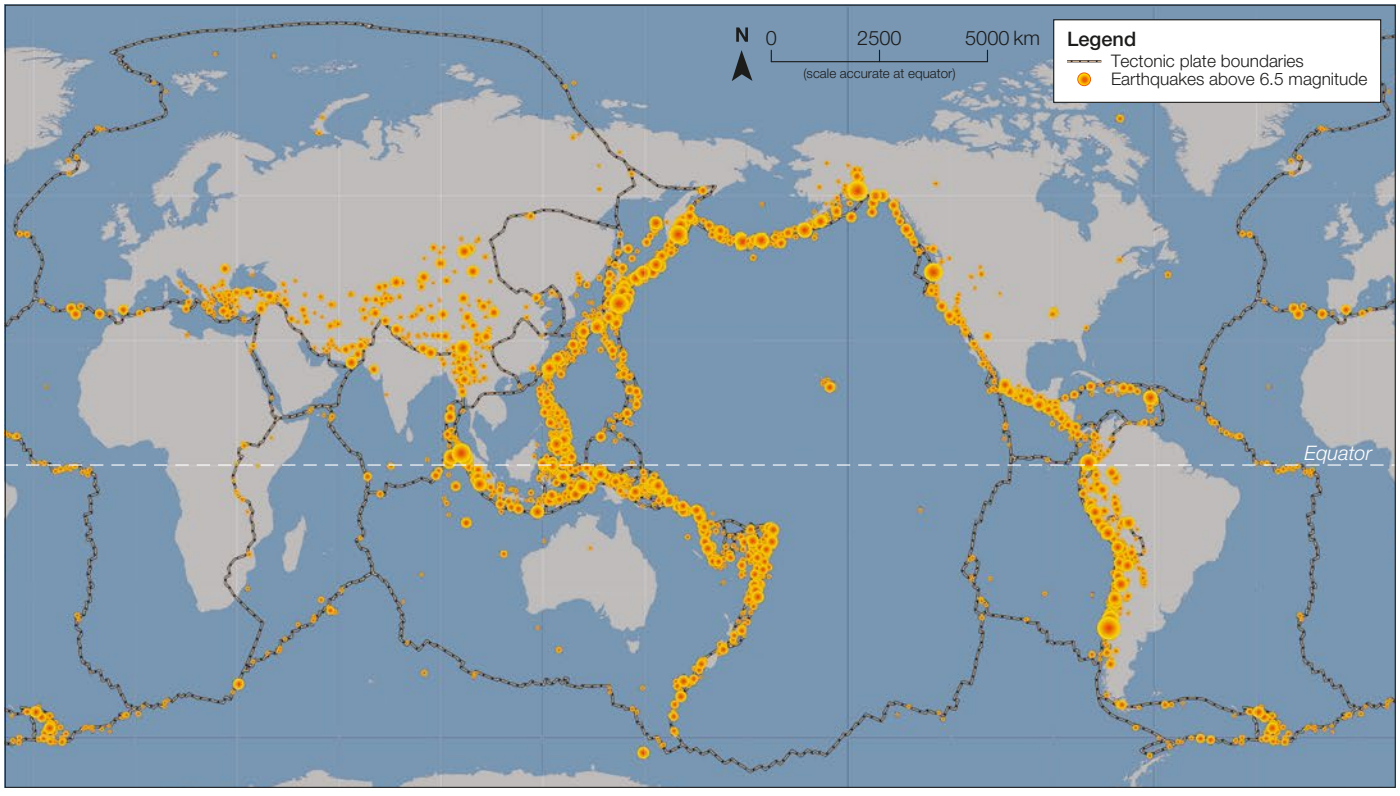
Source 1: The hypocentre and epicentre of an earthquake

Earthquakes have occurred for hundreds of thousands of years. The earliest recorded earthquake dates back to 1831 BC in Shandong province, China.

Earthquakes occur along **geological faults**, or fractures in the Earth's surface where tectonic plates move. Earth's surface is broken into several of these plates, which float on the more fluid mantle beneath. The plates are constantly moving, but they don't always glide smoothly. As the Earth's crust moves over the underlying mantle, the edges of the faults push and grind against each together. As stress builds up from this friction, the rocks eventually slip, suddenly releasing stored energy and generating the seismic waves that cause an earthquake. **Aftershocks** are further smaller earthquakes that occur after the larger **mainshock**. They can occur for weeks to even years after the initial earthquake, depending on its size.

Major earthquakes, 1900–2017

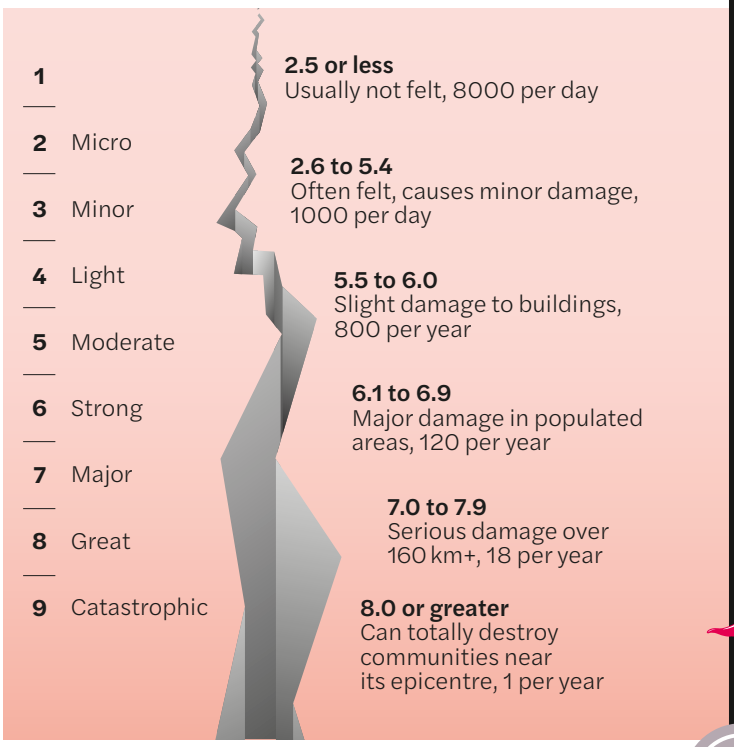
Source: Alamy



Source 2: Major earthquakes and their magnitudes, 1900–2017. About 80 per cent of earthquakes occur along the edges of the Pacific plate, such as in New Zealand and Japan. This region is known as the 'Ring of Fire' and is also home to many of the Earth's active volcanoes.

The point inside the Earth where an earthquake begins is called the **hypocentre**, while the point directly above it on the surface is the **epicentre**. The **magnitude**, or size, of an earthquake is measured using the **Richter scale**. The Richter scale provides a quantitative measurement of each earthquake using values from less than 2 to over 10. An earthquake measuring M3 would be classified as minor but would be felt by humans, while a classification of 9 or 10 would shake for about 30 minutes, and would be equivalent to 20 trillion kilograms of dynamite. Each day there are around 8000 micro-earthquakes, but most go unnoticed because they are too weak or occur in remote areas. Significant earthquakes that cause destruction occur roughly once a year. The strongest recorded earthquake, the Great Chilean earthquake in 1960, reached a magnitude of M9.5 and killed over 1500 people, injured more than 3000 and left an estimated 2 million people displaced and homeless. Based on today's figures, the cost of this quake was over $4.8 billion. A tsunami followed the quake and impacted distant communities in countries as far away as New Zealand and the Philippines. In the following three weeks, more than 260 aftershocks were recorded with magnitudes of 5.0 or greater.

In 2023, a magnitude 6.8 earthquake struck near Morocco's Atlas Mountains, killing nearly 3000 people, 2000 of whom were killed by falling debris in Marrakesh.



Source 3: Earthquake magnitude, frequency and impacts

Landslides and aftershocks, including a magnitude 4.9 tremor soon after, blocked roads and delayed rescue efforts for weeks.

Although scientists can't predict exactly when or where an earthquake will happen, advancements in geospatial technology have improved our understanding of earthquake risks. By studying historical data and monitoring seismic activity, geologists can identify areas that are more likely to experience quakes. Earthquake-resistant buildings, early warning systems, and emergency preparedness programs are all part of systems to reduce the damage caused by these events.

Learning ladder G3.6

Hazard causes

1. What factors contribute to the severity of the geomorphic hazards associated with earthquakes, such as tsunamis and landslides?
2. How does the frequency and magnitude of earthquakes vary across different regions of the world?
3. What is the significance of the Richter scale in understanding the impact of earthquakes?
4. Explain the interconnection between earthquakes and other geomorphic hazards such as landslides.

Presenting ideas

1. Source 1: How are the hypocentre and epicentre of an earthquake interconnected?
2. Explain why people living along the west coast of South America are more vulnerable to geomorphic hazards.
3. Source 2: Why does Australia experience fewer and less severe earthquakes than New Zealand?
4. Using a flow diagram, explain the process of earthquakes from tectonic movement to the occurrence of other geomorphic hazards.

Make it spicy

Source 3: Describe the *interconnection* between earthquake magnitude and damage.

HOW TO
Presenting ideas, page 472; interconnection, page 238

Case study

What was the impact of the 2023 earthquake in Türkiye and Syria?

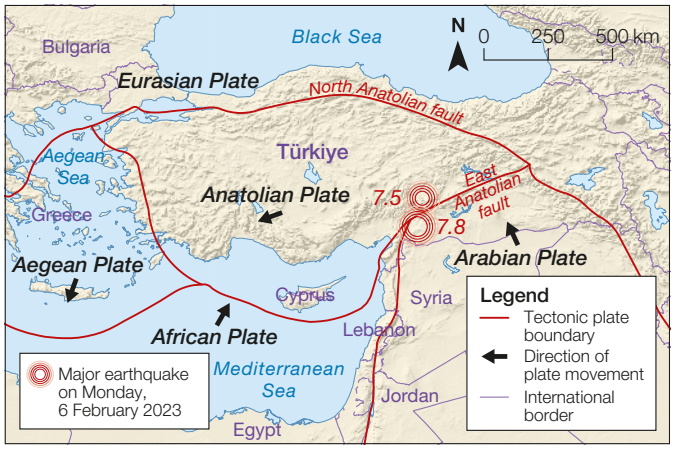
On 6 February 2023, a magnitude 7.8 earthquake hit southern Türkiye and northern Syria, leading to widespread damage over 350 000 square kilometres, killing 59 259 people and leaving 1.5 million people homeless in one of the deadliest disasters of the 21st century.

The earthquake

The M7.8 earthquake was the largest in Türkiye since 1939. The epicentre was close to Kahramanmaras in southern Türkiye, near the Syrian border. The earthquake hypocentre was 10 kilometres below the surface. Shallow earthquakes such as this are more damaging than deeper earthquakes because the seismic waves have less distance to lose energy. It was followed by a M7.7 earthquake hours later, 95 kilometres from the first epicentre, and 30 000 aftershocks in the three months that followed.

The sequence of earthquakes was the result of shallow **strike–slip faulting**, where parallel rock masses slipped past one another along the East Anatolian fault. The earthquake opened two enormous cracks, known as **fissures**, on the Earth's surface near the Türkiye–Syria border. The fissures were up to 7 metres wide and 300 kilometres long.

Fault lines and tectonic plates, Türkiye



Source: Matilda Education Australia

▲ **Source 1:** Map of Turkiye's fault lines and tectonic plates

Impacts

The earthquakes caused widespread damage over about 350 000 square kilometres. More than 160 000 buildings collapsed or were severely damaged, leaving 1.5 million people homeless. The death toll was 50 783 in Türkiye and 8476 in Syria – a total of 59 259 people. The damage bill is estimated at US$119 billion.

Roads and communications damaged by the earthquakes and winter storms hampered rescue efforts. Türkiye's Disaster and Emergency Management Presidency's team of rescue and relief workers included a 60 000-strong search-and-rescue team, 5000 health workers and 30 000 volunteers. A further 141 000 people from 94 countries joined the rescue and relief effort. Some places, such as Japan and California, have warning systems that can warn of an incoming earthquake up to a minute before it starts. These systems turn street lights red and bring trains to a halt. Türkiye did not have these systems in place.

Following a large earthquake in 1999, the Turkish government implemented a series of building codes to improve the rigidity of buildings to better withstand earthquakes. This meant any new buildings had to include at least one of the following designs:

- Structurally tie walls and floors together, using more steel than concrete.
- Design materials and layouts so opposite walls of a building move together during seismic activity, rather than apart as regular buildings do. This prevents buildings splitting and inner floors collapsing on each other.

Source 2: This oblique aerial view shows tents set up in the grounds of the Kahramanmaras stadium, Türkiye, to temporarily house the people left homeless by the earthquake on 6 February 2023. Snow on the nearby hills gives some idea of the freezing temperatures survivors and rescue workers faced in the aftermath of the earthquakes.

- Deepen the foundations of a building so they are connected to bedrock.
- Build on flexible pads to isolate the building from ground motion.

However, these design changes can increase building costs by 20 per cent or more. Many builders chose to pay a cheaper 'construction amnesty', where they were given approval to build without these structural designs. Further, many journalists have reported that the building codes were not strictly enforced. This resulted in more collapsed buildings, more damaged infrastructure and increased debris to sift through to find survivors.

Source 3: Oblique aerial view of rescue effort from collapsed buildings in Kahramanmaras, the epicentre of the first earthquake in February 2023.

Learning ladder G3.7

Hazard impacts

1. What was the epicentre of the 2023 earthquakes?
2. Describe the impact of the 2023 earthquakes.
3. Explain the causes of the 2023 earthquakes.
4. Consider if an earthquake of the same magnitude impacted Melbourne. Compare the possible social, economic and technological impacts with those of the 2023 earthquake in Türkiye and Syria.

Representing information

1. Source 2: Describe the physical and human characteristics of Kahramanmaras.
2. Source 3: Using tracing paper, annotate the oblique aerial photographs identifying impacts of the earthquakes in Kahramanmaras.
3. Source 2: Create a sketch map of the space photographed and label impacts and responses to the earthquake.
4. Access: https://mea.digital/ud6. In the 'Layers' tab, search for 'Recent earthquakes'. Click 'Add to map'. Click 'Legend' to understand the colour coding. Reduce the opacity to better view the world base map.
   - **a** Has there been any recent earthquake activity in the Syrian region?
   - **b** Where in the world have there been recent earthquakes?

Make it spicy

How effective was the response of the Türkiye government in preparing for an earthquake within this *space*?

HOW TO
Representing information, page 436; space, page 234

G3.8

How are tsunamis interconnected with earthquakes?

A tsunami, from the Japanese words *tsu* (harbour) and *nami* (wave), is a large ocean wave caused by earthquakes, volcanic eruptions, landslides or glaciers breaking apart and falling into the ocean, resulting in a large displacement of water.

Unlike wind-driven waves, which only affect the ocean's surface, tsunamis move through the entire **water column**, from the seafloor to the surface. Historically, tsunamis were also known as 'tidal waves', but this is inaccurate, as they are not connected to tides, which are driven by the gravitational forces of the Earth, Moon and Sun.

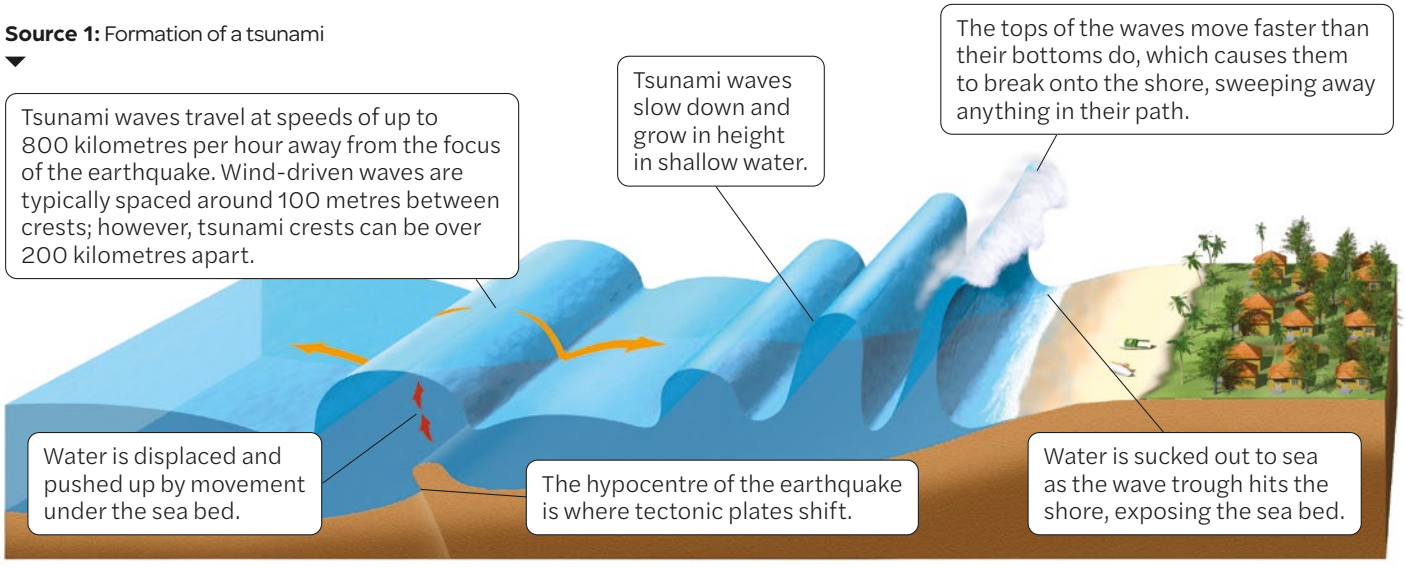
More than 75 per cent of tsunamis are caused by earthquake activity, particularly where tectonic plates converge. When tectonic plates shift, often in subduction zones, the seafloor can rise suddenly, moving a large volume of water. In the open ocean, tsunami waves can be as small as 30 centimetres in height, but can move up to 800 kilometres per hour. Tsunamis are often depicted in movies as a single wave, but they are typically a series of waves or a 'wave train'.

As the tsunami approaches shallower coastal waters, the waves slow down due to friction with the seabed. Meanwhile, faster-moving water piles in behind the waves.

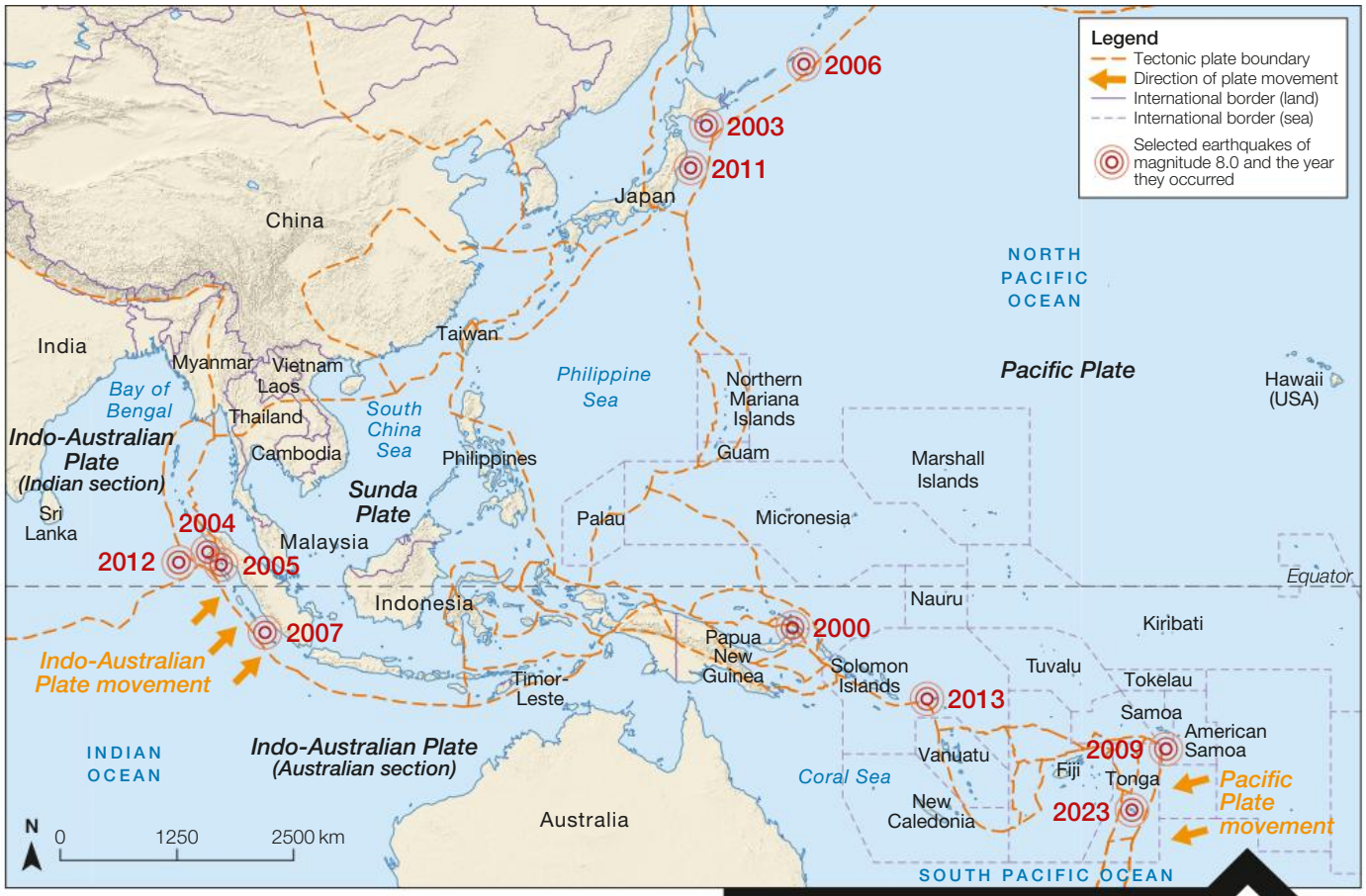
The crests begin to rise over the next 6 minutes, sometimes reaching heights of 30 metres or more. This surge can cause widespread destruction when it hits land. Next, there is a temporary withdrawal of water, a vacuum effect that can pull people and objects back into the sea. This 'drawback' is often depicted in movies, but in real life serves as an important warning sign before the larger wave strikes. Once the larger wave hits, it can flood inland, sweeping away buildings, vehicles and people.

Globally, tsunamis are most common in the Pacific Ocean, which is home to the 'Ring of Fire', a region with high seismic activity and frequent subduction zone earthquakes. Around 90 per cent of tsunamis originate in this area. While tsunamis are less frequent in other parts of the world, geological evidence, such as uncharacteristic inland sandy deposits containing shells or coral, suggests that regions like the Australian coast have also experienced tsunamis in the past thousand years.

Source 1: Formation of a tsunami



Major earthquakes near Australia, 2000–23



Source: Matilda Education Australia

Source 2: Major earthquakes near Australia since 2000

Source 3: Stromboli in the Aeolian Islands, Italy, has experienced numerous tsunamis in recent history. These events require quick beach evacuations, with tsunamis impacting within 4 minutes. Only 33 per cent of coastal buildings can evacuate in that time, and GIS has been used to plan for alternative evacuation options, including vertical evacuation (moving to higher ground).

Learning ladder G3.8

Hazard causes

1. What is a tsunami?
2. Source 2: Describe the distribution of major earthquakes near Australia since 2000.
3. Source 2: Explain why tsunamis are prevalent in this region.
4. Source 3: Why is geospatial technology important for planning for and predicting tsunamis?

Presenting ideas

1. Source 1: Describe how tsunamis are formed.
2. Source 2: Why is an earthquake relevant for understanding the occurrence of tsunamis?
3. Research why the 2004 Indian Ocean tsunami was the deadliest in history.
4. Research and respond to the following statement: 'Tsunamis are predictable events that can be avoided.'

Make it spicy

How are earthquakes *interconnected* with tsunamis?

HOW TO

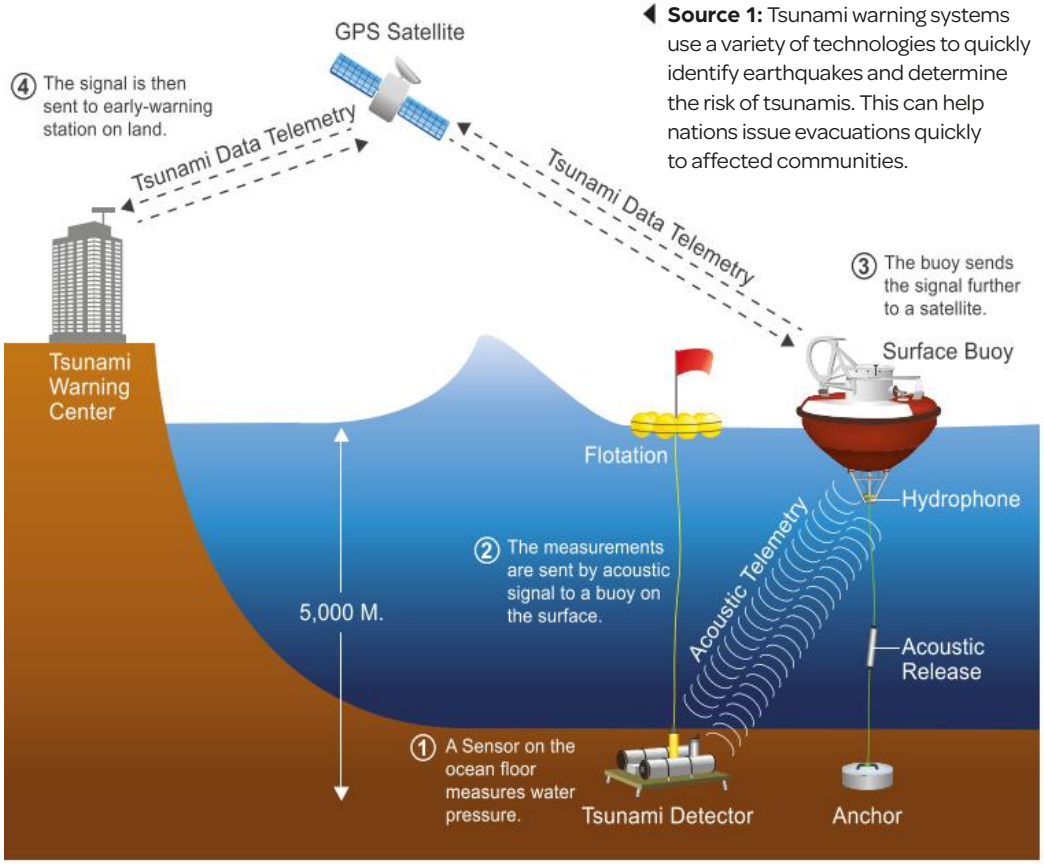
Presenting ideas, page 472; interconnection, page 238

How do countries respond to and manage tsunamis?

In the last century, more than 58 tsunamis have claimed over 260 000 lives. More of these hazards are expected in the future as climate change leads to rising sea levels. Countries cannot prevent tsunamis, so it is important to be prepared for when they do occur.

Warning systems

It is difficult to be entirely prepared, as tsunamis travel as fast as 640–960 kilometres per hour, and their direction and magnitude can be influenced by the shape of the seabed, the water depth and the location of the epicentre. However, new technologies have made this easier. Seismologists (scientists who study the Earth's tectonic crust) can use conductivity instruments, seismometers and thermal cameras to detect underwater volcanic activity and tectonic movements. Drones, satellites and buoys placed around the ocean can also detect if water surface levels decrease, a sign that a tsunami is about to occur. These technologies feed live information to international organisations that constantly monitor tsunami activity, such as the Pacific Tsunami Warning Centre. If implemented effectively, evacuation procedures can occur within 15 minutes of an earthquake, giving people as much time as possible to evacuate or seek high ground.



Source 1: Tsunami warning systems use a variety of technologies to quickly identify earthquakes and determine the risk of tsunamis. This can help nations issue evacuations quickly to affected communities.

Coastal defence

Tsunami-vulnerable countries can implement coastal defences such as sea walls, offshore breakwaters, tsunami walls and flood levees. A more cost-effective solution is to strengthen natural barriers, such as coral reefs, to reduce the energy of waves, using nature-based solutions like rock armour or heavy sandbags. Forests can also be planted between communities and coasts to act as buffer zones, reducing the impact of tsunami waves.

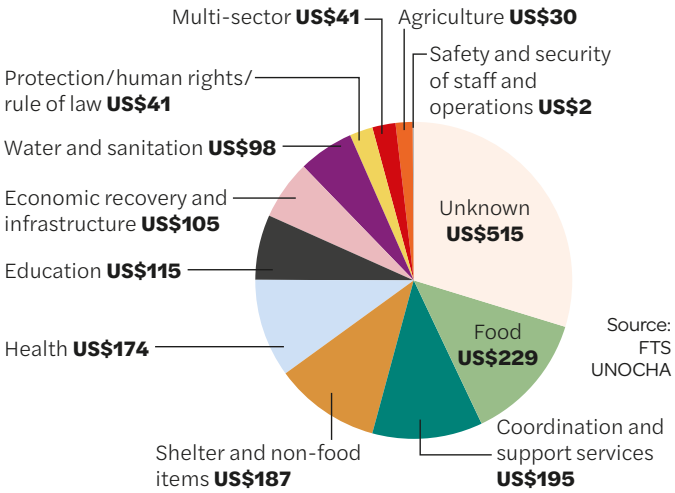
Governments also need to locate critical infrastructure, such as power plants and densely populated areas, on higher ground to minimise their risk of damage. After the 2011 Tohoku tsunami in Japan, towns were rebuilt on elevated ground filled with compacted soils. This will help to reduce the impact of future tsunamis on infrastructure and people.

Source 2: A new coastal levee under construction in Japan. This concrete levee will absorb energy from any future tsunami waves, to reduce the intensity of the waves moving inland towards communities.

Aid responses

Aid is crucial after tsunamis to support affected communities in their recovery and rebuilding efforts. Governments, international organisations, non-governmental organisations (NGOs), and individuals all contribute aid to impacted areas. This aid can take various forms, including financial assistance, medical supplies, food and water, shelter, and rebuilding infrastructure and housing. Following the 2004 Indian Ocean tsunami, $6.25 billion was donated and used to assist 14 countries, including Sri Lanka, Myanmar, Somalia, Indonesia and Thailand. A separate flash fund by the United Nations raised 1.25 billion. Source 3 shows how the funds were used.

2004 Indian Ocean tsunami funding by sector (US$ millions)



▲ **Source 3:** The distribution of the $1.25 billion of aid from the United Nations after the 2004 Indian Ocean tsunami. This was divided among the 14 most-affected countries, with Indonesia and Sri Lanka receiving the largest amount of funding.

Learning ladder G3.9

Hazard responses

1. Describe the role of seismologists in detecting tsunamis, including the technologies they use.
2. Explain the role of aid in supporting communities affected by tsunamis, and identify the various sources of aid.
3. Compare the importance of natural barriers, such as coral reefs and forests, with detective technologies for early warnings.
4. Discuss the significance of aid to help with the response of countries affected by tsunamis. Refer to the 2004 Indian Ocean tsunami aid as an example.

Strategies

1. Identify one international and one national response to tsunamis.
2. Describe how governments coordinate relief efforts and distribute aid to affected regions after a tsunami.
3. Technologies are required to effectively warn people of an incoming tsunami. Why might this disadvantage lower-income nations?
4. Design a coastal defence system that may reduce the impact of tsunamis for communities.

Make it spicy

Analyse the importance of international organisations in monitoring tsunami activity and issuing warnings to affected *places*.

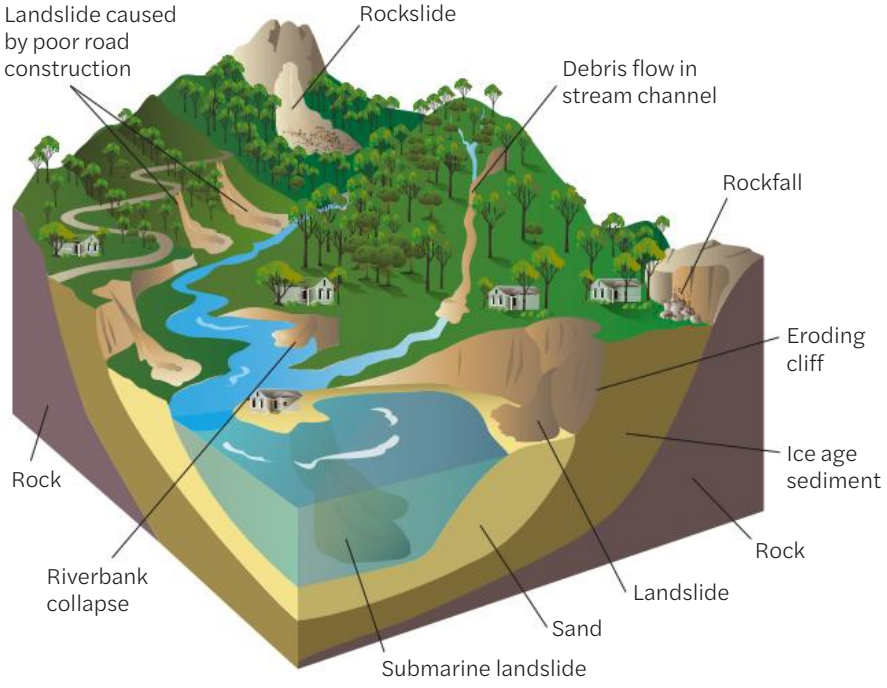
HOW TO

Strategies, page 468; place, page 236

How do landslides occur?

Landslides are a common natural hazard that can range in impact from road closures to significant destruction and loss life. Approximately 8000 fatalities worldwide occur each year as a direct result of landslides.

Have you ever noticed how a section of a bush trail can erode and shift after heavy rain? Landslides are large-scale versions of this process. They occur when rocks and soil move down a slope under the force of gravity. Factors such as increased water content from rainfall, snowmelt or rising groundwater, along with physical or chemical weathering, earthquakes, volcanic eruptions and human activities (like deforestation, construction and climate change), can all increase the likelihood of a landslide by destabilising the terrain. High-risk areas include the southern Himalayas, parts of China, Indonesia and Central America. The most damaging landslides are often mudslides, where a mixture of soil and water destabilises slopes. A mudslide in Gansu, China, in 2010 resulted in 1765 deaths.



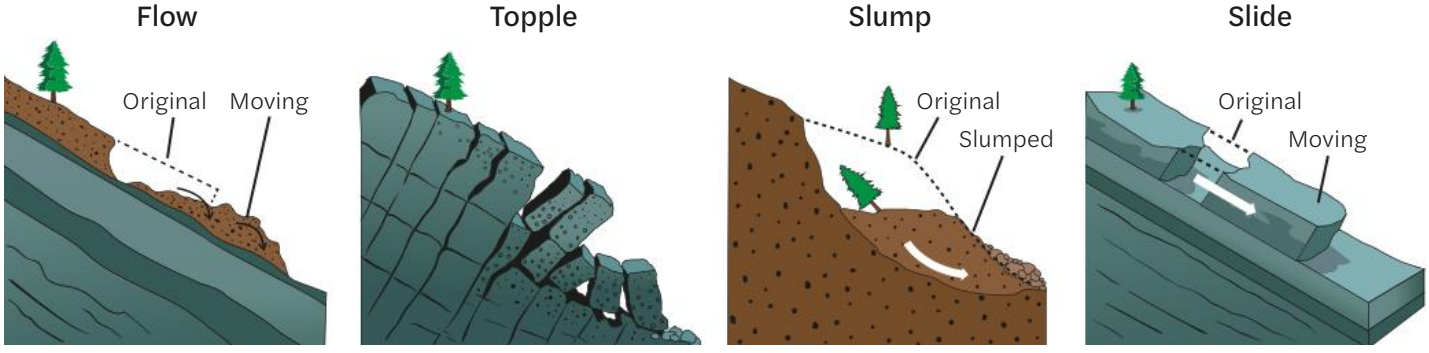
Source 2: Location of different types of landslides in a landscape

Planning for and managing landslides

Landslide hazard analysis, mapping and **geographic information systems (GIS)** assist in allowing planners to develop sustainable land-use practices. Before-and-after aerial photographs and satellite imagery are used to reveal how the landscape has changed, what triggered the landslide, and strategies for effective recovery.

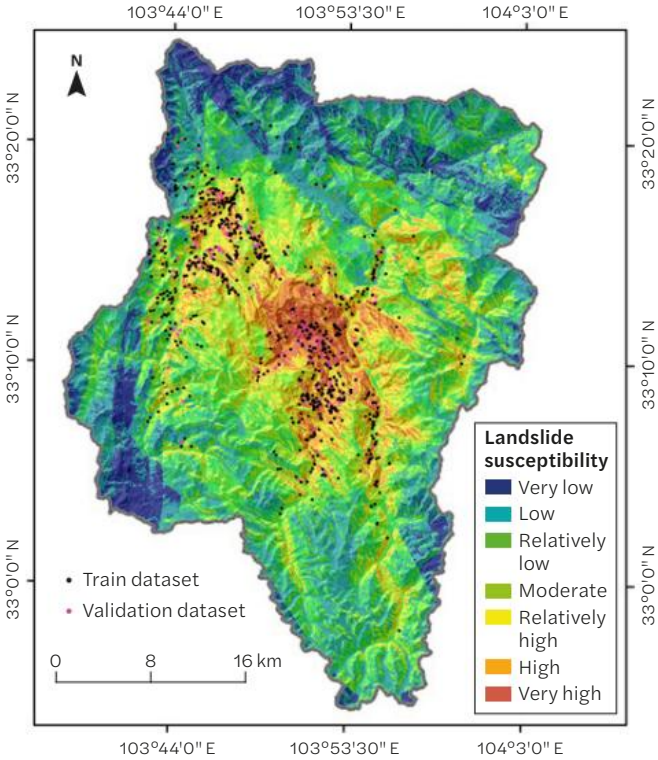
To reduce the impact of landslides, countries have implemented measures such as building retaining walls and establishing early warning systems. Signs of potential landslides include leaning trees, broken water pipes and cracked roads. Geoscience Australia encourages residents to report these indicators to help prevent disasters.

Source 1: Types of landslides



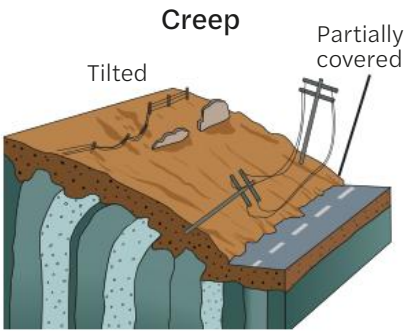
Source 3: A massive landslide buried much of the small city of Alausi in Ecuador's Andes Mountains in 2023. The landslide destroyed 57 buildings and left 1000 people homeless. At least 48 people died in the landslide, caused by months of heavy rainfall.

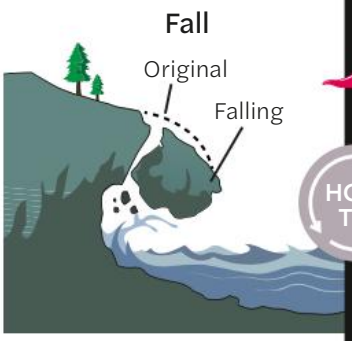
GIS-based mapping of landslide susceptibility



Source: Yaning et al 2019

Source 4: In 2017 an M6.5 earthquake in Jiuzhaigou, China, triggered numerous landslides. Researchers used GIS-based mapping to assess landslide susceptibility, analysing 842 landslides from satellite images.





Learning ladder G3.10

Hazard causes

1. What natural factors can trigger landslides?
2. In which regions of the world are landslides most likely to occur? What geographical features contribute to their frequency?
3. Source 4: Identify the areas most susceptible to landslides. Explain why these places are particularly vulnerable.
4. How is human activity connected with the frequency of landslides?

Making conclusions

1. Source 1: Landslides vary in speed and distance. What does this mean?
2. Source 4: Suggest procedures to reduce the likelihood of a landslide hazard developing into a disaster.
3. Explain why the number of landslides is expected to increase in the future.
4. Source 4: How reliable is this data in helping predict future landslides?

Make it spicy

Identify *environments* where landslides occur.

HOW TO

Making conclusions, page 464; environment, page 241

Case study

What was Australia's worst landslide disaster?

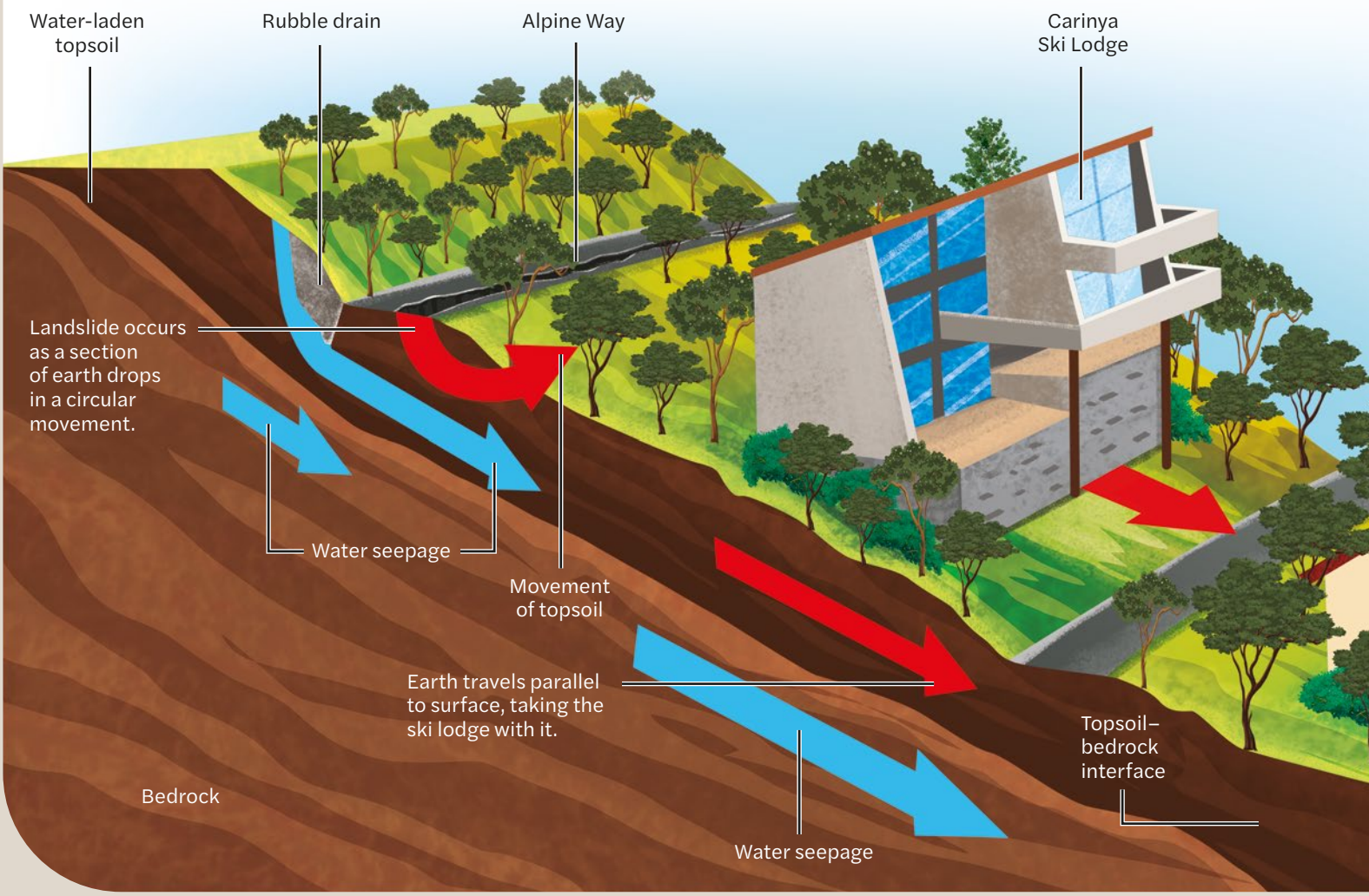
The 1997 Thredbo landslide, although small by world standards, was Australia's deadliest landslide, with the loss of 18 lives.

The landslide and its impacts

The Thredbo landslide occurred at 11.40pm on 30 July 1997, when a section of the Alpine Way embankment slid down a steep slope into the ski resort of Thredbo in New South Wales' Snowy Mountains. The **flow landslide** knocked Carinya Lodge off its foundations and pushed it into Bimbadeen Lodge at high speed, destroying both buildings and burying 19 victims under 2000 cubic metres of rubble.

The steep slope and instability of the land hampered rescue operations. An underground stream that was exposed by the landslide needed to be dammed before the rescue operation could start. Eighteen bodies were recovered from the rubble and only one survivor, Stuart Diver, was rescued after spending more than 60 hours under the debris.

Source 1: How the 1997 Thredbo landslide disaster occurred



Source 2: Damage is surveyed by rescue teams at the site of the 1997 Thredbo landslide.

Investigations and analysis of the landslide found a leaking water main had saturated the embankment on the Alpine Way road, causing a flow landslide, where the land slipped down in a semi-liquid state.

A large section of the Alpine Way was reconstructed following the landslide, including support structures above and below the road to stabilise the land on the steep slope.

Learning ladder G3.11

Hazard impacts

1. Describe the impacts of the Thredbo landslide.
2. Source 2: Explain what has happened in this place.
3. Explain the impacts of the Thredbo landslide.
4. Compare the impacts of this event to another recent landslide disaster.

Strategies

1. What action was taken to reduce the chance of a landslide following the Thredbo tragedy?
2. Source 2: Why was the rescue effort a difficult one?
3. Explain how an unsustainable water management system contributed to the Thredbo landslide.
4. Is there likely to be a landslide in Thredbo in the future? Will the strategies currently in place prevent negative outcomes?

Make it spicy

Source 1: Explain the *interconnection* between the movement of water and soil in the Thredbo landslide.

HOW TO

Strategies, page 468; interconnection, page 238

How do I conduct a good inquiry?

Throughout the chapter you have developed knowledge and understanding of geomorphic hazards. Background knowledge is important as it helps you make connections to new information, ask better questions, and consider different perspectives. As you were progressing through the chapter you have been gathering information through highlighting, note taking, or responding to the Learning ladder. It is now time to start planning your inquiry! Refer to pages 476–82 for a step-by-step guide to this process.

Throughout this chapter, a range of case studies were presented to apply your learning to real-life events. Review these pages and select a case study to build your inquiry around.

- Why is Paricutín a natural wonder of the world?, page 336
- How did authorities respond to the Whakaari eruption?, page 338
- What was the impact of the 2023 earthquake in Türkiye and Syria?, page 344
- What was Australia's worst landslide disaster?, page 352

For your selected case study, complete a 'see, think, wonder' to help build curiosity and develop ideas you may cover in your inquiry.

Remember: A good inquiry will be focused on an aspect of the topic that interests you. It is more than just a research task that you present as a PowerPoint, it is a genuine investigation into something you are wondering about.

See
What do you see?
What are the human and physical characteristics?

Think
What do you think about that?
Where is it?
Why is it there?
When did it occur?

Wonder
What questions does this raise in your mind?
What else do you need to know to understand what is happening here?
What are other people saying about this?

Write down five observations you make when viewing the data presented.

The following is a list of example open-ended questions which may help you develop your inquiry.

Geomorphic hazards

- **Descriptive question:** *What geomorphic hazards are prevalent in my local area and how do they influence land use and community planning?*
- **Procedural question:** *How does an earthquake occur, and what are its immediate impacts?*
- **Comparative question:** *How do the effects of volcanic eruptions differ from the effects of landslides?*
- **Evaluative question:** *How effective are hazard mitigation strategies in protecting communities from geomorphic hazards?*

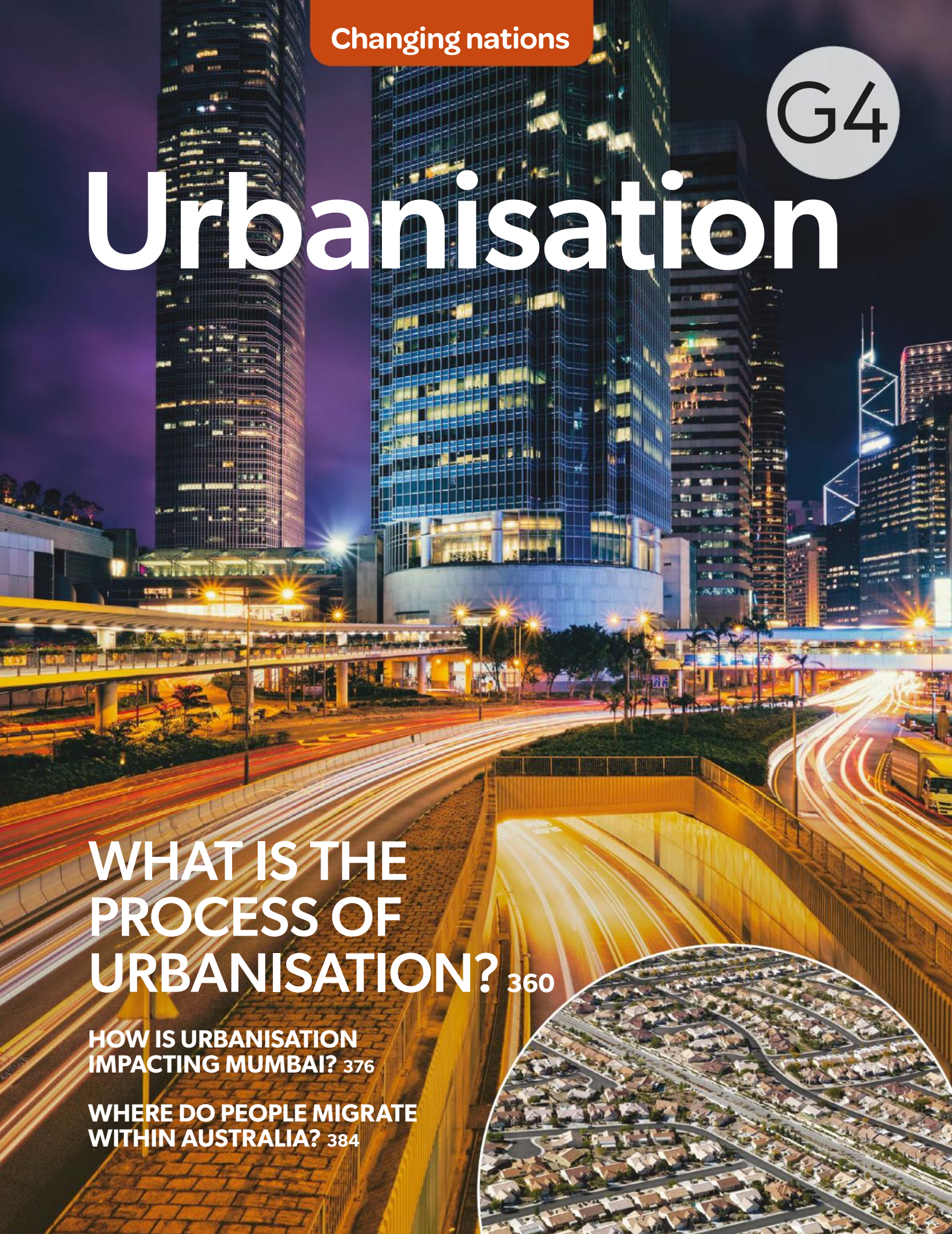
Level up!

Throughout the chapter you have been working to move up the Learning ladder. An inquiry investigation is a great opportunity to practise these skills in context. When planning your inquiry consider how you may integrate geospatial technology into your fieldwork or how you may explore a range of perspectives. Use the How-to chapter to support you in planning and research.

Changing nations

G4

Urbanisation



WHAT IS THE PROCESS OF URBANISATION? 360

HOW IS URBANISATION IMPACTING MUMBAI? 376

WHERE DO PEOPLE MIGRATE WITHIN AUSTRALIA? 384

G4.0

How can I understand urbanisation?

More than half the world's population now lives in urban areas, as large numbers of people move from rural areas to cities seeking job opportunities, higher pay, and better access to health care and education.

Learning ladder

The Learning ladder lists the knowledge and skills you will learn. Each has five levels of difficulty. Learning skills at the bottom of the ladder will help you to master the skills at the top of the ladder.

Steps in knowledge progression	Patterns of urbanisation	Migration	Impacts on places	Planning and collecting	Representing information
5	I can evaluate the causes or consequences of urbanisation.	I can analyse migration patterns.	I can evaluate impacts on places.	I can use geospatial technology to record data.	I can follow ethical practices when working with data.
4	I can compare urbanisation patterns.	I can compare different types of migration.	I can explain the interconnection between impacts.	I can gather primary data.	I can use geospatial technologies to create maps.
3	I can explain urbanisation patterns.	I can explain why people migrate.	I can explain impacts on places.	I can gather information from secondary sources.	I can use geographical conventions to construct maps.
2	I can describe urbanisation patterns.	I can describe migration patterns.	I can describe impacts on places.	I can plan an inquiry.	I can represent data and information.
1	I can identify causes of urbanisation.	I can identify migration types.	I can identify impacts on places.	I can ask open-ended questions.	I can select data relevant to a question.
	Urbanisation			Geographical inquiry	

Source 1: In the 19th century, London became the world's largest city, as people poured into the city for work in the new factories as part of the Industrial Revolution. Today, the largest and fastest-growing cities are in the world's low-income countries, particularly in Asia.

	Interpreting information	Making conclusions	Strategies	Presenting ideas
5	I can use geographical concepts to structure data analysis.	I can evaluate ethical considerations.	I can consider perspectives to evaluate strategies.	I can analyse the implications of phenomena.
4	I can predict change to patterns.	I can assess the reliability of data.	I can design strategies.	I can explain interconnections with data.
3	I can explain distributions and patterns.	I can write evidence-based conclusions.	I can predict the impact of a strategy.	I can support explanations with data.
2	I can describe distributions and patterns.	I can describe the impact of geographical phenomena.	I can explain a strategy.	I can explain the relevance of information.
1	I can read graphs and maps.	I can answer geography questions.	I can describe a strategy.	I can describe phenomena using geographical terms.
		Concluding and decision-making		Communicating

Steps in skills progression

G4.1

Where are the world's urbanised areas?

More than half of the world's population now lives in urban areas, mainly along coastal regions in the northern hemisphere. Urbanisation has seen cities in Asia grow rapidly.

What is an urban area?

An **urban** area is a densely populated human settlement. In Australia, urban areas are defined as centres of 1000 or more people, with a **population density** of at least 200 people per square kilometre. Urban areas such as cities and towns contain commercial and residential buildings, and **infrastructure** such as transport, power, water and sewage treatment.

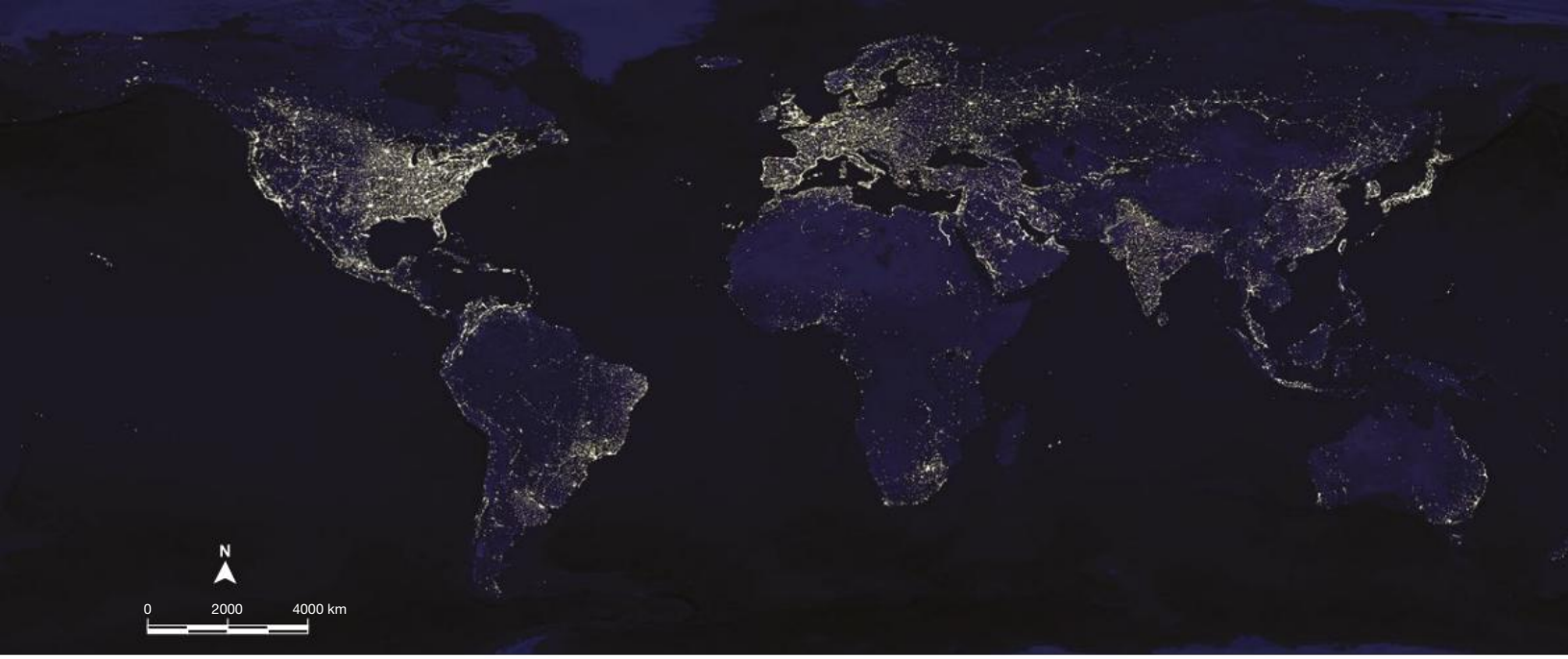
Where are urban areas?

Urbanisation refers to the growth of urban areas as more people move from **rural** areas to cities. The world's urban areas are generally located close to coastlines and transport routes. They are found in areas of high rainfall and on flat land. Desert, mountain, forest and polar environments have some of the lowest population densities on Earth.

The **northern hemisphere** contains most of the world's largest urban areas and cities. Europe and the United States are two regions that have been highly urban for a long time.

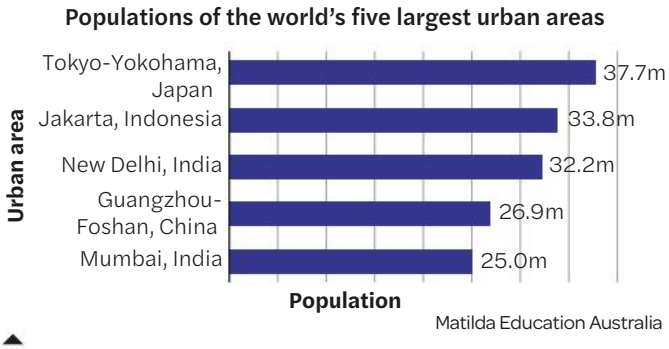
China, India, Indonesia and Singapore have experienced recent and rapid urbanisation. The largest cities in the **southern hemisphere** are found along the coasts of South America.

Source 1: Gardens by the Bay in Singapore. Singapore is one of 11 countries in the world that are 100 per cent urbanised. With only about 700 square kilometres of land, Singapore has increased its land area by 23 per cent by reclaiming land from the sea and has relied on high-rise apartments to house its population.



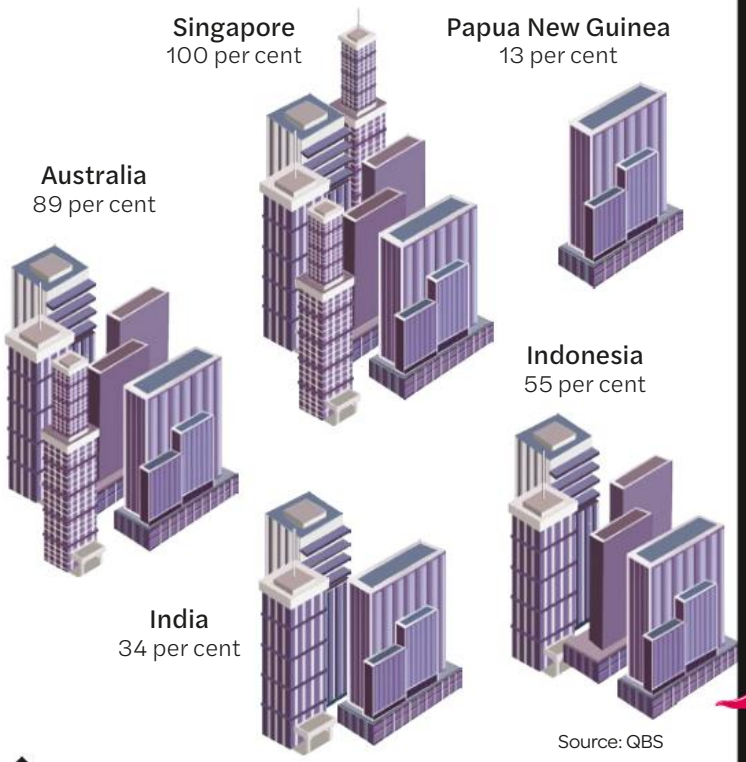
Source: Shutterstock

Source 2: This composite satellite image shows the Earth at night. It highlights the city lights of the world's urban areas. The northern hemisphere is far more urbanised than the southern hemisphere.



Matilda Education Australia

Source 3: The world's five largest urban areas are all in Asia.



Source: QBS

Source 4: In 1950, only 30 per cent of the world's population lived in urban areas. Urbanisation occurred mainly in developed countries such as Australia. Today, 55 per cent of people live in urban areas; however, some countries, such as Papua New Guinea, remain largely rural.

Learning ladder G4.1

Patterns of urbanisation

1. What is an urban area?
2. Describe the regions of the world where urbanisation is taking place.
3. Source 1: How has the environment of Singapore changed through urbanisation?
4. Source 3: Compare the locations of the urban regions presented here.

Interpreting information

1. Source 2: Which hemisphere is the most urbanised? How can you tell from this image?
2. Describe the world's spatial distribution of urban areas.
3. Explain why most urbanised areas are located along coastlines. You may wish to use the SHEEPT factors to broaden your thinking.
4. Predict how future population growth may impact urbanisation in a selected region.

Make it spicy

How might global *scale* patterns of urbanisation *change* in the future?

HOW TO
Interpreting information, page 446; change, page 240; scale, page 242

G4.2

What is the process of urbanisation?

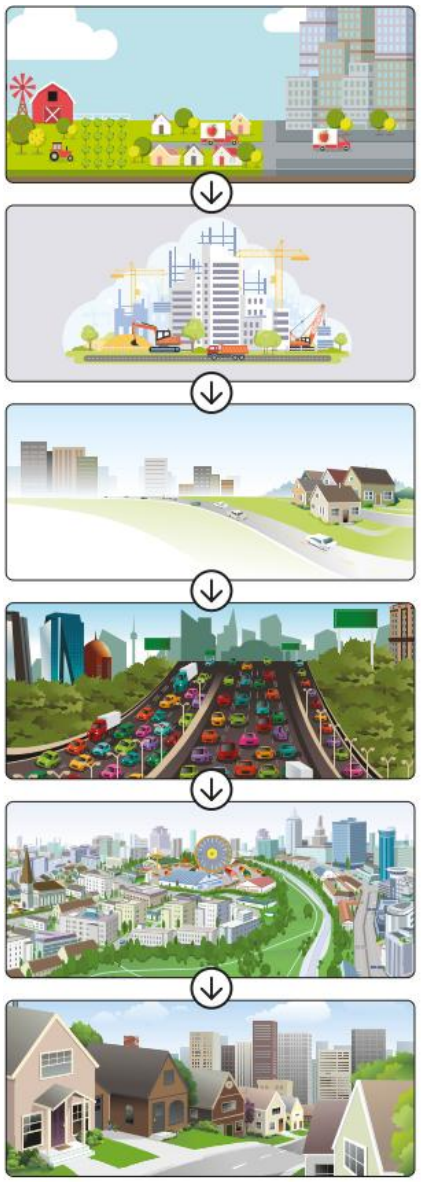
The world's population grew from 751 million in 1950 to over 8 billion in 2024. By 2050 more than 68 per cent of people are expected to live in cities. Many countries are undergoing rapid urban growth and urbanisation.

Urban growth and urbanisation

Urbanisation is when the number of people who live in cities is increasing more rapidly than the number of people who live in rural areas. Urbanisation often happens when a country is developing, as people move from the countryside to urban centres in search of better opportunities.

Source 1: Urbanisation and urban growth are interconnected. Urban growth refers to the physical change in land use for city development, while urbanisation describes the increased percentage of people living in cities.

As more people move to cities, more infrastructure and development is required to accommodate the change in population. **Urban growth** is when the city physically expands and spreads out. **Urban sprawl** is one form of urban growth where low-density development, such as the construction of estates made up of family homes, spreads out over large areas beyond the city. Urban sprawl is occurring in places such as Clyde in Melbourne's south-east and Werribee in the west.



Source 2: Urbanisation is increasing worldwide. Urbanisation is frequently associated with countries that are currently developing or industrialising, but every industrialised nation has undergone urbanisation at some stage in its history.

Planning for urban growth

Governments and urban planners often discuss urban growth when considering the best solution for future population housing. Recent analysis suggests it is more economically viable to build more houses in existing inner-city or metropolitan suburbs, which have existing facilities and services, rather than forming new outer suburbs through urban sprawl. This would increase the housing density of inner-city suburbs and increase the number of apartment and high-rise living options for home buyers. There are a range of perspectives to consider when planning for urbanisation and urban growth, including existing and future residents, local business owners, environmentalists and cultural leaders.

	Year	Urban population (millions)
Australia	1960	8.4
	2022	22.5
China	1960	108.1
	2022	897.6
India	1960	79.9
	2022	508.4
United States	1960	126.5
	2022	276.9

Source 3: Urbanisation between 1960 and 2022 in selected countries

Learning ladder G4.2

Patterns of urbanisation

1. What are two causes of urbanisation?
2. Source 1: What is the difference between urbanisation and urban growth?
3. Source 2: Explain why urban growth occurs.
4. Source 3: Compare urbanisation in Australia and China over time.

Representing information

1. Source 3: Which place had the largest urban population in 2022?
2. Source 3: Present this data in a bar graph.
3. Source 3: Using a blank world map, create a choropleth map illustrating the data.
4. Access: https://mea.digital/x28.
   - **a** Locate the regions of urban growth.
   - **b** Explore the other data layers publicly available under 'buildings', 'population' or 'planning'. Can you find any interconnections or patterns?

Make it spicy

How is urban growth *interconnected* with landscape *change*?

HOW TO

Representing information, page 436; change, page 240; interconnection, page 238

G4.3

How urbanised are Australia and the United States?

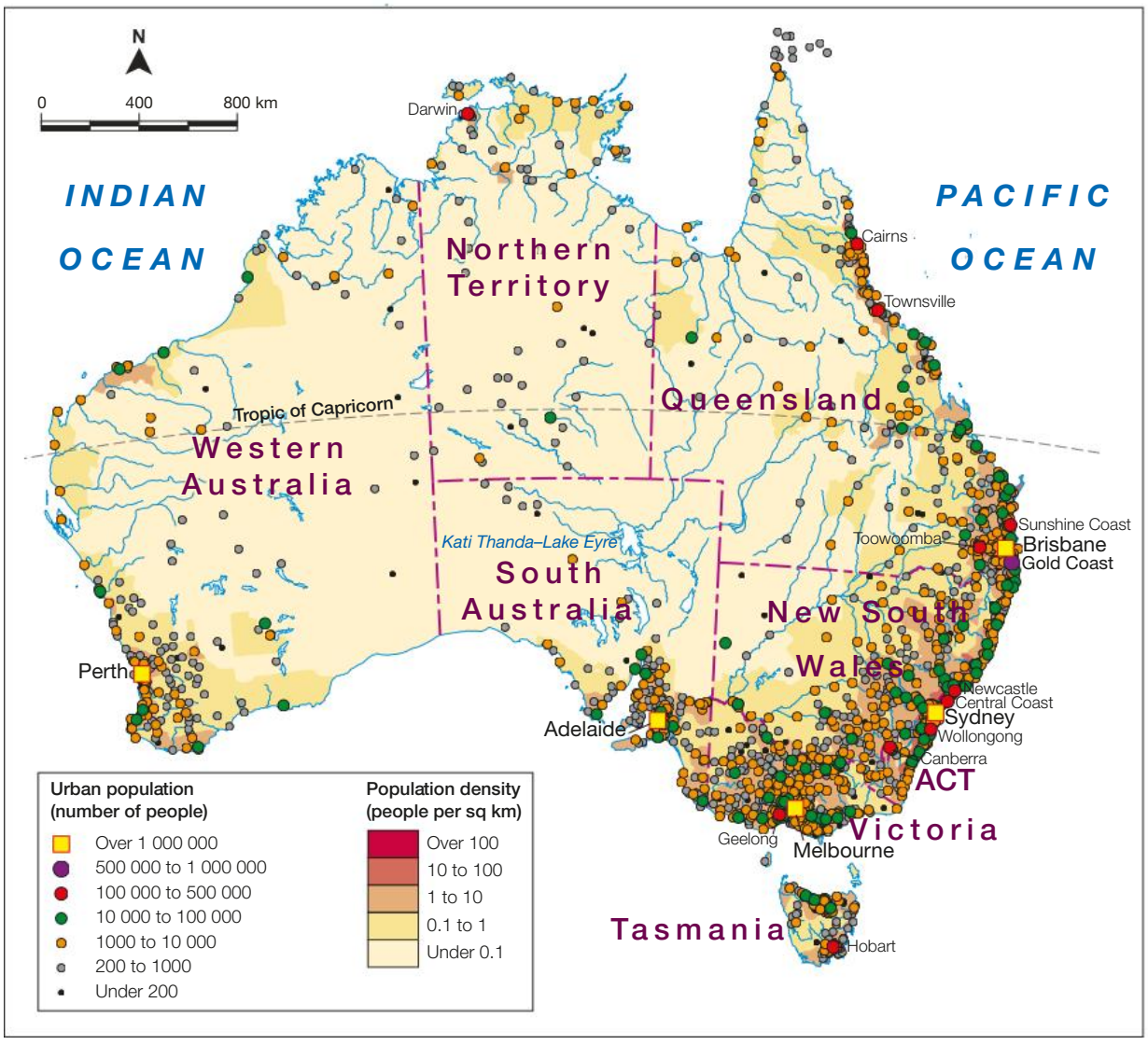
Highly urbanised and high-income countries such as the United States and Australia have many similarities. Large cities develop along the coastline and continue to expand through a process known as urban sprawl.

Urbanisation

Although the United States has a population 13 times the size of Australia, the two countries have many similar urban patterns. Both countries are highly urbanised. In Australia, 89 per cent of the population live in urban areas. In the United States, 82 per cent of people live in urban areas.

The populations of the United States and Australia are concentrated in large cities and towns along the east, west and south-east coasts. Both the United States and Australia have large areas of dry inland desert where virtually no-one lives. In the United States, the large desert city of Las Vegas is an exception to the pattern. The resort town has grown by 400 per cent since 1980 and now has a population of 640 000.

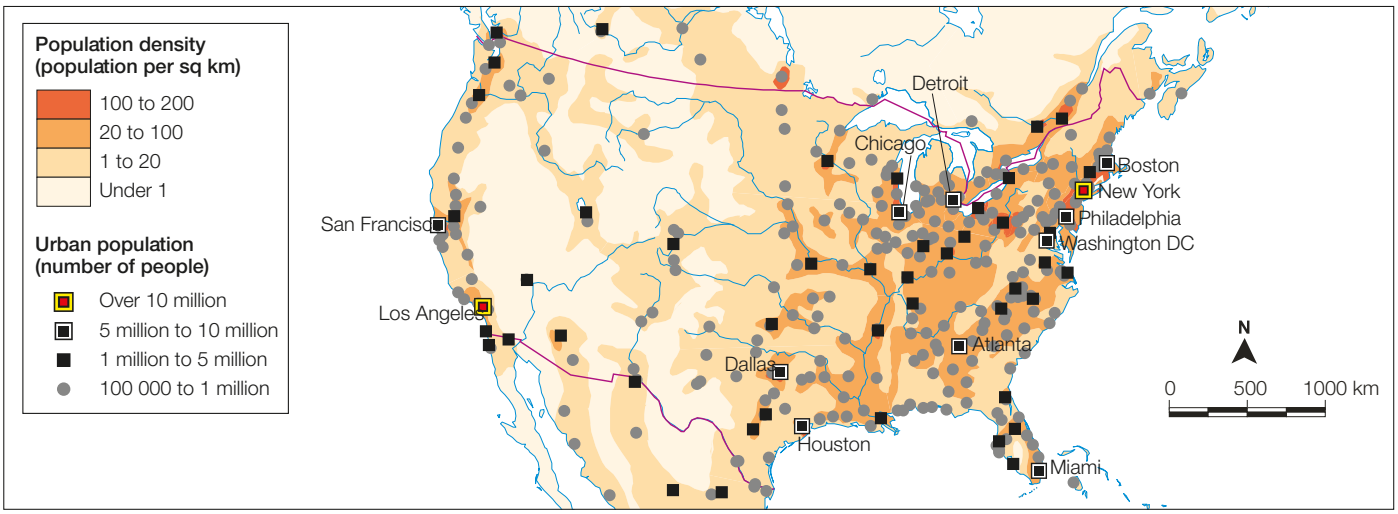
Australia most densely populated urban areas



Source 1: Australia's most densely populated urban areas

Source: Macmillan Global Atlas

United States most densely populated urban areas



Source: Matilda Education Australia

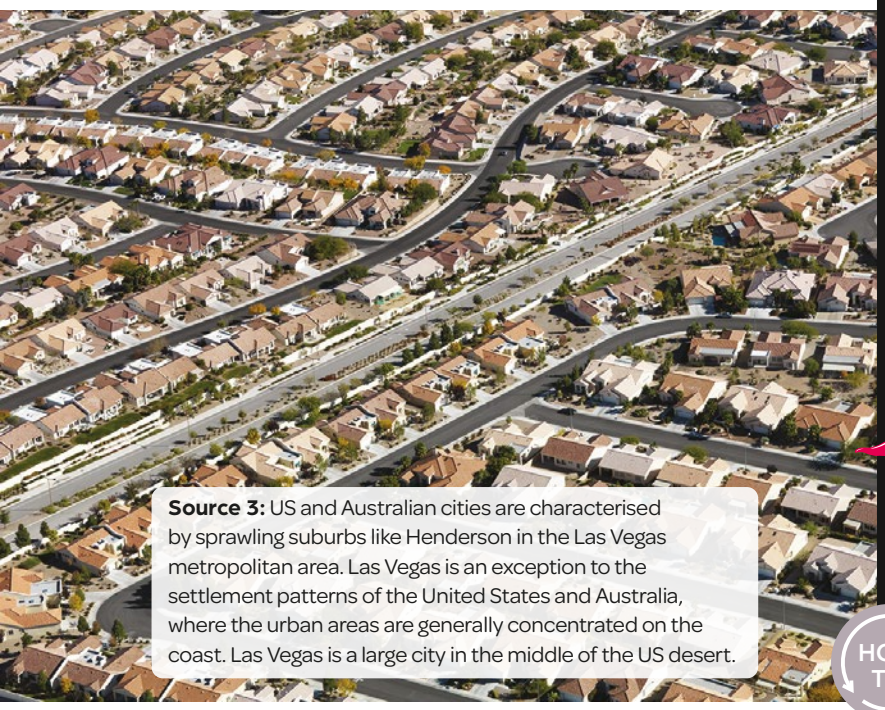
▲ **Source 2:** United States' most densely populated urban areas

Urban sprawl

Australian and US cities are both characterised by urban sprawl. Land in city centres is expensive, so high-density offices and apartments are built for businesses and residents. Surrounding the city centre lies a broad area of medium-density residential housing called **suburbs**.

Commuter towns are separated from suburbs by farmland and open space, but connected by roads and rail. People in these towns commute to the city for work. Over time, suburbs and commuter towns join together, increasing the urban sprawl.

Sometimes whole cities merge together into a **conurbation**. The BosWash conurbation (see page 366) in north-eastern United States joins a number of major cities. More than 52 million people live in this conurbation – 16 per cent of the entire population of the United States.



Source 3: US and Australian cities are characterised by sprawling suburbs like Henderson in the Las Vegas metropolitan area. Las Vegas is an exception to the settlement patterns of the United States and Australia, where the urban areas are generally concentrated on the coast. Las Vegas is a large city in the middle of the US desert.

Learning ladder G4.3

Patterns of urbanisation

1. List the causes of urbanisation in the United States.
2. Describe the most urbanised regions in the United States.
3. Explain what is meant by 'commuter towns'.
4. Sources 1 and 2: Discuss any similarities or differences between the location of urbanised areas in Australia and the United States.

Interpreting information

1. Source 2: What do the squares represent on the map?
2. Source 3: Describe the distribution of the United States' urban dwellings in this photograph.
3. Source 1: Explain why Australia's population density increases with proximity to urban centres.
4. Predict how urban populations may change in the future in Australia and the United States.

Make it spicy

Draw a sketch map of a *place* (either real or imaginary) that has urban sprawl. Include and annotate your sketch using the following key ideas: urban sprawl, roads, commuter town, rail, farmland, suburbs, open space, city.

HOW TO

Interpreting information, page 446; mapping with BOLTSS (NA), page 442; place, page 236

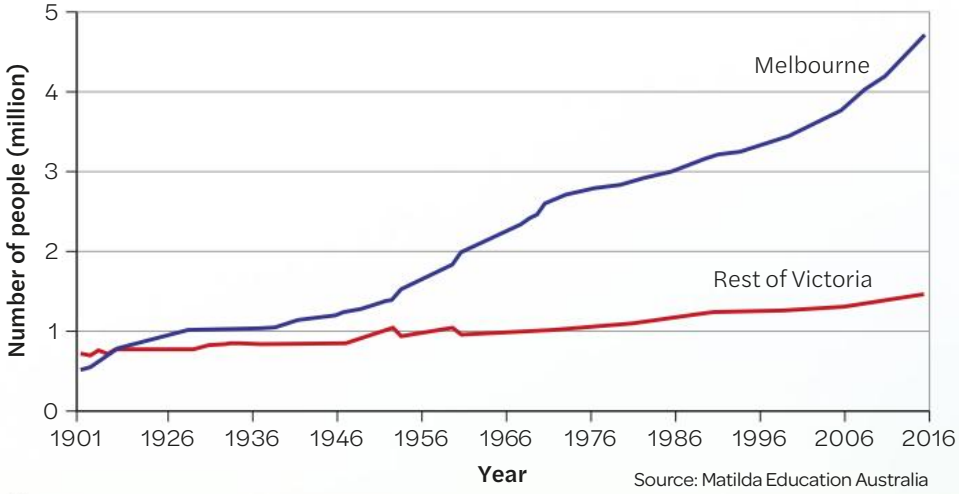
Why is Australia highly urbanised?

Australia is a highly urbanised country with around 89 per cent of the population living in cities or urban areas. Australia's history of settlement and migration, as well as environmental constraints, have shaped population patterns over time.

After European settlement, major cities like Sydney and Melbourne were developed as important trade and administrative hubs. Sydney's population grew from around 200 000 in 1851 to over 5 million today This includes many immigrants, who account for around 48.6 per cent of the city's population.

The centralisation of state governments has meant that capital cities are hubs for political and administrative functions. Many Australians move to cities for work in government or private sectors. Even industries such as mining, located in remote areas, still rely on urban centres for support, logistics and the training of skilled labour.

Population growth in Victoria 1901–2016

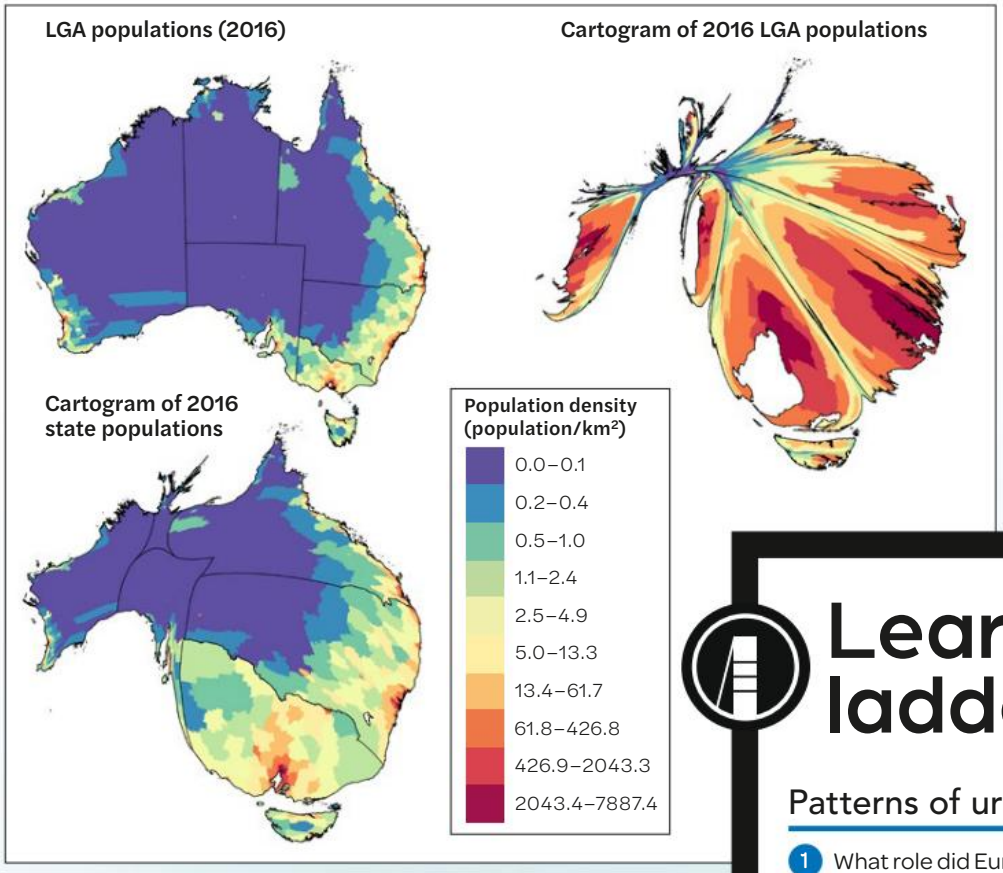


Source: Matilda Education Australia

Source 2: Melbourne's urban population has grown rapidly over time, quickly outpacing rural growth.

Source 1: Perth, Western Australia. Australia's arid centre can act to limit settlement outside urban areas in some states. About 87 per cent of Australians live within 50 kilometres of the coast.

Australia population of local government areas, 2016



Source 3: Population of Australia's local government areas, 2016. The relative thickness or thinness of a region represents the size of the population of that area.

Source: ABS/AUSTATS

Learning ladder G4.4

Patterns of urbanisation

1. What role did European colonisation play in the establishment and growth of contemporary major Australian cities?
2. What geographical and environmental factors influence the distribution of Australia's urban population?
3. How do economic opportunities in urban centres attract individuals from rural areas and contribute to population growth in cities?
4. Source 3: Explain how cartograms can provide indications of urbanisation in Australia.

Making conclusions

1. What percentage of Australia's population lives in urban areas?
2. How has Australia's arid centre affected population distribution and urban growth?
3. Based on the patterns of urbanisation in Australia, what conclusions can be drawn about the relationship between migration and economic opportunities in urban areas?
4. Source 2: How reliable is population growth data for understanding urban growth in Melbourne?

Make it spicy

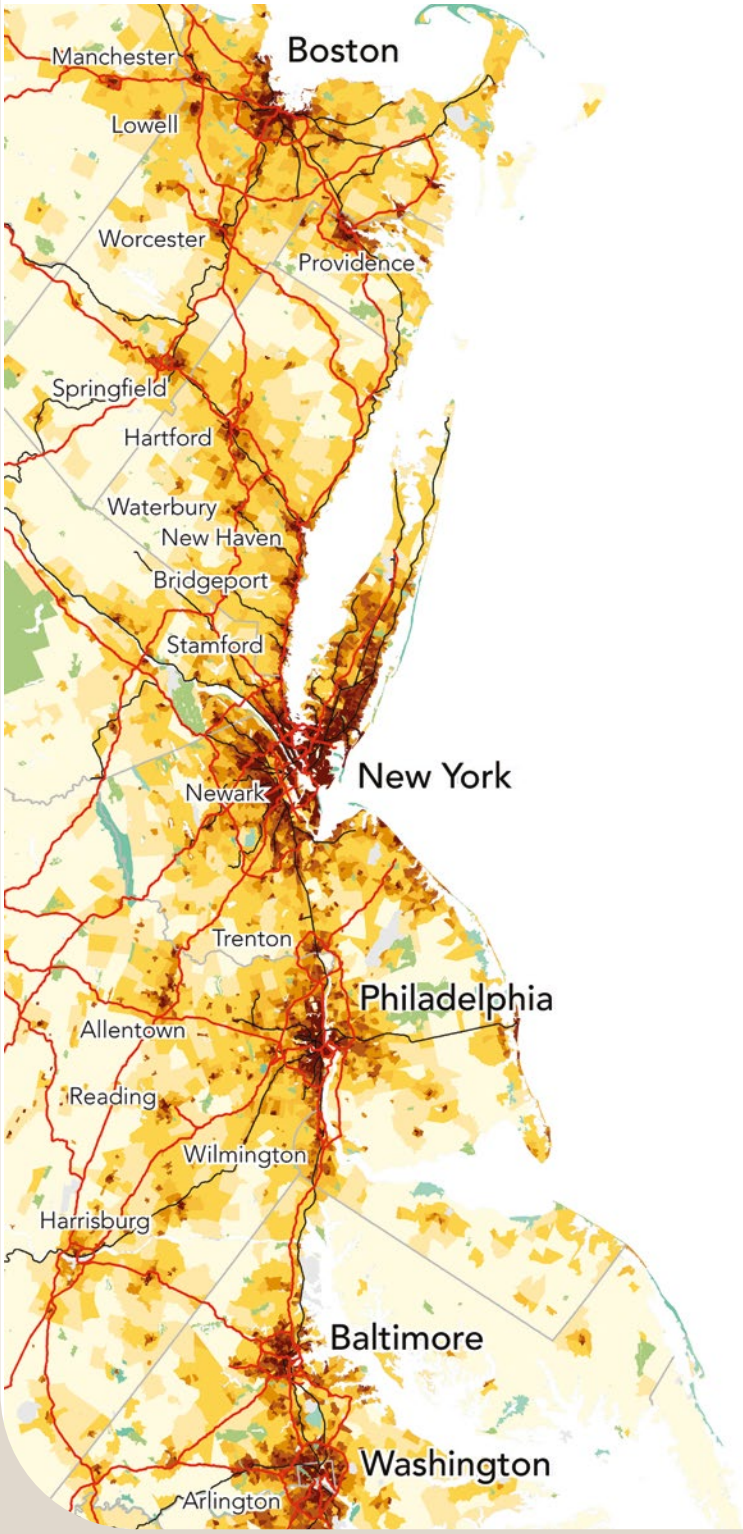
Australia is known for its beautiful *environments*. Why would many people prioritise urban living over these natural *places*?

HOW TO

Making conclusions, page 464; environment, page 241; place, page 236

Case study

What happens when cities grow into one another?



The United States includes the **megacities** of New York City and Los Angeles. As the cities around New York have expanded, they have joined together in what is known as a conurbation.

Conurbation occurs when two or more cities, which were once separate, grow and expand until they join together to form one large, connected urban area, called a megalopolis. In the 'BosWash' or 'Bosnywash' corridor, which stretches from Boston to Washington DC, the cities of New York, Philadelphia, Baltimore and Boston have grown so much that they have become a megalopolis. Through the connection of roads, railways and other forms of transport, they now form a large-scale urban region.

BosWash population density

Major transportation links
- interstate highway
- passenger railroad

Population denisty, 2000
- fewer than 150 people per 1.6 square kilometre
- 150–250
- 250–750
- 750–1500
- 1500–3000
- 3000–5000
- 5000–7500
- more than 7500

Public land
- national park
- national forest
- Departments of Energy and Defense
- other federal land
- state or local park/forest

N

0 50 100 km

Source 1: BosWash population density

Source: Radical Cartography

Growth of urban area for BosWash: 1974–2012

Source: Matilda Education Australia, USGS

▲ **Source 2:** Growth of urban area for BosWash

Forest area change 2000–19 for BosWash area

Source: Matilda Education Australia, USGS, Hansen/UMD

▲ **Source 3:** BosWash forest area change

In a megalopolis, the cities become closely linked, sharing facilities, services and opportunities such as jobs and transport systems. The BosWash corridor is one of the largest in the world. Even though it only covers 2 per cent of US land, about 20 per cent of the US population lives there, and it produces about 20 per cent of the country's GDP.

Examples of conurbation can be found in other parts of the world, such as the 'BESETO' corridor in East Asia (which includes Beijing, Seoul and Tokyo) or the 'Blue Banana' in Europe. As a result of rapid urbanisation and urban growth, these regions are growing into large, interconnected cities that share transport networks, businesses and cultures.

Source 4: With a population of 22 million people, New York City is the largest and most densely populated city in the United States, with 72 000 people per square kilometre. The city is home to over 6500 high rise buildings, including the tallest building in the United States, the 541-metre One World Trade Center. The tower was built on the site of the former World Trade Center that was destroyed in the terrorist attacks of 11 September 2001.

Learning ladder G4.5

Patterns of urbanisation

1. Define the term conurbation and provide an example.
2. Source 2: When did the greatest growth between New York and Philadelphia occur?
3. Explain how conurbations develop.
4. How do these urban places compare to Australian cities?

Interpreting information

1. Source 4: Describe the characteristics of this place.
2. Why is it difficult for New York to expand further?
3. As a class, discuss how the urbanisation of BosWash has impacted the region's natural environment. Do you believe that urbanisation should be prioritised over environmental sustainability?
4. Predict the likely challenges faced by conurbation for both people and the environment.

Make it spicy

Source 1: Which US cities are *interconnected* as part of the BosWash conurbation?

HOW TO
Interpreting information, page 446; interconnection, page 238

G4.6

What are the causes of urbanisation?

Rural to urban migration has seen large numbers of people move from farming areas to cities. Today, 54 per cent of all people in the world live in urban areas.

Push and pull factors

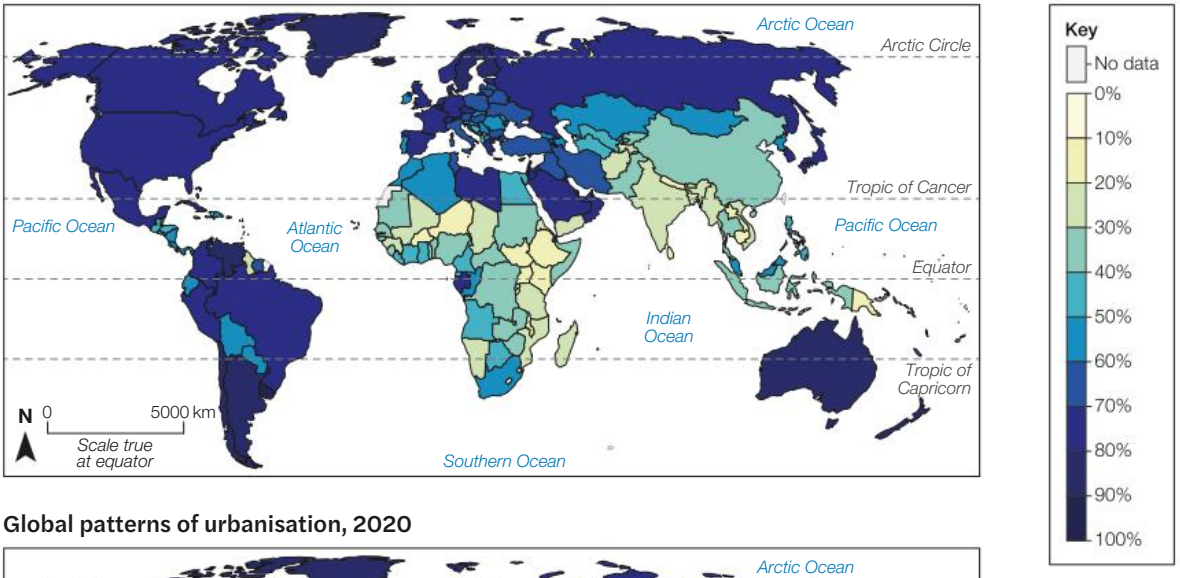
There are several factors pushing people from rural areas and pulling people towards urban areas. **Push factors** can include droughts, floods, famine, lack of employment opportunities and even **civil war**. Many young people today also see farming the land as a difficult, unglamorous and unrewarding career.

Pull factors encouraging people to move to cities include the chance of better jobs with higher salaries; greater access to education, goods and services; and a higher living standard.

In 2023 India overtook China as the world's most populous nation, with a population of 1.43 billion people. Two-thirds of India's population still live in rural areas; however, urbanisation is rapidly changing the distribution of India's population. The push force of unemployment in rural areas and the pull force of higher incomes in urban areas has resulted in the movement of millions of people to urban areas, placing great pressure on cities to cater for the increasing population.

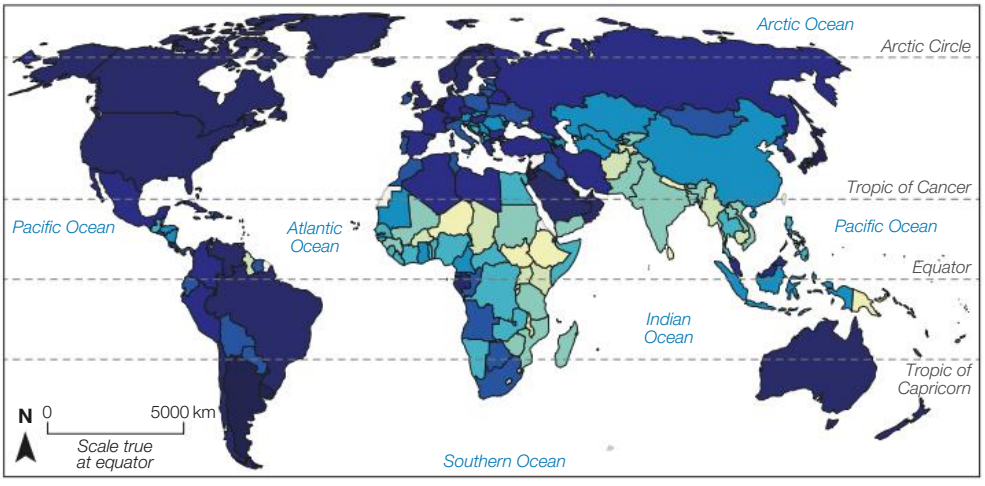
Source 1: Global patterns of urbanisation, 1990

Global patterns of urbanisation, 1990

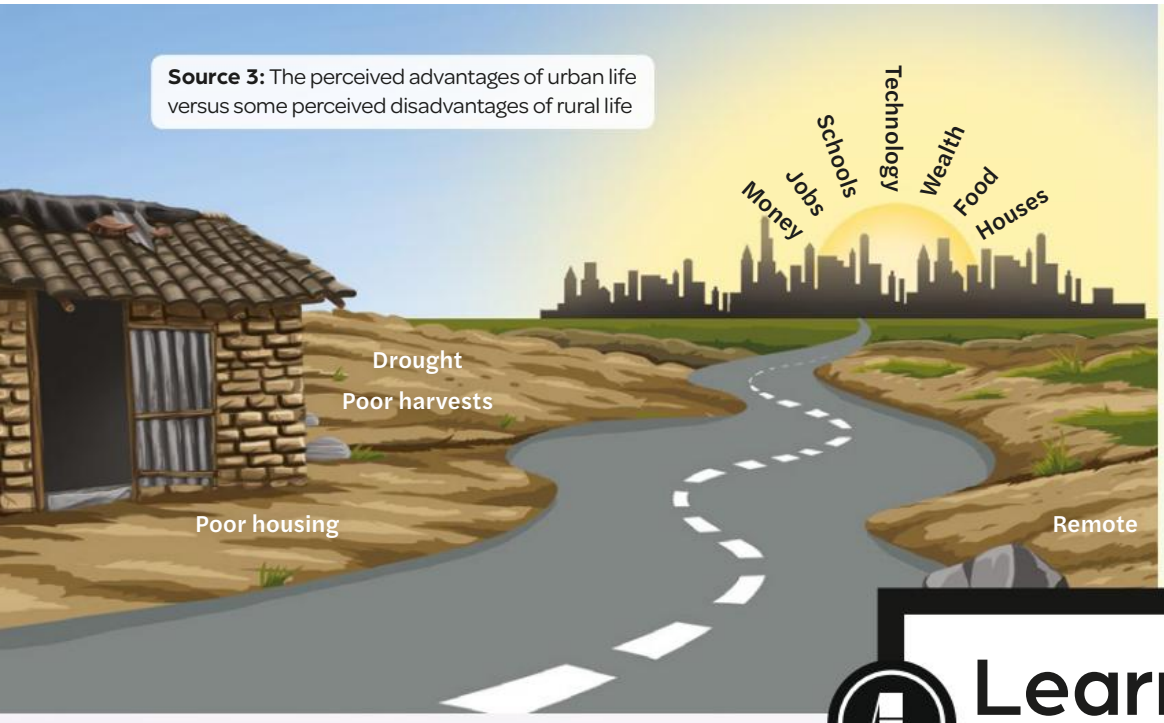


Source 2: Global patterns of urbanisation, 2020. This map shows that many countries, particularly in Asia and Africa, are becoming more urbanised.

Global patterns of urbanisation, 2020



Source: Our World in Data (CC BY 4.0)



Source 3: The perceived advantages of urban life versus some perceived disadvantages of rural life

Push factors

- Few services
- Lack of job opportunities
- Poor transport links
- Natural disasters
- Wars
- Shortage of food

Pull factors

- Access to services
- Better job opportunities
- More entertainment facilities
- Better transport links
- Improved living conditions
- Hope for a better way of life
- Family links

Source 4: Seoul was the destination for most rural migrants in South Korea. Between 1960 and 1970 many farmers left for opportunities in the city. In 1960, just 28 per cent of all South Koreans lived in cities. By 1970, 41 per cent lived in cities. Today, South Korea's urban population is 82 per cent of all South Koreans and it has quickly grown from one of the poorest to one of the wealthiest nations in the world.

Learning ladder G4.6

Patterns of urbanisation

1. Source 3: List three push and three pull factors to urban areas.
2. Source 1: Which regions of the world had the highest percentages of urbanisation in 2020?
3. Source 1 and 2: Identify one world region that has undergone significant urban growth between 1990 and 2020. Explain potential reasons for this growth.
4. Create a comparison table highlighting the pros and cons of living in an urban or rural environment (consider the SHEEPT factors).

Planning and collecting

1. Source 4: Create an inquiry question exploring urbanisation patterns in Seoul.
2. For your inquiry question from question 1, suggest two secondary and two primary methodologies that would help collect data to answer this question.
3. Create a photo essay showing highly urbanised world regions. What do all of these places have in common?
4. Conduct a survey exploring the inquiry question, 'What are the push factors from our local region?' Consider how your results may help us understand urbanisation in Melbourne.

Make it spicy

Source 2: Using SHEEPT, explain why we have seen a *change* in urbanisation over time on a global *scale*.

HOW TO

Planning and collecting, page 426; change, page 240; photo essays, page 439; scale, page 242; SHEEPT, page 460

G4.7

Case study

How is urbanisation changing Indonesia?

Just 50 years ago, Indonesia was mainly a rural society, with just 17 per cent of Indonesians living in urban areas. Rapid urbanisation has seen massive growth in Indonesian cities, which has led to problems such as housing shortages, congestion and pollution.

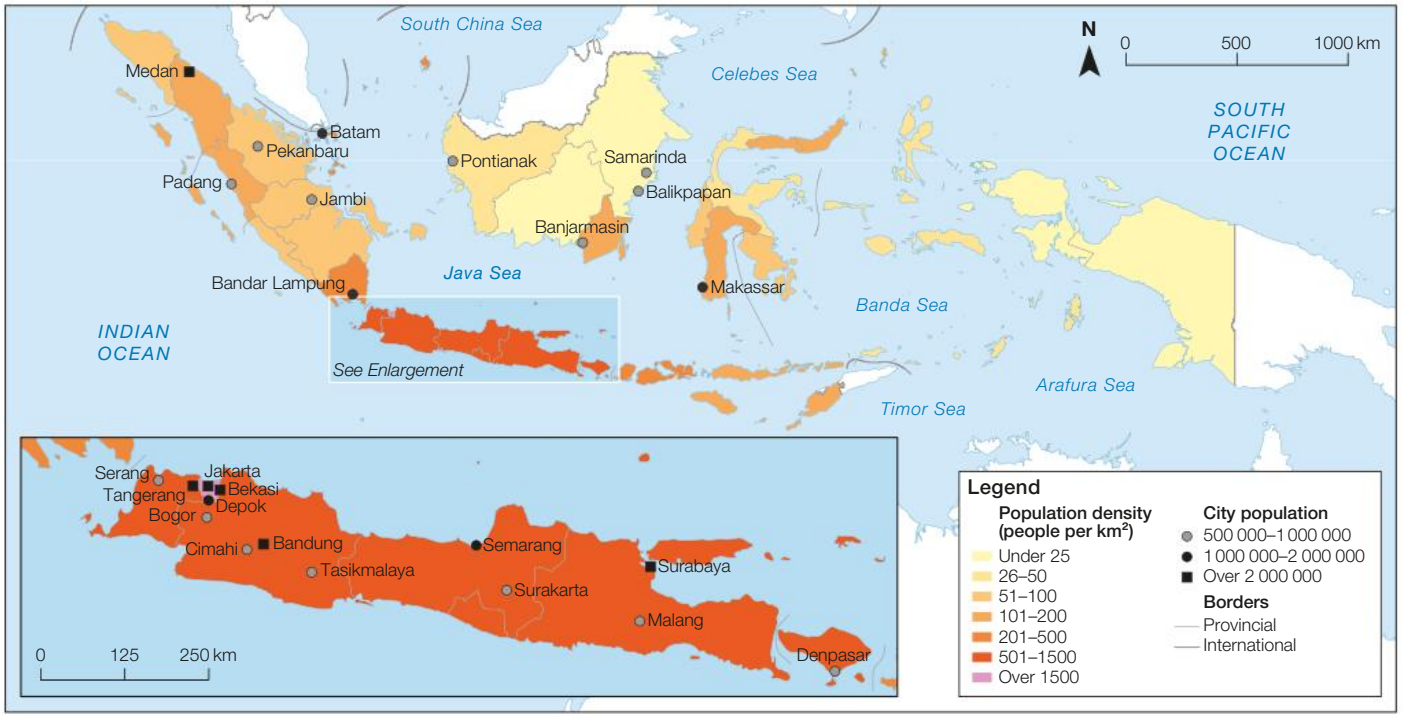
Indonesia's growing cities

Indonesia is the world's fourth most populous country and 60 per cent of Indonesia's 268 million people live on the island of Java. Indonesia has quickly transformed from a rural society to an urban one. In 2018, 55 per cent of all Indonesians lived in urban areas.

In 1950, only Indonesia's capital city, Jakarta (see pages 374–5), had more than 1 million people. Today Indonesia is home to 11 cities with populations over 1 million as well as two megacities – Jakarta and Surabaya.

Indonesia's city populations are growing at a rate of 4.1 per cent per year – faster than any other Asian country. By 2025, Indonesia is estimated to have 68 per cent of its population living in cities.

Indonesia population density



Source: Matilda Education Australia, Statistics Indonesia

Source 1: Population density in Indonesia

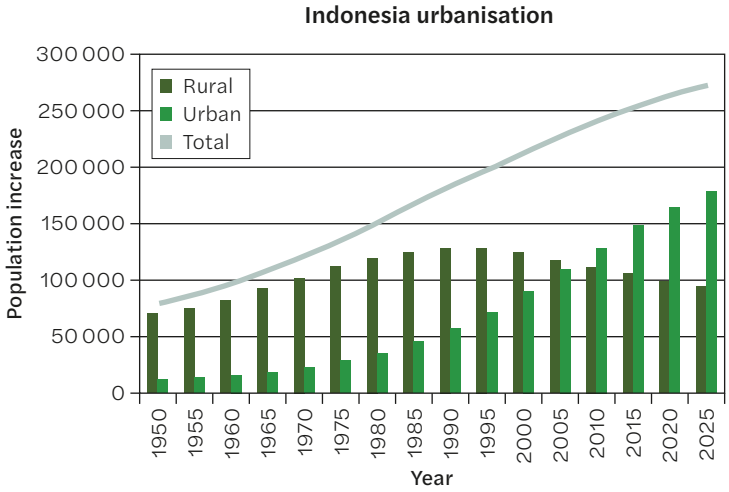
Source 2: A heavily polluted river runs through a Jakarta slum. Twenty-six per cent of all Indonesians live in slums.

Rural to urban migration in Indonesia

The Indonesian government has placed few restrictions on rural to urban migration. Most internal migration in Indonesia consists of the rural poor moving into cities for better wages, education and healthcare access. Most rural migrants are young people seeking stable jobs and a more modern life in Indonesia's large cities.

Almost 80 per cent of Indonesia's 140 million farmers are now aged 45 or older. Officials worry that future food supplies might be affected as the rural population continues to age.

The infrastructure in Indonesia's cities is not keeping pace with growing populations. New arrivals to cities will often live in poor housing in city slums, battle traffic jams and suffer high levels of air and water pollution.



▲ **Source 3:** Urbanisation of Indonesia

Source: Indonesia Statistical Bureau (BPS) Proyeksi Penduduk, 2005

Learning ladder G4.7

Impacts on places

1. Give an example of a social factor that pulls people to Indonesian cities.
2. Source 2: What is the cause and effect of rapid urbanisation shown here? Why do people live here?
3. Source 1: Describe the areas of Indonesia least impacted by urbanisation. Why might this be the case?
4. Explain the interconnection between rapid urbanisation and food insecurity.

Interpreting information

1. Source 1: Which region of Indonesia is the most urbanised?
2. Source 2: Describe the built environment shown here. What characteristics differ from those in Australian cities?
3. Source 3: What impact on the built environment does this graph suggest? How are governments currently coping with large numbers of arrivals to cities in Indonesia?
4. Source 3: Based on the trends shown here, what action will governments in Indonesia need to take to plan for those living in rural and urban areas?

Make it spicy

What *environmental* impacts is urbanisation having in Indonesia?

HOW TO

Interpreting information, page 446; environment, page 241

What are the opportunities and challenges of megacities?

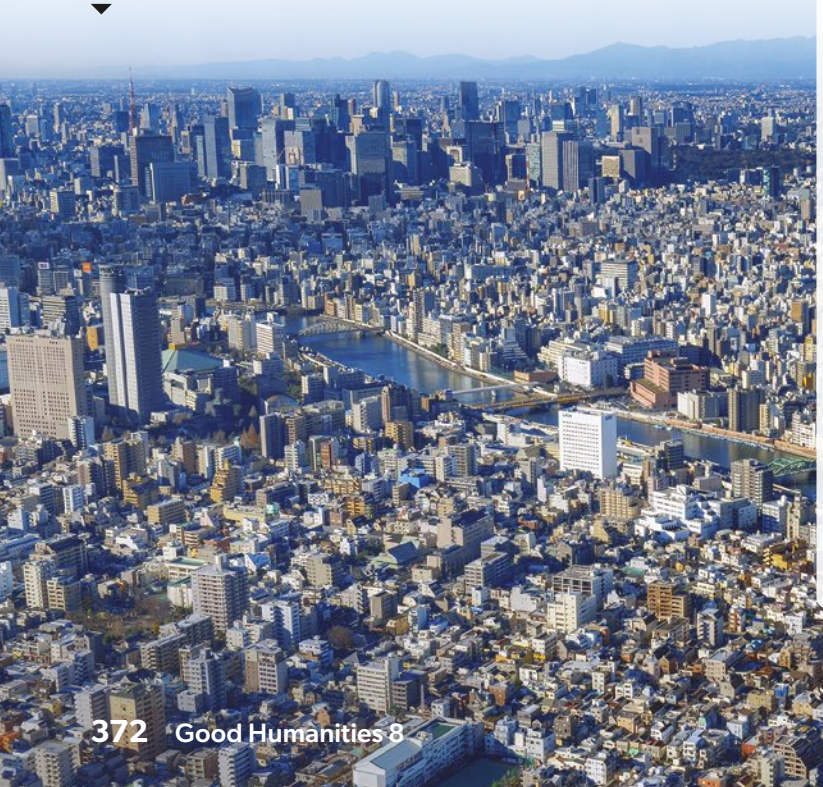
Urbanisation is leading to the development of more megacities – cities with 10 million people or more. Most megacities are found in Asia, where fast-growing cities are causing headaches for planners.

Where are megacities?

Megacities are cities with populations above 10 million. In 2011, there were 22 megacities in the world, and according to the United Nations there will be 43 by 2030. One in eight people lived in one of the world's 33 megacities in 2018.

Nearly 60 per cent of all megacities are found in Asia, including the five largest. Tokyo in Japan is the world's largest city, with 37 million people; if it were a country, the city would be the 31st largest in the world. New York City is the largest city in the United States, yet it is only the 48th most populous in the world. Australia is the only habitable continent without a megacity.

Source 1: Tokyo is currently the world's largest megacity but the United Nations predicts that it will be overtaken by New Delhi in 2028.



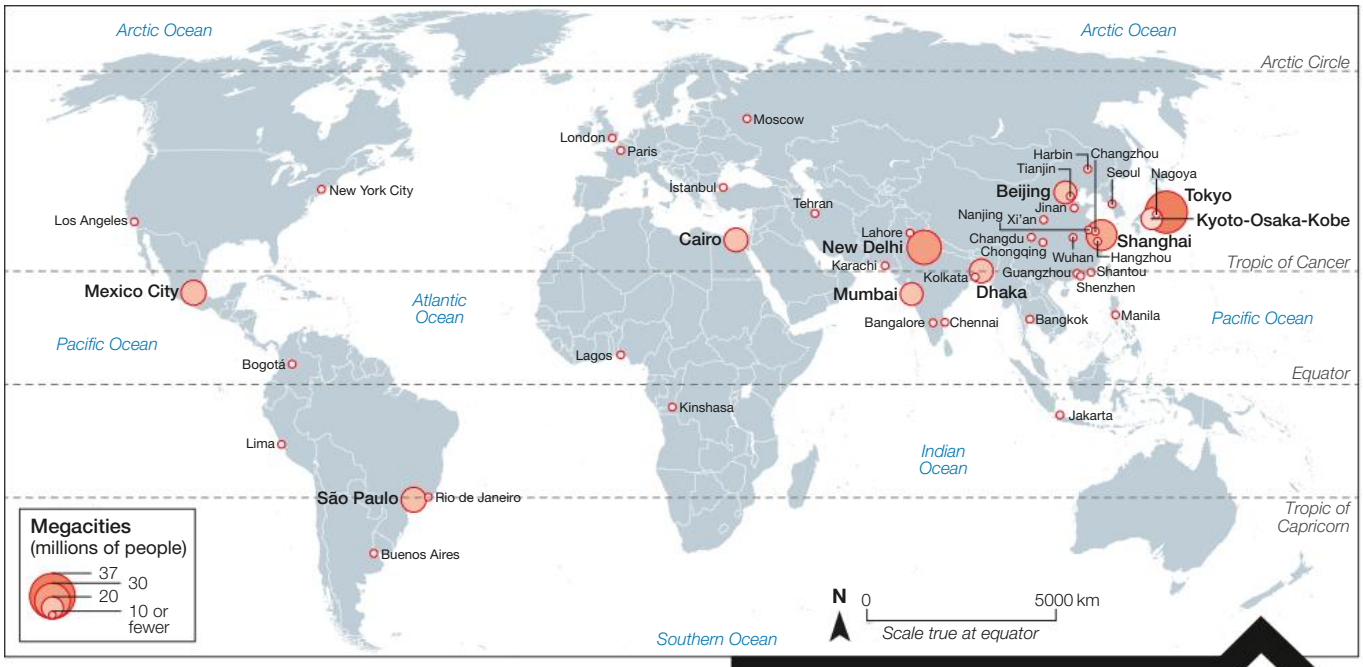
Challenges of megacities

Megacities experience high population density, presenting a variety of challenges. Governments and organisations find it difficult to provide services and resources, or build and maintain infrastructure to support large populations. This can lead to a large number of homeless people, a lack of employment opportunities, limited water and electricity services, high traffic congestion and poor air quality. For example, New Delhi in India has 33.8 million people and is increasing in population by 700 000 each year. Since 2005, the government has built 43 000 new home, but in that same time the population rose by 10 million people. This has led to communities developing **informal settlements**, called slums, that lack clean water and toilets. This is a challenge experienced by many megacities in the world, including São Paulo in Brazil, Cape Town in South Africa and Lagos in Nigeria.

Source 2: Predicted population growth of the top 10 megacities 2020–35

	2020 (millions)	2020 Rank	2035 (projected – millions)	2035 rank
Tokyo	37	1	36	2
Delhi	30	2	43	1
Shanghai	27	3	34	3
São Paulo	22	4	24	10
Mexico City	22	5	25	8
Dhaka	21	6	31	4
Cairo	21	7	29	5
Beijing	20	8	25	9
Mumbai	20	9	27	6
Osaka	19	10	18	18

Megacities of the world



Source: iStock/Peter Hermes Furlan

▲ **Source 3:** Megacities of the world, including three of the biggest: Tokyo, Shanghai and Jakarta.

Opportunities of megacities

Having high-density populations can make it easier for governments to centralise their services, allowing more people to access them. This includes developing effective public transport that can limit the need for cars, as seen in Tokyo and New York. Services such as education are also easier to provide, as children are close to schools and there are enough people to be employed as teachers and in administration. During the COVID-19 pandemic, although the high density of populations in megacities enabled the disease to spread quickly, it was also easier for health organisations to provide vaccinations to large groups of people quickly.

▲ **Source 4:** A crowded street in Dhaka, the world's most densely populated megacity

Learning ladder G4.8

Patterns of urbanisation

1. What is a megacity?
2. Using data, describe the spatial distribution of megacities in the world.
3. Source 2: Explain the term 'population growth' with reference to the population of Dhaka.
4. How is urbanisation in Dhaka similar to Australian cities?

Interpreting information

1. Source 1: Contrast the foreground and background in this photograph. How has urbanisation changed the environment?
2. Source 1: Which natural landforms made this an ideal place for a large city?
3. In 2023 Australia had a total population of 25.7 million people. The largest city is Melbourne with 4.9 million people. Contrast Australia to our closest neighbour, Asia.
4. Predict how megacities may change in the future.

Make it spicy

Discuss ways governments can make the most of the opportunities of megacities, while reducing the *environmental* and social challenges.

HOW TO

Interpreting information, page 446; environment, page 446

Case study

What is the impact of Jakarta's population growth?

Jakarta is the capital city of Indonesia, and a megacity with a population of more than 30 million. The sprawling city has expanded into all usable space.

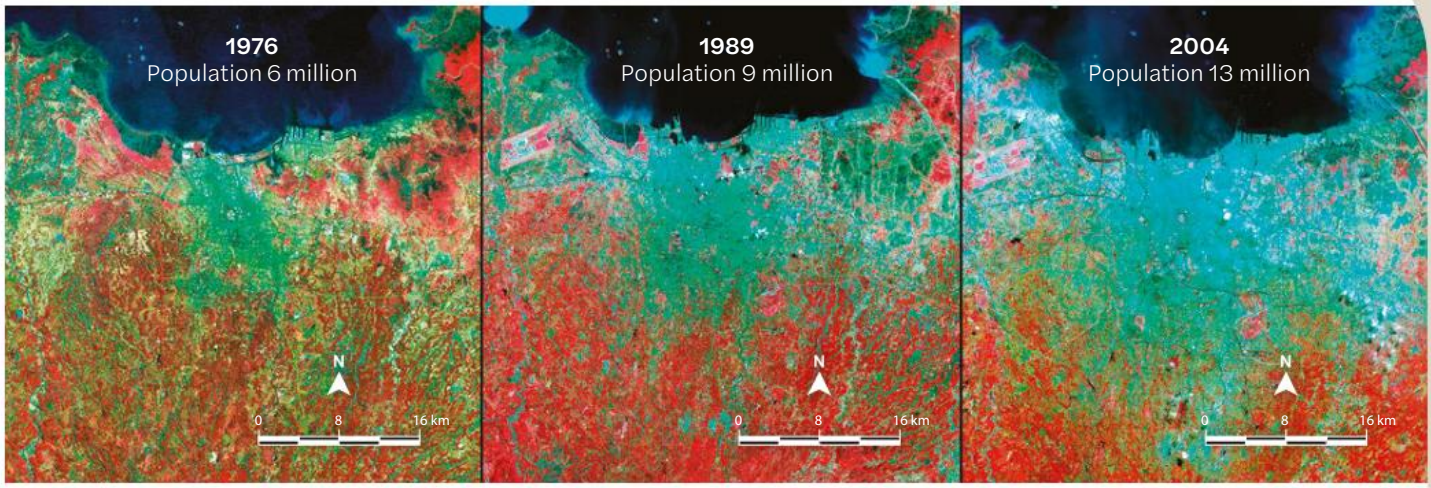
Large areas of Jakarta sit below sea level, so flooding is a constant problem. The rapid pace of Jakarta's urbanisation has introduced multiple problems such as a lack of affordable housing, traffic congestion, and health problems associated with polluted air and water. Poor rural migrants are forced to settle in slums along riverbanks. The new arrivals cannot access health, education and other public services because they don't have official Jakarta identity cards.

Life in the slums

Five million people live in slums in Jakarta, and 60 per cent of the population suffers breathing problems from the polluted air. Ninety-six per cent of Jakarta's river water is severely polluted and dangerous to drink. The government provides some clean water, but it can be too expensive for the poor to afford, so they use river water.

Source 1: Children play and collect materials in a downtown slum in Jakarta.

Source: Science Photo Library



Source 2: Satellite images of Jakarta in 1976, 1989 and 2004. The green area shows the expanding urban area, while the red shows areas of vegetation such as farms and forest.

Source 3: Each day, 15 million motorbikes and 5 million cars try to use Jakarta's gridlocked roads. Just 18 per cent of commuters use public transport.

Learning ladder G4.9

Impacts on places

1. How has urbanisation impacted Jakarta?
2. Outline the positive and negative impacts of urbanisation in Jakarta. Are these issues similar to those faced in Australian urban spaces?
3. Explain the challenges rapid urban growth has had on people and place.
4. Source 1: Explain how the slums are an example of a response from rural migrants to survive in their new urban environment.

Interpreting information

1. Source 2: How can satellite images be used to monitor population growth in Jakarta?
2. Source 3: Describe the distribution of traffic in this source.
3. Predict the long-term impacts of slums on Jakarta's people and environment.
4. Source 2: The northern part of the city on Jakarta Bay is constantly flooding and below sea level. What response can the government make to protect the city from flooding?
5. In 2019 the Indonesian government announced it would move the administrative centre of Indonesia from overcrowded Jakarta to a new site on the island of Borneo. Evaluate the merits and problems associated with this plan.

Make it spicy

The concept of *space* helps describe location. Describe the absolute and relative location of Jakarta.

Interpreting information, page 446; space, page 234

HOW TO

Case study

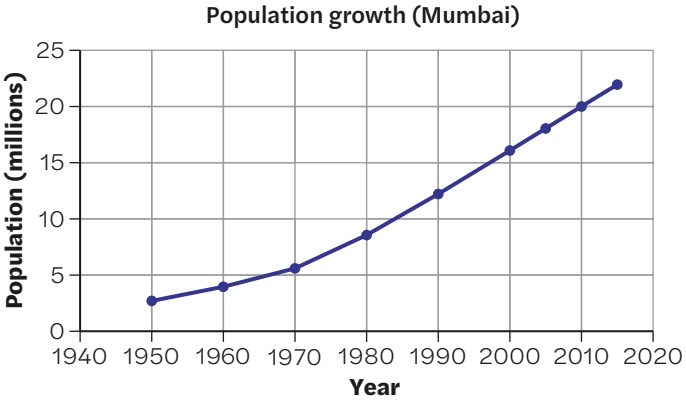
How is urbanisation impacting Mumbai?

Mumbai, India, is a megacity with more than 25 million people. Traditional and innovative solutions for housing, traffic congestion, waste management and healthcare are required to deal with the pressures of a rapidly growing population.

Informal settlements

Although the proportion of the urban population living in slums (or informal settlements) in the developing world declined from 39 per cent in 2000 to around 24 per cent in 2023, the global number of slum dwellers could reach 1 billion by the middle of this century. In megacities like Mumbai, this challenge is often starkly evident and highlights the increasing inequality between rich and poor. In 2000, Mumbai slum residents protested against an airport expansion that would see 85 000 families lose their homes.

Urban planning and the investment of millions of dollars in new infrastructure will be needed to prevent the creation of new informal settlements and to lift millions of people out of poverty.



Source: Matilda Education Australia

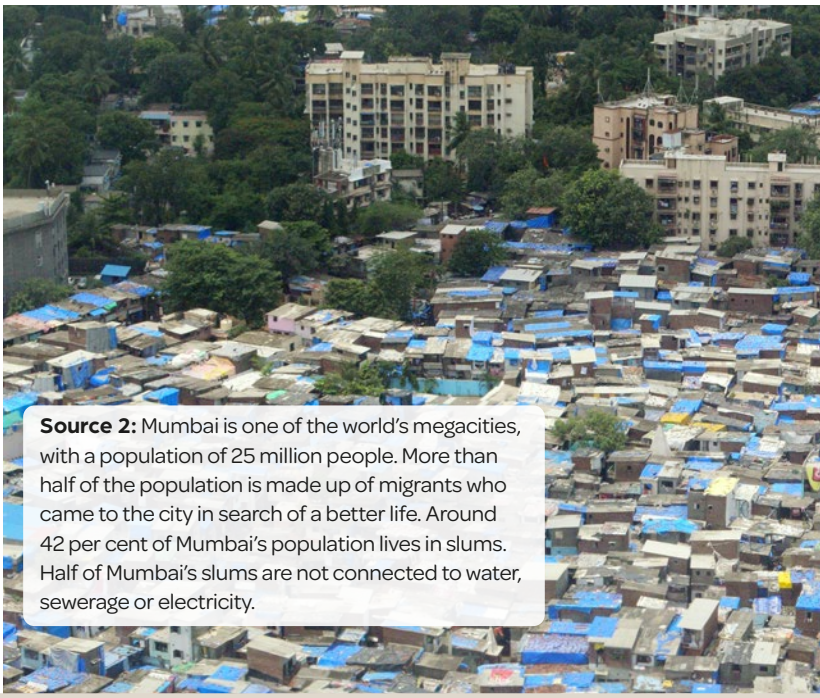
Source 1: Population growth in Mumbai is driving issues such as housing, traffic congestion and waste management.

Informal settlement of Dharavi

In the Mumbai suburb of Dharavi, seen in the movie *Slumdog Millionaire*, some 5000 businesses and 15 000 single-room factories produce an estimated annual revenue of over US$700 million, despite lacking the mainstream resources and support of established brands and multinationals. In recognition of its unique recycling and upcycling industries, King Charles himself once referred to the suburb as 'a role model in sustainability'.

Suburbs like Dharavi have often emerged over time in a vacuum resulting from rural–urban migration and a lack of housing infrastructure, basic facilities and urban planning; the population in the slum is estimated to exceed more than 1 million people, with a population density in excess of 275 000 people per square kilometre, the highest in the world.

As demand far exceeds supply, informal settlements spread and, in the case of Dharavi, informal economies emerge, creating employment through street vending, recycling and the production of materials such as clay bricks and pots.



Source 2: Mumbai is one of the world's megacities, with a population of 25 million people. More than half of the population is made up of migrants who came to the city in search of a better life. Around 42 per cent of Mumbai's population lives in slums. Half of Mumbai's slums are not connected to water, sewerage or electricity.

Shops, schools, health clinics, ATMs and gyms can all be found in Dharavi, as well as electricity. Despite this, life can be both unpredictable and unstable; the dilemma for authorities is how to preserve the economy and livelihoods at the heart of Dharavi while also improving living conditions and providing services.

Strategies to improve lives

In informal settlements around the world such as Dharavi, governments continue to look for solutions to help people improve living conditions:

- **Slum clearance and redevelopment:** a drastic solution involving significant public expenditure in providing housing and/or changing the land use to drive slum dwellers away. In 2023, Gautam Adani, one of India's richest men, flagged an ambitious plan to revitalise the area through investment in one of the largest urban renewal schemes in the world.
- **Upgrading infrastructure:** providing sanitation, water, electricity, waste disposal and paved streets to improve living conditions in informal settlements.
- **Urban planning:** establishing zoning to minimise or mitigate the establishment and growth of slums is ideal, but a significant challenge in established urban areas.
- **Legal tenure:** providing opportunities for slum dwellers to own their home.
- **Microcredit:** facilitating small loans, through charitable groups like Kiva, to provide locals with a means to improve their own lives.

Source 3: Thriving businesses have emerged in Dharavi, creating employment for people living in informal settlements.

Learning ladder G4.10

Impacts on places

1. What issues are facing Mumbai as the population quickly grows?
2. Source 2: Describe how Mumbai differs from most Australian cities.
3. How does the growth of informal settlements, such as Dharavi, affect the environment?
4. Explain the interconnection between rapid urbanisation and the development of informal settlements.

Strategies

1. Consider the strategies listed in this spread and rank them in terms of which are more likely to improve the lives of Dharavi's residents.
2. Why do you think recycling is so prevalent in Dharavi? What factors contribute to this?
3. Explain why 'legal tenure' may be a successful strategy to improve living conditions.
4. Design a policy or strategy that the government could implement to support its growing urban population.

Make it spicy

With reference to the text and sources, identify five geographical characteristics of this *place*.

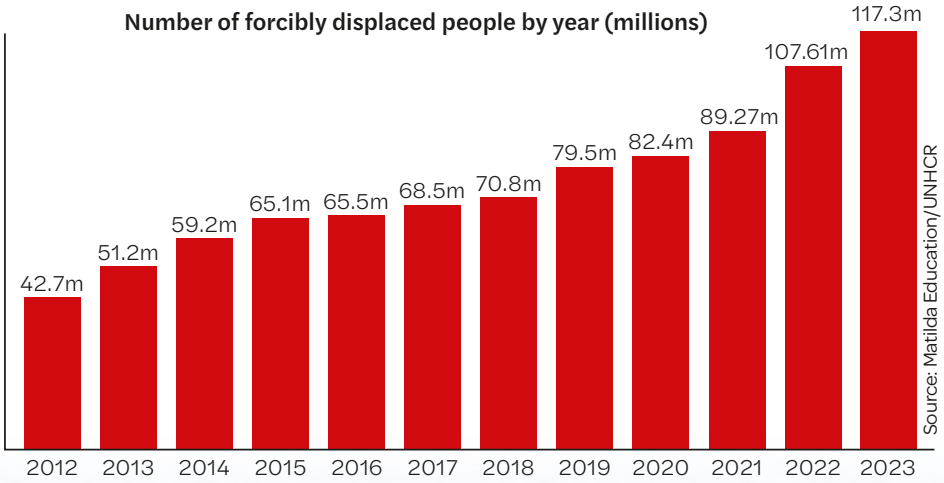
HOW TO

Strategies, page 468; place, page 236

G4.11

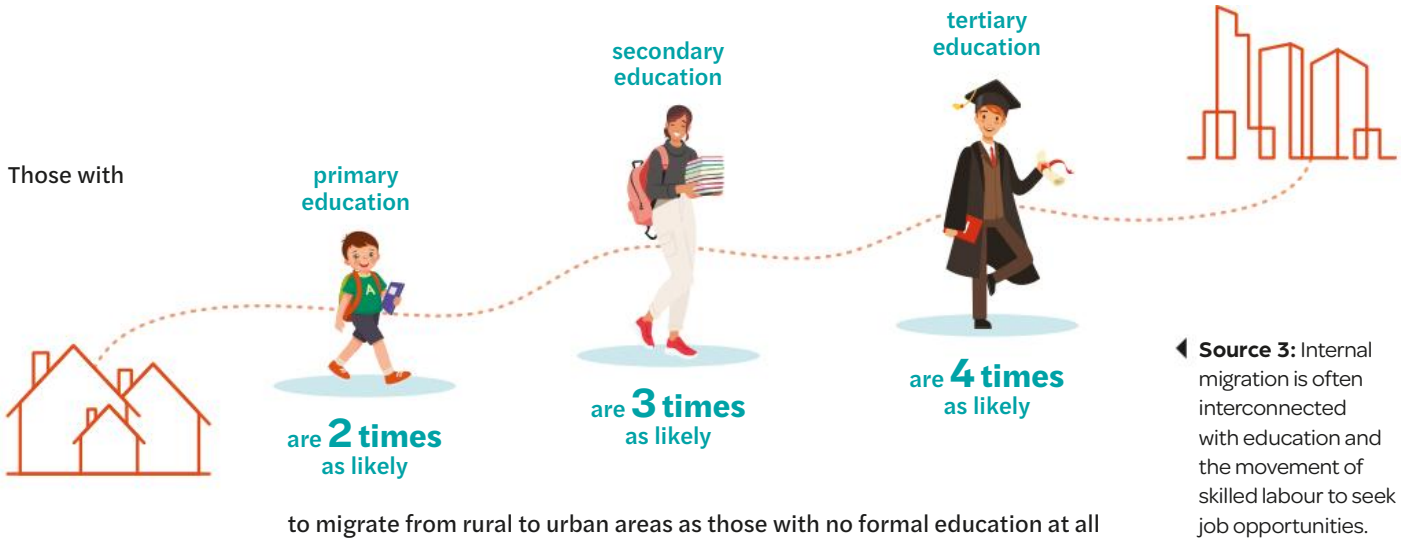
What are the main types of migration?

Migration refers to the movement of people from one place to another. There are various types of migration, each of which can impact urbanisation and global economies.



▲ **Source 2:** Number of forcibly displaced people by year

Source 1: Syrian asylum seekers fleeing the war by boat to the Greek island of Lesvos. After paying traffickers nearly $2000, they risk their lives to make the journey in search of safety.



Source 3: Internal migration is often interconnected with education and the movement of skilled labour to seek job opportunities.

Immigration and emigration

Immigration is the process of coming to live in a new country. Australia is known for its high percentage of immigrants, with over 30 per cent of its population born overseas as of 2023. Emigration refers to leaving your home country to live somewhere else. Many Australians emigrate to work or be with family overseas.

Forced migration occurs when people have to leave their homes due to war, persecution or disaster. This includes refugees, who flee their countries for safety, and illegal migrants, who may enter a country without permission. Illegally trafficked people are also forced migrants who are often exploited for labour.

Internal and international migration

Internal migration is when people move within a country, often from rural regions to urban centres for better job opportunities. International migration involves moving to a different country. In 2020, it was estimated that there were around 281 million international migrants.

Circular migration

Circular migration involves temporary movement between home and another region or country, often for work. Many seasonal or FIFO (fly-in-fly-out) workers travel between regions or countries for their jobs, returning home after their contracts end.

Learning ladder G4.11

Migration

1. What distinguishes circular migration from other types of migration, such as permanent relocation or forced migration?
2. Source 2: How has the global number of forced migrants changed over recent years?
3. Source 2: Explain the factors interconnected with the change identified in question 2.
4. Source 3: Why are tertiary-educated people more likely to migrate internally than primary-educated people?

HOW TO Presenting ideas, page 472; interconnection, page 238

Presenting ideas

1. How can the term 'internal migration' be used to describe the movement of people within Australia from rural areas to urban centres?
2. Why is it important to understand the distinction between immigration and emigration when discussing population dynamics in Australia?
3. Quantify the following statement: 'There are more refugees now than earlier in the century.'
4. Explain how circular migration is interconnected with regional economies.

Make it spicy

Source 3: Why is education *interconnected* with urban migration?

What is temporary migration?

Temporary migration refers to the movement of people for a short time. It is often associated with movement for work, study or cultural events.

Chinese New Year is one of the largest examples of temporary migration. Also known as 'Longest-ever Spring Festival Holiday', millions of Chinese citizens travel back to their hometowns to celebrate the festival with family and friends. The mass migration of people, known as *Chunyun*, creates one of the largest annual human migrations in the world. In 2024, more than 2 billion cross-regional trips were made over an eight-day period. Domestic tourists contributed over $130 billion to the economy. After the festivities, individuals typically return to their usual places of residence.

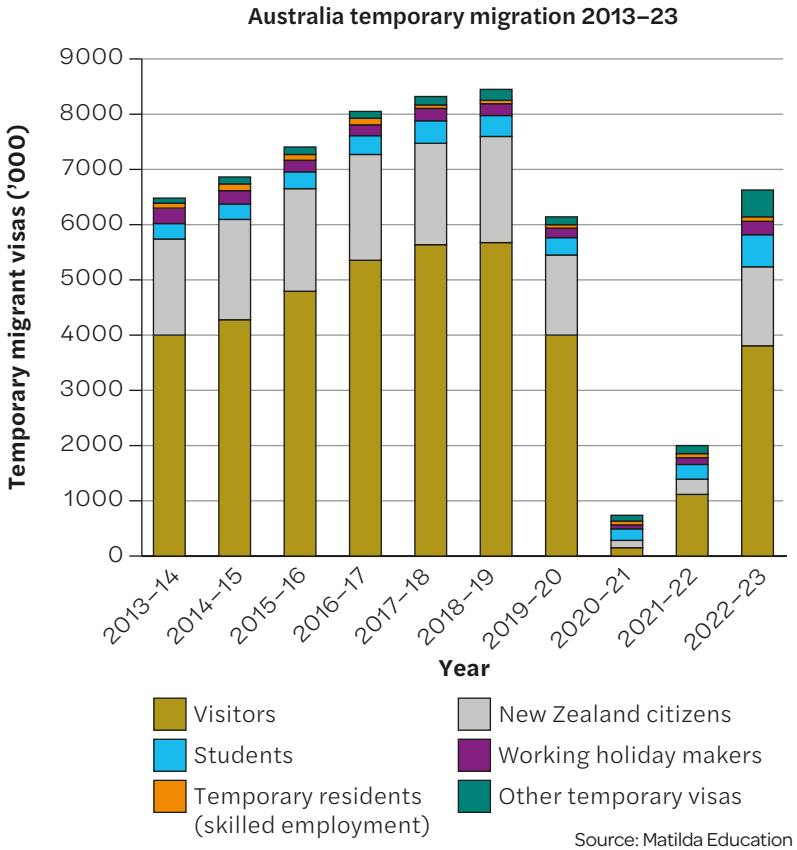
Event	No. of people who travelled for the event in 2019 (millions)
Chinese New Year	415.0
Kumbh Mela	150.0
US holiday season	115.6
Thanksgiving	55.3
Arba'een Pilgrimage	21.0
The Hajj	2.5

Source 2: Festivals and cultural events often prompt mass temporary migration patterns across the world.

Source 1: Crowds of people at Guangzhounan Railway Station, China, travelling during Chunyun

In 2022–23, Australia welcomed 737 000 migrants, with 554 000 arriving on temporary visas. Temporary visa holders, including students (38 per cent), skilled migrants, and working-holiday visa-holders (37 per cent), represent around 80 per cent of all visa holders in Australia. There are over 1 million international students in Australia, representing nearly 5 per cent of the population.

International students play a crucial role in Australia's economy, contributing not just through tuition fees but also by spending on housing, food, transport and tourism. In 2023, international education generated $48 billion, making it Australia's fourth-largest export. In 2023, the number of international students reached over 780 000, with average spending per student doubling in the last 20 years to $61 000. International students also help fill essential roles in sectors like hospitality, retail and healthcare, often working part-time during their studies. Their contributions support businesses and help meet labour needs especially through seasonal work like fruit picking or festive trade periods.



Source: Matilda Education Australia/Home Affairs

Source 3: Australia grants temporary migrant visas for a range of purposes including work, education and travel. People with a temporary visa have a set amount of time they are legally able to remain in Australia before they must return to their home country.

Learning ladder G4.12

Migration

1. What distinguishes temporary migration from international migration?
2. Source 3: What trends can be identified for visitors to Australia from 2013 to 2019?
3. What social and economic factors encourage temporary migration?
4. How does temporary migration compare with internal migration (see G4.11)?

Representing information

1. What data would be important for understanding the impacts of temporary migration on local economies?
2. Source 2: Illustrate the data as a bar graph. Which festival is associated with the highest number of people temporarily migrating?
3. Source 2: Using a blank world map, identify the locations of the events listed.
4. Access the Migration Data Portal and select 'Explore the World Map' under the 'International Data' tab. Comment on the patterns you observe. Would temporary migration impact overall global migration patterns?

Make it spicy

How is temporary migration *interconnected* with the geographical concepts of *space* and *scale*?

Representing information, page 436; interconnection, page 238; scale, page 242; space, page 234

HOW TO

G4.13

Case study

How is internal migration affecting China?

The Chinese government controls where its people work through the *hukou* system. Workers must obtain a permit to work outside their home village.

Internal migration in China

The largest **internal migration** in human history is occurring in China. Its people are migrating from inland rural villages to work in large coastal manufacturing cities such as Dongguan in Guangdong province. In 2015, there were 278 million migrant workers in China – 36 per cent of China's total workforce.

Under China's *hukou* system everyone must be registered in their home town or village to be able to access education, housing and welfare. Individuals are categorised as either rural or urban, and they are required to work within their designated area. In 1984, China allowed people to move to other provinces to work to provide the cheap labour required for China's booming manufacturing industries.

Under the *hukou* system, people moving from rural areas to cities must buy a work permit. Most permits only allow for temporary work of up to 12 months. There is great demand for these permits and they can be difficult to obtain.

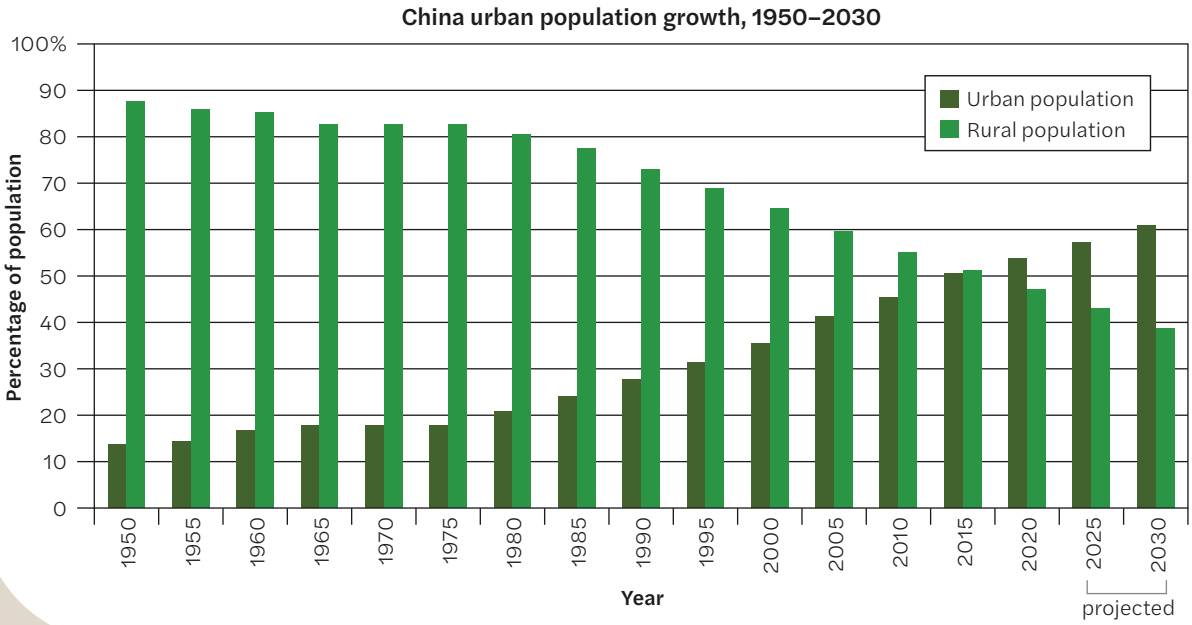
Different living standards

Differences in living standards are so great between rural and urban areas in China that migration is a very attractive prospect for rural workers. Rural incomes are less than 40 per cent of urban ones. Farmers move to the large industrial centres where they can earn far more money than they could growing crops or tending cattle.

Problems for migrant families

Migrant workers often leave their children behind so they can work in urban areas to earn a better income. Good-quality housing is difficult to find and rents are expensive. Migrants also struggle to get access to services such as education and health.

Migrants can spend many years away from their family. More than one-third of children in rural China are left behind in their villages under the care of their grandparents or other relatives.



Source 1: China's urban population growth 1950–2030

Source: QBS

▲ **Source 2:** Smartphone assembly line in Dongguan, Guangdong province. China produces 60 per cent of all mobile phones and about half of them are manufactured in Guangdong province.

China's population by province

▲ **Source 3:** China's population 23 May 2019. Guangdong province, in the south, accounts for 27 per cent of China's temporary migrants.

Source: iStock/Rainer Lesniewski

Learning ladder G4.13

Migration

1. What percentage of China's workforce is made up of migrant workers?
2. Source 1: Describe how China's urban population changed from 1950 to 2030.
3. Source 3: What is the population of Guangdong province? How has its population been impacted by internal migration?
4. Why are temporary work permits in great demand in China when migrants can suffer much hardship?

Presenting ideas

1. What is the social impact of China's *hukou* system?
2. Source 1: Why is this data relevant to understanding 'How is internal migration affecting China?'
3. Migrant families in China face a number of challenges. Explain these challenges using data and examples.
4. Source 2: Explain the interconnection between the demand for Chinese manufacturing and internal migration.

Make it spicy

Why is China's internal migration important for global *scale* economies?

HOW TO

Presenting ideas, page 472; scale, page 242

Where do people migrate within Australia?

Internal migration is, in many ways, part of the Australian way of life. Very few people will live their entire lives in the same home; work, study, lifestyle and family all play significant roles in population movement within Australia. The impacts of this movement are a key factor in the rapidly changing infrastructure, services and urbanisation of our major cities.

Mobile population

Internal migration is a common phenomenon in Australia, as people move between states (interstate migration), between regions, cities and rural areas (intrastate migration) and even from suburb to suburb (intercity migration). According to the Australian Bureau of Statistics, almost half of all Australians move house every five years. Such movement can include:

- seachange and treechange migration as retirees and young families seek a change from urban areas, leaving crowded Sydney suburbs and heading to the Central Coast.
- the pursuit of higher education as young adults leave rural areas, like Shepparton, to attend universities in larger urban areas, like the University of Melbourne.
- First Nations people in remote communities who migrate temporarily to visit extended family, or urban First Nations people moving to their traditional lands, such as returning to the Tiwi Islands from Darwin.

Economic migration

Work is perhaps the primary driver of movement within Australia, creating distinct patterns of migration, including:

- The pull of larger urban areas, notably Sydney and Melbourne, which offer the greatest number and variety of employment opportunities.
- New outer-urban suburbs in larger cities tend to grow quickly due to the availability of more affordable housing, e.g. Tarneit in Melbourne's south-west and the Area 20 precinct of north-west Sydney.
- Resource-rich locations in remote areas of the country, such as the Pilbara in Western Australia and Bowen Basin in Queensland, tend to attract a mobile workforce. With services and facilities often limited, most workers tend to live in cities such as Perth, Darwin, Cairns or Brisbane, and undertake fly-in-fly-out (FIFO) or drive-in-drive-out (DIDO) arrangements.

Source 1: Since 2000, the western Sydney suburb of Kellyville has undergone suburbanisation. On the rural–urban fringe of Sydney, Kellyville has transformed from farmland to a suburb of nearly 30 000 people. The western suburbs of Syney continue to expand and the new suburb of North Kellyville has already added a further 20 000 residents to the region.

Kellyville is an example of economic migration, where families are buying freestanding homes for the same price as apartments in Sydney.

1 Economic
People move to large cities for employment. The CBD offers the largest employment opportunities, stimulating a demand for more inner-city housing.

2 Economic
People move to outer suburbs where housing is more affordable. Many commute to work. Outer suburbs are often a family lifestyle choice.

3 Economic
Workers are moving to Western Australia and Queensland where a resources boom is creating employment in mining and associated industries.

4 Lifestyle
Many mining workers are choosing to move to cities in mining states and live away from the mines using FIFO work arrangements.

5 Lifestyle
Attractive locations with a pleasant climate and proximity to cities attract retirees, families and young people.

6 Lifestyle
Inner-city apartment living attracts workers looking to live close to work, cultural and social venues.

7 Environmental
Droughts, floods, cyclones and bushfires force Australians from farms and devastated communities. Congestion drives people from cities while lack of rural facilities drives them to cities.

8 Lifestage
Families may chose proximity to schools and recreational facilities. Older people might downsize to apartments or move to the coast, while students go off to university after school.

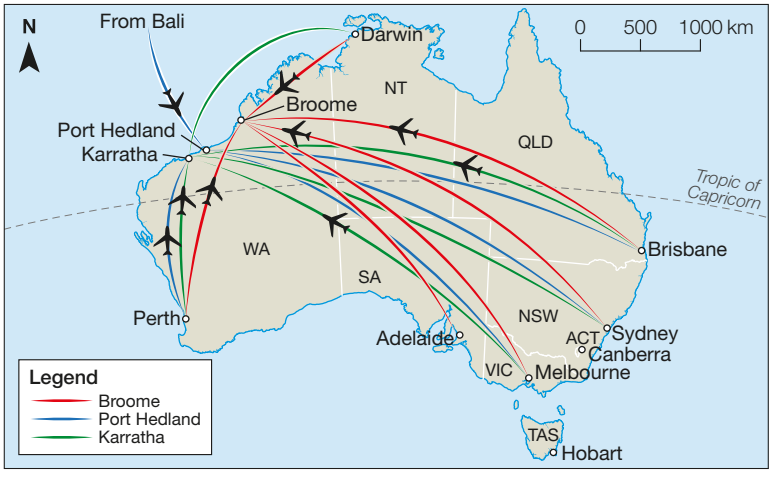
9 Cultural
Aboriginal and Torres Strait Islander people migrate temporarily to visit extended family members or to reconnect with their culture, but most move to larger towns for jobs, education and services.

▲ **Source 2:** Push and pull factors for different Australian regions

FIFO workforce

Infrastructure projects, primary industries and resource extraction require tens of thousands of workers across Australia, particularly in construction, mining and transport. Although some migrants choose to live in local communities like Port Hedland, Newman and Karratha, fly-in-fly-out (FIFO) workers form a significant proportion of the workforce. More than 50 000 people work this way around Australia, spending time in mining camps, local towns and project sites before returning to their place of residence. FIFO workers often form the majority of construction and infrastructure projects, including rail, road, buildings and power infrastructure.

FIFO movement to Western Australia



Matilda Education Australia

▲ **Source 3:** FIFO workers come from as far as the eastern capital cities to work on large mining and construction projects in the Pilbara region.

Migrants stay close to cities

Lifestyle changes have seen growing numbers of Australians move to quieter regions like Victoria's Surf Coast, New South Wales' Blue Mountains, South Australia's Barossa Valley and Queensland's Sunshine Coast.

Although some people are drawn to leave urban areas in favour of country towns, beaches and natural environments, the vast majority of internal migration in Australia occurs from rural to urban areas. Population density in Australia's urban areas continues to rise, particularly in inner-urban suburbs.

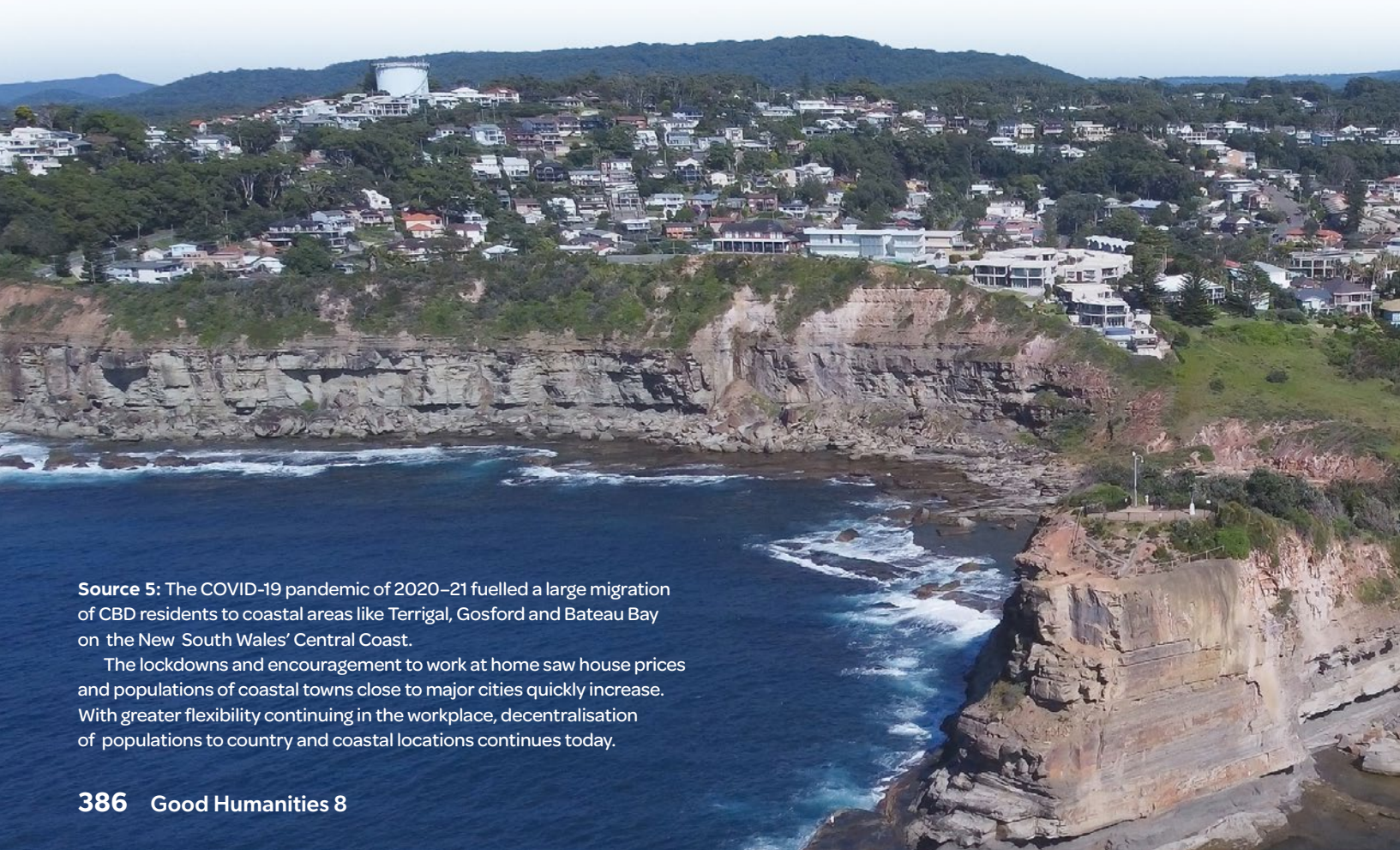
Australia annual population change as at 30 September 2024

State/Territory	Population at 30 September 2024 ('000)	Change over previous year ('000)	Change over previous year (%)
New South Wales	8511.2	120.8	1.4
Victoria	7013.0	146.7	2.1
Queensland	5608.7	111.9	2.0
South Australia	1882.7	21.5	1.2
Western Australia	2981.8	72.6	2.5
Tasmania	576.0	1.9	0.3
Northern Territory	255.6	1.7	0.7
Australian Capital Territory	475.6	6.9	1.5
Australia*	27 309.4	484.0	1.8

Source: Australian Bureau of Statistics

* Includes Other Territories comprising Jervis Bay Territory, Christmas Island, the Cocos (Keeling) Islands and Norfolk Island.

▲ **Source 4:** The annual population change for Australia as at 30 September 2024



Source 5: The COVID-19 pandemic of 2020–21 fuelled a large migration of CBD residents to coastal areas like Terrigal, Gosford and Bateau Bay on the New South Wales' Central Coast.

The lockdowns and encouragement to work at home saw house prices and populations of coastal towns close to major cities quickly increase. With greater flexibility continuing in the workplace, decentralisation of populations to country and coastal locations continues today.

Workers, students and empty-nesters move closer to central business districts in search of the inner-city lifestyle. As prices soar in such areas, more housing is developed on the city fringes, leading to further urban sprawl.

According to the National Sea Change Taskforce, 'the total population in coastal areas outside capital cities will increase to around 13.2 million people by the year 2050. That's a population increase which is equivalent to another 12 or 13 Gold Coasts around coastal Australia'. This further contributes to urban sprawl, as urban corridors emerge, such as Perth–Mandurah and Brisbane–Gold Coast. It can also create unsustainable growth as local and state governments struggle to provide schools, public transport and infrastructure to support ever-emerging residential developments. In addition, the risk of environmental degradation continues to rise as fragile coastal environments are put under increasing pressure.

Interstate migration

The number of interstate moves rose to a record high of 485 000 from March 2021 to March 2022 during the COVID-19 pandemic. Queensland has long been the most popular destination as migrants are drawn to the warmer climate, coastal lifestyle and employment opportunities, and many people flocked there to escape the lockdowns of New South Wales and Victoria.

Since 2022, the other states and territories have made significant efforts to entice internal migrants to support growing economic demand, notably Western Australia and the Northern Territory. Rising house prices in many regions have also accelerated movement, with New South Wales and Victoria seeing negative net internal migration figures; that is, more Australians left those states than moved into them.

Learning ladder G4.14

Migration

1. Source 3: Who are FIFO workers?
2. Source 4: How has Victoria's population growth compared to Queensland's over time?
3. Source 2: Explain the patterns of migration in Australia.
4. Source 4: Compare how population change differs from state to state and suggest three influencing factors.

Planning and collecting

1. Write three open-ended questions you might ask someone who is migrating to Australia and considering where they should settle.
2. Source 2: For each of the nine factors, suggest a research method to collect relevant data on the push or pull factor.
3. Research FIFO work avaliable in Australia. Where are most of the job opportunities located?
4. Conduct a survey asking classmates where in Australia they would ideally like to live. Have a discussion about why this might be the case.

Make it spicy

Suggest three ways that local governments could balance the need for more housing and communities with protecting the *environment*.

HOW TO

Planning and collecting, page 426; environment, page 241

G4.15

How is international migration changing Australia?

More than 30 per cent of Australia's population was born overseas and more than 50 per cent have at least one parent born outside Australia. Migration includes skilled workers, family reunions, refugees and students, with the majority coming from the Asia–Pacific.

Growth through migration

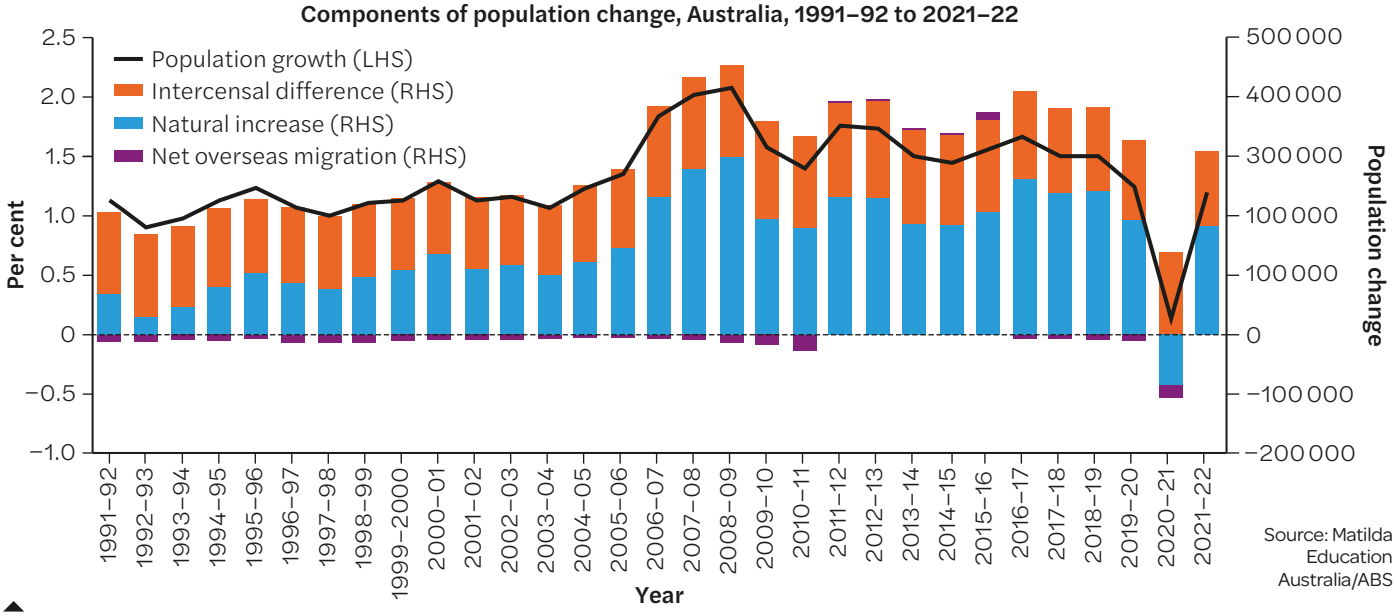
Without migration, Australia's current population would be lower than 15 million; waves of migration have played a major role in the current total of almost 26.5 million in 2023. Today, Australia is one of the most culturally diverse nations in the world, with more than 300 different languages spoken, and migration is a cornerstone of this diversity and growth. Around 83 per cent of Australia's population growth in 2023–24 was attributed to international migration.

In the post-World War II period, most new migrants to Australia came from the British Isles and from Europe, but this trend has shifted over the past few decades, with the fastest-growing populations of migrants coming from China, India, New Zealand, the Philippines and Vietnam.

Australia's migration program

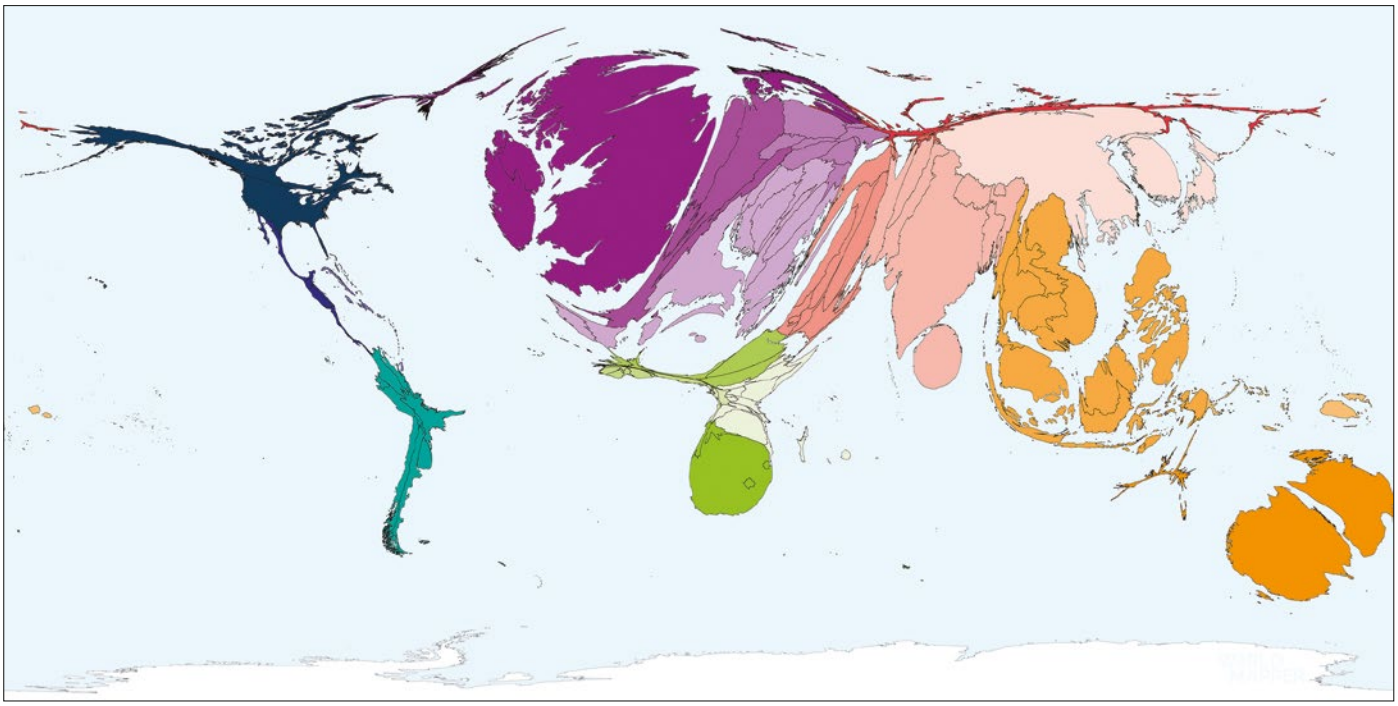
Migration to Australia takes place through a variety of pathways, but the Australian Government's Migration Program is the main avenue for immigration to Australia and is used to increase the national population and promote economic growth. To do this, migration targets are annually adjusted to meet the needs of Australian society. The Migration Program has two streams:

- The skill stream (72 per cent of the 2023–24 program), which attracts migrants who can contribute to identified skill shortages in the economy. The Department of Immigration publishes lists of skilled occupations, including doctors, nurses and engineers, that Australia requires and people from overseas can apply for them. They can either apply as individuals or attract visa sponsorship from employers or governments.



Source 1: This graph of Australia's recent population change shows the country's reliance on the intake of overseas migrants and the impact of the COVID-19 pandemic in 2020–21 on Australia's population when migration was stalled.

Migration to Australia, 1990–2017



Source: World Mapper

- The family stream (28 per cent of the 2023–24 program), which reunites immediate family members who are permanent residents or Australian citizens, such as spouses who are foreign nationals, or the siblings of Hazara migrants from Afghanistan.

In addition to this, the Humanitarian Program allows Australia to fulfill its international obligations to assist in the resettlement of refugees and to provide support in response to regional and global humanitarian disasters and conflict.

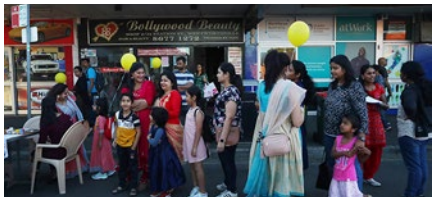
▲ **Source 2:** Migration to Australia, 1990–2017. The relative thickness or thinness of a country represents the proportion of migrants from that country.

▼ **Source 3:** Thomas Deng, Garang Kuol and Awer Mabil all were part of the Australian soccer squad in 2022. They are the first trio of South Sudanese refugees to represent Australia. Deng, Kuol and Mabil all arrived in Australia as refugees. Awer Mabil spent the first 10 years of his life in a refugee camp in Kenya and Thomas Deng also spent his early years in Kenya before arriving in Adelaide. Garang Kuol and his family were forced to flee to Egypt and eventually settled in Shepparton.

Where do migrants settle in Australia?

Every state and territory of Australia has a proportion of its population born overseas, yet the distribution of migrants tends to follow a more clustered pattern, with the majority living in the eastern states and in large cities of over 100 000 people. In recent years, the Migration Program has looked to provide incentives to shift this settlement pattern and attract new migrants into regional areas to support economic growth and the provision of services.

In 2011, 82 per cent of the migrant population lived in capital cities, compared to 66 per cent of all Australians, with the highest proportions of migrants in Sydney, Melbourne and Perth. Following World War II, waves of migrants increasingly concentrated in New South Wales and Victoria; from 1947–1991 migrant populations in Australia's large cities doubled to 80 per cent. Within cities themselves, migrants tended to concentrate into suburbs like Carlton (Italians) and Oakleigh (Greeks) in Melbourne, Fairfield (Vietnamese) in Sydney, and Burns Beach (South Africans) in Perth. Today, the majority of new arrivals continue to settle in eastern states and capital cities; by 2011, three-quarters of all new migrants to Australia settled in New South Wales, Victoria and Queensland.

Increasing components of Migration Program	Impact on settlement patterns
Skilled migration intake 	• Professionals settle in cities and more expensive suburbs that reflect higher incomes rather than ethnicity • States target skilled migrants to fill specific shortages in agriculture, technology, manufacturing and mining • Migration stimulates economic growth in cities, states and regions
Asian migrants 	• Concentrate into cities (e.g. high percentage of Indians in Melbourne and Sydney) • Often choose city apartment living in middle or inner suburbs • Concentrate in suburbs with high populations from previous waves of migration
International students and working holidays 	• Majority in large cities where universities and casual employment are concentrated • Regional centres with universities (e.g. Bathurst and Townsville) • Regional centres benefit from seasonal workers (e.g. tourist resorts and farming districts)
Humanitarian intake 	• Predominantly in large cities where support is available • Lower socioeconomic groups live in outer suburbs (e.g. Blacktown in Sydney) • Regional centres targeted (e.g. Tamworth and Geelong) • Benefits states with falling populations (e.g. Tasmania)
Regional settlement program 	• Benefits towns in regional Australia, particularly in farming and mining areas (e.g. the Kimberley and Ballarat) • Satisfies skills shortages in regional locations • Increases populations, stimulates local and state economies and generates employment • Makes regional and rural areas sustainable by slowing population loss

Source 4: Refugees from Myanmar work at the Luv-a-Duck factory in Nhill. They have created new lives for themselves and strengthened the rural economy.

Case study: Nhill

In regional western Victoria, roughly halfway between Melbourne and Adelaide, lies the town of Nhill. It has a population of around 2000 and, like many regional towns, a gradually aging population (with a median age of 47) due to rural-to-urban migration patterns that see many younger people leave to seek employment and tertiary education in cities.

The principal employer in town, the Luv-a-Duck factory, which prepares duck meat for distribution across Australia, had been struggling to find workers and in 2010 began working with a small group of Karen refugees; over time this community has grown to more than 200 with the support of the Victorian Government's Capacity Building and Participation Program and the entire Nhill community. The Karen – a persecuted minority group from Myanmar – have overcome immense cultural differences and language barriers to thrive in regional Victoria, breathing life into the local economy and serving as a model example of how international migration can support the challenges created by internal migration.

Learning ladder G4.15

Migration

1. Define international migration.
2. List pull factors that draw international migrants to Australia.
3. Why are large cities on the Australian east coast more likely to attract international migrants than other parts of the country?
4. What is the difference between international migrants and forcibly displaced people?

Strategies

1. Describe how the Australian Government works to balance the flow of international migrants.
2. Source 4: How is international migration important to the wellbeing of rural communities like Nhill?
3. Describe how international migration might contribute to the need for better environmental management in urban areas like Melbourne and Sydney in terms of traffic and housing.
4. There are often debates in the media and between politicians about how to manage international migration. Create a list of pros and cons for international migration. Design a strategy to overcome one of the cons listed.

Make it spicy

What might be some of the impacts of international migration on national *scale* economies?

HOW TO

Strategies, page 468; scale, page 242

How do I conduct a good inquiry?

Throughout this chapteryou have developed knowledge and understanding of urbanisation. Background knowledge is important as it helps you make connections to new information, ask better questions, and consider different perspectives.
As you were progressing through the chapter you have been gathering information through highlighting, note taking, or responding to the Learning ladder.
It is now time to start planning your inquiry! Refer to pages 476–82 for a step-by-step guide to this process.

Throughout this chapter, a range of case studies were presented to apply your learning to real-life events. Review these pages and select a case study to build your inquiry around.

- What happens when cities grow into one another?, page 366
- How is urbanisation changing Indonesia?, page 370
- What is the impact of Jakarta's population growth?, page 374
- How is urbanisation impacting Mumbai?, page 376
- How is internal migration affecting China?, page 382

For your selected case study, complete a 'see, think, wonder' to help build curiosity and develop ideas you may cover in your inquiry.

Remember: A good inquiry will be focused on an aspect of the topic that interests you. It is more than just a research task that you present as a PowerPoint, it is a genuine investigation into something you are wondering about.

See
What do you see?
What are the human and physical characteristics?

Think
What do you think about that?
Where is it?
Why is it there?
When did it occur?

Wonder
What questions does this raise in your mind?
What else do you need to know to understand what is happening here?
What are other people saying about this?

Write down five observations you make when viewing the data presented.

The following is a list of example open-ended questions which may help you develop your inquiry.

Urbanisation

- **Descriptive question:** *What is urbanisation and how does it affect communities?*
- **Procedural question:** *How has urbanisation changed the landscape of my local area over time?*
- **Comparative question:** *How does urbanisation in Australia compare to urbanisation in other countries?*
- **Evaluative question:** *How sustainable is the current rate of urbanisation in my country?*

Level up!

Throughout the chapter you have been working to move up the Learning ladder. An inquiry investigation is a great opportunity to practise these skills in context. When planning your inquiry consider how you may integrate geospatial technology into your fieldwork or how you may explore a range of perspectives. Use the How-to chapter to support you in planning and research.

Sustainable urban planning

G5

ARE AUSTRALIA'S CITIES GROWING SUSTAINABLY? 396

HOW WILL CLIMATE CHANGE IMPACT URBAN SPACES? 402

HOW CAN WE DESIGN SUSTAINABLE CITIES? 412

How can I understand sustainable urban planning?

As the populations of Australia's urban spaces continue to rise, issues such as housing shortages, traffic congestion and pollution are creating problems for urban planners to solve. Future urban planning requires strategies that promote sustainability such as urban renewal, higher density housing, an increase in green space and energy-saving measures.

Learning ladder

The Learning ladder lists the knowledge and skills you will learn. Each has five levels of difficulty. Learning skills at the bottom of the ladder will help you to master the skills at the top of the ladder.

Steps in knowledge progression	Sustainability	Management practices	Interconnections	Planning and collecting	Representing information
5	I can analyse how sustainability influences planning.	I can evaluate management practices.	I can analyse the causes or consequences of interconnections.	I can use geospatial technology to record data.	I can follow ethical practices when working with data.
4	I can explain different perspectives on sustainability.	I can compare management practices.	I can explain the causes and consequences of interconnections.	I can gather primary data.	I can use geospatial technologies to create maps.
3	I can explain the importance of sustainable practices.	I can explain sustainable management practices.	I can explain interconnections.	I can gather information from secondary sources.	I can use geographical conventions to construct maps.
2	I can describe sustainable practices.	I can describe management practices.	I can describe interconnections.	I can plan an inquiry.	I can represent data and information.
1	I can identify factors that influence sustainability.	I can identify management practices.	I can identify interconnections.	I can ask open-ended questions.	I can select data relevant to a question.
	Sustainable urban planning			Geographical inquiry	

Source 1: CopenHill in Copenhagen, Denmark, is an an energy plant that runs on rubbish rather than fossil fuels.

	Interpreting information	Making conclusions	Strategies	Presenting ideas
5	I can use geographical concepts to structure data analysis.	I can evaluate ethical considerations.	I can consider perspectives to evaluate strategies.	I can analyse the implications of phenomena.
4	I can predict change to patterns.	I can assess the reliability of data.	I can design strategies.	I can explain interconnections with data.
3	I can explain distributions and patterns.	I can write evidence-based conclusions.	I can predict the impact of a strategy.	I can support explanations with data.
2	I can describe distributions and patterns.	I can describe the impact of geographical phenomena.	I can explain a strategy.	I can explain the relevance of information.
1	I can read graphs and maps.	I can answer geography questions.	I can describe a strategy.	I can describe phenomena using geographical terms.
		Concluding and decision-making		Communicating

Steps in skills progression

Are Australia's cities growing sustainably?

Governments need to plan far into the future to successfully manage Australia's growing urban populations. Redevelopment of underused areas and encouraging people to move to regional areas helps authorities deal with rapid urbanisation.

Population growth

Australia is one of the world's most highly urbanised countries, with three in every 10 people in Australia living in Sydney or Melbourne.

Australian cities have low population densities compared to cities in other countries. Montreal in Canada has the same population as Sydney, but covers only a third of the area. Cities in Australia contain unused or poorly used space that could be **redeveloped** for housing through **urban renewal**.

It is projected that by 2050 Australia will have a population of 40 million people. Nearly all of the growth will come from international migration and more than 70 per cent of this growth is likely to be in the major cities.

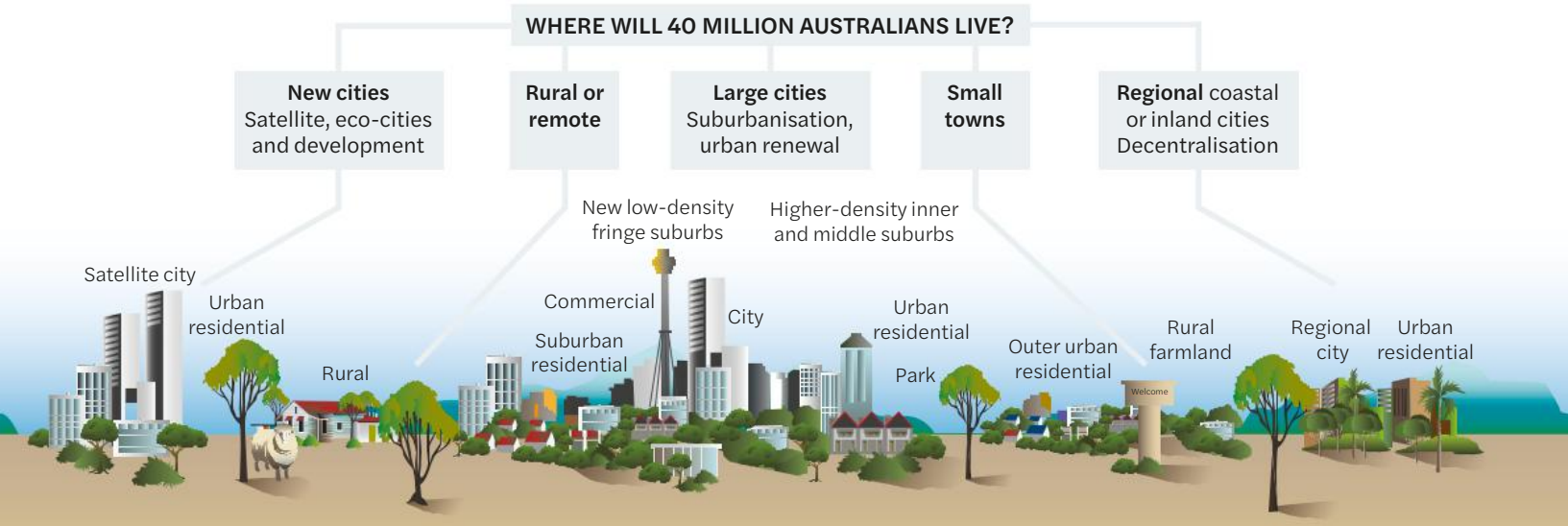
Source 1: Living options for Australians as the population grows to 40 million people by 2050

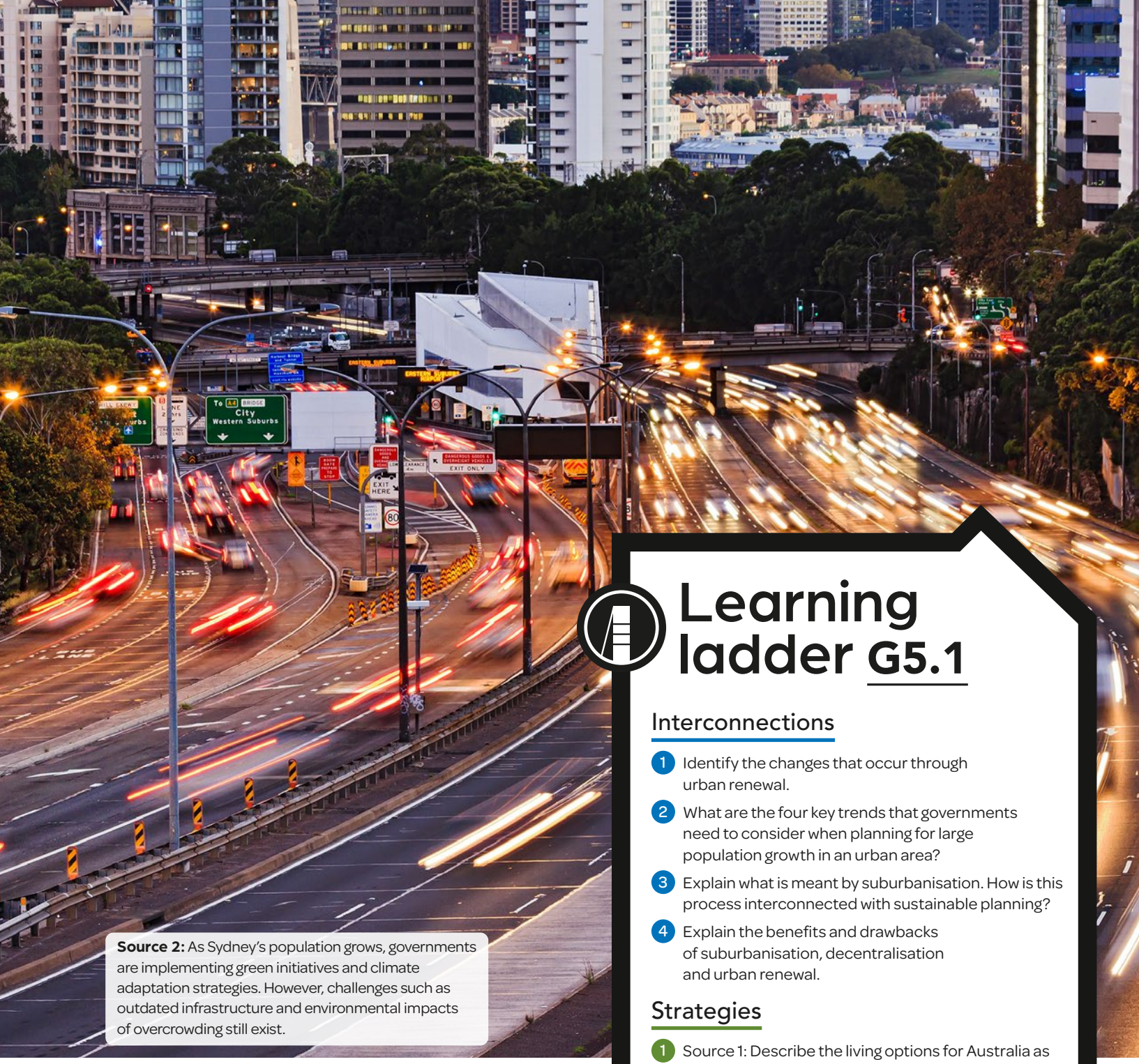
Planning for urban growth

When planning for future urban growth, urban planners and governments consider four key trends:

- **suburbanisation** – where land on the city's outer edge is made available for housing. The suburbs grow outwards as new houses and services are constructed. Expanding cities through suburbanisation replaces natural environments or land previously used for farming.
- **decentralisation** – when people move from an urban area to a rural or coastal area to escape urban challenges such as expensive housing, traffic and pollution. The decentralisation of the population helps take pressure off the urban centre
- **urban renewal** – when people move back into inner-city areas that have been improved by modernising infrastructure, increasing access to facilities and services. People who enjoy the advantages of being near the city centre may move to renewed spaces.
- **satellite cities** – creation of new towns and cities that are separate from the main city centre. These smaller city hubs, such as Dandenong in Victoria, provide similar access to opportunities, facilities and services as the main city, but enable people to live in suburban areas and travel to their local hub, rather than live in or commute to the main city. Satellite cities aim to take the pressure off the main city centre.

2050





Source 2: As Sydney's population grows, governments are implementing green initiatives and climate adaptation strategies. However, challenges such as outdated infrastructure and environmental impacts of overcrowding still exist.

Australian city growth

The Australian Bureau of Statistics (ABS) reported that the population of Australia's capital cities increased by over 500 000 people in the year ending June 2023. Melbourne grew by 167 500 people and Sydney by 146 700 people. The growth rate for the capital cities combined was more than double the growth rate for regional Australia. This puts increasing pressure on urban infrastructure, facilities and services. Governments need to ensure they are working on building sustainable city development strategies to support changes.

Learning ladder G5.1

Interconnections

1. Identify the changes that occur through urban renewal.
2. What are the four key trends that governments need to consider when planning for large population growth in an urban area?
3. Explain what is meant by suburbanisation. How is this process interconnected with sustainable planning?
4. Explain the benefits and drawbacks of suburbanisation, decentralisation and urban renewal.

Strategies

1. Source 1: Describe the living options for Australia as the population climbs to 40 million people by 2050.
2. Source 2: Why is traffic management an important part of sustainable growth?
3. Source 1: How might satellite cities help reduce the impact of urbanisation?
4. Design a sustainable eco-city for Victoria that would encourage social, economic and environmental sustainability.

Make it spicy

Is the growth of Australia's urban centres *sustainable*? Why/why not?

HOW TO

Strategies, page 468; sustainability, page 244

What are the consequences of urban concentration in Australia?

While urbanisation can have positive impacts on city infrastructure development and investment, it can negatively impact the regional towns where populations ultimately decline.

Urban economic growth

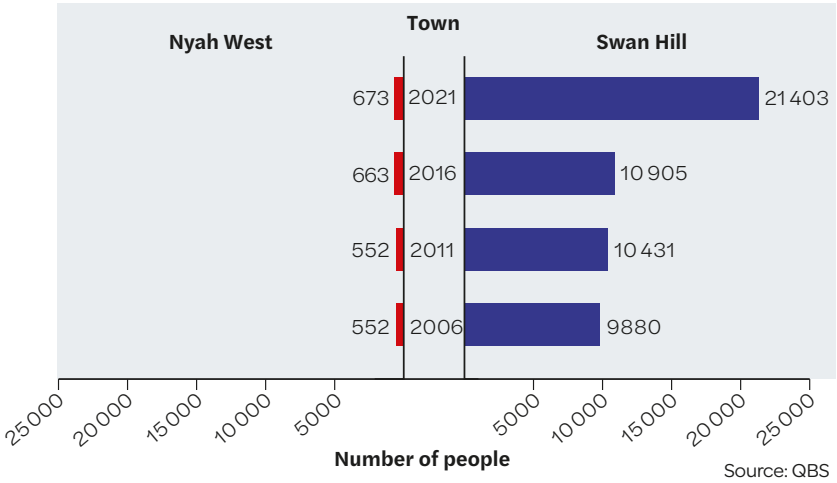
Concentrated urban areas like Sydney and Melbourne drive economic growth by providing access to jobs, services and infrastructure. High population densities in the capital cities lead to the development of more essential services such as hospitals and schools. Investment in transport and utilities connects regional people to city centres, encouraging movement to urban areas.

Regional loss

The urbanisation of Australia is slowly leading to the decline of some regional towns. Nyah West is a small town in north-western Victoria, near the New South Wales border. It was established in 1915 when the railway was extended from Swan Hill, and it has since supported the surrounding irrigated farms that produce wine, dried fruit, vegetables and wool.

Like many small rural towns in Australia as they lose their services, Nyah West is losing its people to larger cities such as Melbourne, and to the nearby regional centre of Swan Hill. Nyah West lost several government services and all of its banks in the 1980s and 1990s. These services are all now available in the growing town of Swan Hill, just 20 minutes away.

Population change in Nyah West and Swan Hill, 2006–21

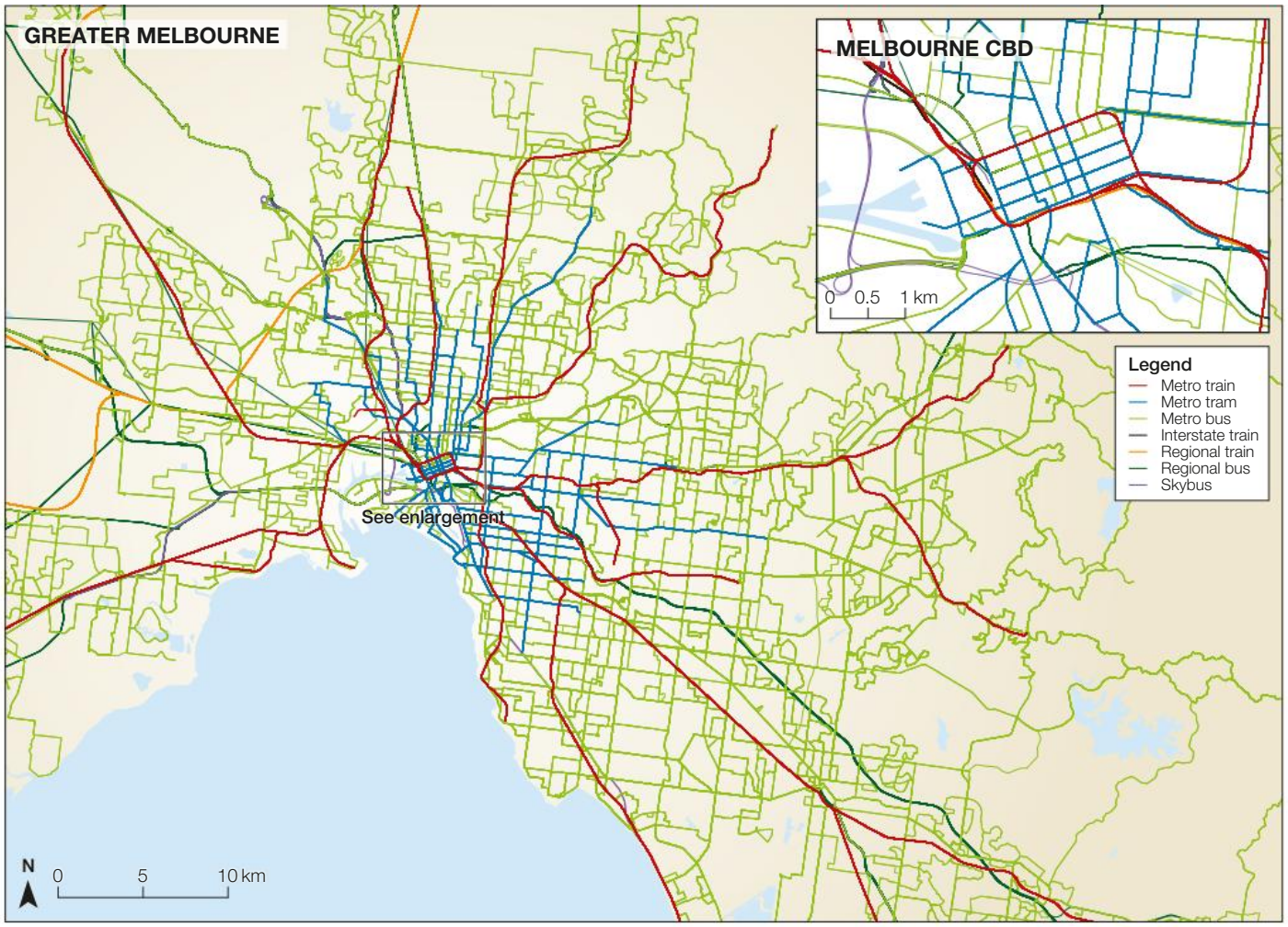


Source: QBS

Source 1: Population change in Nyah West and Swan Hill, 2006–21

Source 2: Vacant shops line the main street of Nyah West, a declining town in Victoria's Mallee region. Only three of the 20 shops in the main street are still open. Once it had three more cafes, three supermarkets, two hairdressers, a baker, a gunsmith, a bank, three doctors and a nursing hospital. The primary school is still there, but has less than 45 pupils of the original 100.

Public transportation in Melbourne CBD and suburbs



Source: Matilda Education Australia

Source 3: Access to infrastructure and services such as public transport is clustered towards city centres. In some situations, people may need to travel to major hubs like Richmond station to change train lines to complete their journey.

Learning ladder G5.2

Interconnections

1. What are some positive impacts of urbanisation on city infrastructure development?
2. Source 3: What interconnections exist between urban concentration, access to services and population movement in Australia?
3. Explain the interconnections between urban infrastructure development and the quality of life for residents in both concentrated urban areas and declining regional towns.
4. Consider the SHEEPT factors. Explain why regional towns are important for Australia.

Making conclusions

1. What historical factors contributed to the establishment and development of Nyah West, and how are they connected to current population trends?
2. Describe how the situation in Nyah West illustrates how urbanisation is affecting regional towns.
3. Write a conclusion for the following inquiry question: 'Will urbanisation result in the loss of regional Australian towns?'
4. Consider the sources presented. What other data is required to fully understand the impact of urban concentration on rural townships?

Make it spicy

Describe the *change* over time in Nyah West.

Making conclusions, page 464; change, page 240; SHEEPT, page 460

HOW TO

How does urbanisation impact the environment?

As migration to urban centres continues, increasing pressure is put on the environment to support growing population densities. Urbanisation can lead to deforestation, increased pollution and overuse of resources, ultimately reducing biodiversity and habitat availability.

Habitat loss

The construction of roads and highways can lead to the isolation of native animal populations and increase road fatalities. A proposed highway to reduce **congestion** between the Gold Coast and Brisbane was criticised due to environmental concerns about the safety of koala populations near the build site. Koalas have recently been declared an **endangered species**. In response, the state government designated a 400-hectare site in Pimpama for relocating affected koalas.

Carbon emissions

Cities are responsible for around 70 per cent of global carbon **emissions**. In Sydney, most nitrogen oxides and carbon monoxide emissions come from vehicles. People living within 200 metres of a busy road are more likely to experience asthma and have lower lung function because of the pollution in the city air.

Water use

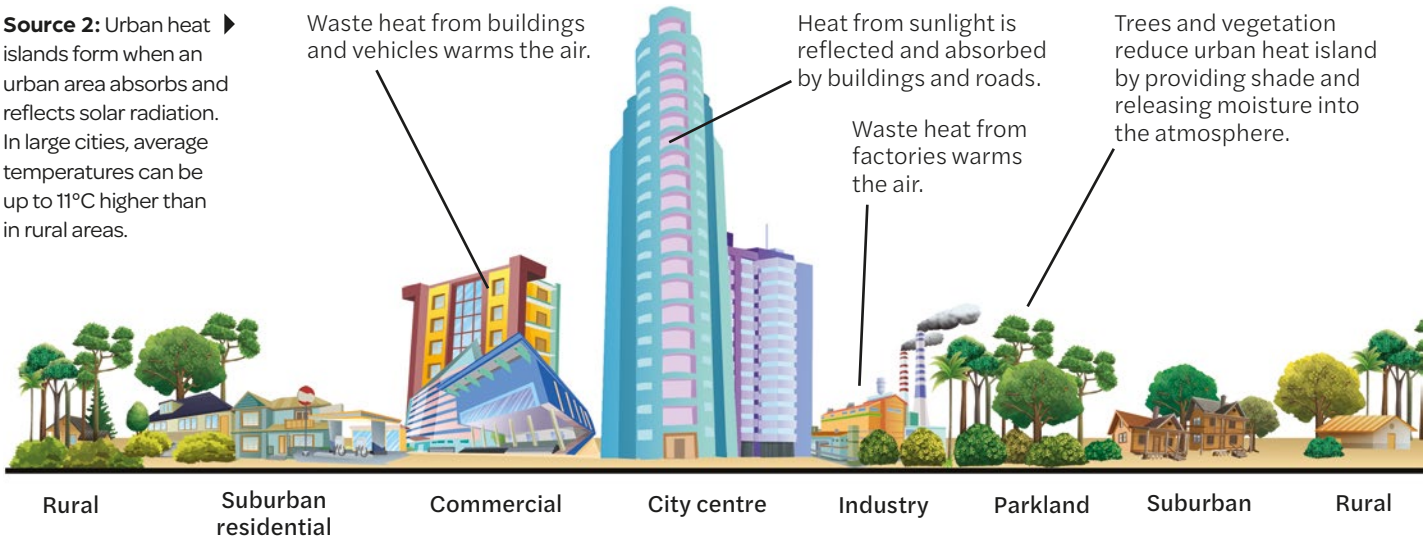
Rapid urban growth can lead to higher demand for resources such as water and energy. Severe water shortages due to over-extraction of groundwater and inadequate infrastructure can impact the health of people and the environment. Redirection of water from increased run-off and alteration to natural drainage patterns can also increase flood risks.

Urban heat island effect

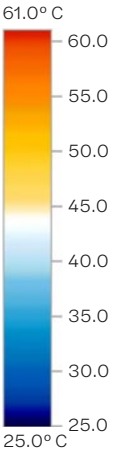
Urban surfaces and buildings absorb heat from the sun and can be 10–20°C warmer than the surrounding air. The **urban heat island effect** is the warming of urban environments due to heat absorbed by bricks, roads, car parks and concrete, and then radiated into the air. The urban heat island effect is making increased temperatures and hot weather events from climate change more severe.

Source 1: Pollution in the Yarra River, Melbourne. As urbanisation continues, waste output increases. Mismanagement of waste can lead to significant pollution of the environment and surrounding towns.

Source 2: Urban heat islands form when an urban area absorbs and reflects solar radiation. In large cities, average temperatures can be up to 11°C higher than in rural areas.



Source 3: The effect of urban heat islands is evident in places such as Melbourne, resulting in an increased local energy demand for air-conditioning and risks to community health.



Learning ladder G5.3

Sustainability

1. What factors contribute to the overuse of resources in rapidly urbanising areas?
2. What strategies can cities use to reduce the urban heat island effect and promote a cooler environment?
3. What role do sustainable transportation options play in reducing carbon emissions in urban areas?
4. How do the concerns regarding koala populations near proposed highways reflect differing perspectives on sustainable growth?

Presenting ideas

1. Describe the concept of 'habitat loss' considering the process of urbanisation and its effects on wildlife populations.
2. Why is data on koala populations relevant when discussing urban development projects?
3. What percentage of global carbon emissions is attributed to cities? Why is this data important? How is it interconnected with developing sustainable urban practices?
4. Source 2 and 3: Explain the interconnection between urbanisation and urban heat islands. How might the urban heat island effect change as city populations grow?

Make it spicy

Water is a renewable resource. Why then are water shortages an issue in urbanised *places*?

Presenting ideas, page 472; place, page 236; sustainability, page 244

HOW TO

G5.4

How will climate change impact urban spaces?

Global warming is the long-term heating of Earth's atmosphere due to human activities that have increased heat-trapping greenhouse gases. The climate change resulting from global warming is already impacting urban areas.

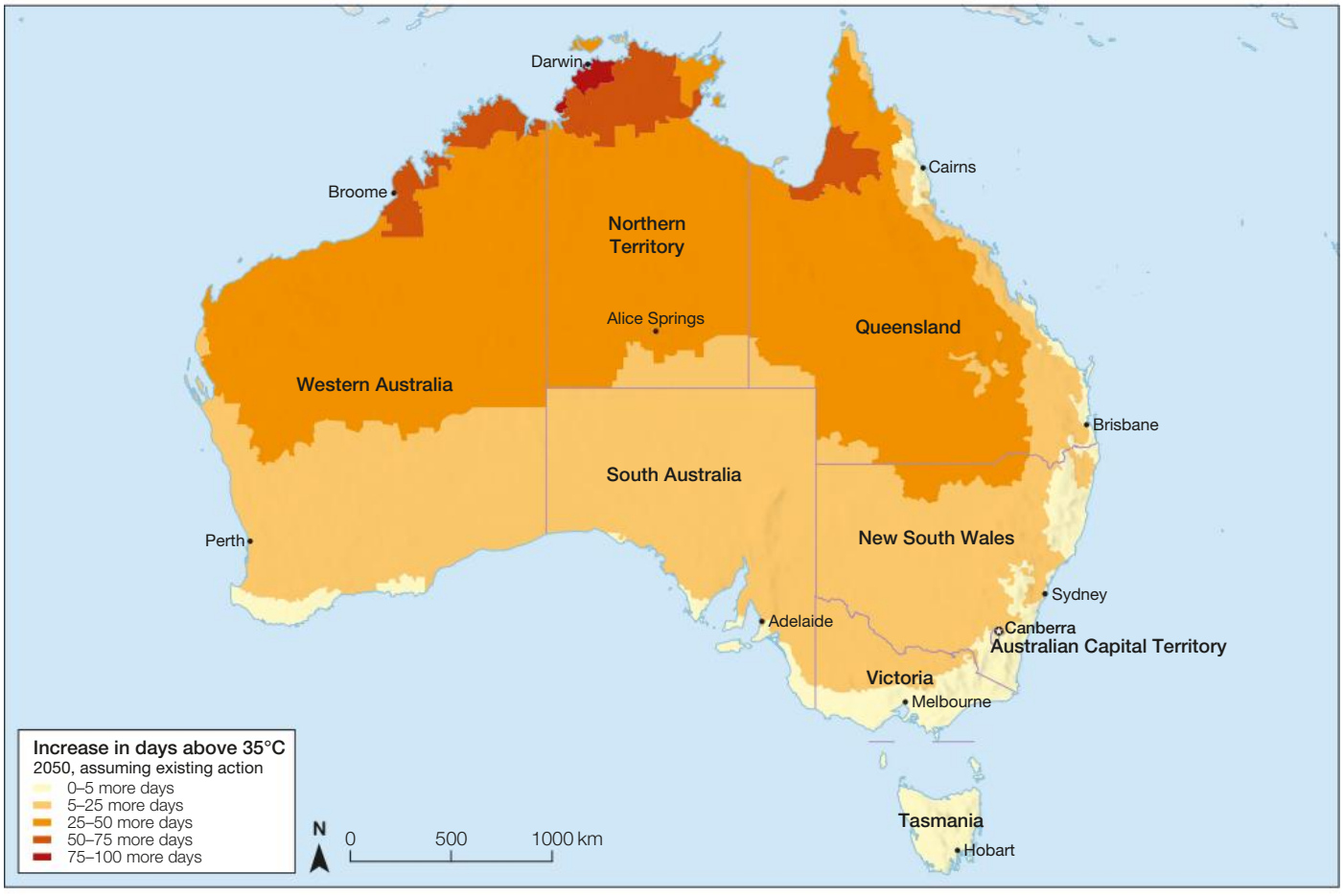
Climate change

The extra energy stored in the atmosphere is changing the Earth's climate system, with an average temperature increase of 0.7°C since the beginning of the 20th century and the 10 warmest years ever recorded since 2010. Greater climate variability, increasing extreme weather events, changed **precipitation** patterns, rising sea levels and ocean warming are consequences of climate change that are already impacting urban areas.

Extreme weather events

The impact of intensifying and more frequent extreme weather events is being felt in urban areas. A Climate Council analysis has revealed that Australian capital cities will face twice as many days exceeding 35°C by century's end. In Darwin, if current climate pollution reduction efforts continue, the city could see four times as many days over 35°C by mid-century, with nearly three additional months of high temperatures by 2050. Without action, by 2090, Darwin might experience 283 days above 35°C annually and similarly high nighttime temperatures.

Australia number of days with temperatures over 35°C



Source: Matilda Education Australia/Climate Council

▲ **Source 1:** Australia will experience up to 100 or more days over 35°C in some places by 2050 if existing action continues.

Projecting inundation scenarios for the impact on Australian capital cities

Source 2: Coastal Risk Australia's online hazard-mapping tool highlights impacts on Australian capital cities of sea-level rise, projecting inundation scenarios through to 2100. This tool uses LiDAR technology to create 3D elevation models aimed at informing the public, urban planners and local authorities about local flood risks, prompting action.

Source: Coastal Risk Australia

Sea-level rise

The warming ocean and ice sheets melt are contributing to rising sea levels and putting low-lying coastal towns and cities at risk of inundation. Sea levels are already on the rise around Australia. Recent projections indicate that if current emissions continue, sea levels in the Cairns and Port Douglas regions will increase by 65 centimetres by 2090, inundating the region.

Impact on infrastructure

In addition to rising sea levels and extreme weather events, climate change may also put more stress on urban infrastructure and public services.

Hotter temperatures can damage roads, warp train tracks and strain electricity grids due to the number of air-conditioners and appliances being run simultaneously. This can then lead to more power outages during peak demand periods. Increased heat also affects human health, particularly in densely built areas where the urban heat island effect traps warmth and limits overnight cooling. Vulnerable populations such as older adults, young children and those with pre-existing health conditions are most at risk.

On the other hand, altered rainfall patterns may increase the likelihood of flash flooding, overwhelming stormwater systems and damaging property.

Learning ladder G5.4

Interconnections

1. Provide an example of an extreme weather event that may impact urban areas.
2. Describe the interconnection between global warming and urbanisation.
3. Explain why sea-level rise will impact urban growth.
4. Explain how global warming is causing climate change. Why is a changing climate problematic for urban areas?

Interpreting information

1. Source 2: What does the blue on this satellite image represent?
2. Source 1: Which regions of Australia are predicted to experience more than 75 days above 35°C in 2050?
3. Source 2: Explain why cities are susceptible to flooding caused by sea-level rise. Consider the SHEEPT factors.
4. Source 1: How might increasing national temperatures impact liveability of local places?

Make it spicy

Source 1: How might increasing national *scale* temperatures impact liveability of local *places*?

Interpreting information, page 446; place, page 236; scale, page 242

HOW TO

G5.5

How can national strategies manage urban growth?

Australia's cities and suburbs offer both opportunities and challenges. It is important to plan for the ways our cities will grow and change to ensure continued high liveability standards and environmental sustainability.

To guide urban planning and decision-making, policies and strategies are developed that outline goals and objectives for the future. In some cases, after drafting strategy documents, the government seeks public feedback and input to ensure they are addressing the diverse needs and perspectives of the broader community. It is important that urban strategies not only have clear goals and objectives, but also detail an affordable way of achieving these goals within a given timeframe.

The National Urban Policy in Australia was designed in 2021 to guide the development of liveable, sustainable cities by promoting coordinated planning and collaboration among federal, state and local governments.

Objective of the National Urban Policy

The National Urban Policy aims to support the UN Sustainable Development Goals, especially Goal 11: Sustainable cities and communities.

The Australian Government has set five goals for urban places:

1. **Liveable:** Safe, well-designed cities promoting quality of life
2. **Equitable:** Fair access to resources and opportunities for all
3. **Productive:** Economic opportunities and efficient movement of goods and services
4. **Sustainable:** Planning for growth, reducing emissions, and adapting to climate change
5. **Resilient:** Cities that can withstand and recover from changes and disasters

The key initiatives outlined in the policy include building 1.2 million new homes over five years and increasing the availability of social housing. The policy also aims to promote sustainable transport by allocating $100 million for developing bicycle and walking paths. There has been some early criticism of the policy regarding how urban development challenges will be overcome and technologies will be implemented to enhance transport networks and connections.

Source 1: The National Urban Policy recognises the importance of rehabilitating, restoring and protecting natural environments.

Federal government

Federal matters such as infrastructure, foreign policy, postal and telecommunications services, Medicare and welfare payments

State/Territory governments

State matters such as infrastructure, public transport, hospitals, and police and ambulance services

Local councils

Local matters such as building approvals, waste management, local roads/footpaths/cycleways

Source: Matilda Education Australia

Source 2: There need to be strong partnerships between, across and within governments, all working together to increase sustainability and liveability for all Australians. Roles and responsibilities of each level of government are outlined in the National Urban Policy.

Source 3: The National Urban Policy includes a push to encourage the uptake of electric vehicles.

Learning ladder G5.5

Management practices

1. Identify the five goals outlined in the National Urban Policy and state their relevance to urban development.
2. What initiatives are included in the National Urban Policy to enhance liveability of Australian cities?
3. In what ways does promoting sustainable transport contribute to the overall sustainability of urban areas?
4. Reflect on the National Urban Policy goals. Is there anything missing that you think would improve the liveability of cities for all people, including youth and First Nations people?

Planning and collecting

1. You have been employed in a taskforce to examine the success of the National Urban Policy in increasing the sustainability of urban places. What questions would be relevant to investigate as part of this taskforce?
2. What data would the taskforce need to collect to examine the success of the policy?
3. Research why equality is important to increase sustainability of a place.
4. Suggest some suitable primary methods the government could use to gather data and monitor the success of the policy (outlined in question 2).

Make it spicy

How do national policies help shape local *scale* actions?

HOW TO

Planning and collecting, page 426; scale, page 242

G5.6

How does decentralisation reduce urbanisation pressure?

Decentralisation in Australia reduces city overcrowding by encouraging people and businesses to move to regional areas, boosting local economies and jobs. Governments support this through infrastructure projects and incentives, with satellite cities, such as Geelong, providing access to jobs and amenities near major cities.

Decentralisation describes the move by people, businesses and government from large cities to smaller towns and regional areas. This reduces overcrowding, and eases traffic congestion, high housing costs and pressure on public services in the large cities. Meanwhile it boosts regional economies, creates jobs and improves work–life balance in the regional areas. Satellite cities like Geelong, near Melbourne, attract growth from main cities while staying connected through established transport links and shared services. Their proximity allows access to broader job markets and cultural amenities. Decentralisation also brings challenges, including the need for more regional infrastructure, such as roads, schools and hospitals.

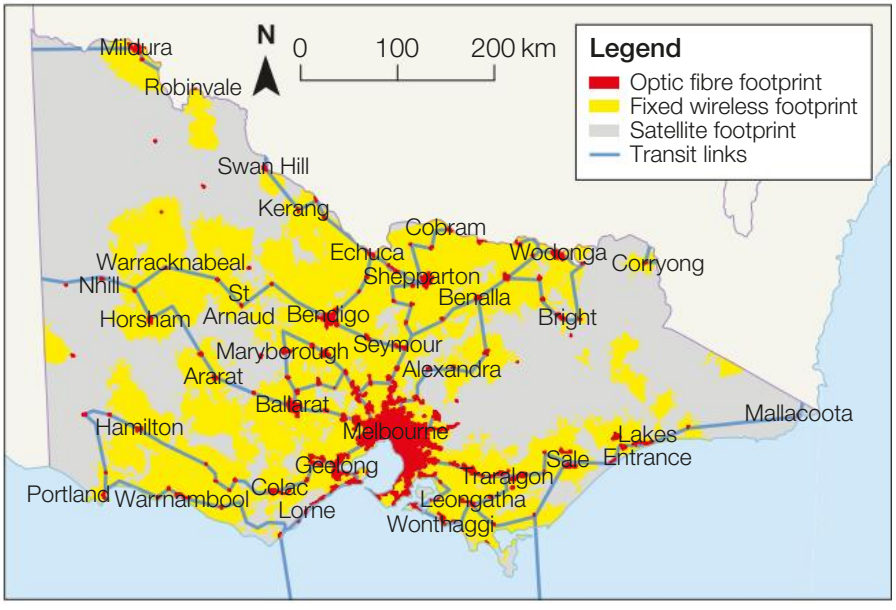
The flexibility to move

To address this, governments fund projects, such as expanding the National Broadband Network (NBN) and regional transport links. They also offer incentives such as tax breaks and grants, and relocate government departments, creating jobs and strengthening local economies.

In recent years, decentralisation has also occurred as a result of changing working conditions. The COVID-19 pandemic (2020–21) resulted in many workers working remotely from home, removing the need for transport and central office spaces. Remote working allowed people to make sea or tree changes while still working for major city-based organisations.

Source 1: The Transport Accident Commission (TAC) building in Geelong. The relocation of the TAC to Geelong from Melbourne created 650 ongoing jobs along with the 800 jobs created in the construction of a new purpose-built headquarters. The relocation of the TAC also led to many of the workers purchasing or renting homes in Geelong and using local shops and services, driving economic growth in the region.

NBN network in Victoria



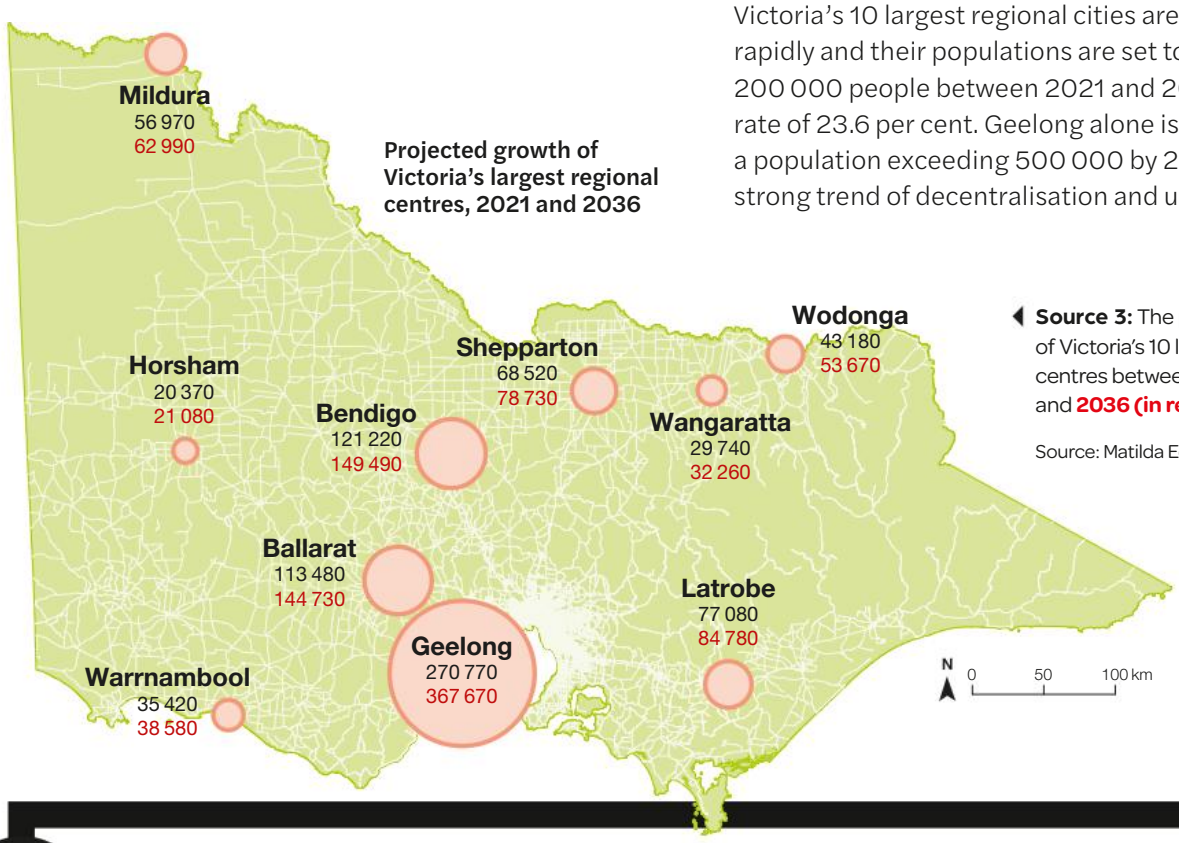
Source: Matilda Education Australia

Source 2: The National Broadband Network (NBN) is Australia's nationwide broadband system, built to deliver high-speed internet to homes and businesses across the country.

Businesses have adapted to using digital tools such as video conferencing, reducing overhead costs for office rent or upkeep. Since the pandemic, some organisations have mandated a return to the office, while others have made the permanent shift to remote working. This has resulted in a shift for major cities. In August 2023, office vacancy rates in city centres reached a 30-year high, with 12.8 per cent of offices unoccupied.

Connecting places

COVID-19 lockdown restrictions, cost of living and lifestyle choices have meant that many regional cities have experienced significant population growth in recent years. This movement away from city centres has increased demand for infrastructure such as schools, hospitals and businesses in regional areas. The National Broadband Network (NBN) has been extended into many regional towns to support population increases. Victoria's 10 largest regional cities are growing rapidly and their populations are set to grow by nearly 200 000 people between 2021 and 2036 – a growth rate of 23.6 per cent. Geelong alone is forecast to have a population exceeding 500 000 by 2047, reflecting a strong trend of decentralisation and urban expansion.



Source 3: The projected growth of Victoria's 10 largest regional centres between **2021 (in black)** and **2036 (in red)**.

Source: Matilda Education Australia

Learning ladder G5.6

Management practices

1. Define the term 'decentralisation'.
2. Sources 3: Which Victorian regional centres are expected to grow the most from 2021 to 2036?
3. Consider the list of government support for decentralisation. Which type of support do you think is the most important for individuals and businesses who are considering a move to a regional centre and why?
4. Refer to G5.5. Does the strategy of decentralisation fit into the goals of the National Urban Policy?

Strategies

1. Describe the government's plans for the decentralisation of their major city populations.
2. What are the economic impacts of growing populations in regional areas?
3. How did the COVID-19 pandemic impact the decentralisation of populations in Australia?
4. Source 1: Consider other businesses or government agencies that would benefit from relocating to a satellite city. Write a letter to one of these organisations outlining these benefits to convince them to move.

Make it spicy

What important *interconnections* do governments need to provide to help support the decentralisation of businesses and individuals?

HOW TO

Strategies, page 468; interconnection, page 238

Case study

Why was the new city of Canberra built?

On 1 January 1911, the Australian Capital Territory (ACT) was founded on the ancestral lands of the Ngunnawal people as the declared centre of the Australia's new federal government, serving as a compromise between the locations of Sydney and Melbourne.

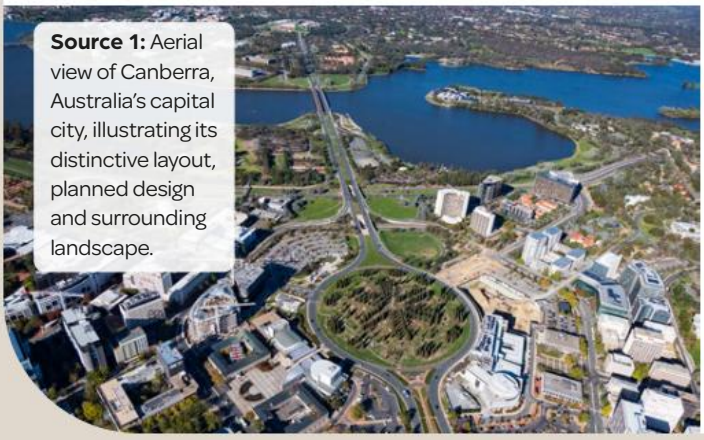
In response to the Australian Constitution's mandate of establishing a territory at least 100 miles from Sydney, Canberra is Australia's earliest example of decentralisation, established as the nation's capital and the seat of federal parliament. After the completion of (Old) Parliament House in 1927, the Commonwealth Government transitioned from Melbourne to Canberra, along with many other public services. Today, most Commonwealth departments are based in Canberra.

Initial population growth was slow in Canberra due to limited trade and public transport, but the establishment of satellite towns such as Woden (1964), Tuggeranong (1973) and Gungahlin (1991) encouraged development. By 2023, Canberra's population had risen to 472 000 across more than 100 suburbs.

Researchers suggest that Canberra offers insights into the successful development and management of decentralisation. Canberra's success is often attributed to long-term support from the government to establish a new urban centre in regional Australia.

Successful decentralisation initiatives require:

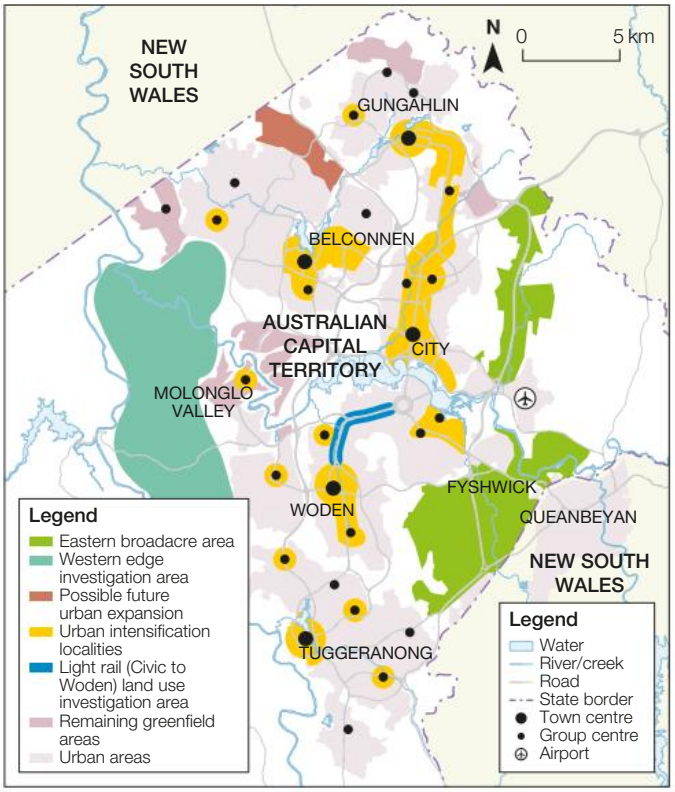
- strong government commitment
- community engagement
- sustainable infrastructure design.



Source 1: Aerial view of Canberra, Australia's capital city, illustrating its distinctive layout, planned design and surrounding landscape.

As a planned city, Canberra's layout includes a central business district (Civic) and satellite suburbs. Despite this design, urban sprawl and car dependency are still prevalent. In 2019, a light rail system connected Civic to Gungahlin, with plans to extend it to Woden. The city's strategic plan aims to accommodate future population growth through increased housing density along transit corridors and ongoing greenfield development.

ACT development plan



Source: Matilda Education Australia/© Australian Capital Territory

Source 2: This map shows the ACT government's strategic direction for the development of Canberra to 2048.

Source 3: Satellite image of Canberra

Learning ladder G5.7

Sustainability

1. What is a key environmental issue with the design of Canberra?
2. Source 2: What sustainable urban plans are in place for the further growth of Canberra?
3. Why was Canberra chosen as a site for a new inland city?
4. Compare Canberra to another Australian city. Investigate sustainability measures and urban planning for population growth.

Representing information

1. Source 3: Why are satellite images helpful for understanding urban patterns?
2. Source 3: Describe the design of Canberra as a series of satellite suburbs. Using tracing paper, annotate any barriers to growth or potential issues that may arise.
3. Using Canberra as an example, how would you go about establishing an entirely new regional city in Australia? Create a sketch map illustrating the key features of your city, taking into account employment, transport and environmental factors.
4. Locate Canberra using Google Earth. Annotate the satellite towns around Civic. Compare the characteristics of these towns. Where would you choose to live and why?

Make it spicy

Is decentralisation a *sustainable* solution to the *changes* brought about by urbanisation?

Representing information, page 436; change, page 240; sustainability, page 244

HOW TO

G5.8

Case study

How is suburbanisation changing Melbourne?

The development of new suburbs on **greenfield**, or undeveloped, land is known as suburbanisation. Melbourne has a long history of suburbanisation, resulting in sprawling low-density cities, which are often criticised as unsustainable.

Suburbanisation in Melbourne

At 2500 square kilometres, Melbourne is already one of the world's largest cities by area – and it is still expanding. More than 50 suburbs have been added to Melbourne since 2005. Melbourne overtook Sydney as Australia's largest city in 2023 with nearly 5 million people. With 60 per cent of population growth occurring in the outer western regions in the previous decade, the satellite city of Melton has now been absorbed into Melbourne's metropolitan area.

The major advantage of suburbanisation as a strategy is that affordable housing estates can be quickly established and designed. Entire new estates are sometimes built within a couple of years, providing families with a range of housing options. The disadvantages of suburbanisation are that open land , which may have been used for agriculture, green space or as a reserve, is sacrificed to build new urban areas. Often new estates do not have the same access to facilities and services as existing towns, with minimal green space, youth spaces and transport services.

Source 1: In 2017, the Victorian government attempted to provide more affordable housing by rezoning areas on the edge of the city to create 100 000 new housing blocks and 17 new suburbs in Melbourne's key growth corridors:

Corridor	Houses	Population
West	170 000	480 000
North	117 000	330 000
South-east	103 000	110 000
Sunbury	32 000	90 000

Over time, expensive public transport networks, schools and medical facilities need to be constructed and there is often a lag between when people start to populate the new suburb and when the required infrastructure is built, creating tensions and traffic problems in the local area. With most jobs available near the city centre, many residents in outer suburbs face long commutes to get to work, further increasing local traffic congestion and pollution.

Careful planning needs to be undertaken to ensure that population growth is sustainable. Already planners are suggesting that by 2050 Melbourne will need:

- 1.6 million new homes
- 8 new hospitals
- 67 new secondary schools
- 222 new kindergartens.

There is constant debate about how the government will meet these ambitious planning targets. Recent conversations have leant towards building more high-density housing in established suburbs such as Essendon. With this approach, planners can use existing infrastructure to support new residents. However, some experts and local residents are concerned about how increasing the local population will put pressure on existing resources and services, as well as how high-density living will alter the aesthetic of the region.

Source 2: Looking east to Melbourne (in background) over Tarneit and Melbourne's west growth corridor. In 2021, Tarneit's population was 48 953 people. It is expected to nearly double by 2026, at an average annual growth rate of nearly 13 per cent.

Melbourne's growth corridors

Source 3: Melbourne's growth corridors

Source: Matilda Education Australia

Learning ladder G5.8

Management practices

1. What is suburbanisation?
2. Source 2: How is Tarneit's population projected to grow?
3. Why did the Victorian government rezone areas on the edge of the city to allow for residential development?
4. Source 3: Which satellite towns and cities are likely to be included in the Melbourne metropolitan area in the future and what impact might it have for these places?

Interpreting information

1. Source 2: How is the space in the foreground of this photograph divided?
2. Source 3: Describe the spatial distribution of Melbourne's growth corridors.
3. Explain how suburbanisation may impact environmental sustainability or liveability for locals.
4. Sources 2 and 3: Predict the social and economic implications of suburbanisation for Melbourne in 2050.

Make it spicy

Can environmental *sustainability*, liveability and urban growth be balanced?

HOW TO

Interpreting information, page 446; sustainability, page 244

How can we design sustainable cities?

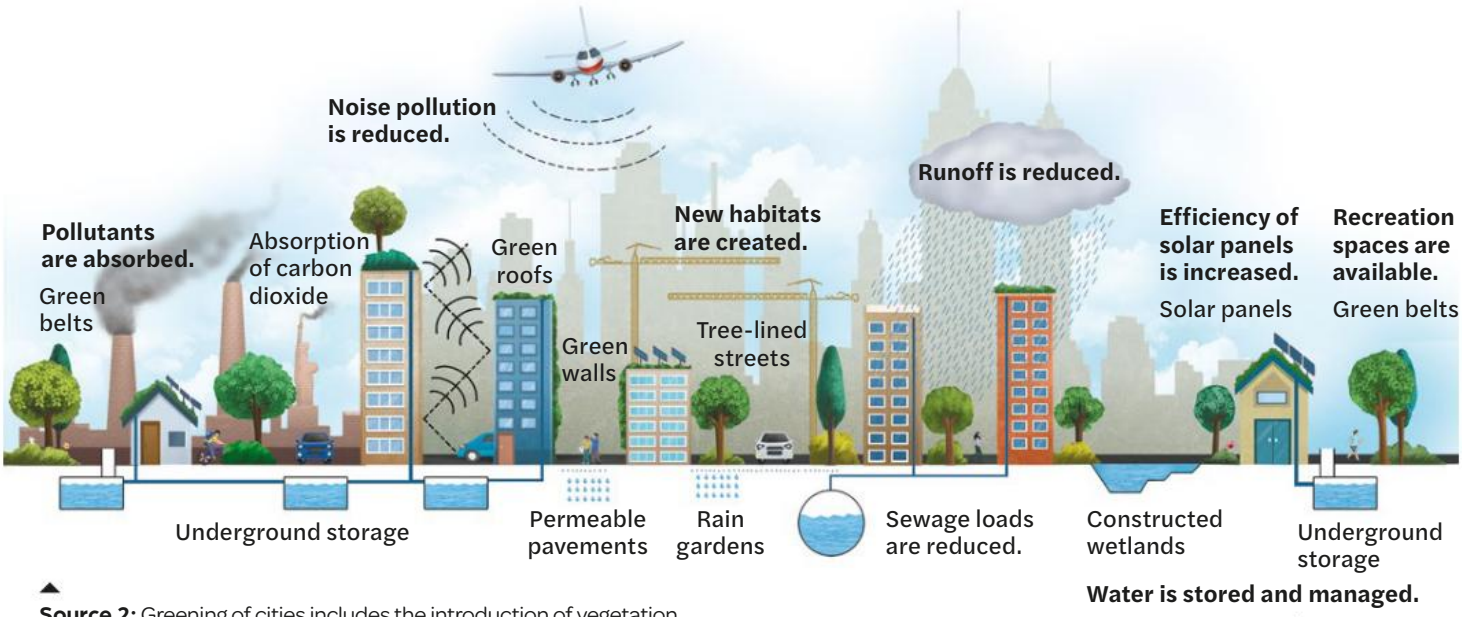
Sustainable cities aim to meet the needs of their residents while being environmentally sustainable. Sustainable design balances social, environmental and economic factors through good planning and long-term management.

In Australia, cities use a lot of our resources, including water, energy, food and materials. Australia ranks second in the world for annual waste disposal per person at 704 kilograms, just behind the United States at 771 kilograms. Over the past five years, pollution driven by the growing population has significantly affected urban areas and their environment. The way cities are designed can greatly affect how much energy and water they use.

To improve sustainability, Australia needs to turn sustainable design ideas into effective policies. This requires teamwork and planning that looks at how different resources, like food, water and energy, are connected. Many cities in Australia are already trying out new ways to work together on these challenges. These include:

- creating high-density areas that minimise land use and promote walkability throughout the space
- incorporating green spaces to enhance **biodiversity**
- having access to reliable public transit systems to decrease dependence on cars
- adding bike lanes and pedestrian lanes to promote cycling and walking
- designing structures that use renewable energy sources
- harvesting rainwater using tanks
- implementing regional and localised composting programs
- designing communities that combine residential, commercial and recreational spaces to reduce travel distances
- promoting community gardens and urban farms to enhance food security and decrease transportation emissions
- designing facilities and services to make spaces more resilient to climate-related events, such as floods and storms.

Source 1: Sydney aims for net zero emissions by 2050 through its Sustainable Sydney 2030 strategy. Key initiatives include sourcing 25 per cent of electricity from renewables and enhancing energy efficiency in buildings, with over 500 000 square metres of green roofs and walls already installed. In the 2022 Sustainability Index, Sydney ranked 33rd globally, leading Australian cities, but improvement is needed in electric vehicle infrastructure and renewable energy use. The city plans to expand public transport, cycling infrastructure and tree canopy cover to enhance resilience. One Central Park is highlighted as a sustainable building featuring vertical gardens and solar energy systems.



Source 2: Greening of cities includes the introduction of vegetation on roofs and vertical gardens on buildings and green belts of public space. Vegetation absorbs carbon dioxide emissions and improves the living conditions for people.

Learning ladder G5.9

Sustainability

1. Identify the three challenges for sustainable cities.
2. Source 2: Outline the multiple benefits of greening cities.
3. Why are sustainable cities important socially, economically and environmentally?
4. If sustainability is so important, why aren't all new houses designed and built to rely on greener solutions such as renewable energies and water tanks?

Presenting ideas

1. What is meant by 'zero emissions'?
2. Source 1: Why is the Sustainable Sydney Strategy 2030 focused on sustainable urban growth?
3. Respond to the following prompt using examples and data to support your position. 'Sustainable cities are an idea for the future, but economic growth should be the main focus in the coming years.'
4. Explain the interconnection between urban areas and waste production. Suggest how this could be better managed.

Make it spicy

Describe how *sustainability* can be addressed at a variety of *scales*.

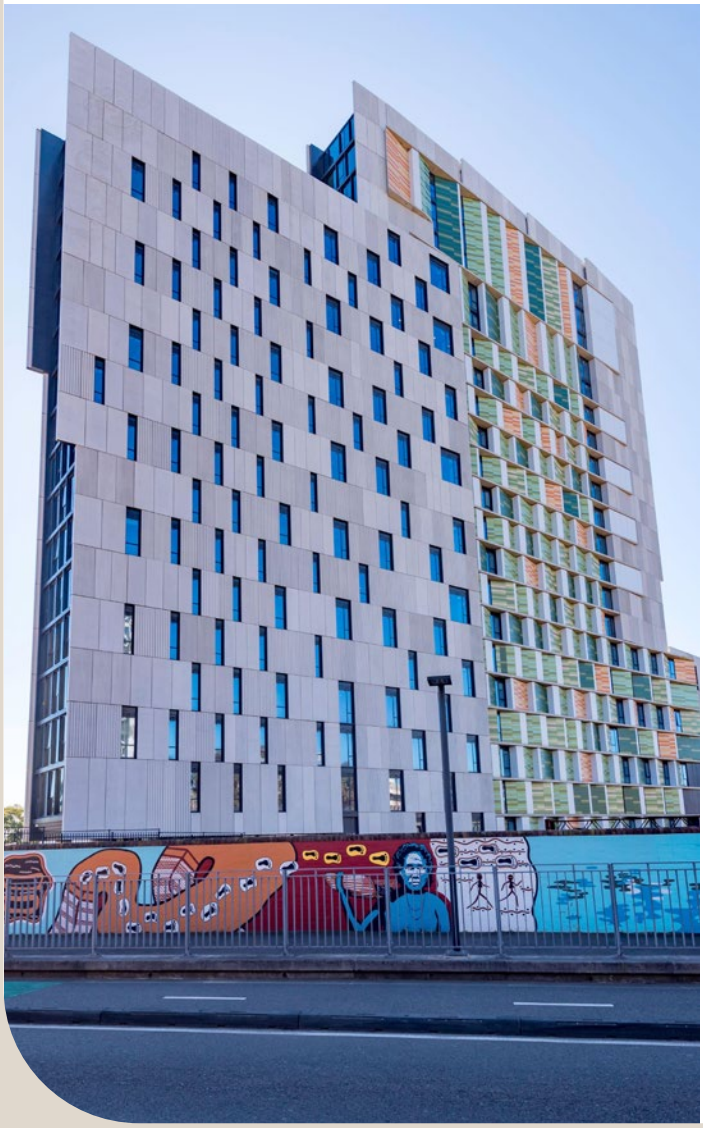
HOW TO

Presenting ideas, page 472; scale, page 242; sustainability, page 244

How can we innovate using Caring for Country guidelines?

Before colonisation, the practices of caring for Country were holistic and included the community, family and individuals. Communities ensured that there was enough to eat, a safe place to live and access to clean water and medicine.

Source 1: One principle of Caring for Country is to ensure that people have a safe place to live. The Aboriginal Housing Corporation redeveloped land in Redfern, Sydney through the Pemulwuy Project to provide affordable housing for First Nations families. The aim of the project was to restore a strong and healthy First Nations community to Redfern with an emphasis on culture, spirituality and employment.



Innovation from Caring for Country

With the colonisation of Australia and the removal of First Nations people from Country, and in many cases, community and family, the ability of First Nations communities to continue to care for Country and care for each other was severely disrupted. Despite this disruption, many First Nations people have continued to share knowledge of caring for Country to younger generations and this knowledge is beginning to be applied in a range of projects in Australia today. These include Indigenous Ranger programs in charge of caring for land and marine environments using First Nations knowledges relating to caring for Country.

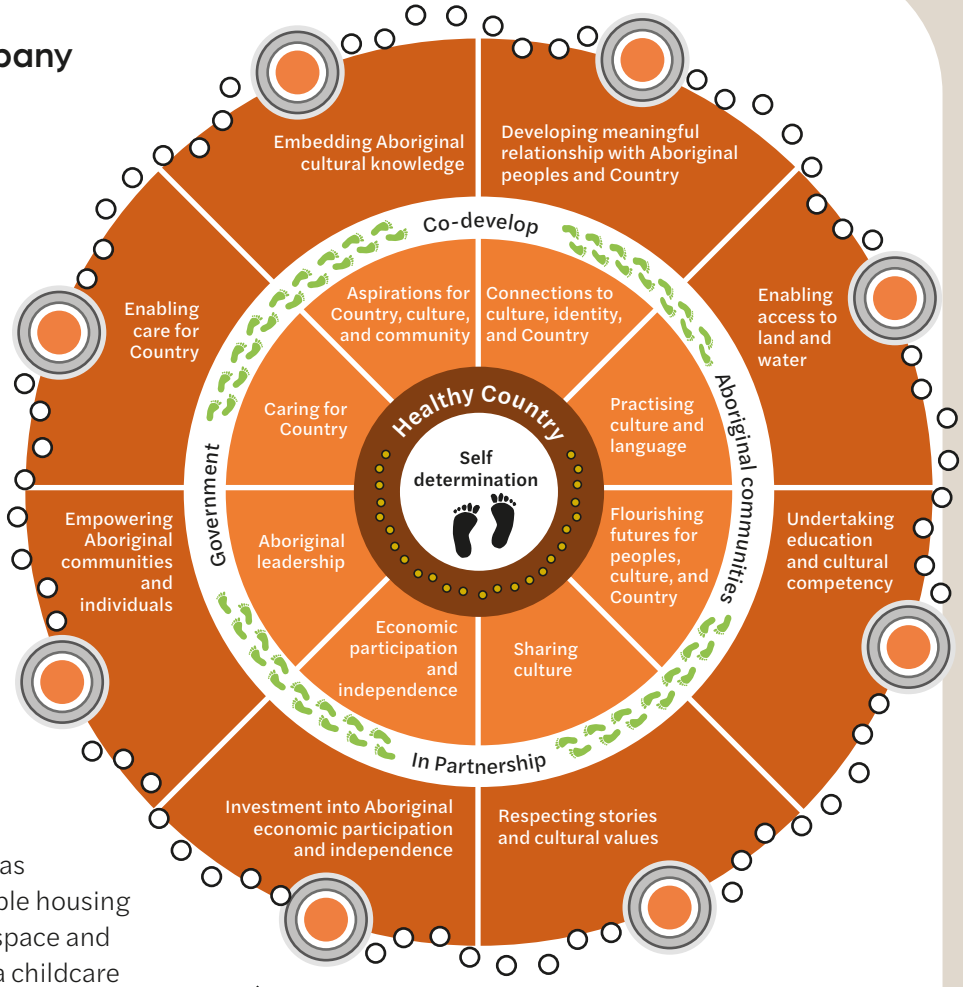
Caring for Country can be incorporated into urban design and planning through the inclusion of First Nations practices and knowledge at all stages of policy, planning and development of projects. Some specific outcomes of the use of Caring for Country guidelines are improved sustainability, connection and respect for Country through physical structures or artworks and the naming of urban spaces.

> Indigenous people are not just stakeholders; they should have a guaranteed seat at the table for determining what happens in local places and local country and their traditional lands. They should be decision-makers about the whole structure of grants and funding; they should not be competing with big industry groups in terms of who has a say over a place. The whole system needs to be changed.
>
> **Source 2:** State of Environment workshop participant, Western Australia, Muramin, 2021

The Aboriginal Housing Company

The Aboriginal Housing Company is an independent not-for-profit community housing provider located in Redfern, in the traditional lands of the Gadigal people. The Aboriginal-governed organisation formed in 1973 as a response to the discrimination First Nations people suffered in the private rental market. The Aboriginal Housing Company is funded through the income it makes from its rental properties across Sydney and throughout regional New South Wales.

A major project of the Aboriginal Housing Company has been the redevelopment of a property in Redfern, called the Pemulwuy Project, after an important Bidjigal/Gadigal tribal warrior who bravely fought against the English invasion. The development was completed in 2022 and includes affordable housing for 62 First Nations families, a public art space and gallery featuring local Aboriginal artists, a childcare facility with allocated places for First Nations children, student accommodation, a gym, and commercial and retail space.



Source 3: Draft Caring for Country Guidelines 2023–2033, New South Wales Department of Planning and Environment

Learning ladder G5.10

Management practices

1. What is Caring for Country?
2. Source 2: Describe this person's view about planning for their traditional lands.
3. How is the Pemulwuy Project an example of Caring for Country?
4. In contemporary Australia, how might Caring for Country look different in urban and rural environments?

Making conclusions

1. Source 1: What is the key reason behind the built characteristics of this site?
2. Source 1: Identify elements that distinguish this environment as connected to First Nations people.
3. Source 3: Explain how the NSW Department of Planning and Environment intends to include Caring for Country principles in its guidelines.
4. Source 2: How reliable are quotes for providing insight into people's perspectives and values?

Make it spicy

How are different perspectives important for the development of *sustainable* spaces?

Making conclusions, page 464; space, page 234; sustainability, page 244

HOW TO

What is the purpose of urban renewal?

Urban renewal, often referred to as urban regeneration, aims to enhance the physical, social and ecological aspects of urban areas. This process involves the revitalisation of neglected or underutilised spaces, transforming them into vibrant communities that meet the needs of growing populations.

Benefits of urban renewal

There is a range of advantages to redeveloping existing urban spaces:

- Power and infrastructure already exists on-site.
- The environment is already dominated by tall, high-density buildings, so the local character will not be altered too dramatically.
- Developments and investment in modern services, facilities and green spaces can improve the local liveability of spaces and benefit homeowners.
- Public transport and roads are already in place to service the area.

Source 1: The industrial region of Fishermans Bend once hosted large car and aircraft factories, but is now the site of Australia's largest urban renewal project. The Victorian government has rezoned the former industrial land to provide inner-city homes for more than 80 000 people by 2050. Fishermans Bend will be served by train and tram links to the city. A key focus of the Fishermans Bend urban renewal is on creating a sustainable environment.

Fishermans Bend

Fishermans Bend, covering approximately 480 hectares in the City of Melbourne, is one large-scale example of urban renewal. Once a hub for large car and aircraft factories, Fishermans Bend is being redeveloped to support the city's expansion, with plans to accommodate over 80 000 residents by 2050 and generate up to 40 000 jobs. The project will improve connectivity through new train and tram links to the city and a bridge across the Yarra River. To support the growing population, vital infrastructure, including secondary and primary schools, childcare centres, parks and shopping facilities, will also be established.

A significant focus of the Fishermans Bend urban renewal project is sustainability. One-quarter of the redevelopment area will be designated for open space, ensuring that residents and workers are no more than 200 metres away from recreational areas. Planners expect that 80 per cent of transport movements will be via walking, cycling or public transport, reducing reliance on cars. Additionally, wastewater will be recycled for residential and commercial use, further minimising the project's environmental impact.

Learning ladder G5.11

Interconnections

1. Is the process of urban renewal interconnected with sustainable urban population growth?
2. Describe how urban renewal projects have the power to create interconnected communities.
3. How does an interconnection to infrastructure give urban renewal an advantage over suburbanisation to deal with growing urban populations?
4. Explain how the renewal of Fishermans Bend may impact the surrounding region.

Presenting ideas

1. Define the term 'urban renewal'.
2. Describe the advantages of urban renewal for growing urban areas.
3. Explain the drawbacks of urban renewal. Who might be impacted negatively by developments such as Fishermans Bend?
4. Source 1: Explain how urban renewal can be interconnected with sustainable environmental management.

Make it spicy

Source 1: What *interconnection* have architects created between work and living *spaces* and open *spaces*?

HOW TO

Presenting ideas, page 472; interconnection, page 238; space, page 234

Source 2: Sky Park takes up 25 per cent of the new Melbourne Quarter commercial, retail and residential project and is an example of a small-scale urban renewal project. The park provides city residents and workers with new green space. Designers have also added high-speed public wi-fi, power outlets and USB charge points to the park.

What is the future of sustainable transport?

Sustainable transport refers to the use of low-emission, energy-efficient forms of public and personal transportation to help lower carbon dioxide levels, reduce congestion and improve access to transportation for all.

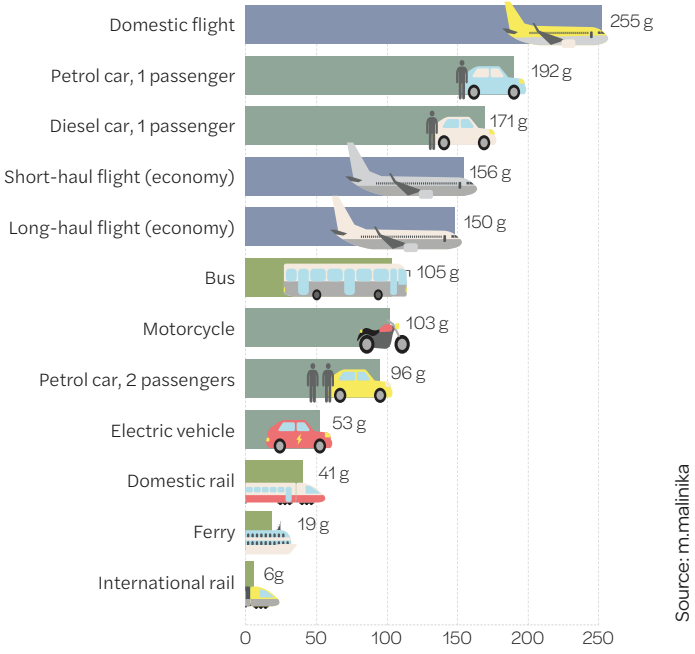
Carbon emissions from transport

Transport accounts for around 25 per cent of global carbon dioxide (CO_2) emissions. For short distances, walking or cycling have the lowest carbon output. Using trains for transportation instead of a car for medium-length distances will reduce carbon emissions by 80 per cent.

Electric vehicles are the best choice to reduce emissions for private vehicles. They emit one-third of the amount of carbon dioxide that petrol- or diesel-powered cars send into the atmosphere. Powering an electric car from renewable electricity such as solar power gives the greatest benefits.

Shorter aeroplane flights emit the greatest amount of **carbon dioxide emissions** per passenger per kilometres travelled.

Carbon cost of transportation
(emissions per kilometre travelled)



▲ **Source 1:** Carbon dioxide emissions from transport per passenger

Sustainable transport options

Individual choice

From the perspective of an individual traveller, there are decisions you can make to reduce your transport carbon footprint. These include:

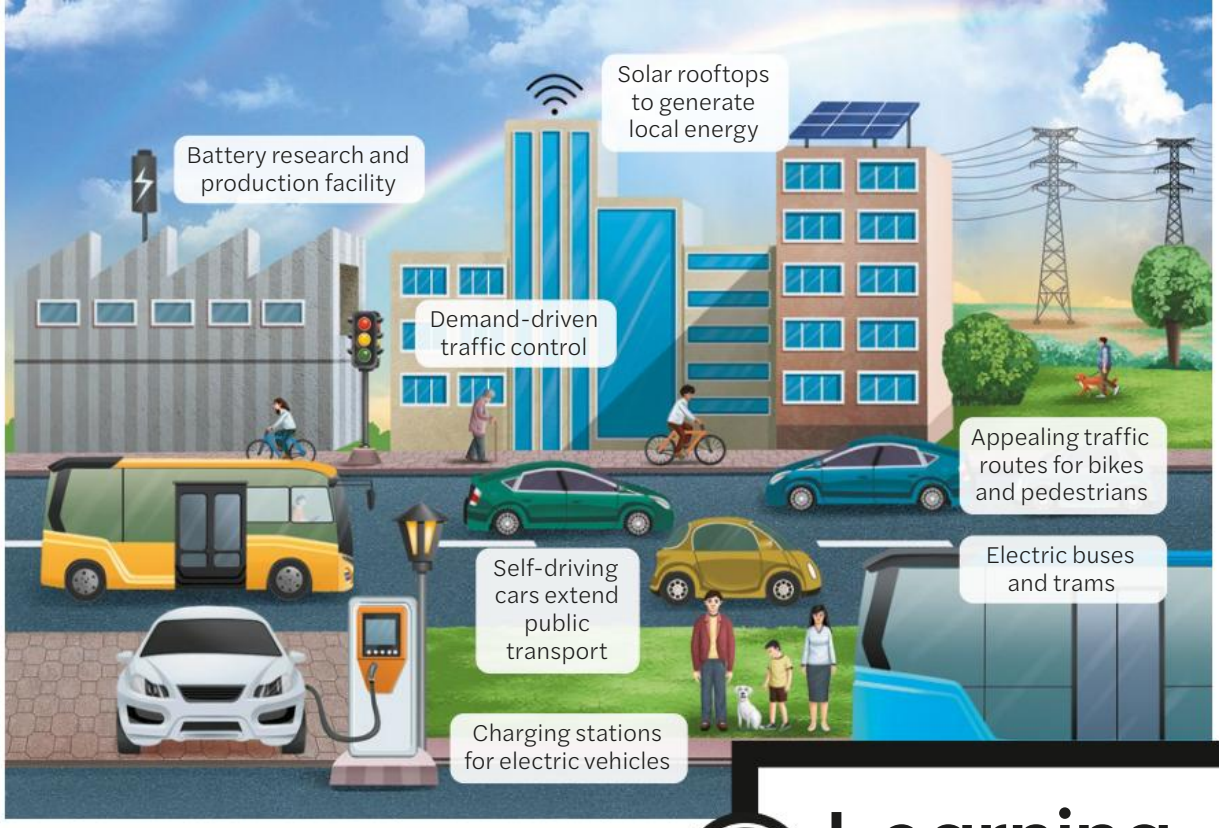
- Walk, run or cycle wherever possible to also reduce pollution and improve health.
- Use trains or boats for longer trips.
- Car-sharing not only reduces CO_2 emissions, but also relieves congestion and pollution.
- Use electric rather than petrol or diesel cars.

Action of governments and organisations

Given that almost a quarter of global energy consumption and carbon dioxide emissions come from transport, it is essential that governments and councils prioritise transitions towards sustainable transport for their populations. There is a lot Australia can learn from other countries in the way they plan for and develop sustainable transport infrastructure.

For example, sustainable solutions developed in the Colombian capital of Bogotá include:

- building 84 kilometres of bike lanes *(ciclovias)* and prioritising cycling as a form of transport
- repurposing 44 000 square kilometres of street space into pedestrian walkways and thoroughfares for foot traffic
- purchasing almost 1500 electric buses for public transport
- reducing tolls and restrictions for cars that carry more than two people, thus encouraging carpooling
- implementing a bikeshare scheme, where thousands of bicycles are made available for public usage, with reduced rates for low-income earners, as well as hundreds of public bicycle repair stations.



Source 2: Sustainable transport options

Source 3: Bogotá has constucted special bike lanes on key thoroughfares and prioritised cycling as a form of transport.

Learning ladder G5.12

Sustainability

1. List three issues that vehicles and transport create in urban areas.
2. Describe the interconnection between transport and pollution.
3. How can sustainable transport improve social equity?
4. To what extent can initiatives like those in Bogotá be implemented in a city like Melbourne?

Strategies

1. What are three of the initiatives used in Bogotá to promote sustainable transport?
2. Source 2: Explain how the initiatives in this source contribute to reduced emissions.
3. Melbourne has not had major success with bike- and scooter-sharing services in the past. What other strategies could be trialled to improve sustainable transport options in the city?
4. Design a sustainable transport solution for your local region. You may wish to improve existing infrastructure or redesign networks to better serve the community.

Make it spicy

Why is *sustainable* transport important to improve the liveability of *places*?

HOW TO

Strategies, page 468; place, page 236; sustainability, page 244

How can urban greening improve liveability?

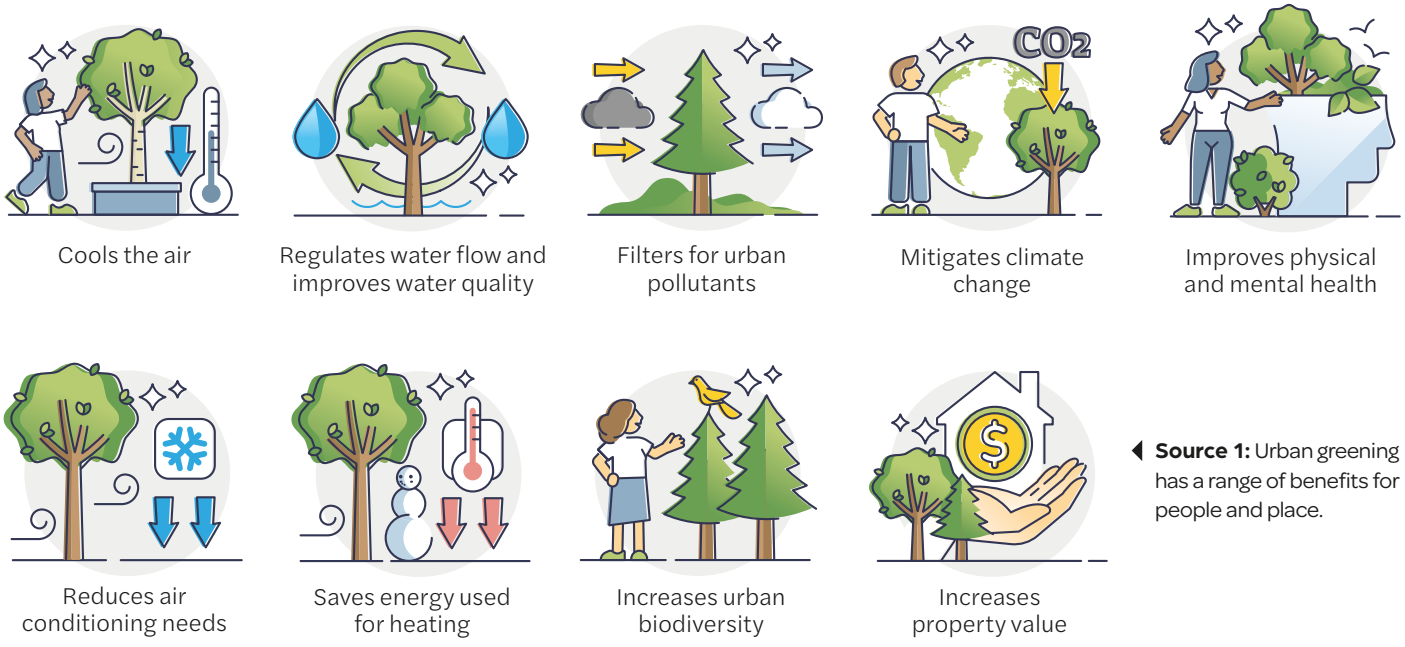
Urban greening involves mixing green spaces – such as parks, green roofs and street trees – into urban environments. Urban greening has been found to improve liveability, social cohesion and environmental sustainability, particularly in rapidly growing cities like Melbourne.

Urban greening can help reduce the urban heat island effect. Trees and vegetation reduce local temperatures by providing shade and **evapotranspiration**. Evapotranspiration is when water evaporates from plant surfaces (like leaves), absorbing heat from the environment, which in turn cools the surrounding air. This natural cooling effect can significantly lower heat-related health risks for residents. Additionally, green spaces can also enhance stormwater management by reducing run-off, improve air quality by absorbing carbon dioxide, and support local biodiversity.

Urban greening can also encourage community wellbeing. Access to green spaces is linked to improved mental and physical health, with research indicating that proximity to nature enhances overall life satisfaction and reduces anxiety.

Greening the West is a strategic plan that aims to double tree-canopy cover in Melbourne's western suburbs by 2050. The plan's objectives include increasing green space by 25 per cent by 2030 and ensuring all residents have access to quality green space within 400–500 metres of their home. They aim to support the maintenance of these spaces by increasing the supply of alternative water by 25 per cent by 2030.

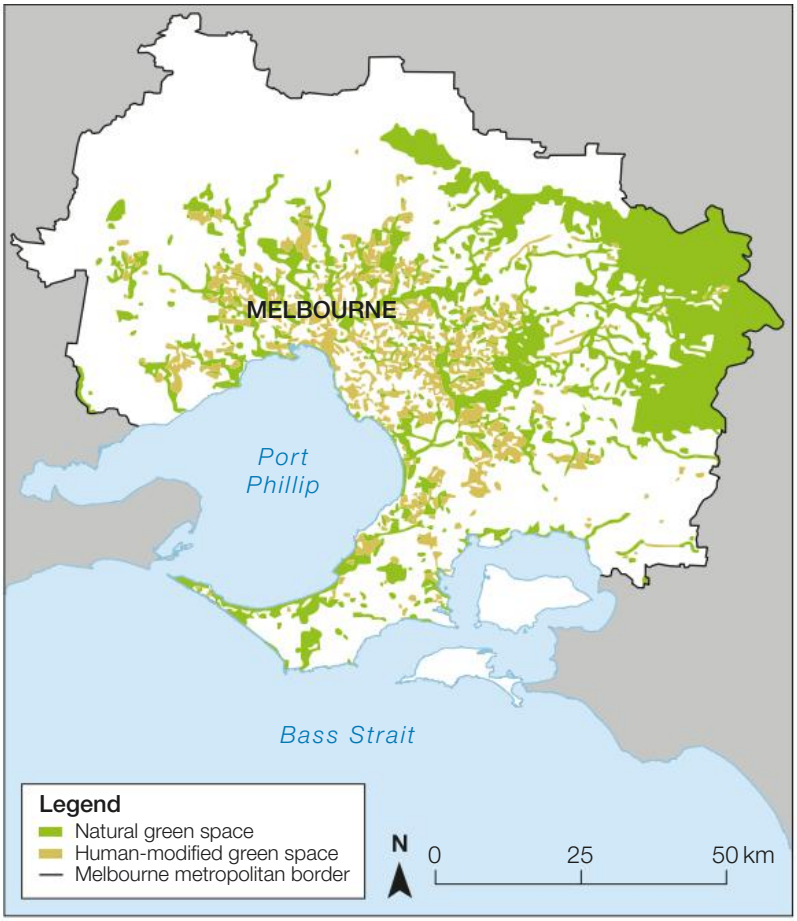
Urban forestry



Source 1: Urban greening has a range of benefits for people and place.

Source 2: Melbourne's Botanical Gardens provide a large and attractive green space near the city.

Distribution of green space in Melbourne



Source 3: Green space is not evenly distributed in Melbourne. Urban regions tend to have access to more human-modified spaces such as gardens, while regional areas have access to natural green space such as bushland and national parks.

Source: Matilda Education Australia

Learning ladder G5.13

Sustainability

1. What role do local government policies, such as the Greening the West plan, play in promoting sustainable practices in urban environments?
2. Describe how reducing the urban heat island effect through sustainable practices benefits community health.
3. In what ways does urban greening contribute to environmental sustainability and resilience against climate change?
4. Compare the potential perspectives on the Greening the West project. Which stakeholders are involved?

Planning and collecting

1. Write a potential inquiry question to explore green spaces in your local community.
2. What primary methodology would be helpful to collect data to answer the question raised in question 1?
3. Access https://mea.digital/bh9. What plant species would thrive in your local environmental conditions? Why is this important to consider when planning sustainable green spaces?
4. Conduct a survey on local community members to answer the inquiry question, 'Would more green space make our region more liveable?'

Make it spicy

Can the creation of green *spaces* alone support the *sustainability* of urban areas?

Planning and collecting, page 426; space, page 234; sustainability, page 244

HOW TO

G5.14

Case study

What local initiatives improve environmental sustainability?

There are 537 councils across Australia. The Hobart Climate Change Action Plan is a framework developed by the Hobart City Council with the aim of reducing the impacts of climate change and promoting sustainability within the city.

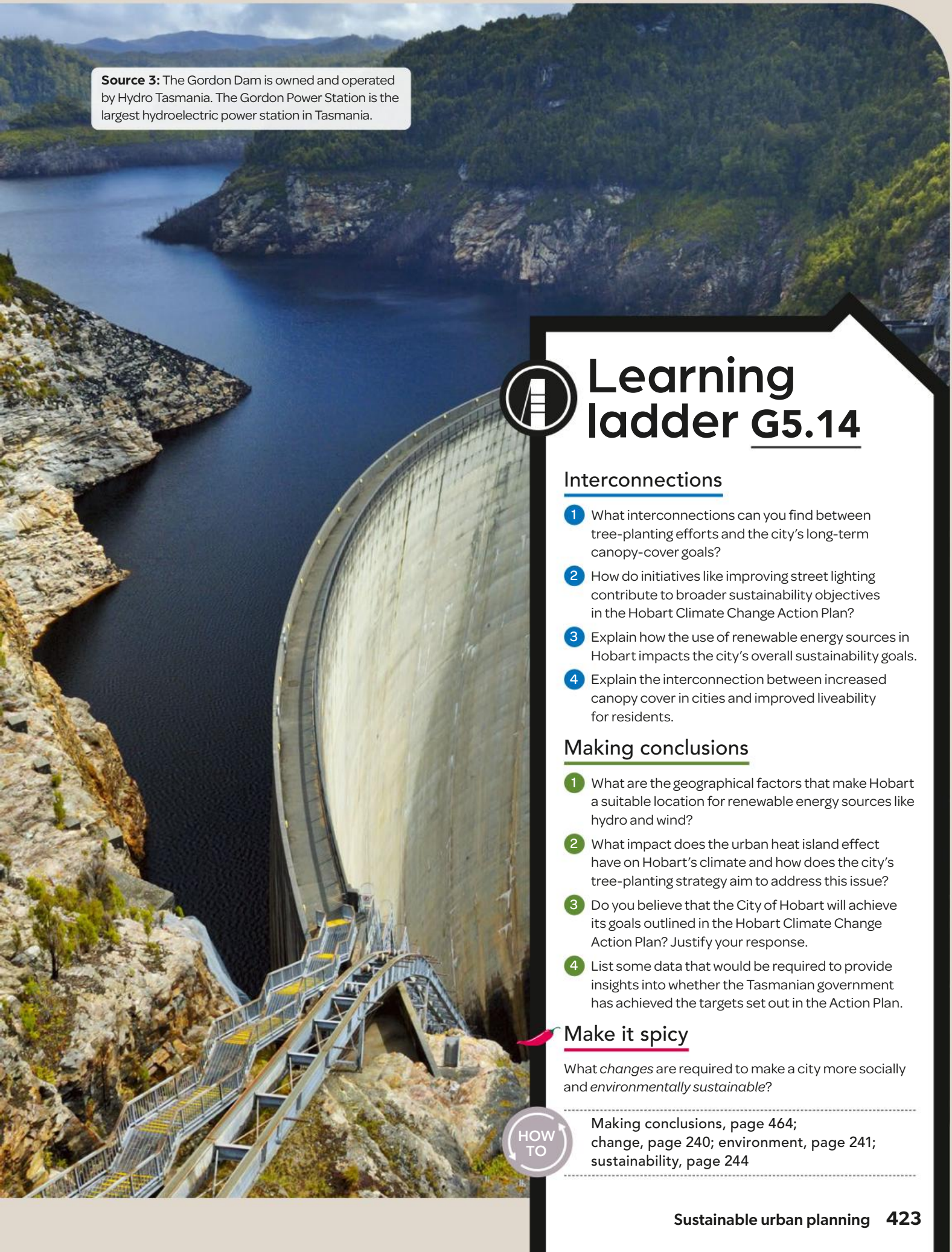
The Hobart Climate Change Action Plan sets a range of targets and outlines 42 projects over the next five years. By 2030, the City of Hobart will reduce its 2020 corporate greenhouse gas emissions by 20 per cent. The City of Hobart aims to be reliant on 100 per cent net renewable energy by 2040.

Presently, vehicles make up a large share of fossil fuel use and carbon emissions in Tasmania. Given over 80 per cent of Hobart's electricity comes from hydro and wind sources, the city is in a good position to promote the use of electric vehicles (EV), which can be charged with renewable energy. The City of Hobart installed the first fast EV charger in Dunn Place car park in 2020.

Hobart is also focusing on increasing tree planting in streets and waterway corridors to combat urban heat islands. Spatial data collection will identify heat islands and prioritise areas for planting. The city aims to reach a goal of 40 per cent canopy cover by 2046.

Source 2: As part of the plan, the City of Hobart is actively engaging youth in its sustainability programs through climate mentorship initiatives.

Source 1: There are plans to enhance nighttime visibility in Hobart by improving street lighting. A comprehensive program will incorporate better-directed, dimmable and sensor-driven lights, reducing energy waste and allowing residents to enjoy stargazing at night with minimal light pollution.



Source 3: The Gordon Dam is owned and operated by Hydro Tasmania. The Gordon Power Station is the largest hydroelectric power station in Tasmania.

Learning ladder G5.14

Interconnections

1. What interconnections can you find between tree-planting efforts and the city's long-term canopy-cover goals?
2. How do initiatives like improving street lighting contribute to broader sustainability objectives in the Hobart Climate Change Action Plan?
3. Explain how the use of renewable energy sources in Hobart impacts the city's overall sustainability goals.
4. Explain the interconnection between increased canopy cover in cities and improved liveability for residents.

Making conclusions

1. What are the geographical factors that make Hobart a suitable location for renewable energy sources like hydro and wind?
2. What impact does the urban heat island effect have on Hobart's climate and how does the city's tree-planting strategy aim to address this issue?
3. Do you believe that the City of Hobart will achieve its goals outlined in the Hobart Climate Change Action Plan? Justify your response.
4. List some data that would be required to provide insights into whether the Tasmanian government has achieved the targets set out in the Action Plan.

Make it spicy

What *changes* are required to make a city more socially and *environmentally sustainable*?

HOW TO

Making conclusions, page 464; change, page 240; environment, page 241; sustainability, page 244

How do I conduct a good inquiry?

Throughout the chapter you have developed knowledge and understanding of sustainable urban planning. Background knowledge is important as it helps you make connections to new information, ask better questions, and consider different perspectives. As you were progressing through the chapter you have been gathering information through highlighting, note taking, or responding to the Learning ladder. It is now time to start planning your inquiry! Refer to pages 476–82 for a step-by-step guide to this process.

Throughout this chapter, a range of case studies were presented to apply your learning to real-life events. Review these pages and select a case study to build your inquiry around.

- Why was the new city of Canberra built?, page 408
- How is suburbanisation changing Melbourne?, page 410
- How can we innovate using Caring for Country guidelines?, page 414
- What local initiatives improve environmental sustainability?, page 422

For your selected case study, complete a 'see, think, wonder' to help build curiosity and develop ideas you may cover in your inquiry.

Remember: A good inquiry will be focused on an aspect of the topic that interests you. It is more than just a research task that you present as a PowerPoint, it is a genuine investigation into something you are wondering about.

See
What do you see?
What are the human and physical characteristics?

Think
What do you think about that?
Where is it?
Why is it there?
When did it occur?

Wonder
What questions does this raise in your mind?
What else do you need to know to understand what is happening here?
What are other people saying about this?

Write down five observations you make when viewing the data presented.

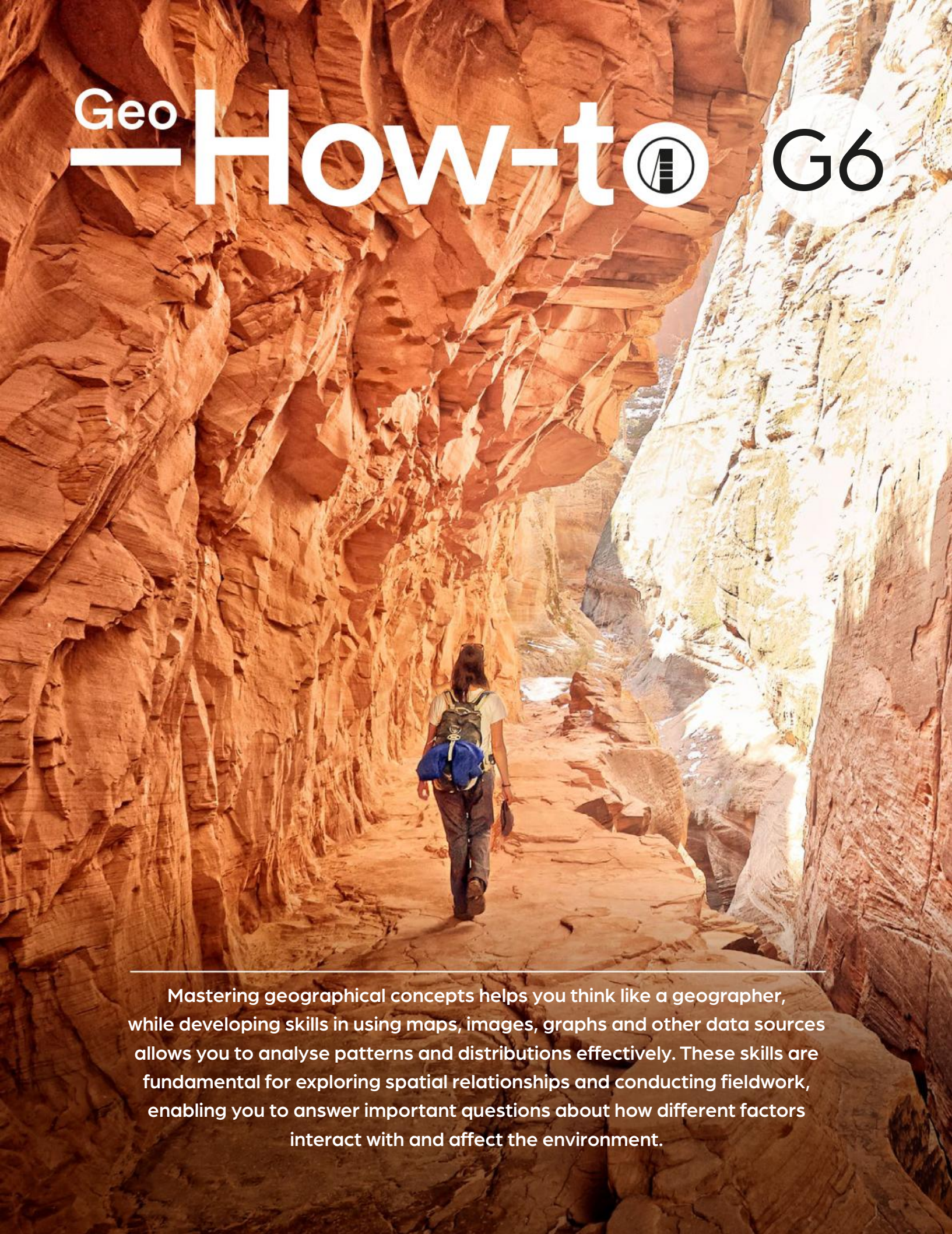
The following is a list of example open-ended questions which may help you develop your inquiry.

Sustainable urban planning

- **Descriptive question:** *What features make an urban area sustainable?*
- **Procedural question:** *How do city planners create sustainable urban areas?*
- **Comparative question:** *How do sustainable urban-planning approaches differ between cities in developed and developing countries?*
- **Evaluative question:** *How effective are sustainable urban-planning strategies in reducing environmental impacts?*

Level up!

Throughout the chapter you have been working to move up the Learning ladder. An inquiry investigation is a great opportunity to practise these skills in context. When planning your inquiry consider how you may integrate geospatial technology into your fieldwork or how you may explore a range of perspectives. Use the How-to chapter to support you in planning and research.



Geo How-to G6

Mastering geographical concepts helps you think like a geographer, while developing skills in using maps, images, graphs and other data sources allows you to analyse patterns and distributions effectively. These skills are fundamental for exploring spatial relationships and conducting fieldwork, enabling you to answer important questions about how different factors interact with and affect the environment.

Geographical inquiry

This section will enhance your geography skills by offering explanations and practical examples. Some examples will address real-world challenges and solutions, while others will use 'Shakerville', a fictional place that illustrates issues and processes that could occur in your own community.

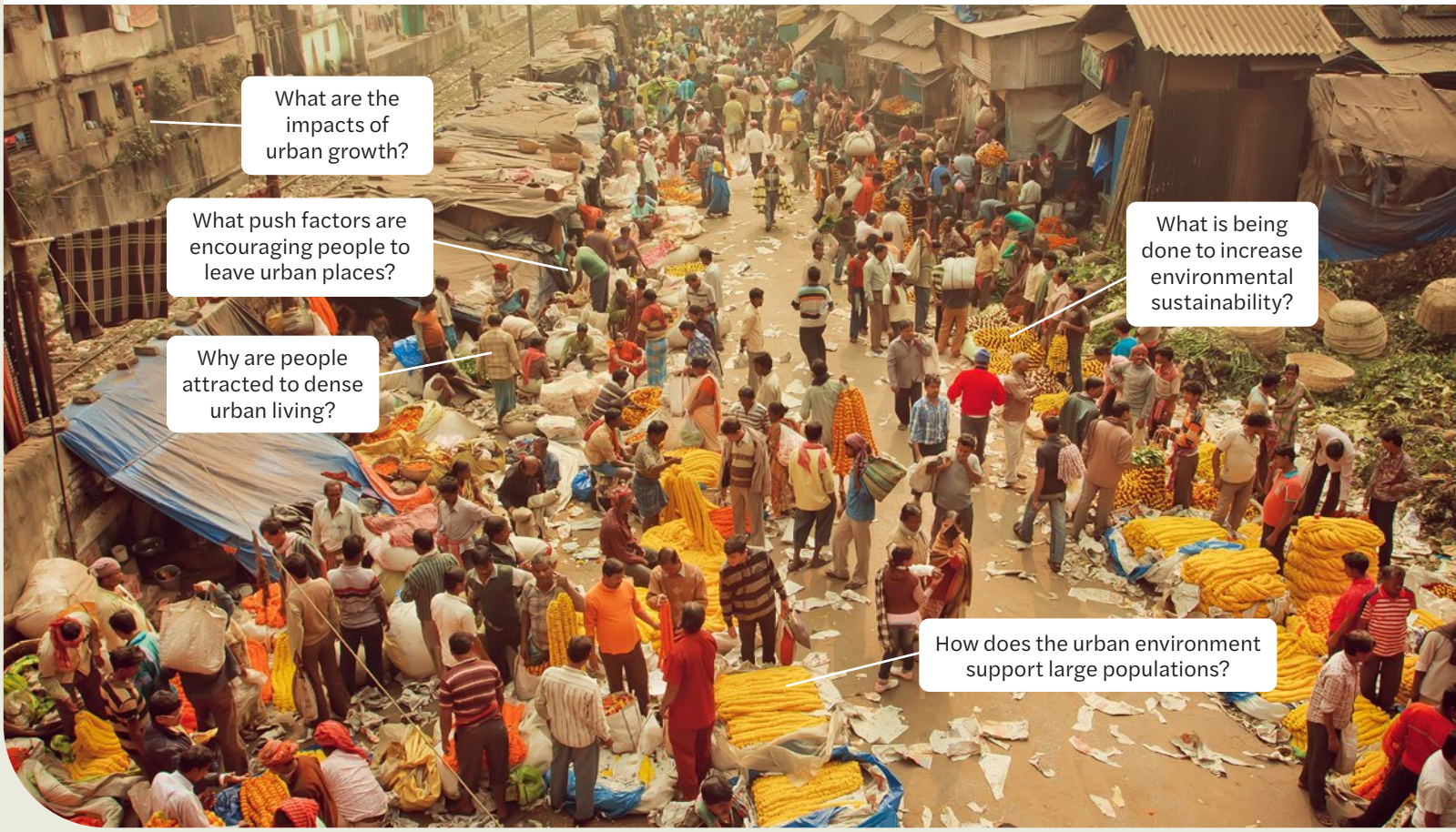
Planning and collecting

1 I can ask open-ended questions

Open-ended questions cannot be answered with a simple 'yes' or 'no'. They often begin with words like 'how', 'why' or 'what'. These questions make us think and we may need to conduct some further research in order to answer them fully.

Some examples of open ended-questions are shown in Source 1.

Source 1: Some possible open-ended questions to ask about this place



2 I can plan an inquiry

Inquiry projects in geography help you explore real-world issues, develop critical thinking and improve research skills. Careful planning is important because it makes sure you collect reliable and useful resources, prepares you for challenges you may face and supports clear communication of your findings.

Before you start an inquiry, complete the following three steps:

1 Select a topic that interests you or is relevant to your surroundings.

When thinking about what topic you would like to investigate you may:

- explore local-scale issues; for example, look at landscapes or urban growth issues in your community. Investigate how these issues affect people and shape places
- explore recent news articles and reports on geomorphic hazard events or new urban sustainability policies
- review the case studies and data presented throughout this book. Do any of these ideas spark curiosity and make you want to investigate an idea or challenge further?
- use digital maps to explore patterns related to landforms and landscapes or changing nations. What do these patterns make you think?
- investigate historical changes. Explore how volcanic eruptions, earthquakes or landslides have impacted social, environmental or economic factors over time.

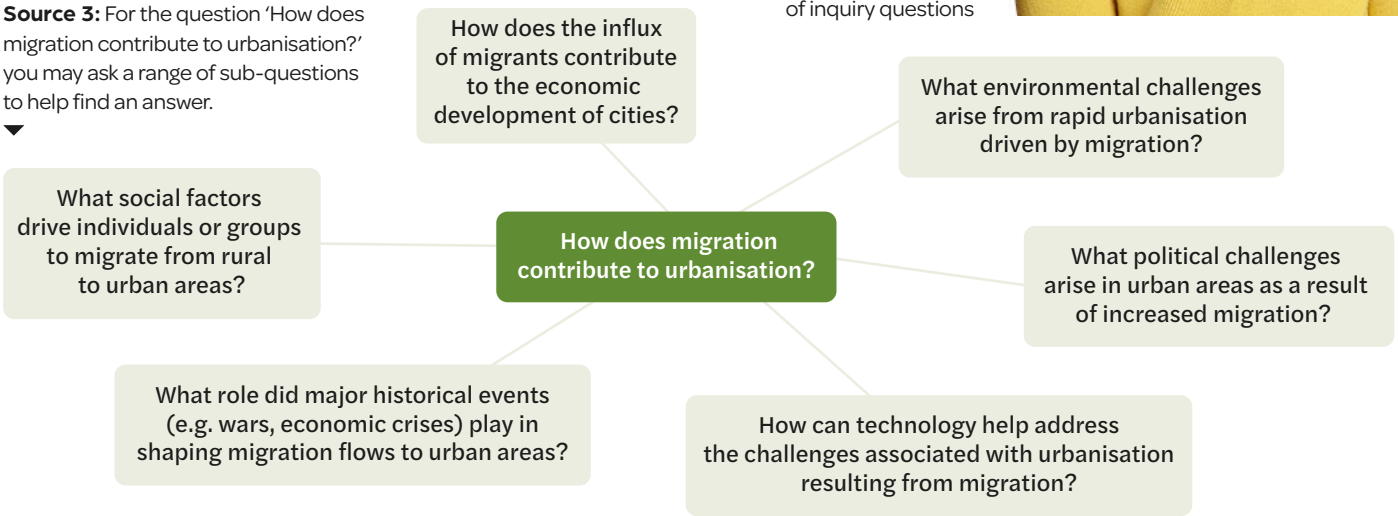
2 Choose your **inquiry question**.

Identify the key aspects of the topic, issue or challenge you want to explore. Write a clear and concise inquiry question. An inquiry question is an overarching idea that you or your class want to investigate. A good inquiry question is one that is measurable and quantifiable. You need to be able to collect data and answer the question within the limitations you are presented with. For example, will you have to conduct your fieldwork at school? Will you be able to survey members of the public? How much time will you have to complete your inquiry?

You may wish to create some sub-questions for your big inquiry questions to help you frame your research (Source 3).

Source 2: Some examples of inquiry questions

Source 3: For the question 'How does migration contribute to urbanisation?' you may ask a range of sub-questions to help find an answer.



3 Plan how you will answer your inquiry question.

Next, you need to plan ways to find information to discover answers to your inquiry question. You may consider:

- What do I know already about this topic?
- What do I need to find out?
- Where/how/from who can we find that out?

There are two main kinds of data:

- **quantitative data**
- **qualitative data**.

Quantitative data is recorded in numbers; for example, the height of a building, the number of plants on a sand dune, the number of people in a population or the flow rate of a river. Qualitative data tends to be more observational. You might write down descriptions of a place, conduct a field sketch or take photos as evidence to answer your inquiry question.

Data is collected in two main ways:

1 **Primary methods** are tasks that you will do while conducting field work.

2 **Secondary methods** are ways that you can collect data back in the classroom to help you answer the question; for example, researching websites, books or other publications.

Source 4: Record your selected methods and use this as a checklist as you begin to collect and gather data.

Primary methods	Secondary methods	Information required for my inquiry
Surveys		Collect perspectives of the local community.
Sketches		Identify processes within my local area.
	Good Humanities textbook	Gain background information and understanding.
	Australian Bureau of Statistics	Collect up-to-date and useful data.

Source 5: Using a field sketch to record primary data for a fieldwork investigation (see Source 10).

3 I can gather information from secondary sources

Collecting reliable secondary data is important for conducting accurate and relevant geographical research. Secondary data refers to information that has already been collected by others and is available for analysis.

Secondary data can come from various sources, including academic journals, government reports and reputable databases. These are some reliable online sources:

- Academic journals and books:
  Look for publications written by experts and checked by other experts (this is called peer-reviewed).
- Government and official reports:
  Data from government agencies and international organisations (e.g. the World Bank, United Nations).
- Databases and organisations:
  Use databases like Google Scholar or non-government organisations (NGOs) and research institutes such as the Australian Bureau of Statistics (ABS).

4 I can gather primary data

Primary methods are tasks that you will do to find evidence to answer your inquiry question.

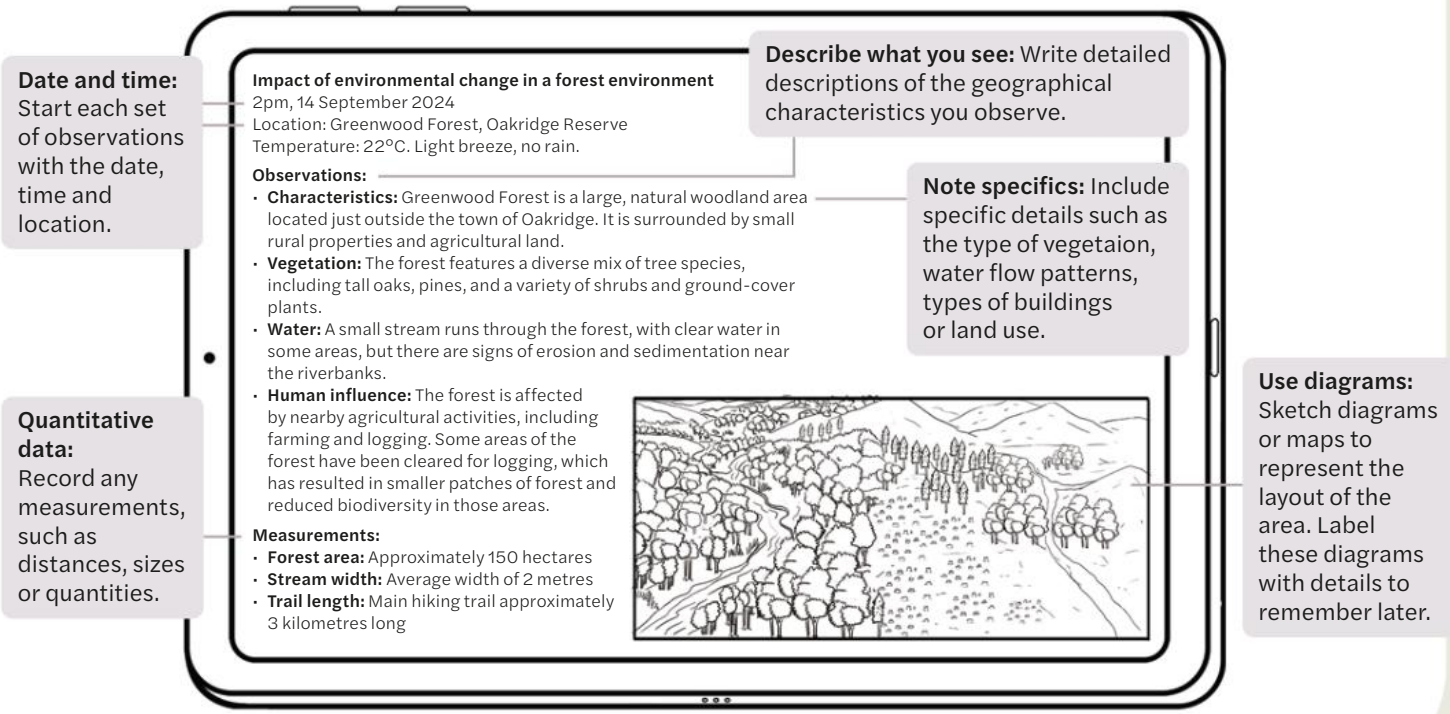
Fieldwork is important

Fieldwork is a core part of being a geographer. While collecting secondary data gives us a broad perspective and understanding, fieldwork provides us with primary data.

It gives us real-time understanding of spatial patterns and processes, while also improving our observation skills, and ability to connect what we learn in class to what is happening in our community. The most common fieldwork methodologies are recording observations, conducting surveys, taking photographs and sketching.

Recording observations

Observations are a great way to record what you see and hear while out in the field. Divide your notebook into sections for different types of observations (e.g. physical features, human activities, and environmental conditions).



▲ **Source 6:** You can record your observations in a table or digitally using a phone or tablet.

Observations using multimedia

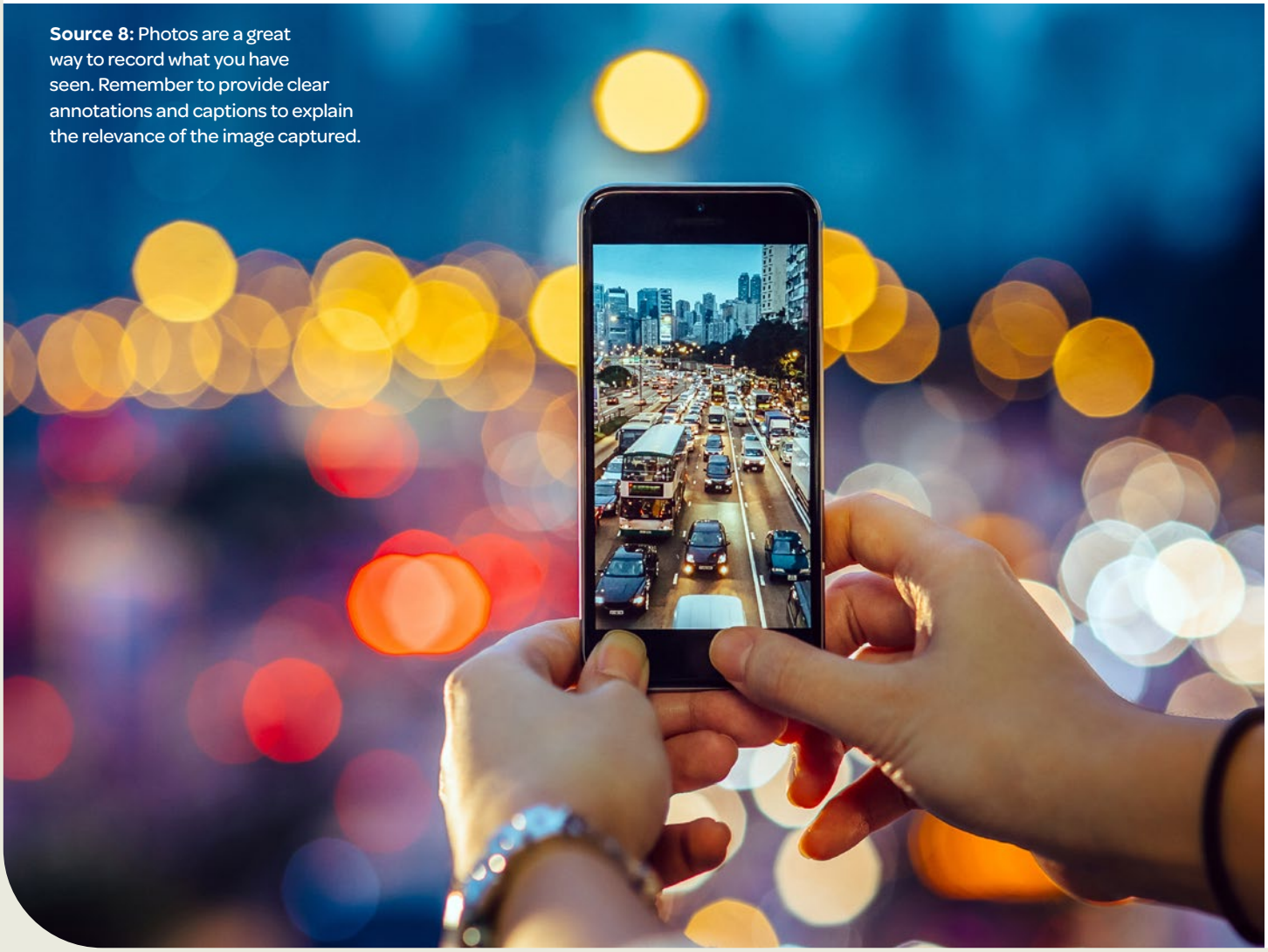
You can also document your observations using different kinds of media:

- **photographs:** take photos to provide a visualisation of your notes. Use a smartphone to capture images of significant features, changes or areas of interest. Label each photo with a brief description and its location.
- **audio notes:** consider using an audio recorder to capture verbal descriptions or insights that you may not have time to write down.

Source 7: Fieldwork means getting out the classroom to explore and collect real-world data firsthand. It can be as simple as exploring your school grounds or as involved as travelling between countries to explore and compare a range of phenomena.

"This desk job is killing me Jim. I need to be out in the field."

Source: CartoonStock.com



Source 8: Photos are a great way to record what you have seen. Remember to provide clear annotations and captions to explain the relevance of the image captured.

Source 9: Surveys can be designed in different ways depending on the information being collected. They might involve a questionnaire survey (asking people for opinions or information), a traffic survey (recording the movement of vehicles or people), or a field survey (observing and measuring features directly in the environment).

A field survey is especially important for botanists because it allows them to record plant types, numbers, health, and growth patterns directly in nature. This first-hand data helps botanists monitor ecosystems, track environmental changes, and protect endangered species.

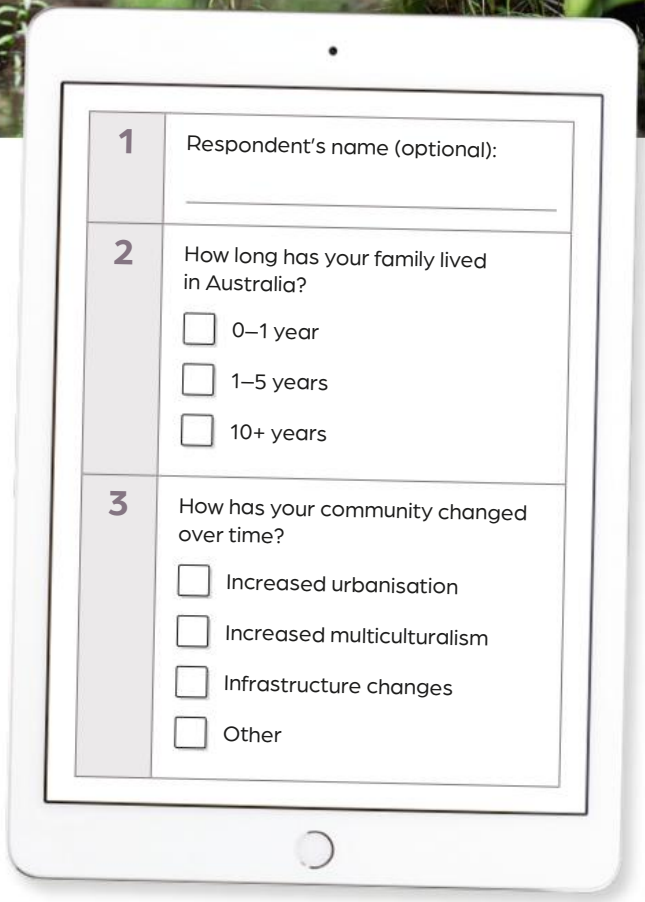
Conducting surveys

In geography, surveys are useful ways to collect data in the field. Surveys could be in the form of a questionnaire, where you ask questions about a topic to better understand people's views.

Questionnaire surveys in geography are useful for gathering detailed data on people's behaviours and perceptions, understanding human–environment interactions, and comparing regions.

Questionnaire surveys are best when they are multiple choice and provide a few short, clear options for participants to choose from. You can also do a vehicle survey, where you tally the number of vehicles that pass in a particular amount of time. Surveys provide you with a sample of what is occurring in a natural or human *environment*.

Surveys can be written by hand or prepared on software such as Survey Monkey or Google Forms (see level 5). Some sample questions for a questionnaire are shown in Source 10.



1	Respondent's name (optional): _____
2	How long has your family lived in Australia? ☐ 0–1 year ☐ 1–5 years ☐ 10+ years
3	How has your community changed over time? ☐ Increased urbanisation ☐ Increased multiculturalism ☐ Infrastructure changes ☐ Other

Source 10: A sample questionnaire survey

Sketching and annotating

Field sketches are an excellent way to record data when you are investigating an inquiry question. Sketches allow you to annotate movement, patterns or any interconnections you see. Field sketching is not a test of your artistic skills – the idea is to record a simplified version of what you can see.

When you are making a field sketch, you need to remember TOASTIE!

TOASTIE will help you remember the key skills when making a field sketch. It stands for Title, Orientation, Annotations, Scale, Time, Information and Edge.

T Title (1)

Provide a heading for your sketch that tells readers what it is and where it is located. You might wish to record both the absolute and relative locations.

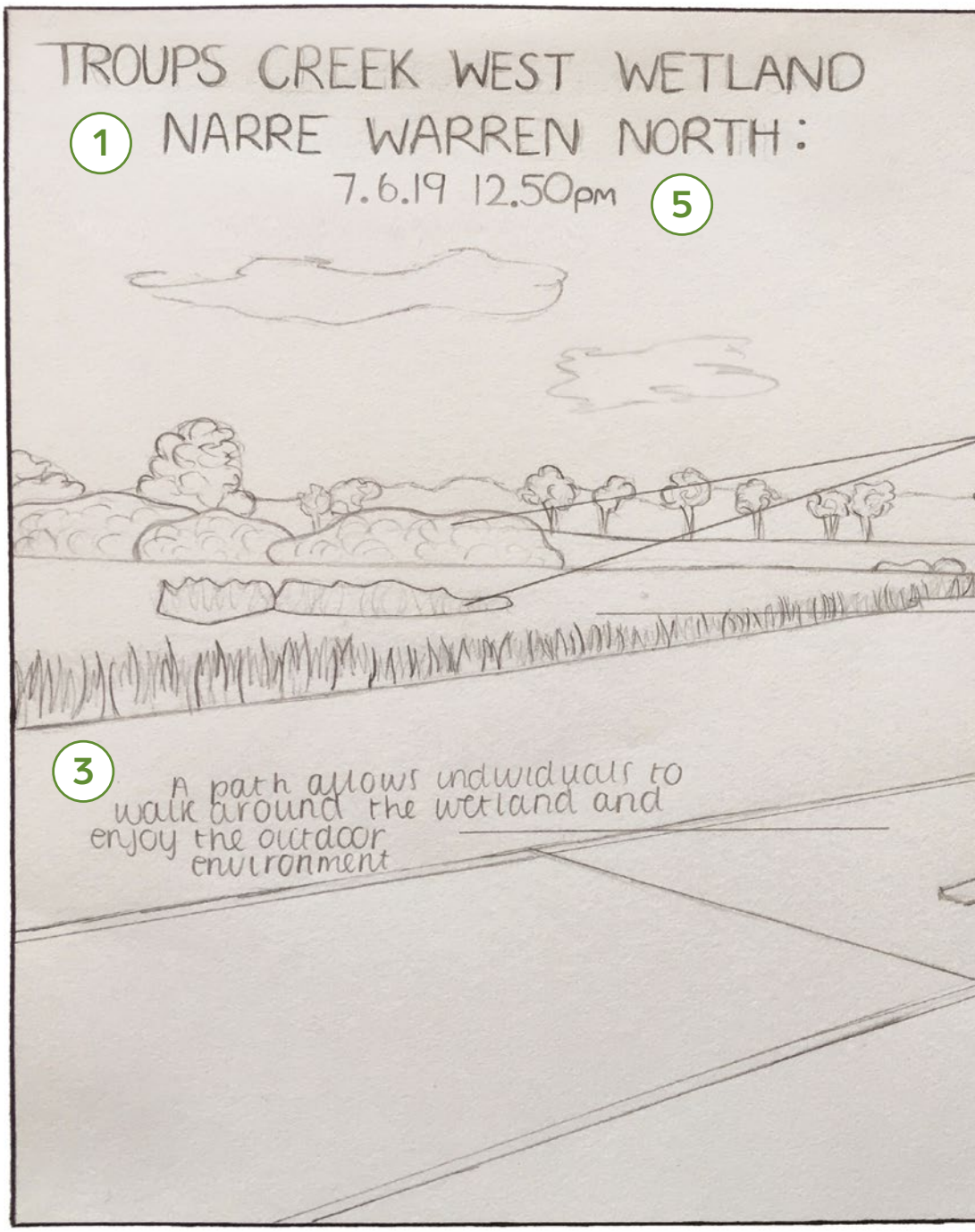
O Orientation (2)

An orientation shows the direction that you were facing when you made your sketch. You need to use a compass so you can record a correct orientation.

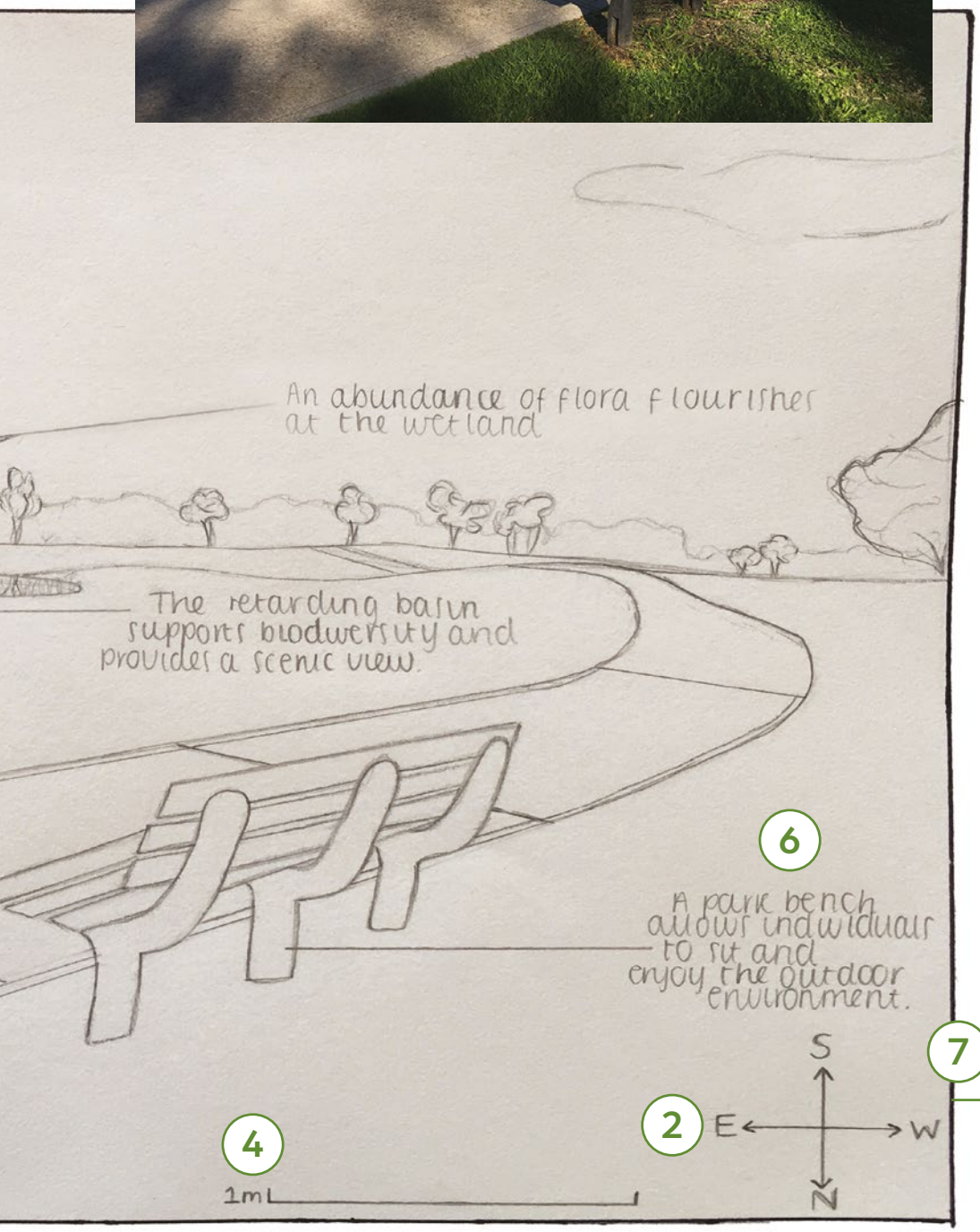
A Annotations (3)

Annotations (or notes) are the most important thing to complete when drawing a field sketch.

Annotations allow you to record details about what you see, and explain how elements of your drawing relate back to the inquiry question. Make sure that the lines to your annotations are made with a ruler – and that they do not overlap.



▲ **Source 11:** An annotated sketch



S Scale

4

Most sketches are not made to scale. However, all geographical maps and sketches require a scale to give the reader some indication of size.

To estimate a scale, use a ruler or pace out the area you have sketched. Then measure how large the same area is on your drawing.

For example, you might estimate that the path you have drawn is 1 metre wide, and when you measure your drawing of the path it is 1 centimetre wide. So your rough estimated scale is 1 cm = 1 m.

T Time

5

By recording the time your sketch was completed, you can analyse how the environment changes over the course of a day, a month or even years.

I Information

6

The annotations on your sketch need to be longer than one word. Annotations should be at least one sentence, and they should inform the reader and help them to identify patterns.

E Edge

7

Always include a border so it is clear where your sketch starts and ends.

Ethical considerations when conducting fieldwork

When conducting fieldwork, you should be mindful of ethical considerations to ensure respectful and responsible research practices.

- **Informed consent:** Always get permission from survey participants before collecting data from them. Ensure they fully understand the purpose of your inquiry, how their data will be used, and that participation is voluntary (they choose to do it and are not forced).
- **Confidentiality:** Protect the privacy of participants by not taking photos of people's faces, or recording names or other personal information without consent.
- **Respect for people:** Treat all community members with respect and sensitivity. Ensure you are being culturally respectful if you visit places of significance.
- **Accuracy and honesty:** Report findings honestly and accurately. Avoid making data up (like survey results) or misrepresenting results so it better answers your inquiry question. As a student you can be limited in the types of data you can collect. Report this rather than inventing data to fill these gaps.

Source 12: Remember to always be respectful when visiting places of cultural or spiritual significance.

5 I can use geospatial technology to record data

Geospatial technology is an effective way to record data and enhance your data analysis. There is a range of programs and apps you can use to help you collect and record data. Many of these are free for schools to use.

Global positioning system (GPS)

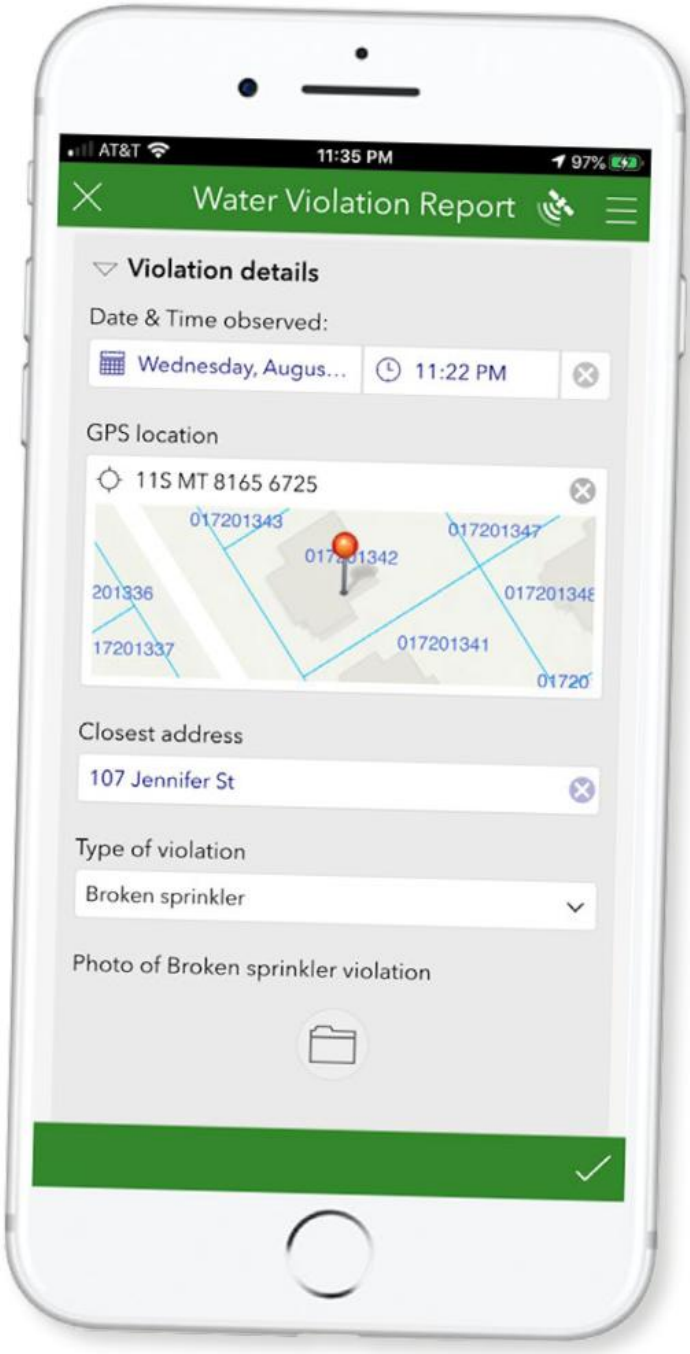
GPS devices or smartphone apps can record absolute locations of where data is collected. This may help you with mapping the exact coordinates of observations, such as the locations of environmental features or infrastructure.

Mobile apps and tools

Mobile apps like ArcGIS Collector, Survey123, or QField allow you to collect data in the field using your smartphone or tablet. These apps allow you to record various types of data, including survey results, observations, photos and GPS coordinates. They make data representation and interpretation much easier when you are conducting analysis later in your inquiry.

Digital survey tools

Online survey platforms such as Google Forms or SurveyMonkey can be used to create digital questionnaires, rather than the traditional paper ones you may have used in primary school. They allow you to create location-based questions and gather geographical information related to specific areas. They also help you create graphs, tables and maps later when you need to represent the data.



▲ **Source 13:** ESRI Survey123 is free for schools and allows you to collect, record and display a range of useful primary data.

Representing information

Imagine you have completed a paper survey with over 100 participants as part of your fieldwork. Would you take a photo of all 100 surveys and include them in your report? Imagine how much time it would take! Plus, it doesn't give your audience a good understanding of what patterns you have discovered. In geography, we can represent data using maps, graphs, tables and diagrams.

1 I can select data relevant to a question

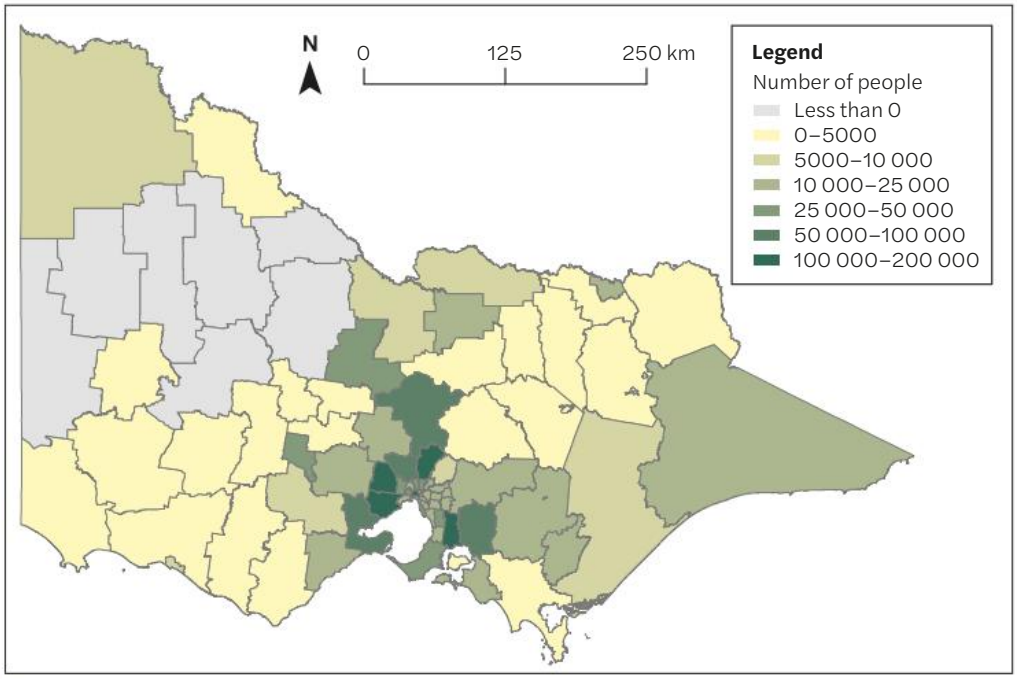
Not all information and data you collect will be useful in answering your inquiry question. The first step is selecting the information or data you have collected which best tells the story of your inquiry.

Example

To answer the question, **'How does urbanisation impact rural towns?'**, you need to select data that focus on both the effects of urbanisation and how it influences the life in rural areas. Helpful data might include:

- **population changes:** information about how many people are moving from rural areas to urban areas
- **economic impact:** data on how urbanisation influences job opportunities, local businesses and income levels in rural towns
- **infrastructure and services:** information about how urbanisation affects the availability of services like healthcare, education and transport in rural areas
- **environmental changes:** data on how urban sprawl affects natural areas, farmland and local ecosystems in rural towns
- **social impacts:** measures of how community life, local traditions and social connections are affected as people move away to cities.

Current and predicted population change across Victoria, 2011–31



Source 14: Current and predicted population change across Victoria, 2011–31

Source: Matilda Education Australia

2 I can represent data and information

There are various ways you can represent information using diagrams, graphs and maps. You need to select which style is best for the information you have collected.

Visual communication

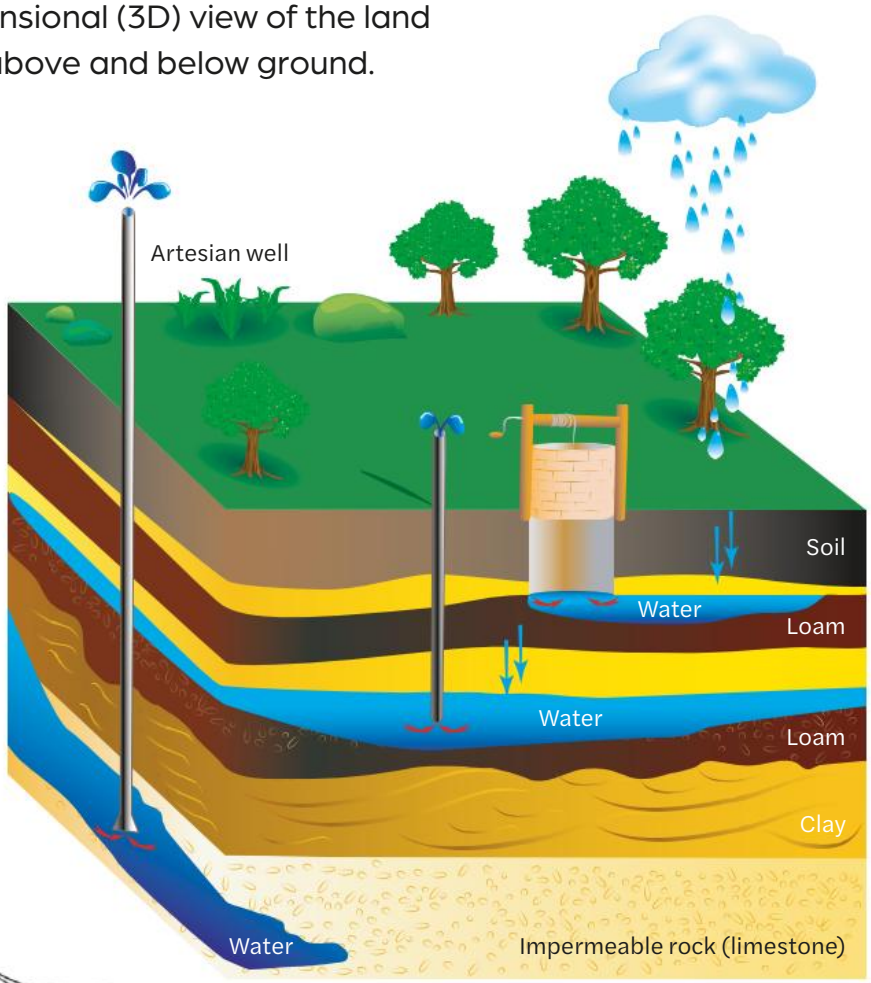
Block diagrams

Block diagrams give a three-dimensional (3D) view of the land and can show what is happening above and below ground.

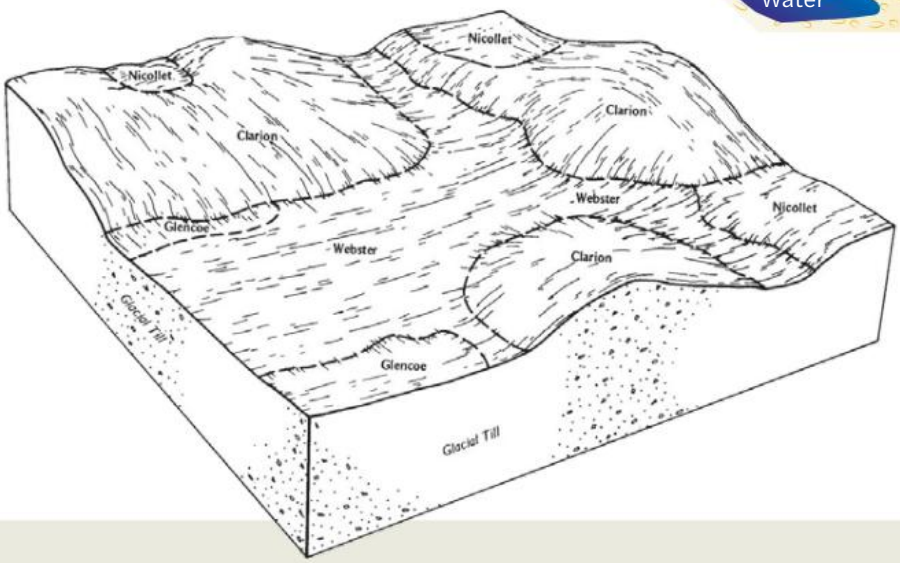
For instance, block diagrams can help us visualise how water can move from the atmosphere to the surface of Earth through rivers, oceans and streams – and also how it can move under the ground.

When you create a block diagram, make sure you draw a 3D object that has an equal amount of drawing room both above and below the surface of Earth.

Labels and annotations are important on a block diagram, as they help your audience to interpret your drawing.



Source 15: A block diagram

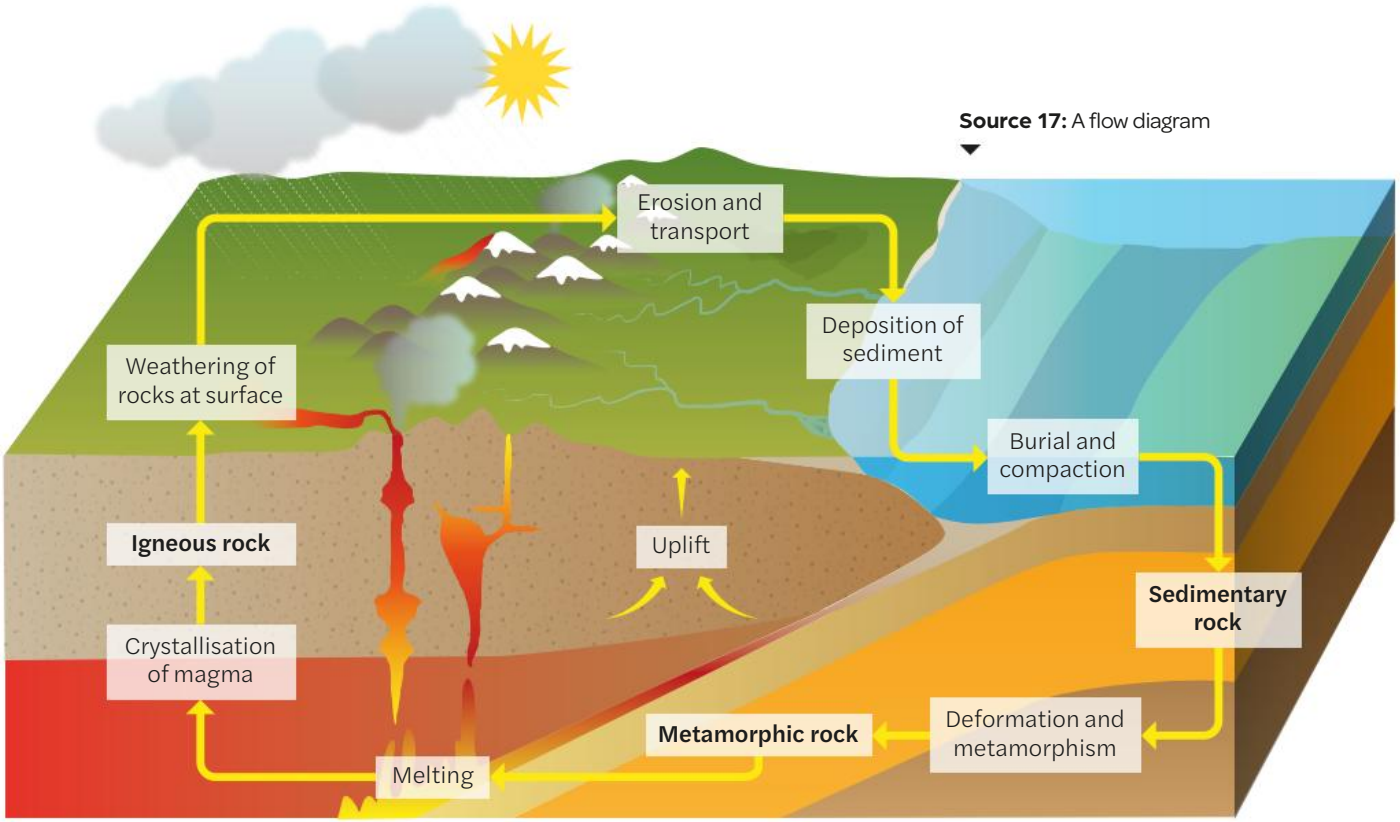


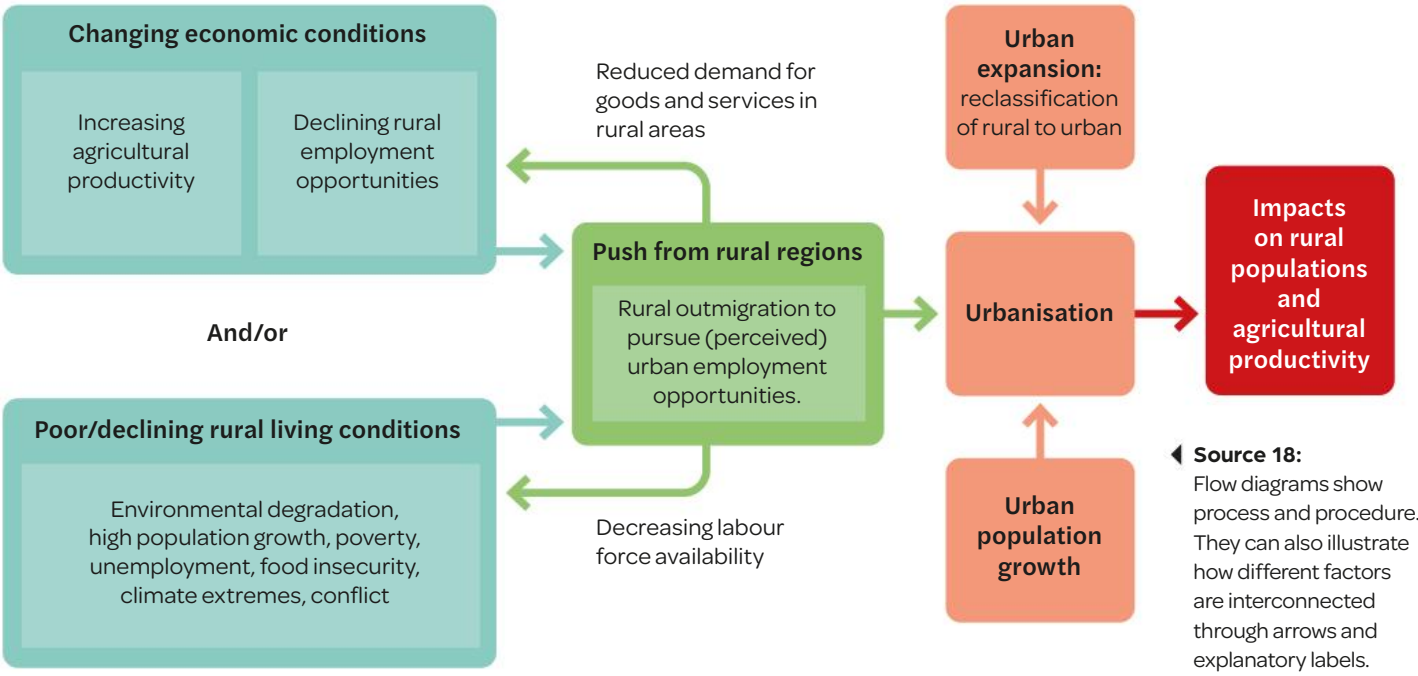
Source 16: Sketch of a block diagram

Flow diagrams

Flow diagrams are helpful to show processes or to show how different parts of the environment are interconnected. Arrows show the movement between stages or how different items are connected. Flow diagrams can be as simple as joining stages of a process with arrows, or can be overlaid with block diagrams to illustrate more complex connections.

Source 17: A flow diagram





Source 18: Flow diagrams show process and procedure. They can also illustrate how different factors are interconnected through arrows and explanatory labels.

Photo essays

A photo essay is a way of presenting information visually. It is ideal for showing characteristics of a place or a process.

A photo essay usually includes a series of photos with specific annotations or captions. The captions provide brief background information about the key features of the image, or the meaning behind the selected image. They should be full sentences and link the image to the overall topic or investigative focus.

Example

Historical photo of Hampton Beach showing initial signs of erosion along the coastline

Early boating at Hampton Beach providing evidence of continuous human use over time

Modern-day Hampton Beach featuring groynes to reduce the impact of seasonal long-shore drift

Aerial view of Port Phillip Bay, including Hampton Beach, showing the variety of coastal management strategies implemented in the area such as sea walls, groynes and coastal vegetation to reduce the impact of erosion

Source 19: A photo essay

Graphing

Simple graphs

Graphing is an important way of displaying geographic information. It shows us patterns and changes over time.

Graphs best represent data for comparisons (bar graphs), trends over time (line graphs), proportions (pie charts), relationships (scatter plots), distributions (histograms), and statistical summaries (box plots).

When you are creating a graph, the word to remember is SALTS. **SALTS** is an acronym based on the first letters of five key things about graphs: Scale, Axis, Legend, Title and Source.

S Scale

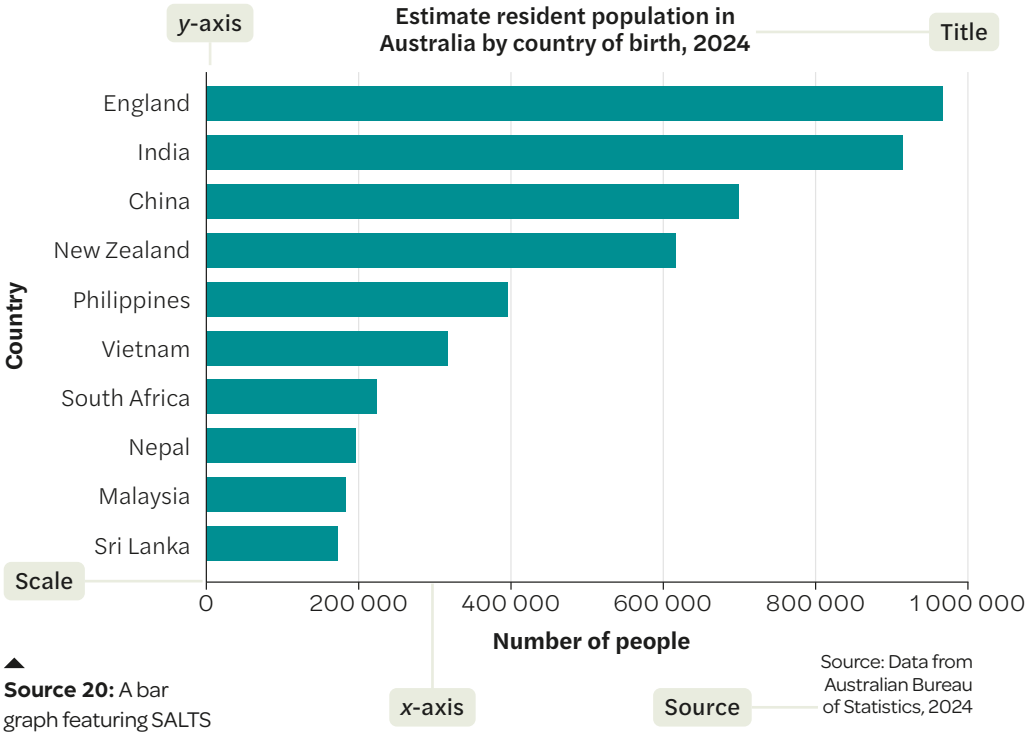
The scale of your graph will depend on the data you are trying to visualise. To find out the axis scale you need for a graph, first find out the 'range' of the numbers, which means finding the lowest value and the highest value, then fill in the numbers in between so you can mark your data points easily.

A Axis

Each graph has an *x*-axis and a *y*-axis. The *x*-axis is the horizontal axis and the *y*-axis is the vertical axis. Make sure you label each axis.

L Legend

A graph often uses colours to represent data. A legend shows the audience what these colours mean and how to read the data.



Source 20: A bar graph featuring SALTS

T Title

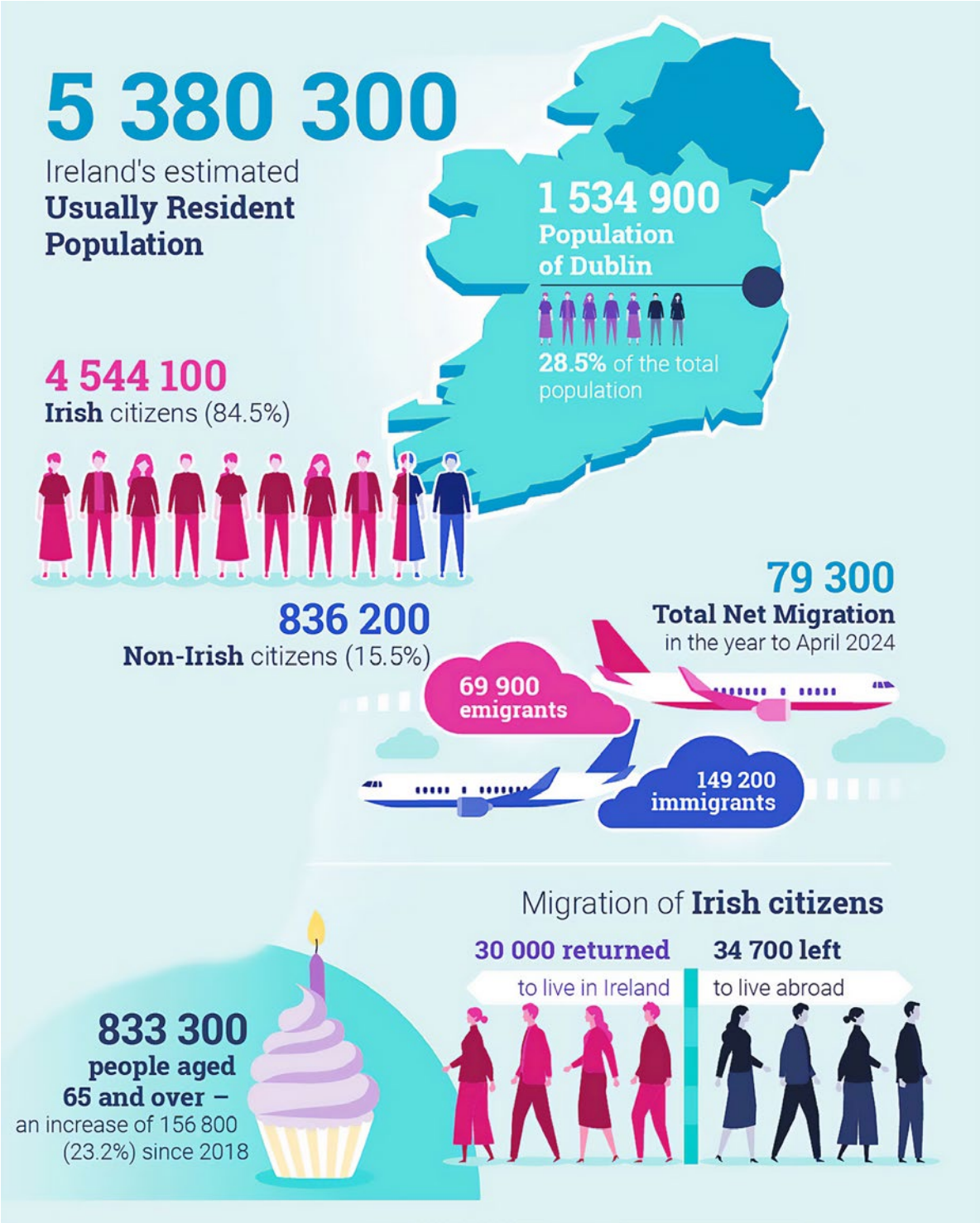
A title lets your audience know what your graph is showing.

S Source

When you graph information, it is important to acknowledge where you obtained the data. Maybe you collected it yourself or maybe you sourced it from a website. By stating the source of your information, the reader knows how reliable it is.

Infographics

Collecting and displaying data is an important skill for geographers. As quantitative data tends to be quite complicated, we can sometimes use **infographics** to communicate these findings. Infographics are posters that use images, graphs, shapes and colour to illustrate to the audience key patterns and trends. Infographics are an engaging way to present information if used properly.



Source 21: An infographic

3 I can use geographical conventions to construct maps

Geographers use specialist tools to assist in geographical inquiry. Developing skills in understanding and using these tools helps us display and analyse data effectively. Geographers use the following conventions when constructing a map to ensure it is clear for their audience to read and interpret.

Mapping with BOLTSS (NA)

Source 22: This map features all aspects of BOLTSS.

B Border

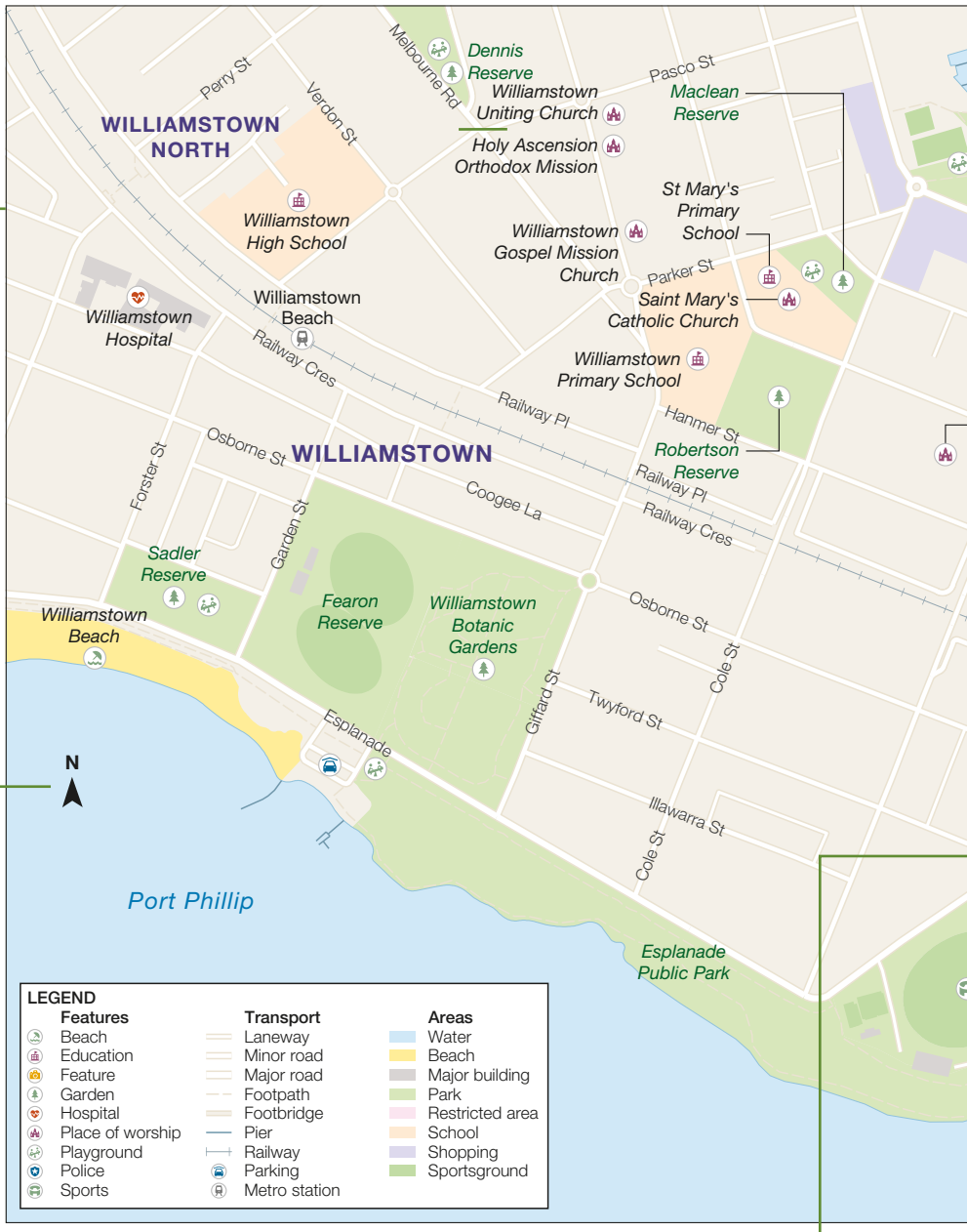
A border is important to show the edges of the mapping field. It provides a clear area for you to construct your map and makes it appear clear and neat to readers.

O Orientation

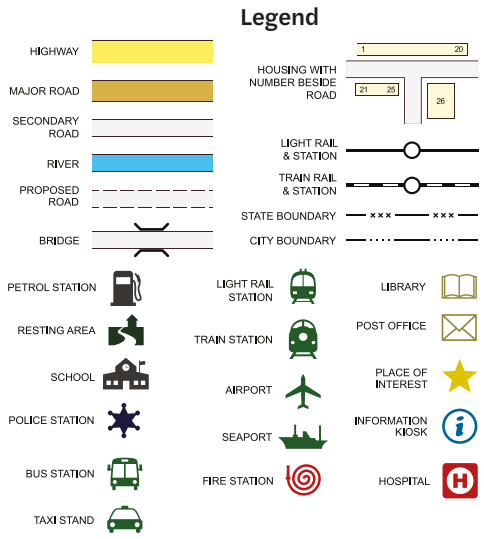
Orientation refers to the compass direction. The four cardinal points on a compass are north, east, south and west. The points in between, such as north-east, give more accurate directions.

Source 23:
Cardinal points of the compass

Street map of Williamstown, Victoria



Source: Matilda Education Australia



Source 24: A sample legend

L Legend

A legend, or key, is vital to understanding the map. Without a legend, colours and symbols would not make sense and we would not be able to interpret patterns or distributions.

T Title

A title gives us an understanding of what the map is showing. If you are drawing a sketch map, you should also provide a date and time. This allows you to monitor change in a location over time.

S Scale

The scale gives us information about how big something is in real life. Scale can be expressed in three ways:

1 **Scale statement** describes the scale: 1 centimetre on the map represents 2 kilometres on the ground.

2 **Representative fraction** uses units to show scale: 1:100 000 means 1 centimetre on the map represents 100 000 centimetres on the ground.

3 **Linear scale**

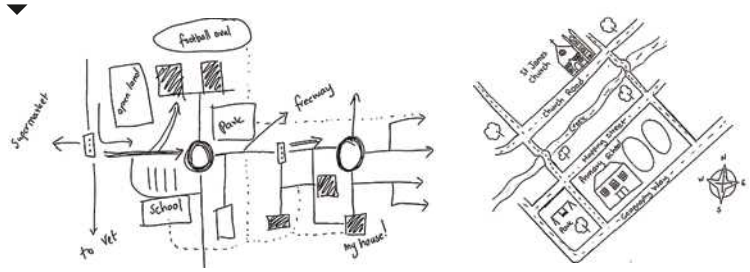
S Source

Always acknowledge the source of the information that you illustrate on your map. The source can also indicate whether the map is reputable or not.

(NA) Neatness and Accuracy

Some people add the final letters `NA'. When we read a map, we rely on it being neat and legible and we expect that its data is displayed accurately. Therefore, when you construct a map it is important you take the time to correctly illustrate the patterns and distributions you see in the data.

Source 25: Which sketch map is easier to read?



4 I can use geospatial technologies to create maps

While paper maps provide good practice to develop understanding about place and distributions, they are limited in what data they can represent. Digital maps using geospatial technologies allow geographers to show multiple datasets at the same time, illustrating interconnections between data.

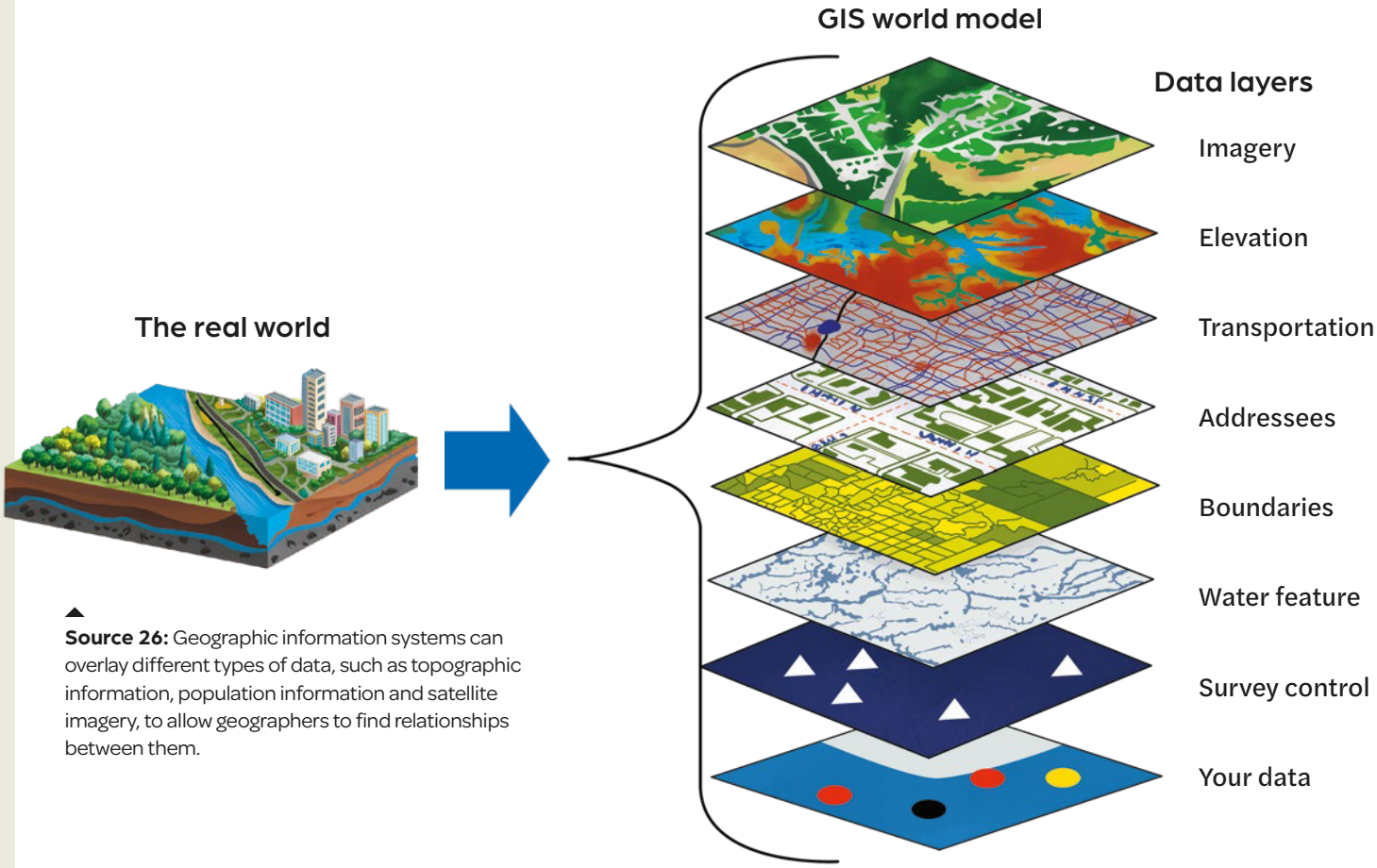
There are a variety of options available that allow you to create maps using your own or existing datasets:

- geographic information system (GIS) software (e.g., ArcGIS, QGIS)
- online mapping platforms (e.g. Google Maps, Google My Maps, Google Earth Pro, Digital Twin).

Example

There are some key words you may come across when creating a digital map. They may include:

- **geospatial data:** information about locations and geographic features
- **layers:** different types of information stacked on top of each other. Each map layer is a different dataset and can be 'turned on' or 'turned off' so geographers can compare specific relationships
- **datasets:** collections of data on a particular topic. For example, one dataset might contain information about river locations, while another might contain data on water use.



Source 26: Geographic information systems can overlay different types of data, such as topographic information, population information and satellite imagery, to allow geographers to find relationships between them.

Layers

Imagine you have a big sheet of clear plastic, and you use different coloured markers to draw on it. Each colour represents a different type of dataset. When you stack these sheets, you can see all the information at once: the city layout, the parks, and the schools. Each layer gives you different details and can be added or removed as needed.

Data collection

You may choose to map your own data that you collect in the field. However, there are also lots of freely available datasets available online for you to use to create map layers. ArcGIS provides the Living Atlas with a huge variety of data freely available for public use. The Australian Atlas of biodiversity is another free Australian dataset. You can explore the websets of ArcGIS and Google Earth Pro. Instructions on how to create a digital map will depend on what program you choose to use.

Source 27: You can use layers so that you can see all the information at once, or only particular sections.

Water usage

Another layer could show where people use the water, such as for farming, drinking or industry. This might be represented with icons or colour codes to show different types of water use.

Water quality

On a separate layer, you could add information about the water quality in different parts of the rivers and lakes; for example, some areas might be marked with a red dot to indicate polluted water, while green dots show clean water.

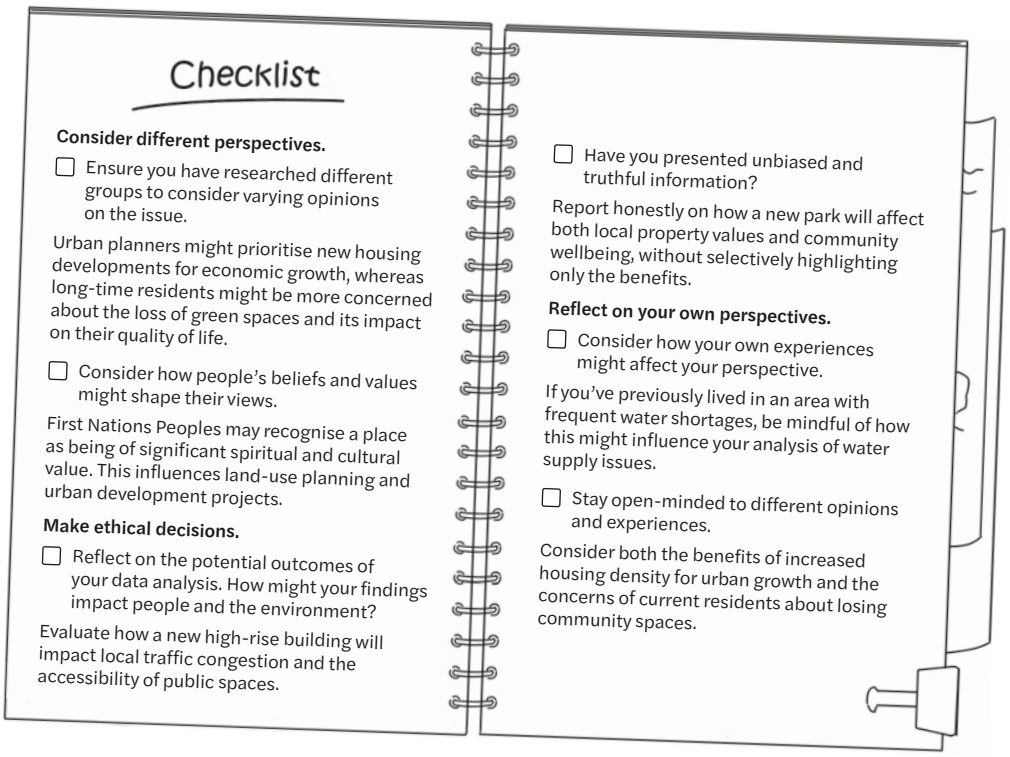
Water bodies

Imagine a map where the base layer shows geospatial data, such as locations of rivers, lakes and oceans. This layer outlines where all the major bodies of water are in an area.

5 I can follow ethical practices when working with data

When working with geographical data, it's important to think about making decisions that are fair and respectful. You need to ensure you are considering different perspectives, impacts on people and place, ensuring the right to people's privacy and equal representation.

Source 28: When reviewing your data use the following checklist to ensure you are using data ethically.



Checklist

Consider different perspectives.

☐ Ensure you have researched different groups to consider varying opinions on the issue.

Urban planners might prioritise new housing developments for economic growth, whereas long-time residents might be more concerned about the loss of green spaces and its impact on their quality of life.

☐ Consider how people's beliefs and values might shape their views.

First Nations Peoples may recognise a place as being of significant spiritual and cultural value. This influences land-use planning and urban development projects.

Make ethical decisions.

☐ Reflect on the potential outcomes of your data analysis. How might your findings impact people and the environment?

Evaluate how a new high-rise building will impact local traffic congestion and the accessibility of public spaces.

☐ Have you presented unbiased and truthful information?

Report honestly on how a new park will affect both local property values and community wellbeing, without selectively highlighting only the benefits.

Reflect on your own perspectives.

☐ Consider how your own experiences might affect your perspective.

If you've previously lived in an area with frequent water shortages, be mindful of how this might influence your analysis of water supply issues.

☐ Stay open-minded to different opinions and experiences.

Consider both the benefits of increased housing density for urban growth and the concerns of current residents about losing community spaces.

Interpreting information

Maps and graphs are only useful in an inquiry if the geographer explains them and puts them into context for the audience.

1 I can read graphs and maps

Graphs and maps use different colours and symbols to represent data. In order to be able to read a map or graph, you first need to be able to understand what these things mean.

Direction

Up until now, direction may have been described to you as 'left' and 'right', 'above' or 'below'. While these words are helpful, in geography we also need to use compass points: north, south, east and west.

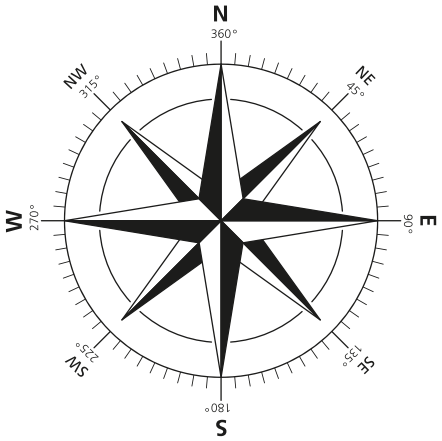
Consider the globe in Source 30. Around the centre there is a line of latitude called the equator. North of the equator is the northern hemisphere, which includes the continents of North America and Europe. South of the equator is the southern hemisphere; this is where we live!

Sometimes, we mistakenly use the word 'above' instead of 'north' or 'below' instead of 'south'. If you say something is 'above' the equator, you are actually saying it is floating in the air over the top of it! If you say something is 'below' the equator, you are describing something buried beneath it! Use directional terms carefully to ensure you are sending people in the right direction.

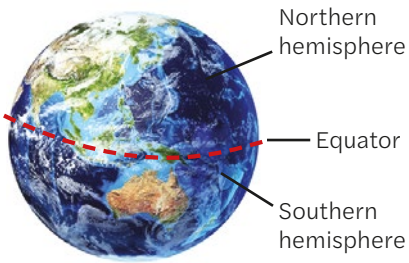
Geographers use compass points to give accurate directions because these points do not change. No matter where you are, the hand on a magnetic compass will always point towards the Magnetic North Pole.

The four cardinal points on a compass are north, east, south and west. The points in between, such as north-east and north-north-east, give more accurate directions. A bearing is the angle measured in degrees clockwise from north to a direction line: a bearing of 90° is due east and a bearing of 180° is due south. Bearings give you 360 points of direction. They are used where highly accurate direction is important, such as in air, sea and land navigation.

On the map of Australia in Source 32, the compass reading for Halls Creek (C4) is east of Broome. Port Hedland (B3) is located south-west of Broome.



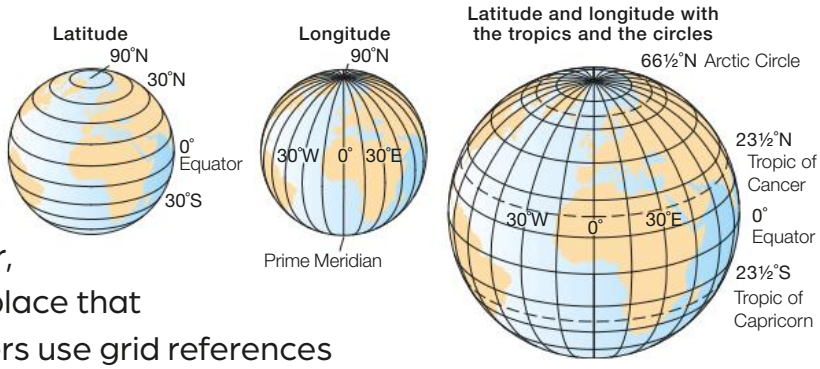
Source 29: Cardinal and intercardinal points of the compass



Source 30: The Earth

Latitude and longitude

How do you identify where you live? Most people have an address they can share with you that gives the exact location of their house. However, how do we identify the location for a place that doesn't have an address? Geographers use grid references and **latitude** and **longitude** to help them identify these locations. This grid system is used in maps for long-distance navigation.



Source 31: To give an accurate location of a place, a geographical grid consisting of imaginary lines of latitude and longitude is used.

Parallels of latitude are imaginary lines drawn around the Earth from east to west. Lines of latitude are parallel to one another and are measured in degrees north and south of the equator (0° latitude). The Tropic of Cancer (23.5°N) is the most northerly and the Tropic of Capricorn (23.5°S) is the most southerly parallel of latitude at which the Sun can be directly overhead. The Arctic Circle in the northern hemisphere and the Antarctic Circle in the southern hemisphere mark the point that the Sun will not rise in winter on the shortest day of the year and the Sun won't set on the longest day of the year.

Meridians of longitude are imaginary lines that run from the North Pole to the South Pole. Degrees of longitude increase to the east and west of the prime meridian (0°), which runs through Greenwich, near London. The International Date Line (180°) marks the division point of the western and eastern hemispheres.

We can locate any place in the world at the point where latitude and longitude intersect. Latitude is stated before longitude.

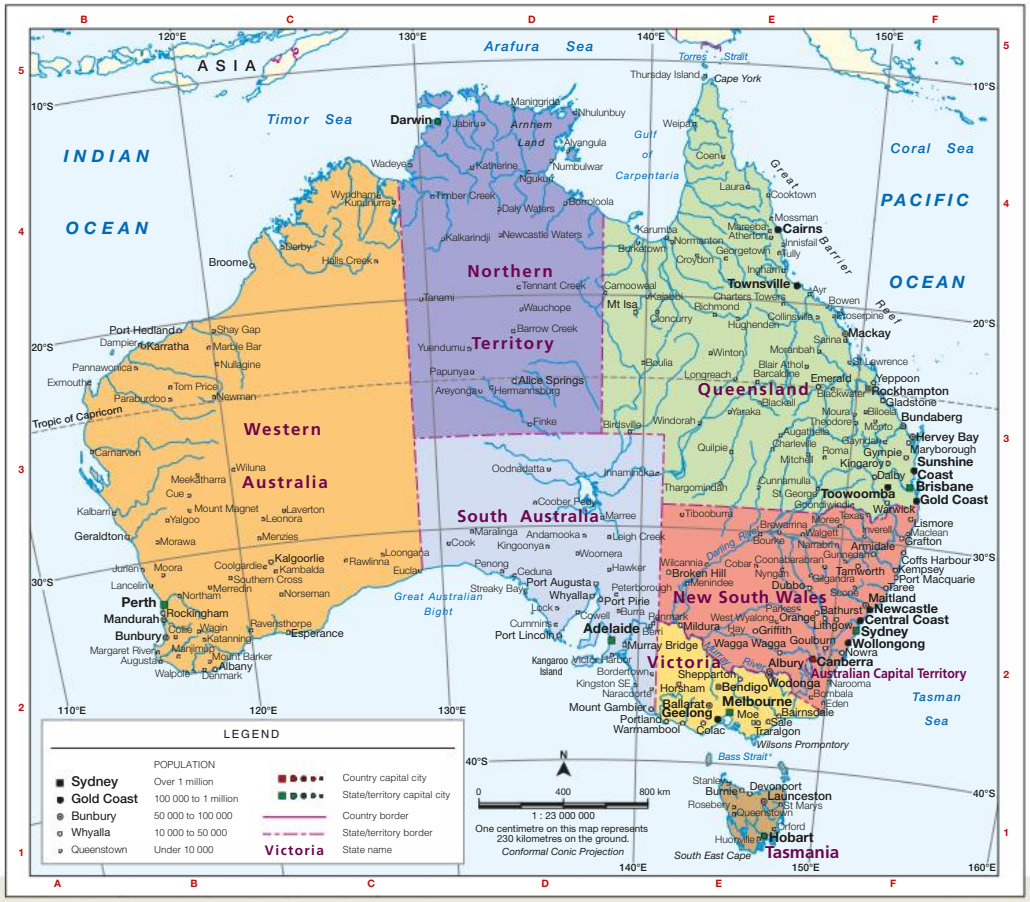
Example

In Source 30, Tanami, NT, is located 20° south of the equator and 130° east of the prime meridian.

For more accuracy, each degree can be further divided into 60 minutes (') and each minute into 60 seconds ("). The location of Darwin is 12°27'26"S 130°50'12"E, expressed in degrees, minutes and seconds.

Political map of Australia

Source: Mapgraphics



Source 32: This political map contains three different ways to locate places – lines of latitude and longitude, an alphanumeric grid and a direction arrow.

Scale

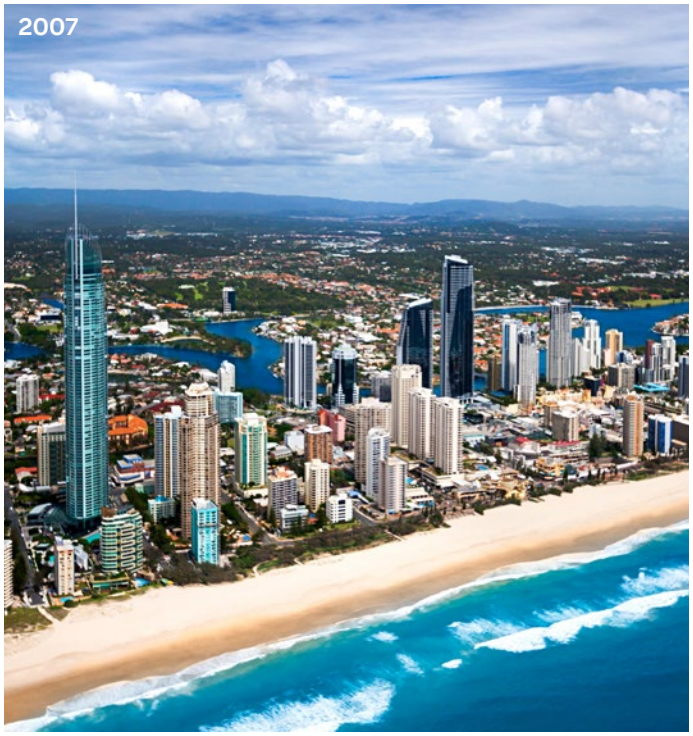
Look at Source 30 again. Logically, we know that this image of the Earth is not to scale. In reality, the Earth is over 12 700 kilometres in diameter! Scale is important in geography as it allows us to make maps and other images, and shrink them down to a size where we can see patterns, distributions and changes over time.

Scale is the ratio between the distance shown on the map and the real distance. To calculate the real distance between Sydney (F2) and Canberra (E2) in Source 32, mark the distance between the cities on the edge of a piece of paper, then place the edge of the paper under the linear scale. You will find the distance is about 250 kilometres. In the source, the scale is shown in three different ways:

- The linear scale is like a ruler for you to measure distances on the map.
- The scale statement uses words to say 1 centimetre on the map represents 230 kilometres on the ground.
- As a representative fraction – 1:23 000 000 (1 cm = 23 000 000 cm).

Source 33: This car model is a scaled-down version of the real car. This is a 1:64 scale model of a VW Beetle car. One centimetre length of the model represents 64 centimetres of the real car.

Scale can also be used to describe changes that occur over time. A 'large-scale change' indicates that something has caused major alterations to a region. A 'small-scale change' indicates that little has been altered. Review the images in Source 34. What is the scale of the city's change?



Source 34: Change over time to Surfers Paradise, 2007 to 2019

Types of maps

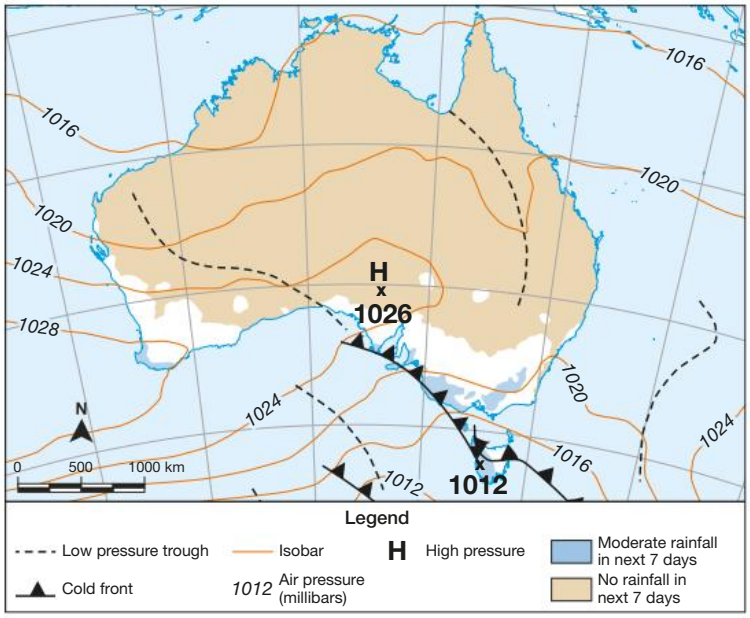
Weather maps

Weather maps show conditions in the atmosphere.

The curved lines you see on a weather map are called isobars, and they join areas of the same barometric pressure. Air circulates around high pressure in a clockwise direction and low pressure in an anticlockwise direction, so isobars also indicate the direction of the wind. When isobars are close together, this indicates strong winds. When they are far apart, winds are light.

A cold front line marks the forward boundary of a cold air mass and the triangles point in the direction the cold front is moving. Clouds and rain are expected with a cold front.

Weather map



Source: Mapgraphics/Bureau of Meteorology

▲ **Source 35:** A weather map, also known as a synoptic chart

Choropleth maps

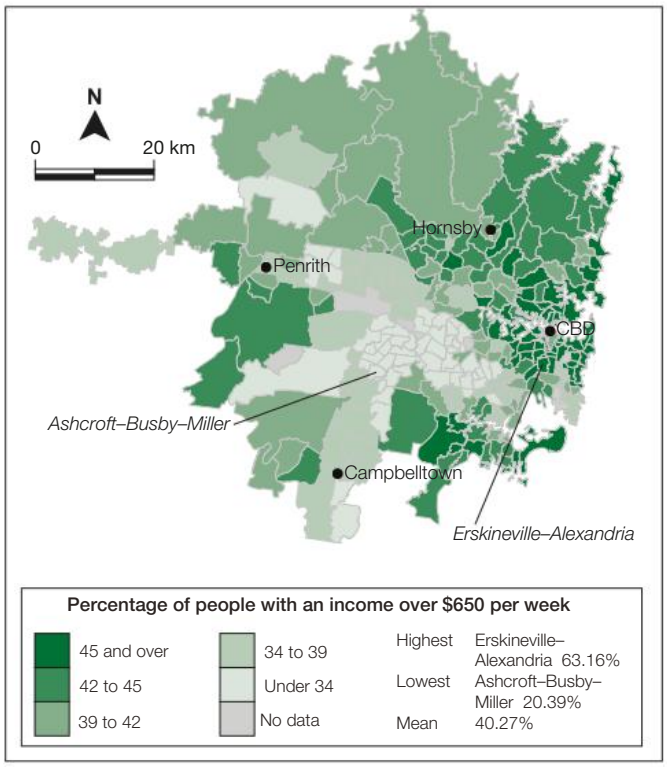
Choropleth maps use colour to show the spatial distribution of data.

To enable the viewer to quickly make sense of a pattern, choropleth maps use different shades of the same colour to reflect a pattern. Darker shades show 'the most' of something and lighter shades show 'the least'.

This choropleth map shows the percentage of people with an income of more than $650 per week in the Local Government Areas (LGAs) of Sydney. The pattern shows that a higher percentage of people earning more than $650 per week live north and directly south of the Central Business District (CBD). A lower percentage of people earning more than $650 per week are located in the LGAs to the west of the CBD.

The graded colour scheme on choropleth maps enables us to see exceptions to the general pattern: the LGAs south and west of Penrith have 42–45 per cent of their working population earning more than $650 per week, which is higher than the surrounding area.

Income distribution: Sydney



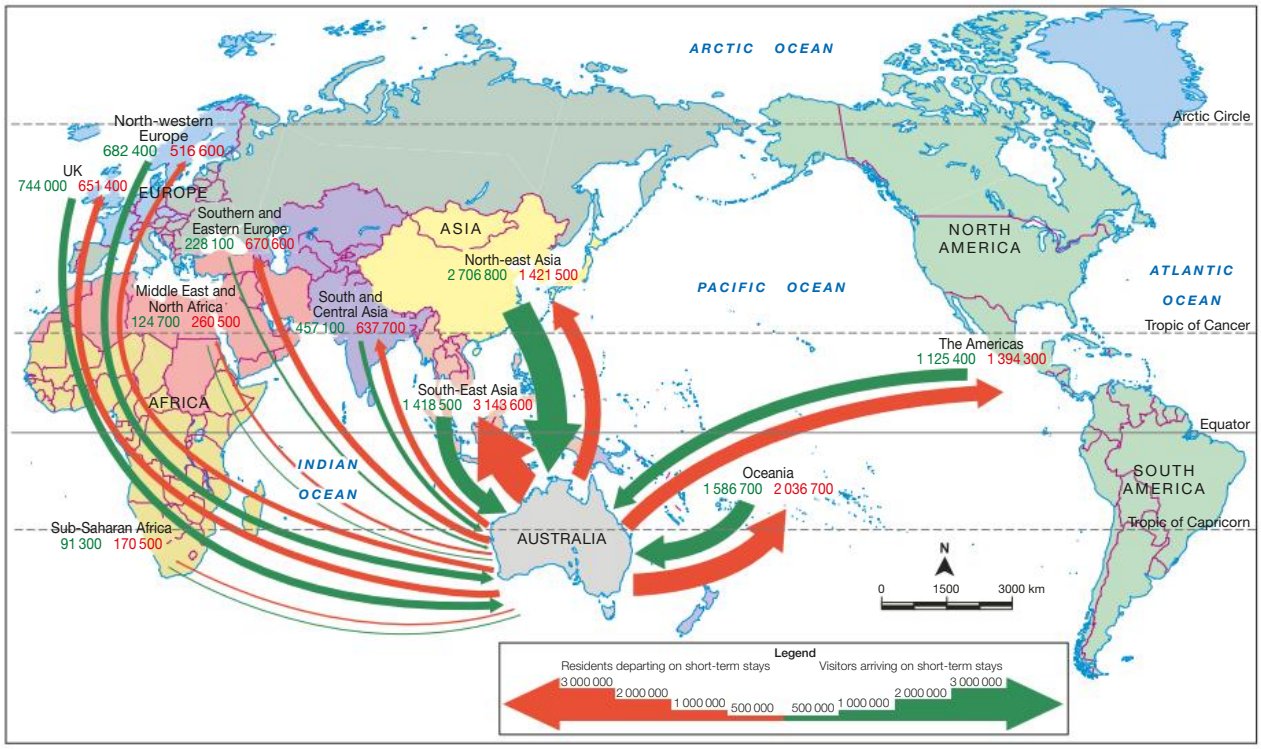
Source: Mapgraphics

▲ **Source 36:** Choropleth map showing the distribution of income in Sydney's LGAs

Flow maps

Arrows show direction of movement and thickness shows size of movement.

Australian tourism: Arrivals and departures



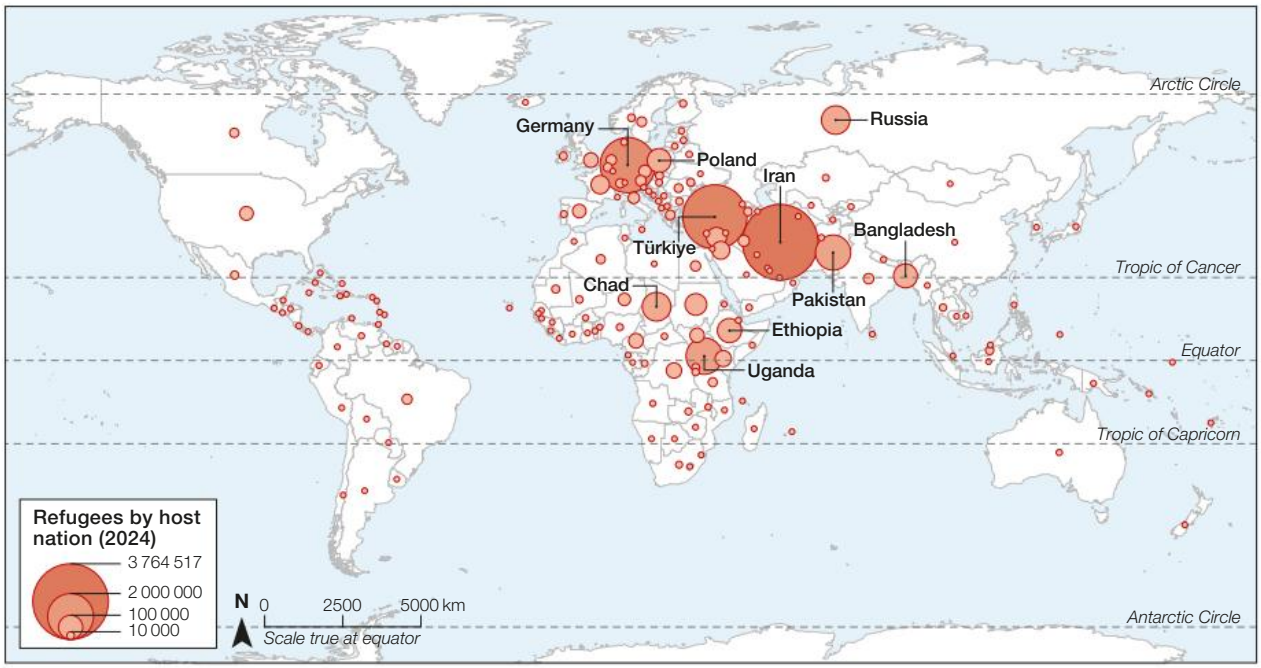
Source: Mapgraphics

Source 37: Flow map showing Australia's international tourist arrivals and departures

Proportional symbol maps

A proportional symbol map uses map symbols (such as circles) that vary in size to represent the data value. The larger the symbol, the greater the value.

Refugees, people in refugee-like situations and Venezuelans displaced abroad, 2021



Source: Mapgraphics

Source 38: Proportional symbol map showing the number of refugees, people in refugee-like situations and Venezuelans displaced abroad in 2021.

Topographic maps

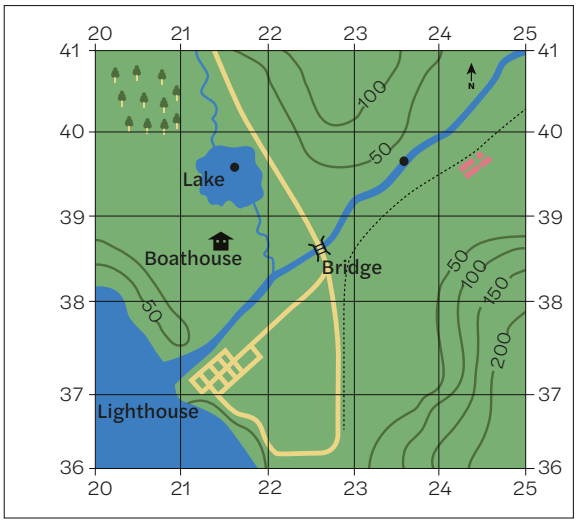
Topography is the study of land surface. Topographic maps show the different human and natural features on the ground, such as towns, roads, railways, forests, lakes and rivers. Topographic maps use contour lines to show different heights, helping you identify the shape of the land and features such as hills, valleys and ridges. A grid over the topographic map allows you to find relative and absolute locations.

Contour lines

Contour lines are imaginary lines on a map that join points of the same height above sea level.

When contour lines are close together, the land is steeper, and when they are spaced further apart, the land is flatter. On the contour map in Source 41 on page 452, the town of Tully (86°E, 16°N) is located in a flat valley between steep mountain ranges that surround it. The contour lines in the valley are widely spaced. The contour interval is the difference in height between the contour lines. For example, the contour interval used in Source 39 is 50 metres.

A sample topographic map



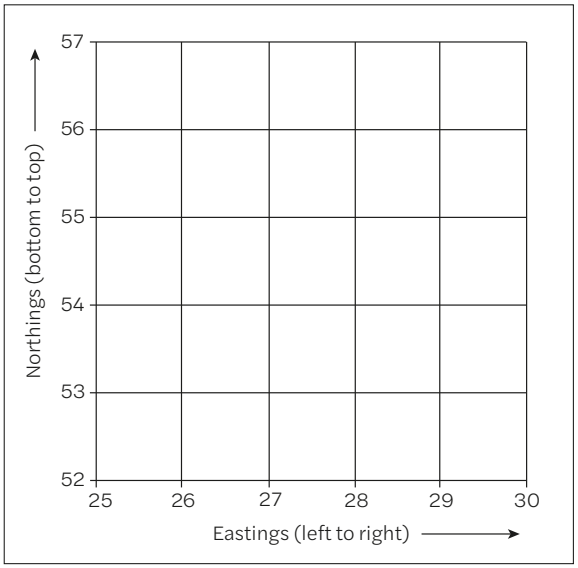
▲ **Source 39:** This simple map shows contour lines and grid references.

Grid referencing

It is not always easy to describe a specific point on a map using directional terms. Instead, you can use the grid references, also called the area reference (AR), to show the exact or absolute location of that place.

For example, you may want to highlight the exact position of the boathouse using the map in Source 39. If you spent time explaining where this was, you would be describing the relative location of that place. You might say, 'It is north-north-east of the lighthouse and west of the bridge'.

To read an area reference, we first look at the numbers (or letters) associated with the vertical lines, reading from left to right – these are called 'eastings'. We then look at the numbers associated with the horizontal lines, reading from the bottom of the map to the top – these are called 'northings'.

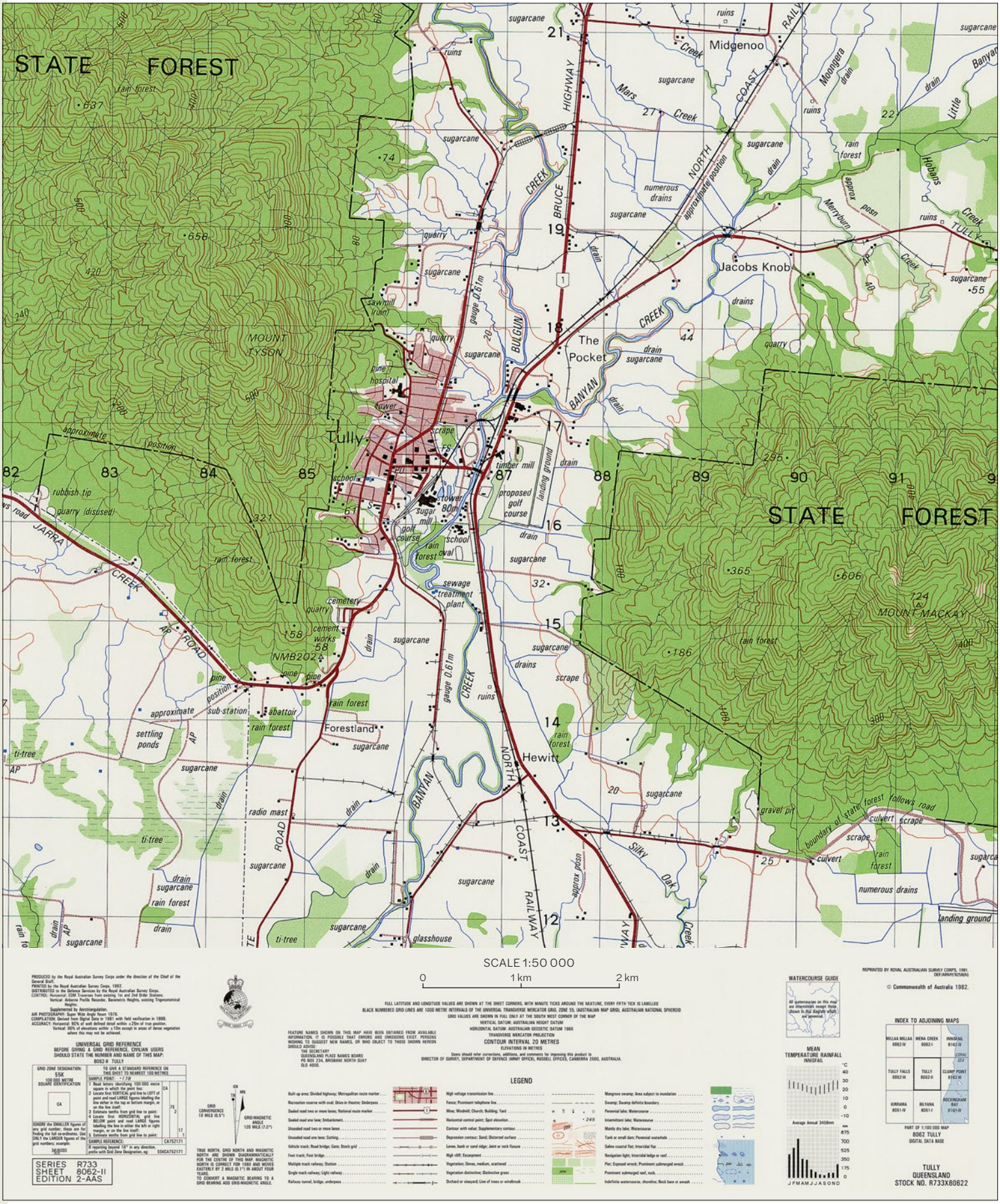


▲ **Source 40:** An example of grid references

Example

In Source 39, the boathouse is located at the four-figure grid reference AR2138. This reference takes us to the bottom left-hand corner of the grid square that the boathouse is located in. The lake is located at AR2139 and the bridge is located at AR2238.

Tully 1:50 000 topographic map



▲ **Source 41:** Tully 1:50 000 topographic map

Source: Commonwealth of Australia (Geoscience Australia)

Cross-sections

A cross-section shows the shape of a geographical landscape or landform from the side, as if it had been sliced by a knife. The cross-section in Source 43 shows Uluru as you would view it if you were on the ground.

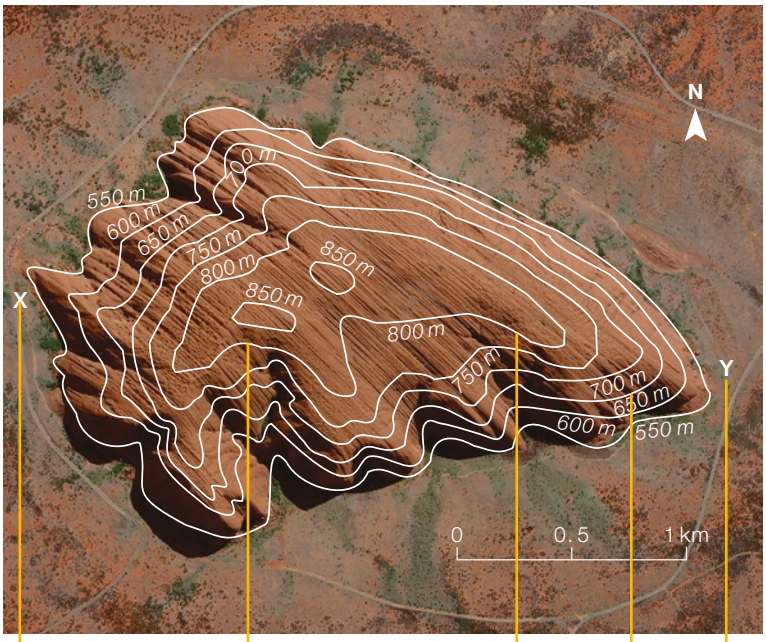
Contour lines are used to construct a cross-section. The overlay on the aerial photograph of Uluru in Source 42 is a contour map. As discussed previously, the contour lines are the numbered lines that join places of equal height. Close contour lines indicate a steep slope and widely spaced contours mean a gentle slope.

Source 43 shows how to draw a cross section:

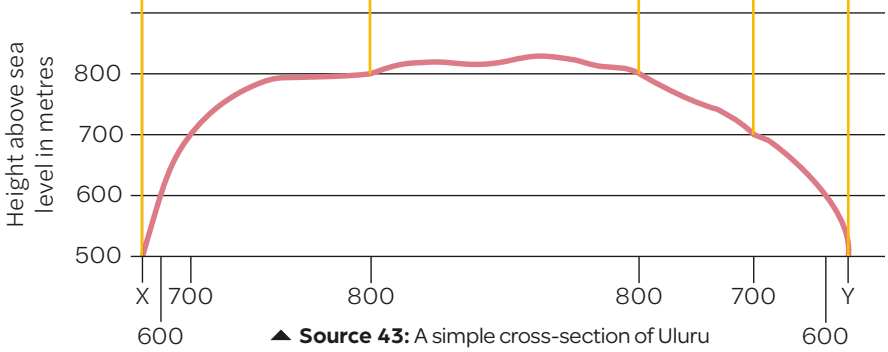
a Place a straight edge along the line between points X and Y. Mark each contour line at the point it touches the edge of the paper and record the height.

b Draw a vertical scale similar to the one in Source 43, with 1 centimetre representing 100 metres. Place the marked edge of the paper underneath and mark the appropriate height directly above with a dot. Join the dots with a smooth line and add labels.

▼ **Source 42:** An aerial photo of Uluru with contour lines overlaid



Source: Contour map from Matilda Education Australia, Geoscience Australia



▲ **Source 43:** A simple cross-section of Uluru

Gradient

Contour lines and spot heights, such as those shown at the top of mountains, can be used to calculate gradient and local relief. Gradient and local relief are important influences on land use.

The formula used to calculate gradient is Vertical Rise (VR; the change in height between two points – use the contour lines) divided by Horizontal Run (HR; the horizontal distance between two points – use the scale map). Make sure that they are using the same unit of measurement.

For example, if the VR is 100 and the HR is 1000 the gradient is 100/1000 or 1/10. This means that for every 10 metres you travel across the land you have walked uphill by 1 metre.

Climate graphs

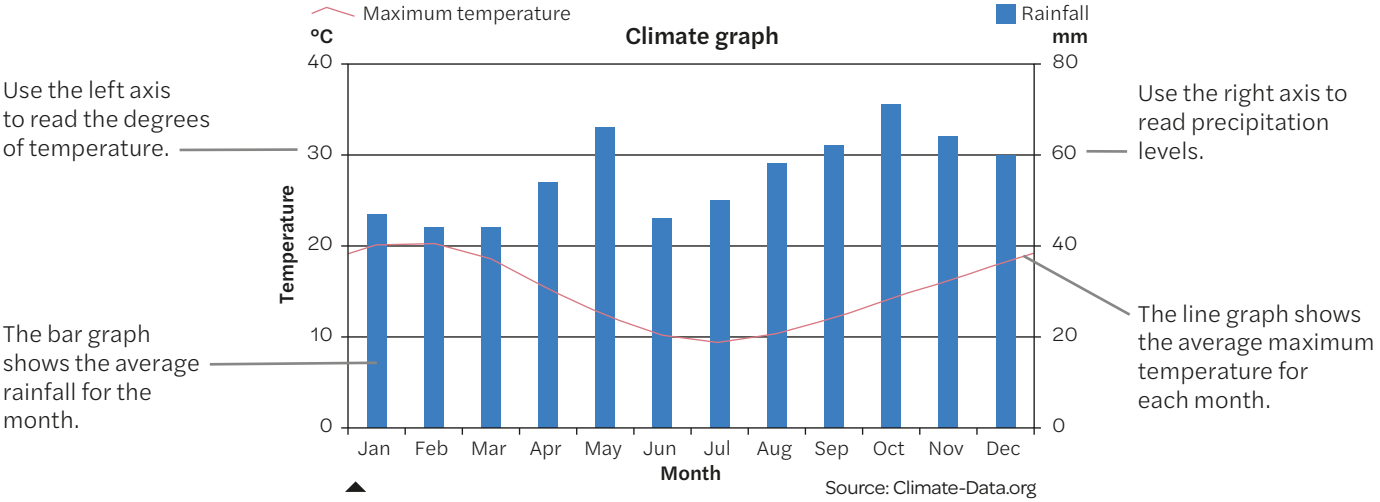
A **climate graph** shows two types of data on one graph. It shows both the average temperature and rainfall that a region usually receives over a year.

How do I read climate graphs?

This climate graph shows:

- maximum temperature (in degrees Celsius) on the left *y*-axis
- rainfall (in millimetres) on the right *y*-axis
- the months of the year on the *x*-axis
- the red line (or maximum temperature) varying throughout the year, peaking December to March and decreasing from April to July in the southern hemisphere
- the amount of precipitation varying, shown with the blue bars. In Australia, it tends to be highest in spring from August to November – with the exception of another peak in May.

The best way to describe the patterns we can see in a climate graph is by using two PQE analyses (page 458) – one for temperature and one for precipitation.



Source 44: A climate graph

What is the difference between weather and climate?

Look outside your window and describe today's temperature and the amount of rainfall there has been. Is it cloudy? Has there been a thunderstorm, or is the Sun shining? What you have just described is the weather. Weather changes daily and is usually predictable up to 10 days in advance. Apps on your smartphone and the last five minutes of the television news show you these predictions of daily weather.

Now close your eyes and describe the climate of Australia. Do you imagine Australia being hot and dry? Just because we can describe Australia as hot and dry, does not mean it is like this everywhere, all year round. Unlike the weather, climate helps us describe the yearly (annual) average temperature and level of precipitation (rainfall and snow) in a region or country.

Climate graphs help us visualise the climate of a region or country. Climate change describes how the average temperature and precipitation levels of a location are changing over time.

Population profiles

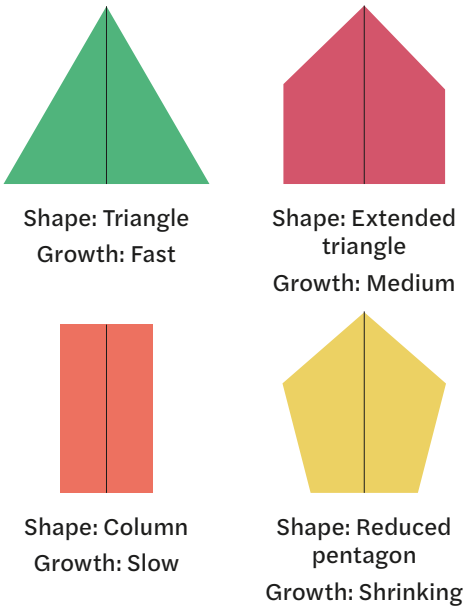
Population profiles are graphs that show the percentage of females and males in particular age groups in a population.

Population profiles can be made on a local, national or global scale. On a population profile, female data is normally shown on the right side and male data on the left. The length of each bar represents the number or percentage of males or females in that age group.

The shape of the profile tells us a lot about the population

Population profiles come in different shapes: triangles, columns, pentagons and so on. The shape tells you about the population. If the shape is:

- a triangle: growing population, with more young people than old people
- a box: slow or stable growth, with equal numbers of old and young people
- an upside-down profile: ageing or declining population, with more old people than young people.



Source 45: Various population profiles. The shape of the profile tells you about the population.

Example

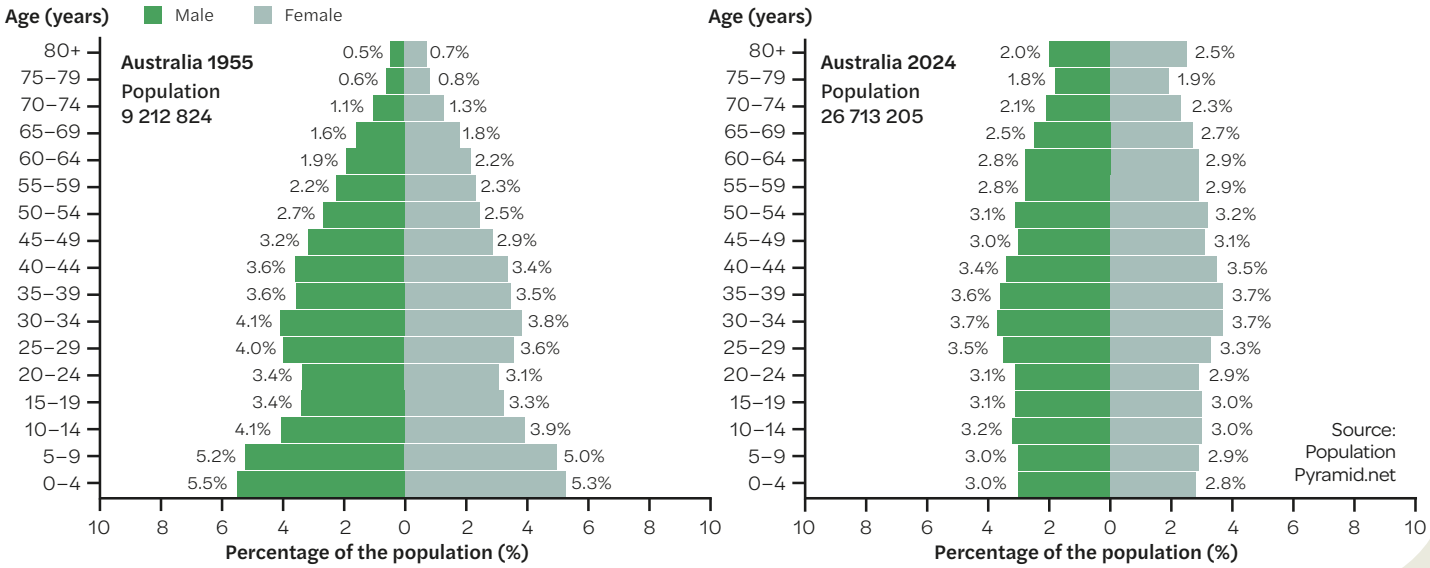
How do I interpret a population profile?

The population profiles in Source 46 show Australia's population in 1955 and 2024. In 1955, many people were in the age range 0–14. Approximately 5.5 per cent of the population were males aged 0–4 years old, and 5.3 per cent were females aged 0–4 years old. We also had many working-age people. For example, 4.1 per cent of the population were males aged 30–34, and 3.8 per cent were females aged 30–34.

In 2024, the largest population cohorts were within the working-age groups, 30–34 and 35–39, accounting for approximately 6.7% of males and 7.4% of females. As age increases, the proportion of the population steadily declines. Overall, the pyramid presents a barrel-like shape rather than a classic triangular form, indicating an ageing population, longer life spans, and a relatively stable population size.

Source 46: Population profiles showing Australia's population in 1955 (left) and 2024 (right)

Australia's population in 1955 and 2024



Photographs

Photographs are a valuable tool in geography. They help capture a moment in time and can provide a greater level of visual detail that is difficult to capture in a quick field sketch. Taking photos is part of modern culture, with the average person taking at least 20 photos per day.

Photographs are often taken for a specific purpose and only show selected perspectives. In geography there are four main types of photographs: ground-level, oblique aerial, vertical aerial and satellite.

▲ **Source 47:** Ground-level photos are taken at eye level. You probably take these most often using your phone. These photos can show details like landscapes, people and activities.

▲ **Source 48:** Oblique aerial photos are taken from an angle and are often used to show relationships or interconnections between phenomena.

▲ **Source 49:** Vertical aerial photos are taken from above, looking straight down. These photos can show patterns over large areas and help viewers understand spatial distributions and patterns.

▲ **Source 50:** Satellite images are taken from space showing a wide view of the Earth.

How do I interpret a photograph?

1. **Look closely:** Start by examining the photograph. What do you see? Identify specific features in the image, such as people, buildings or natural landscapes.
2. **Consider the purpose:** Think about why the photograph was taken. What message or story is it trying to convey? This can change how you understand the image. What can you infer from the photograph? What guesses can you make?
3. **Think about the context:** Remember that photographs show only part of a bigger picture. Try to understand the broader context of what's happening around the image. What information do you need to understand the photograph and its purpose?
4. **Use prior knowledge:** Draw on what you already know about the topic. This will help you make informed guesses or predictions about what the photograph is showing.
5. **Ask questions:** Ask yourself questions about the photograph. What details stand out? What might be missing from the image? What other images do you need to understand the whole story?

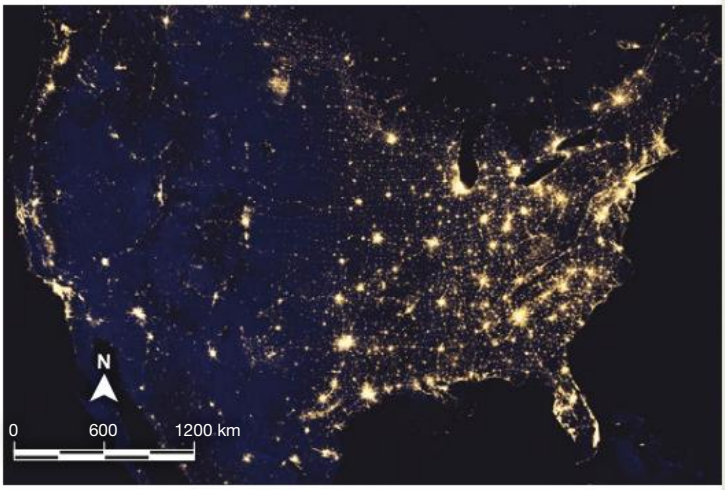
Satellite images

Satellite images are pictures of Earth taken from space. Satellites orbit the Earth and record images of the Earth's surface. We can use this data to see an event, such as a volcanic eruption, or to observe a change in land cover or other spatial patterns over time. Satellite images taken in daylight provide the most information.

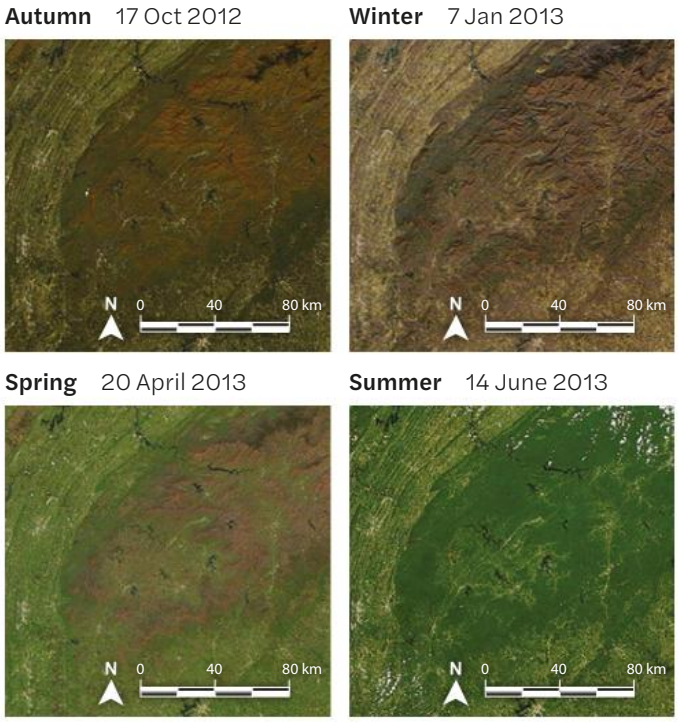
How can I use colour to interpret satellite images?

When you are trying to interpret a satellite image, look for colours and shapes. Colour will normally give you some idea about land cover. For example, in naturally coloured satellite images, green usually indicates vegetation, blue is the colour of water and brown is usually desert or barren land. False colour satellite images substitute colours to make patterns clearer to see. For example, Source 52 substitutes red for green to show vegetation.

White can indicate snow or clouds, so here you need look at shapes. Clouds tend to look fluffy and, depending on the time of day, can cast a shadow onto the ground. Snow is usually on the tops of mountains, and you can see where it is melting or following the slopes. Looking for shapes is also helpful when you are trying to identify rivers or reservoirs, which can be seen as blue lines.



▲ **Source 51:** Satellite images taken at night provide different information than those taken during the day. This photo of the US shows the extent of its urban areas.



▲ **Source 52:** Satellite images taken in summer provide different information than those taken during winter. This photo shows the same location over the four seasons.

▲ **Source 53:** This satellite image of Puget Sound in Washington State, United States, shows its interconnecting waterways and basins, as well as the surrounding lowlands.

2 I can describe distributions and patterns

In geography, we use maps and graphs to understand what is happening in the world around us. In many cases, these maps and graphs provide us with information about patterns and the location or distribution of specific items.

The formula PQE helps us to describe these patterns and their distribution. **P** stands for pattern, **Q** stands for quantify (or 'how many') and **E** stands for exception.

P Pattern

A pattern is a trend in the data. When you look for a pattern, you need to read the legend and interpret what the colours or symbols mean.

On a graph or map, you might notice data points are clustered in one spot, or you might see the opposite, that they are distributed unevenly. You can then use compass points or the names of places to describe where the data clusters appear.

Descriptive words you can use include: *clustered, even, uneven, highly distributed, north, south, east, west, increase, decrease* and *fluctuate.*

Q Quantify

When we quantify our pattern, we need to use numerical data to provide evidence of what we see.

You could obtain data by using the legend, by using the scale to measure or by conducting a count. You need to ensure that the data you provide relates directly to the pattern you recorded earlier.

E Exception

An exception is a piece of data on the map or graph that doesn't 'fit in' with the general pattern. When you spot an exception on a map or graph, it is good to quantify it to provide a comparison to your original pattern description.

What is the difference between qualifying data and quantifying data?

PQE helps us describe patterns and distributions. When we describe, we 'say what we see'. In a PQE analysis, we do not explain or give a reason why we see patterns, this is done in a SHEEPT analysis (page 460).

To quantify means to use percentages, counts, ratios or data from the legend to provide more details about the different patterns you are writing about.

To qualify a statement means you use general descriptive words such as 'large', 'many', 'small scale', 'enormous', 'broad' or 'tiny' to describe a pattern or change.

By using quantifiable data, we can more easily see key differences between locations or even monitor change over time.

How do I start my PQE sentences?

When writing a PQE analysis, start sentences with the following key terms:

Example

Pattern:

Overall, the most asylum seekers originate from countries in Africa, the Middle East, South Asia, and parts of Latin America. Australia and Europe have low levels of people seeking asylum.

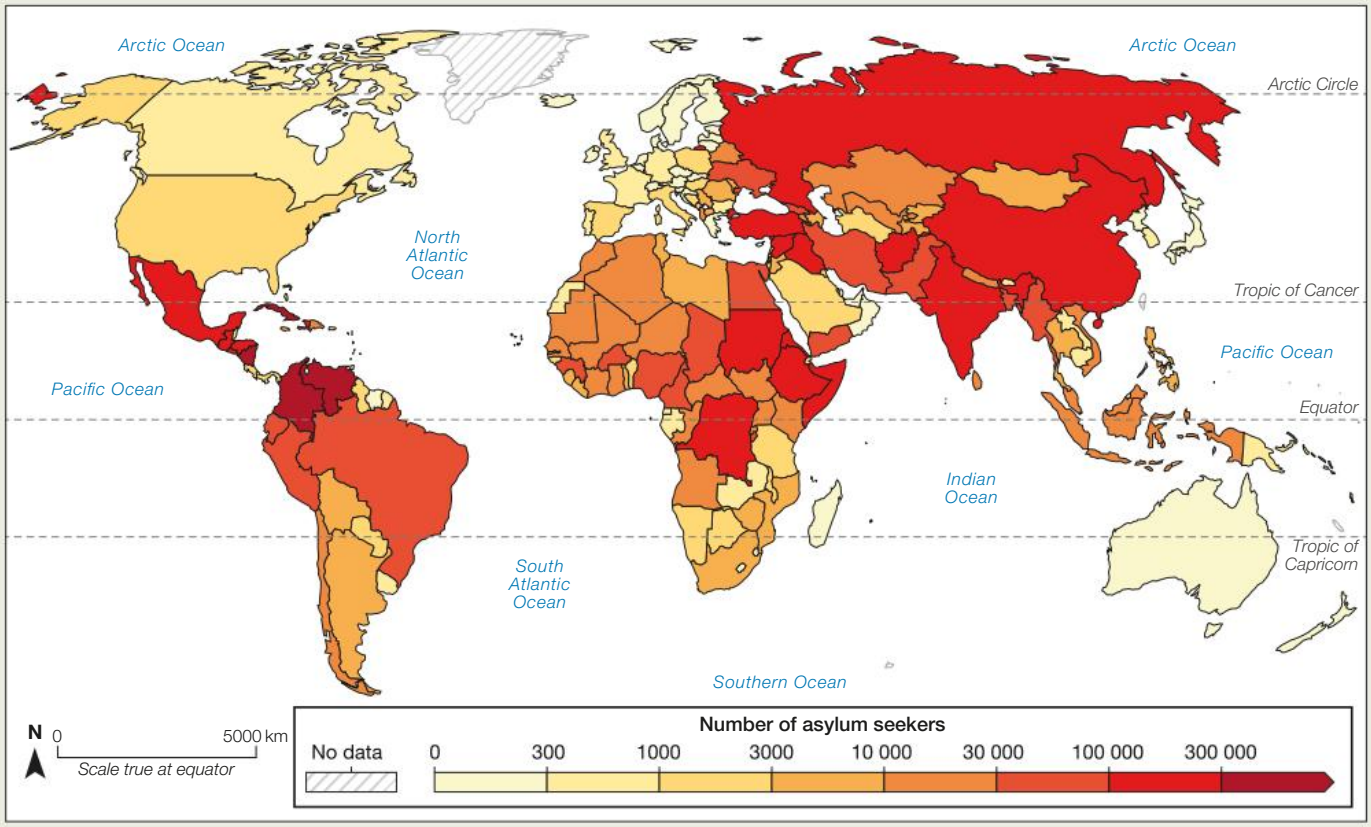
Quantify:

To quantify, more than 100 000 asylum seekers originated from Middle Eastern countries, Syria and Afghanistan. More than 200 000 asylum seekers originated from Haiti and Cuba in Latin America. Fewer than 1000 asylum seekers originated from countries like France and Australia.

Exception:

However, in Russia over 100 000 people have sought asylum, a higher number than many other European or East Asian countries. Additionally, some African and South American countries, like Namibia (less than 2000 asylum seekers) and Madagascar (less than 300 asylum seekers), have relatively low asylum-seeker numbers compared to neighbouring regions.

Number of asylum seekers by country of origin, 2023



Source: The World in Data

Source 54: The number of asylum seekers by country of origin, 2023

3 I can explain distributions and patterns

SHEEPT is an acronym that helps you explain the reasons why a spatial pattern occurs. This acronym stands for: Social, Historical, Economic, Environmental, Political and Technological.

SHEEPT

S Social

1

Social factors are anything to do with people. Social factors include population, culture, language and religion. Here we see social differences between living conditions in India.

H Historical

Historical factors are anything to do with our past. Historical events, buildings, people and changes to climate all influence what we see in our world today.

E Economic

2

Economic factors are those relating to money. In geography, how much people earn, how much things cost and how much money is spent can provide us with information about a place.

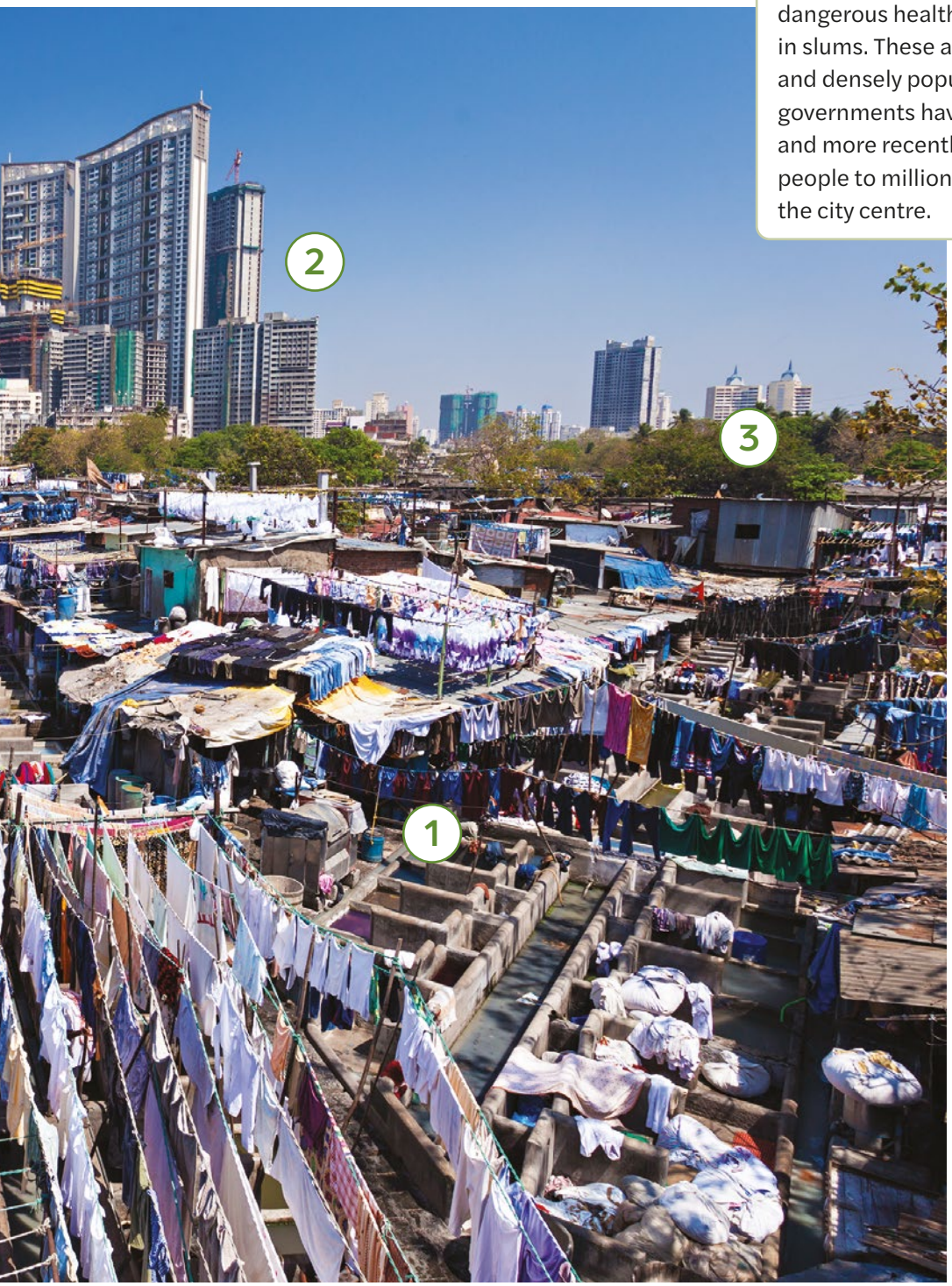
Source 55: Mumbai, India

How do I write a SHEEPT analysis?

SHEEPT is usually used to explain why patterns or distributions may occur in a particular region. It can also be used to expand our thinking when annotating images or considering new geographical content. The following is an example of how we can write a SHEEPT analysis for an image. The highlighted terms indicate the use of a SHEEPT term. Can you identify all of them? The analysis does not need to include every term.

Example

Source 55 is an image of slums in Mumbai, an Indian megacity of more than 12 million people. Rural-urban migrants come in the hope of better economic conditions but find it difficult to afford housing. In Mumbai, 42 per cent of the population live in slums, built of recycled materials on any available open land. Lack of infrastructure and basic amenities such as a safe water supply and sanitation produces dangerous health conditions for the people living in slums. These are among the most overcrowded and densely populated places to live. Historically, governments have tried to improve services in slums, and more recently there have been plans to relocate people to millions of affordable homes away from the city centre.



E Environmental (3)

Environmental factors are those relating to the natural or human environments on Earth. Humans can manipulate the environment to suit their needs.

P Political

Political factors are those to do with the government or leading groups. When we consider political factors, we refer to laws and policies.

T Technological

Technological factors relate to the different kinds of technology that we have access to. This could be in the form of gadgets, spatial technology, medical technology or even roads, transport or basic machines used in the home.

4 I can predict change to patterns

Once you understand what has happened in the past and in the present, you can make evidence-driven predictions and suggest how patterns may change in the future.

The following steps can be used to help guide you to make predictions in geography.

1. Start by gathering current and past data about the topic; for example, past and current air-quality data for a region.
2. Look for trends or changes in the data; for example, air quality in a region may have decreased over time due to increased pollution from a growing urban population.
3. Think about other things that might affect the future, such as local policies or environmental factors. The SHEEPT factors may help you think more broadly; for example, a new environmental regulation (political) or advancements in clean technology (technological) could improve air quality.

Source 56: Urmia Salt Lake in Iran. Iran is facing water stress, with over 90 per cent of the country's available water used for agriculture. Climate change is likely to exacerbate the issue.

5 I can use geographical concepts to structure data analysis

The geographical concepts SPICESS can be used to help you structure data analysis. You do not need to specifically mention each concept. Highly skilled analyses will use the meaning of the concepts to help think more broadly about a topic.

The seven geographical concepts – space, place, interconnection, change, environment, scale and sustainability – are fundamental for structuring geographical analysis. The following shows you an example using liveability for context.

- **Space** refers to the way that we use, *change* and distribute things on the Earth's surface. Using space, you may evaluate how the arrangement of monitoring stations, evacuation routes and emergency services impacts preparedness for a geological hazard. For example, how far away from a town or village is the nearest earthquake-resistant shelter or volcano-monitoring station?
- **Place** helps in examining the unique characteristics and significance of specific locations. By focusing on place, you may assess how a location's geological features, such as proximity to fault lines or volcanic craters, contribute to a community's sense of identity and preparedness for hazards.
- **Interconnection** is the idea that two things or phenomena are related, interact or are linked in some way. Recognising these links may help you understand how geomorphic hazards like earthquakes and landslides are related to tectonic activity and how these hazards influence building codes and land-use policies.
- **Change** refers to how a place is altered due to shifts in the *environment* or to meet the needs of humans. You may predict the future risk of landslides in a region based on current data, such as rainfall patterns, and historical occurrences of slope failures.
- **Environment** explores the built and physical features of the Earth. Understanding the environment may help you consider how factors like soil stability and volcanic activity affect the risk of landslides and eruptions in a particular area.
- **Scale** usually refers to the size of something or describes different spatial levels. You may consider how management strategies related to geomorphic hazards vary across different local, regional and national scales, such as local community preparedness for earthquakes compared to national policies on hazard-resistant infrastructure.
- **Sustainability** focuses on maintaining and preserving resources and *environments* for future generations. You may consider how current land-use policies can ensure long-term safety by restricting development in areas deemed high-risk to geomorphic hazards, such as active volcanic zones or areas prone to earthquakes.

Source 57: Earthquakes can cause large-scale damage. Sustainable management of environments and policies is vital for the safety of residents.

Concluding and decision-making

Making conclusions

Drawing conclusions in geography involves interpreting and summarising the findings from your research or data analysis in order to answer a specific question or address an issue or challenge.

1 I can answer geography questions

The first step to writing a conclusion is thinking about a simple answer to your inquiry question. From all the things you have read and done to collect information, what have you found out?

Example

For example, 'Why has traffic congestion increased in megacities?'

Answer: There may be more traffic congestion in megacities due to growing populations and people relying on cars for transport.

2 I can describe the impact of geographical phenomena

In geography, an impact is the effect a phenomenon, action or change has on people, places or the environment.

Impacts can be either positive or negative and occur at a range of scales. For example:

- Urban green space projects have positive impacts: Megacities can use green spaces to improve air quality, reduce urban heat and provide recreational areas for residents, enhancing overall livability.
- Rapid urban sprawl has negative impacts: Rapid urban sprawl in a megacity can lead to the loss of agricultural land and natural habitats, increased air pollution from transportation, and strain on public services.

When drawing conclusions for your own inquiry question, consider the positive or negative impacts you have researched.

Source 58: Tokyo is currently the world's largest megacity, but the United Nations predicts that it will be overtaken by New Delhi in 2028.

Example

Consider the question 'What are the impacts of megacities?'

Positive impacts:

- stronger economy
- more job opportunities
- better infrastructure
- better public transport access
- more services, cultural activities and schools.

Negative impacts:

- high population density and overcrowding
- more traffic and air pollution
- reduced green spaces
- heat island effect.

3 I can write evidence-based conclusions

A conclusion is written when you have reviewed all the information. It is a summary of your results and outlines the key findings of your research. No new ideas should be raised in a conclusion.

Example

Consider the question 'What are the impacts of megacities?'

A conclusion could read something like this for the fictional megacity of 'Shakerville': Our inquiry investigated the effects of rapid urbanisation in Shakerville. We found that the city's growing population has positive and negative impacts. On the positive side, the city has more economic opportunities, creating more jobs. On the negative side, there are problems such as overcrowded public spaces, higher housing costs and more air pollution, which make the city less liveable. Even though we faced some challenges, such as not having the latest census data, our findings show that careful planning is needed to make sure Shakerville remains a good place to live in the future.

4 I can assess the reliability of data

While data may appear useful, it is not always reliable. Reliability means information is consistent and dependable; in other words, you can trust it to be accurate.

To ensure the data you use is reliable, ask yourself these questions:

- When was the information written? If the data is more than 10 years old, it may not be reliable to represent current patterns and distributions.
- Check who wrote the information: Sites like Wikipedia can be updated by the public. Rely on peer-reviewed information written by authoritative voices. Peer-reviewed means other experts in the field have checked and approved the work before it's published, making sure it's accurate and reliable.

Source 59: How to write an evidence-based conclusion

1. Begin by revisiting the inquiry question or topic to remind your audience of the focus of your investigation.
2. Briefly summarise your main findings, highlighting the most important data or insights that help provide answers to the inquiry question.
3. Acknowledge any limitations in your research. Did it rain on your field day so there weren't many people to survey? Was there a topic you could not find any data on?
4. Finish your conclusion with a clear, concise statement that emphasises the importance of your inquiry.

5 I can evaluate ethical considerations

There are several ethical considerations when drawing conclusions in geography. They involve properly referencing materials used and ensuring a range of perspectives have been studied.

Perspectives and bias

In geography, it is important to consider a range of perspectives and understandings on a topic. You need to ensure you present data honestly without altering its meaning or context.

Choosing what data to collect

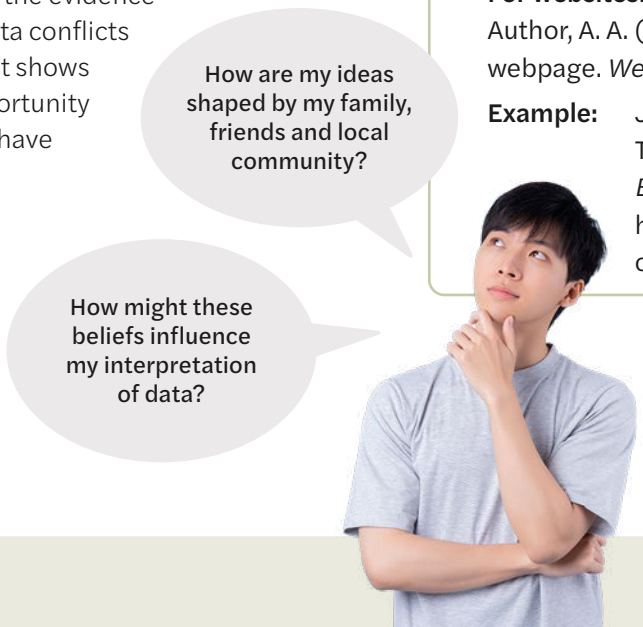
Your personal views might affect what you focus on in fieldwork or secondary data collection. For example, if you think that urbanisation is negative, you might choose to focus on collecting data that shows pollution or overcrowding in cities, while overlooking positive aspects like improved public services or economic opportunities. Try to collect a wide range of data that explores a range of positive and negative aspects.

Interpreting your data

Once you've collected data, your personal views can affect how you interpret it. For example, if you have strong ideas about environmental issues, you might interpret data on land-use changes in a city as entirely negative, even if there are also benefits like better housing or public transport.

Making conclusions

Your conclusions should sum up the data you collected, not what you expected to discover. Base your conclusions on the evidence you've gathered. If the data conflicts with your initial ideas, that shows that you have had an opportunity for learning, not that you have failed in your research.



Source 60: Consider how your own personal beliefs, values and understandings influence your perspective.

Copyright

Ensure you have cited the secondary data you have collected. While copying and pasting is a good way to start collecting general ideas, the real skill is in reading, interpreting and applying the information you have found to your inquiry question, using your own words and interpretations. Remember to acknowledge the original sources by using a bibliography.

In-text citations and bibliographies

There are a range of styles and formats to create a bibliography. Quality bibliographies do not simply copy and paste URLs onto a page; they provide the information required to properly reference the material you accessed and used. The following bibliography formats are in line with APA styling.

List all entries in alphabetical order by the last name of the first author. If there's no author, use the title of the work.

Example

- **For books:**
  Author, A. A. (Year). *Title of the book*. Publisher.
  Example: Smith, J. A. (2020). *Understanding psychology*. Academic Press.
- **For journal articles:**
  Author, A. A. (Year). Title of the article. *Title of the Journal, volume number*(issue number), page range. https://doi.org/xx.xxx/yyyy
  Example: Doe, J. (2019). Cognitive development in children. *Journal of Child Psychology, 15*(3), 234–245. https://doi.org/10.1234/jcp.2019.6789
- **For websites:**
  Author, A. A. (Year, Month Day). Title of the webpage. *Website Name*. URL
  Example: Johnson, M. (2021, March 5). The effects of climate change. *Environmental News*. https://www.environmentalnews.com/effects-of-climate-change

Strategies

A geographical strategy is a planned set of actions to overcome a specific issue or challenge. A strategy is developed by identifying the problem, assessing impacts and implementing solutions.

1 I can describe a strategy

You can structure your description of a geographical strategy by considering these three questions:

1 **What are the goals?**
Describe the strategy being used to address a specific geographical issue.

2 **What actions are being taken?**
List the key steps or measures involved in the strategy.

3 **How are they doing it?**
Explain how the strategy is put into practice.

Example

The fictional suburb of 'Shakerville' is planning to implement the Tsunami Preparedness Plan.

1 **What are the goals?**
A Tsunami Preparedness Plan aims to reduce the risk of death, injury and property damage in coastal areas.

2 **What actions are being taken?**
- Teaching people about tsunami risks and safety procedures
- Doing regular tsunami drills for schools, businesses and residents
- Installing and maintaining tsunami warning systems
- Finding safe evacuation routes and shelters for residents

3 **How are they doing it?**
The local government, emergency groups and the community work together to carry out the Tsunami Preparedness Plan. Schools and businesses help people learn about tsunamis and conduct practice drills. Warning systems and evacuation routes need to be checked often to make sure they will work if a tsunami happens.

Source 61: The city of Miyako on the north-east coast of Japan's Honshu island was devastated by the 2011 tsunami. The 13-metre-high tsunami swamped the city's sea wall and tsunami shelters. Over 600 people were killed and 6000 buildings were destroyed in that city.

Source 62: Southern Hume areas have received over 6300 trees from council to support urban greening.

2 I can explain a strategy

When explaining a strategy, you may consider the following steps:

1. Outline what they are doing to undertake this strategy. What are the aims? Who is involved? What scale is it addressing (local, regional, national)? What do they need to successfully carry it out?
2. List the steps taken to carry out the strategy. This includes the methods or systems used.
3. Explain how these actions are organised and carried out, and who is responsible for each step.
4. How is the strategy managed? Discuss the roles of various **stakeholders** and how tasks are assigned and monitored. A stakeholder is someone who is affected or interested in the strategy; for example, individuals, communities, businesses, governments and organisations.

Example

The Greening the West initiative is a project designed to improve green spaces in the western suburbs of Melbourne.

- The goal is to create more parks and green corridors that provide spaces for people to improve community connection, biodiversity and overall liveability.
- The project involves working together with local councils, environmental organisations and the community.
- Local councils are in charge of planning and managing the project, while environmental groups teach people about the importance of green space and organise volunteer activities like tree planting.

3 I can predict the impact of a strategy

In geography, predicting means guessing what might happen in the future based on current information and past events. This can include things like how populations might grow, how water use may change or what effects climate change could have. Predictions help decision-makers prepare for possible future scenarios.

To predict the impact of the Greening the West initiative, first, you need to collect data and information on current patterns. For example, is the amount of urban green space in the area currently increasing? Are residents experiencing improvements in their access to parks and recreational facilities? Then, you should consider these patterns and, using your understanding of urban greening, suggest what might happen in the future.

Example

The Greening the West initiative has several goals:

- **Improve community health:** As urban green spaces increase, residents may do more outdoor activities like walking and exercising, leading to better physical and mental health.
- **Enhance social connectivity:** With more parks and green areas, communities may have increased social interaction, reduced feelings of isolation and a stronger sense of community.
- **Boost local biodiversity:** By creating new green spaces and planting native vegetation, local wildlife may return to the region, improving the environmental quality of the area.

4 I can design strategies

Recommending strategies not only allows you to apply your understanding of people and place, but also enables you to take real action and make a difference in your local community.

These steps can help you design your strategy.

1. First you need to clearly define the geographical issue or challenge you want to address. Think about how you might gather information to understand the challenges and brainstorm what is already being done to try and overcome these issues.
2. You then need to create specific, measurable, achievable, relevant and timely (SMART) goals that outline what you hope to achieve with your strategy.
3. Consider the community members, organisations and experts that may be impacted by this strategy. How might they feel about what you are planning to do?
4. Create a set of steps that will help you carry out your strategy.
5. How will you measure if your strategy is successful? Consider how you will measure whether your strategy has met its SMART goals.

Example

You might propose a community greening project to enhance urban spaces and improve local liveability. You could do some research on how much green space is available, gather survey data from residents about their preferences for parks and recreational areas, and design a plan that includes locations for new green spaces, types of vegetation to plant, and community engagement activities such as planting days. This strategy would aim to create sustainable urban areas that promote physical activity, encourage social connections and increase biodiversity.

Source 63: Design your goals to be SMART.

5 I can consider perspectives to evaluate strategies

In geography, perspectives are the different ways people see and understand the world. These views can be influenced by things like culture, personal experiences, money and the environment. By learning about these different perspectives, geographers can better understand how groups of people interact with their surroundings and with one another.

When evaluating the success of strategies, it's important to consider that different people may have different expectations of outcomes. Recognising these varying perspectives ensures that we take everyone's views into account.

- Consider various viewpoints related to the strategy. Think about how personal values, cultural beliefs and economic needs might influence how different groups perceive the strategy. For example, how do local businesses and First Nations people view the strategy?
- Reflect on how your own values and attitudes shape your understanding of the strategy. Think about what you value, and how your family's attitudes or beliefs impact how you think about a strategy. Your perspective may be different from those of others.
- Look at the possible impacts of the strategy from multiple angles. SHEEPT factors may help you broaden your thinking. For example, how might the strategy benefit some groups while causing challenges for others?
- Consider the strengths and weaknesses of the strategy based on the range of perspectives you explored. Think about how understanding these different views can lead to better and more inclusive decision-making.

Example

Here is an example of the need to consider different perspectives when considering a strategy for earthquake preparedness in the fictional suburb of 'Shakerville'.

In Shakerville, the government started a plan to make the area safer from earthquakes by strengthening buildings and improving emergency response systems. Many business owners were happy about these changes because it made the area safer and might bring in more customers. But some people who had lived in Shakerville for a long time were concerned about the problems caused by construction. They didn't like being blocked from local businesses or community spaces while the work was happening. They also worried about safety risks during the construction. Some people also thought that while the focus was on building improvements, the community might be forgetting about other important things, like teaching people how to prepare for earthquakes with emergency kits and evacuation plans.

Source 64:
Different people have different perspectives.

Communicating

Presenting ideas

Communicating findings in geography is important because it helps us understand the information, make decisions, raise awareness of issues, take action and work together to solve geographical challenges.

1 I can describe phenomena using geographical terms

In geography, 'phenomena' means things or events that we can see and study in the world. This includes natural events like weather, mountains and plants, as well as human activities like building cities or moving from one place to another.

Geographers look at these phenomena to understand what causes them, how they affect the world and how everything is connected. We can describe phenomena using a range of geographical terms. The glossary provides you with a range of geographical terms you may like to use. Some examples may be:

- **distribution:** refers to how things are spread out in a geographic area
- **density:** how close things are together in an area
- **patterns:** how things are organised in an area or trends we might observe on a map
- **scale:** the level of detail of an observation (e.g. local, regional, national, global)
- **spatial interaction:** the way phenomena are linked to each other
- **topography:** the physical features of a landscape or area, such as hills or valleys
- **climate zones:** areas with similar long-term weather conditions (e.g. tropical, arid, temperate zones)
- **region:** an area characterised by common features (e.g. cultural region, economic region).

Example

This example uses some geographical terms:

The *distribution* of coastal erosion is affected by factors such as wave strength and human activities. There is an *interaction* between how we manage the coast and the environment, which shows that we need to work together to reduce the risk of erosion.

Source 65: Huge waves hit Bondi Beach.

2 I can explain the relevance of information

While there is lots of information available, not all the data you collect will be relevant to your investigation. It is important to be able to sort out and categorise the information you collect.

- Does the information connect to your inquiry question?
- Does the information help show important patterns? For example, data on urbanisation patterns can help us understand areas experiencing rapid population growth.
- Can we use the information to inform decisions and planning? For example, data on transportation accessibility helps urban planners design effective systems to accommodate growing populations.
- Does the information help provide examples or illustrate real-world issues or challenges? For example, statistics on urban growth are essential for understanding the challenges of managing green spaces and infrastructure in expanding cities.

3 I can support explanations with data

Providing evidence makes your geographical explanations stronger and gives your audience a better understanding of the issues and challenges you are investigating. When writing explanations, use quantifiable data like percentages to emphasise your ideas.

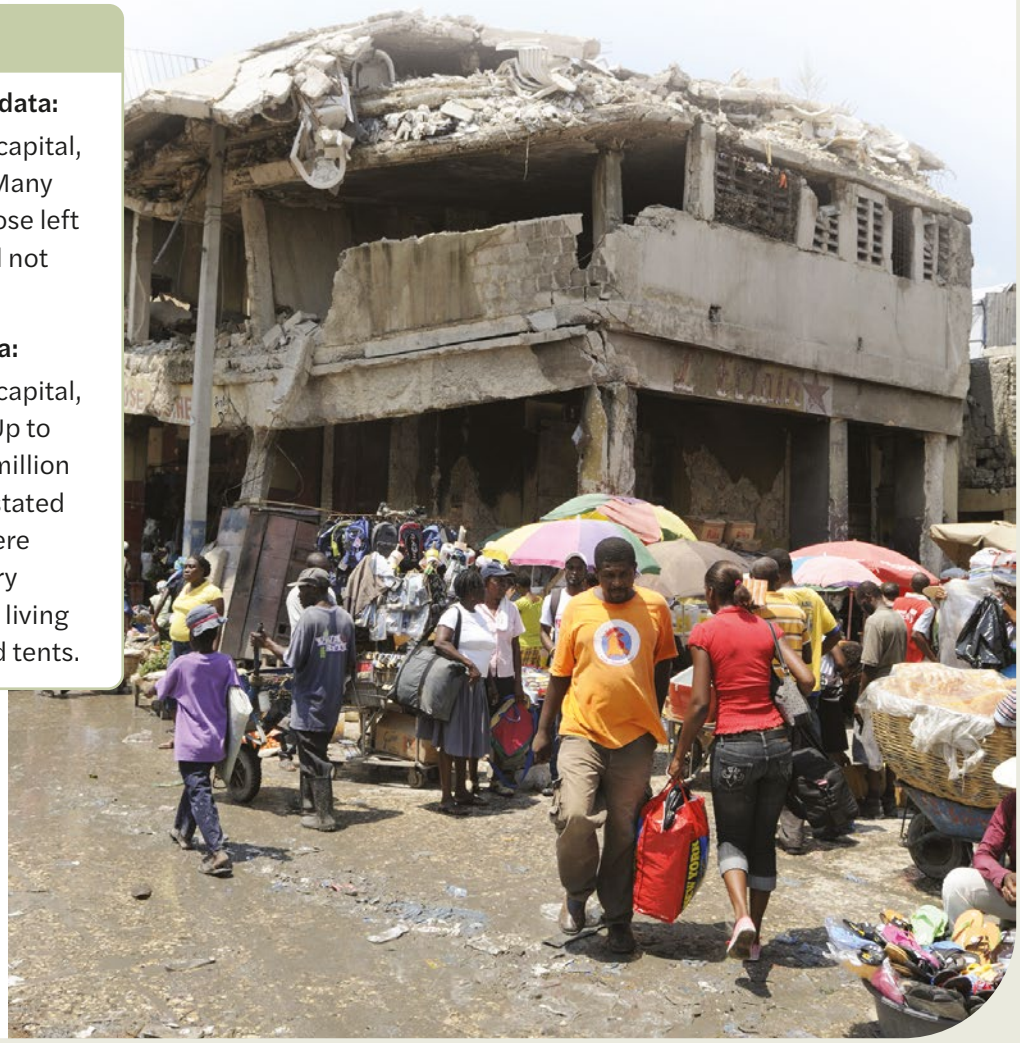
Example

Explanation without quantifiable data:

A major earthquake struck Haiti's capital, Port-au-Prince, in January 2010. Many people died or were displaced. Those left homeless by the earthquake could not afford to move elsewhere.

Explanation with quantifiable data:

A major earthquake struck Haiti's capital, Port-au-Prince, in January 2010. Up to 85 000 people died and another million were made homeless. In the devastated urban areas, displaced Haitians were forced into crowded and unsanitary camps in city parks, and they were living in self-made structures or donated tents.



Source 66: A devastated street in Port-au-Prince, Haiti, a week after the powerful 2010 earthquake

4 I can explain interconnections with data

Interconnection is the idea that two things or phenomena are related, interact or are linked in some way.

These are some steps when considering the interconnection between things.

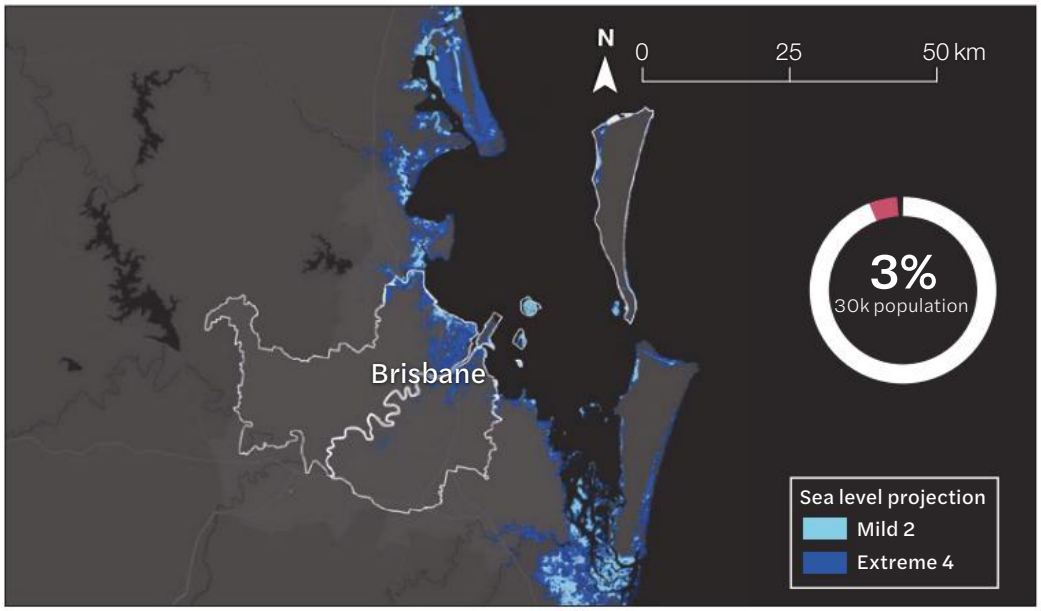
1 **Identify key ideas:** Start by identifying the main ideas associated with the geographical issue or phenomenon you are studying, such as places, people, environments and processes.
2 **Describe relationships:** Explain how these ideas are related to each other. Consider how changes in one element can affect another, such as how climate impacts agriculture or how urban development influences local environments.
3 **Use examples:** Provide specific examples to illustrate these interconnections. This could include real-world scenarios, case studies or personal observations that highlight the relationships.

Example

There is an interconnection between the climate change, sea level rise and coastal flooding, which can be demonstrated in a paragraph like this.

Climate change has a strong interconnection with increased flooding events. As the Earth gets warmer, ice caps melt, causing water levels to rise along coastlines. This makes flooding more likely in coastal areas, especially during storms or heavy rain. For example, in Miami, Florida, rising sea levels lead to regular flooding during high tides, which is called 'sunny day flooding'. This flooding affects homes, roads and local businesses.

Prediction for sea-level rise in Queensland 2100



Source: Earth.org

Source 67: Sea-level rise is interconnected with flooding in low-lying coastal regions. Sea-level rise is caused by melting ice caps as a result of warming oceans. The Queensland Government is predicting a sea level rise of 0.8 metres by 2100, which could lead to regular inundations during high tides.

5 I can analyse the implications of phenomena

In geography, the 'implications of phenomena' refers to the effects that your inquiry might have on how people think, make decisions or conduct future research. When conducting an analysis, you need to identify the key findings and communicate their importance and any relationships or interconnections between them. These are some questions to consider:

- How do your findings enhance or change understanding of a geographical issue or phenomenon? Did you find any new patterns, processes, perspectives or relationships?
- How could your findings affect decision-making processes?
- How might your findings impact local communities or environments? Consider the SHEEPT factors to broaden your analysis.
- How might your findings help provide ideas for further research or investigation? Has your inquiry found any gaps in our knowledge or new patterns that require more information?

Example

In my geographical inquiry project, I investigated how climate change affects melting glaciers in the Himalayas. I discovered that rising global temperatures are increasing the melt rate of glaciers, leading to reduced glacial mass. Millions of people who rely on meltwater from glaciers for drinking and agriculture are at risk. The retreat of glaciers is also exposing underlying rock formations and leading to the formation of new lakes.

Meltwater is connected with an increased risks of landslides or volcanic activity in particular regions. Understanding the impacts of glacial retreat on local landscapes can assist conservation efforts and help land-use planning to reduce the risks. I suggest further research is needed to explore the long-term environmental consequences of glacial retreat, such as changes in habitats and species distribution, as well as increased risk of geomorphic hazards.

Source 68: Oraefajokull glacier is home to the biggest volcano in Iceland.

How to develop a geographical inquiry

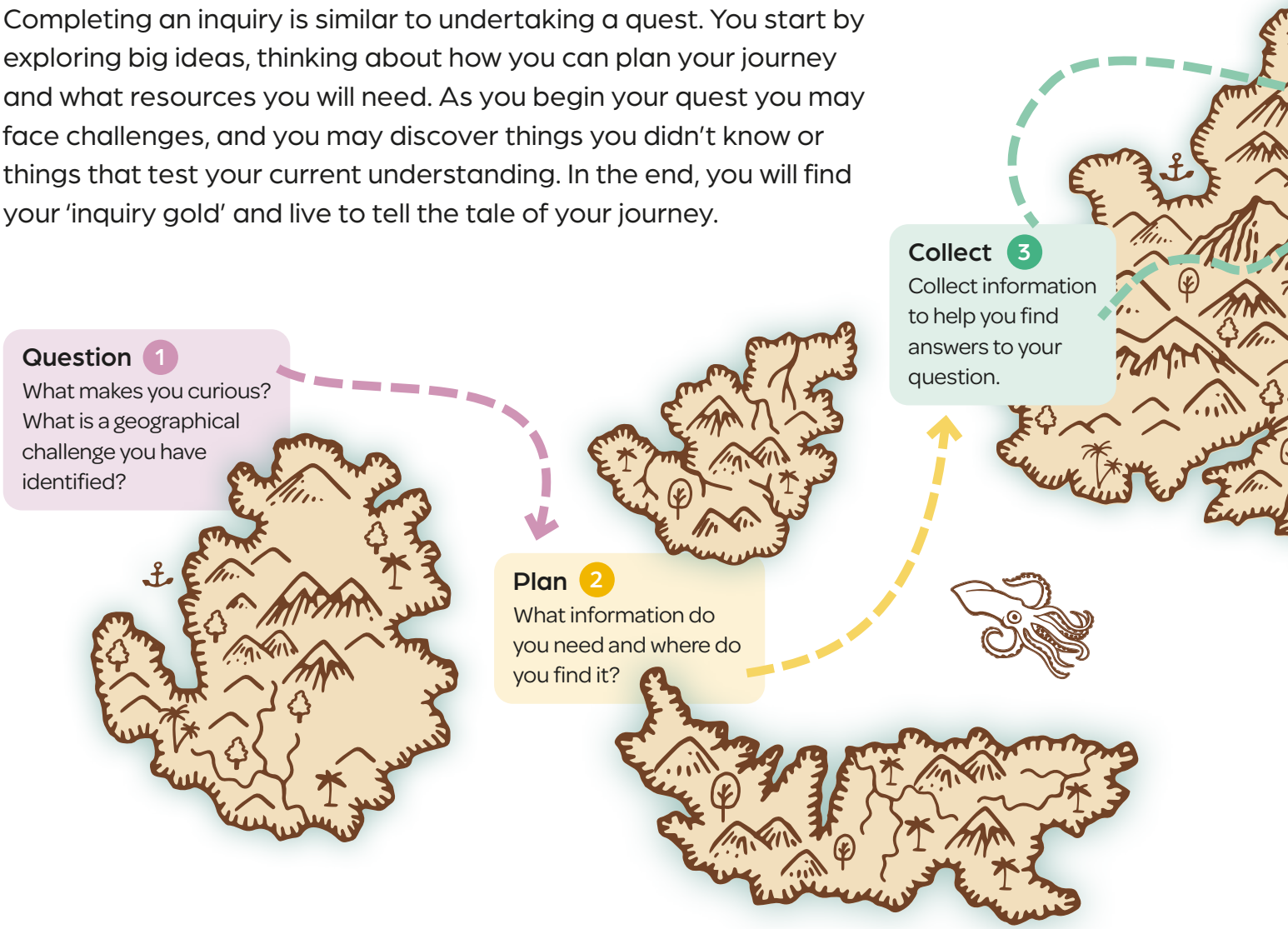
Geographical thinking enables us to make connections between new ideas and what we already know about the world. The ability to create thoughtful, open-ended questions that can be explored using both primary and secondary data is a skill you'll keep developing over time.

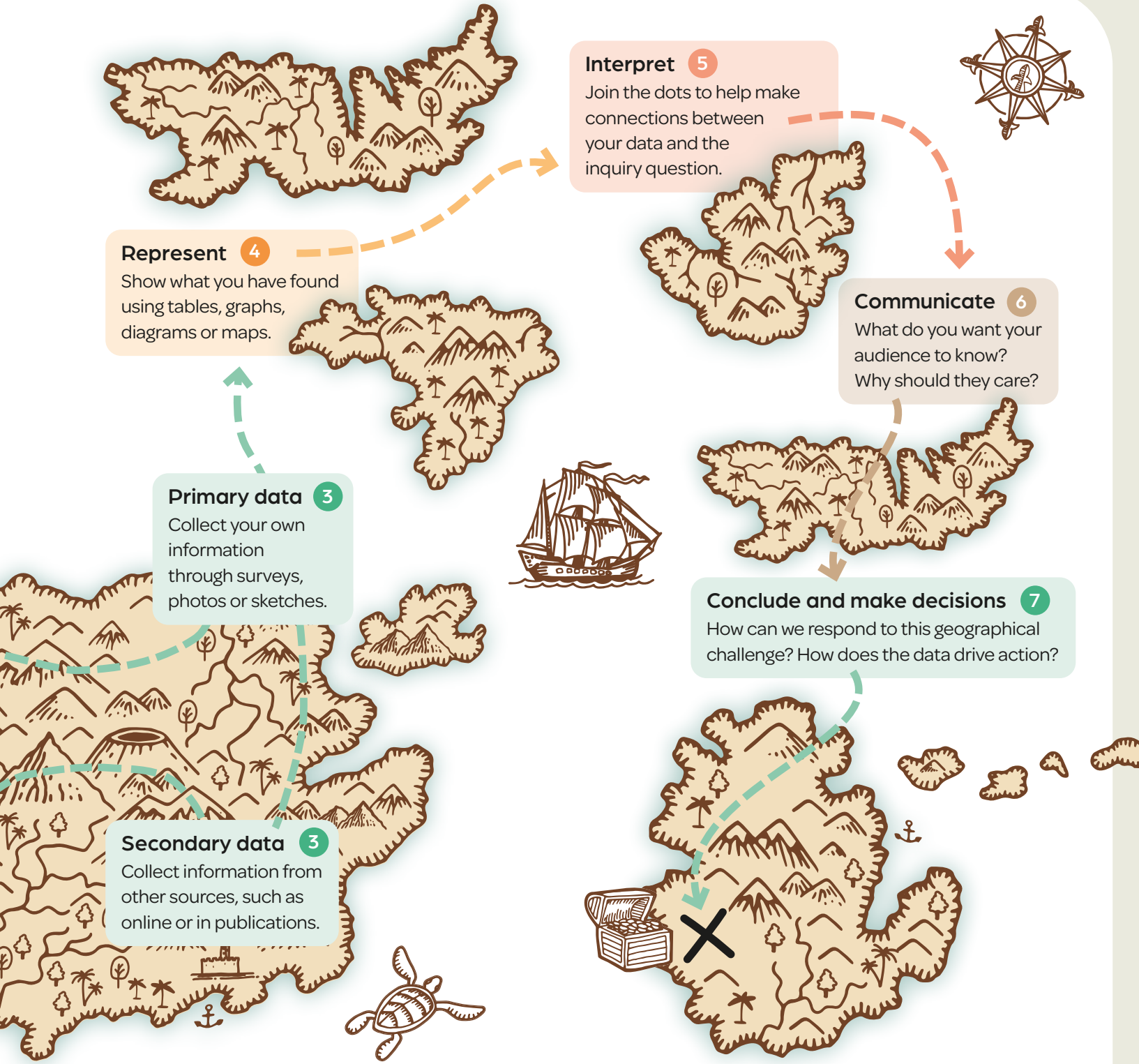
What is a geographical inquiry?

A **geographical inquiry** involves individuals or groups developing and investigating spatial questions. In an inquiry, you are not trying to find one correct answer. Instead, you are collecting information and exploring data to tell a story about an interesting topic. You may be considering questions like, 'How did this form?', 'How does location influence characteristics?', 'How has this changed?' or 'Why does this matter?'.

Geographical inquiries range in scale. They do not have to be big investigations about distant places; they can be as small as exploring an aspect of your backyard. A geographical inquiry should be linked with topics about the world that make you curious. Each student in your class may form different conclusions based on their own thoughts, research, geographical understanding, values and skills.

Completing an inquiry is similar to undertaking a quest. You start by exploring big ideas, thinking about how you can plan your journey and what resources you will need. As you begin your quest you may face challenges, and you may discover things you didn't know or things that test your current understanding. In the end, you will find your 'inquiry gold' and live to tell the tale of your journey.





Setting the scene

Before you start thinking about what you will inquire about, you need to develop some background knowledge. The preceding five chapters provide theoretical understanding, case studies, concepts and skills that may spark curiosity or questions. The knowledge you build over each chapter provides you with an excellent basis to conduct an inquiry to extend your understanding and skills. At the end of each chapter, you are prompted to develop an open-ended inquiry question. Inquiry investigations do not have to be big, challenging projects; your question may simply build on a concept you have learnt about in the chapter or help you move up a step in the Learning ladder by applying your geographical skills.

The following pages explore the seven steps of geographical inquiry. Refer to this map (page 476) and use the steps in this How-to chapter to support your various inquiry investigations. Don't forget: all your notes, answers to Learning ladder questions and classroom activities can help you build understanding and form primary and secondary data for your inquiry.

Step 1: Question

The first step in an inquiry is to develop curiosity and form a question to investigate. You will seek to find answers to this question throughout the inquiry.

Within each chapter of this book there is a variety of visual sources and data. These help you gain a better understanding of the topic. To help form an inquiry question, review the data presented in the chapters of this book and complete a 'See, think, wonder' to help build curiosity and think about ideas you may cover in your inquiry.

In an inquiry, questions can be descriptive, procedural, comparative or evaluative.

- **Descriptive questions** ask you to identify or describe an event or change over time.
- **Procedural questions** involve recalling facts, such as when something happened, creating timelines and telling the story of processes.
- **Comparative questions** require you to think deeper, using your geography knowledge to analyse and compare ideas.
- **Evaluative questions** ask you to present an evidence-based judgement or opinion by analysing, interpreting and assessing the value or impact of something.

Your inquiry question should be open-ended. Open-ended questions cannot be answered with a simple 'Yes' or 'No'. They often begin with words like 'How', 'Why' or 'What'. These questions make us think and we may need to conduct some further research in order to answer them fully.

Refer to the end of each chapter for topic-specific examples of open-ended questions.

Hint

When forming your question, consider: Where is it? Why is it there? Can I map it? Why is it important? Throughout your geographical inquiry you will collect and analyse information to tell a story that explores answers to this question.

Stretch

You may wish to hypothesise some of the possible answers to your inquiry question using your current understanding of the topic. A hypothesis is an educated guess. Your hypotheses may be found to be incorrect, but that all forms part of your learning in the inquiry process.

Make it spicy

We can use the seven geographical concepts to help us think geographically. They are often referred to as SPICESS: space, place, interconnection, change, environment, scale and sustainability. Review your inquiry question and check it is connected to the concepts; for example, environment and change.

HOW TO

- Planning and collecting

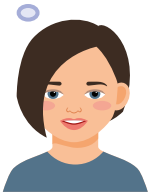
- Forming a question
- Example statements for inspiring questions

Step 2: Plan

In this step you plan your inquiry. Creating a summary table or mind map with your inquiry question at the centre will help you think about what information you will need to help you find answers to your question.

Questions to consider:

- What do you already know?
- What information do you need?
- Where can you find this information?
- What scale are you going to carry out your inquiry (e.g. for your local area or for your whole region)?



Information can be collected via **primary** or **secondary methodologies**. Secondary methodologies are ways that you can collect data back in the classroom to help you answer the question; for example, research using websites or books. Primary methodologies are what you do to collect your own data through fieldwork, such as surveys, field sketches or taking photographs.

Hint

If you are working in a group, consider how you might divide the research tasks.

Stretch

When you are listing the information you may need, consider what the causes, relationships and impacts might be. You may also want to consider what may happen in the future.

HOW TO

- Planning and collecting

- Mind map template
- Plan stage template #1
- Plan stage template #2

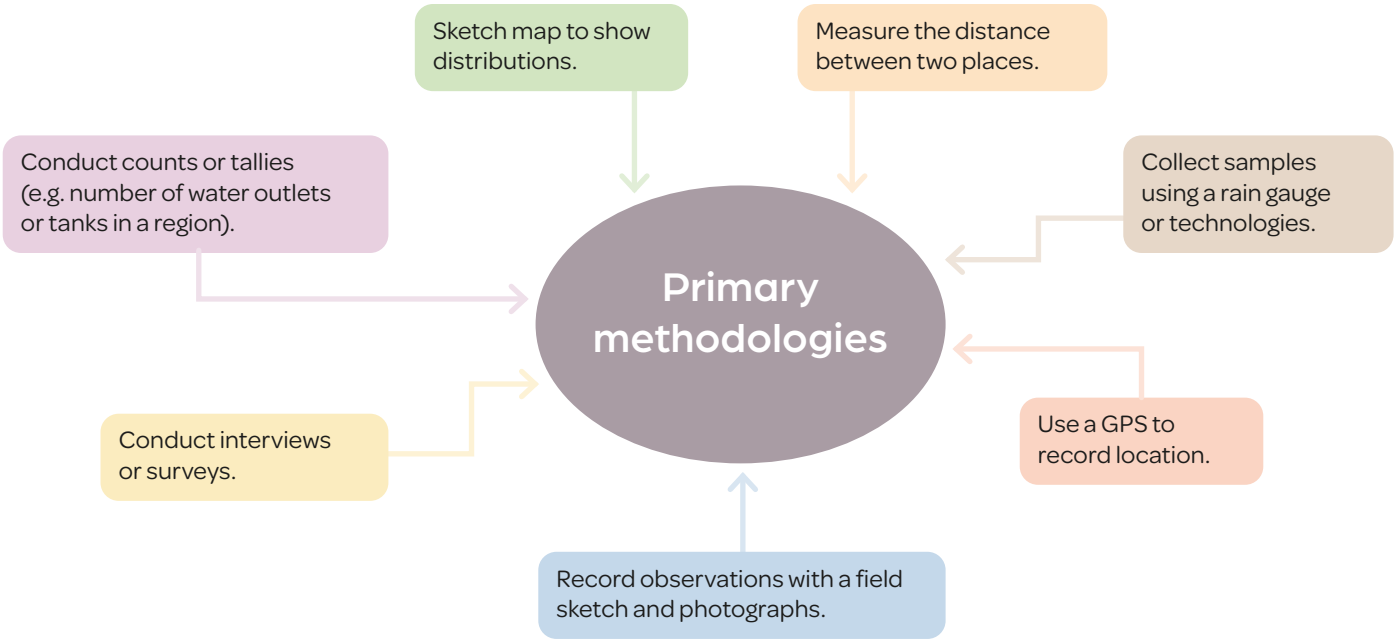
Step 3: Collect

Collecting information from secondary sources

Chapters 1–5 present geographical information for you to analyse by discussing processes that shape the land, valuing and protecting the land, geomorphic hazards, urbanisation and sustainable urban planning. You may take notes on what you read, create summary posters based on online research or answer Learning ladder questions based on the text. All of these are examples of ways you can record and interpret secondary data, and can be used as part of your inquiry, so make sure you put effort into everything you do!

Collecting primary data through fieldwork

Primary data forms an important part of inquiry. Geographical questions can't be answered without talking to other people or observing what is happening in the real world. In geography, primary research is conducted using **fieldwork**. Fieldwork can feel like a whole new project in itself, but it is important to remember that you are simply trying to collect more information to find answers to your inquiry question. There are a number of ways you can collect primary data through fieldwork. Brainstorm and record these to help you plan for and carry out your inquiry. You may only have one opportunity to go into the field and collect data, so you need to be organised and ensure you have all the information you need to answer your inquiry question.



Hint

Depending on the scale of your inquiry, fieldwork can be as simple as exploring your school or local community.

Stretch

There are a number of geospatial tools available to help collect data, such as ESRI Survey123 and Google MyMaps. Collecting information using geospatial technologies makes representing and interpreting the information easier later on.

HOW TO

- Planning and collecting

Step 4: Represent

Once you have gathered data from various sources, including fieldwork, just like in this book, information needs to be organised, collated and explained. In this step you will consider all the information you have collected and ask: how can I display the information I have gathered to answer my inquiry question?

Not all data you collect will be useful. You need to know which information is most relevant to answering your inquiry question. Some information may challenge what you thought you already knew about the topic.

It may be helpful to discuss with a partner the best way to present your information. You could use tables, line graphs or bar graphs to help visualise quantitative (numerical) data. You could use diagrams, annotations on sketches, photographs or quotes from interviews to help present qualitative (descriptive) data.

Consider:

- Does this information help me answer my inquiry question?
- Does the information reflect my current understanding?
- What information helps provide multiple perspectives or ideas on the topic?
- Do I need to find more data?

Maps are the best way to visualise spatial relationships and patterns. For example, you may have collected data on geographical features of an area, population, land use or climate.

Hint

Don't forget to use SALTS and BOLTSS (NA) when constructing your graphs and maps!

- Representing information

Stretch

While hand-drawn maps are one way to present spatial data, they are not always accurate and it is difficult to show relationships between phenomena. Try using GIS, Google Earth Pro or Google My Maps to present your data instead.

Step 5: Interpret

All the information you have gathered and visualised in tables, graphs and maps then needs to be explained to help answer the inquiry question. Picture joining the dots between your question and all the things you have discovered, just like a detective at their evidence wall.

You now need to ask:

- What does the data mean?
- How can I explain what patterns I have found?
- How does this information help answer my inquiry question?
- Can I make any predictions?

It may help to create a mind map that shows the connections between the information collected and the inquiry question. Along each connection write a short paragraph explaining what the information shows and how it helps answer your inquiry question.

Hint

Don't forget to use PQE and SHEEPT to help structure your analysis!

Make it spicy

Use the SPICESS concepts of space, place, interconnection, change, environment, scale and sustainability to help structure your interpretation. For example, what patterns are interconnected? How is a pattern likely to change in the future? Can we improve sustainability? How can humans better manage the environment?

- Interpreting data
- Mind map template

Step 6: Communicate

Communication is the most important step in the inquiry process. In this step you will tell a story using the information you collected. You will explain your interpretation of this information and show how it provides answers to your inquiry question formed in Step 1. You may wish to present your findings to the class, or create a book.

When planning your communication consider the following questions:

- What do you want your audience to know about your inquiry topic?
- What information did you discover?
- What patterns did you find?
- Why is this information important?
- What tables, graphs or maps help support your understanding of the topic?
- Were there any interconnecting causes or impacts?
- Have you had to rethink what you thought you knew about the topic?
- What didn't you expect to discover?

Stretch

It is also important to communicate how your findings have real-world applications. For example, how should policies be changed? What future research needs to be completed? What further issues did your findings raise? These questions help your audience understand the broader implications of your inquiry.

- Communicating template

Step 7: Conclude and make decisions

Now it is time to answer your question. You can start by providing a brief summary of what you found and what it means. Then consider:

- What impact does your topic have on people and places?
- What evidence do you have to support the answers to your question?
- How reliable is the data you collected? Did you use blogs or social media?

Geographers do not just seek to discover and explore, but also to take action and make positive changes. You will also need to reflect on your inquiry and the story you have told about your findings. Consider the following questions and include them in your presentation:

- What strategies already exist to help improve current issues and challenges?
- How does this existing strategy help improve the issue?
- What impacts do existing strategies have on people and places?
- Should a new strategy or policy be created? What should this look like?

Stretch

When we consider taking action, it is important to remember that there are many different groups of people with varying values and perspectives. Reflect on your personal values and attitudes and how these influence the action you may recommend.
For example, when implementing water sustainability measures, residents have concerns about water-use restrictions, business owners might complain about costs, and environmentalists may want stronger action.

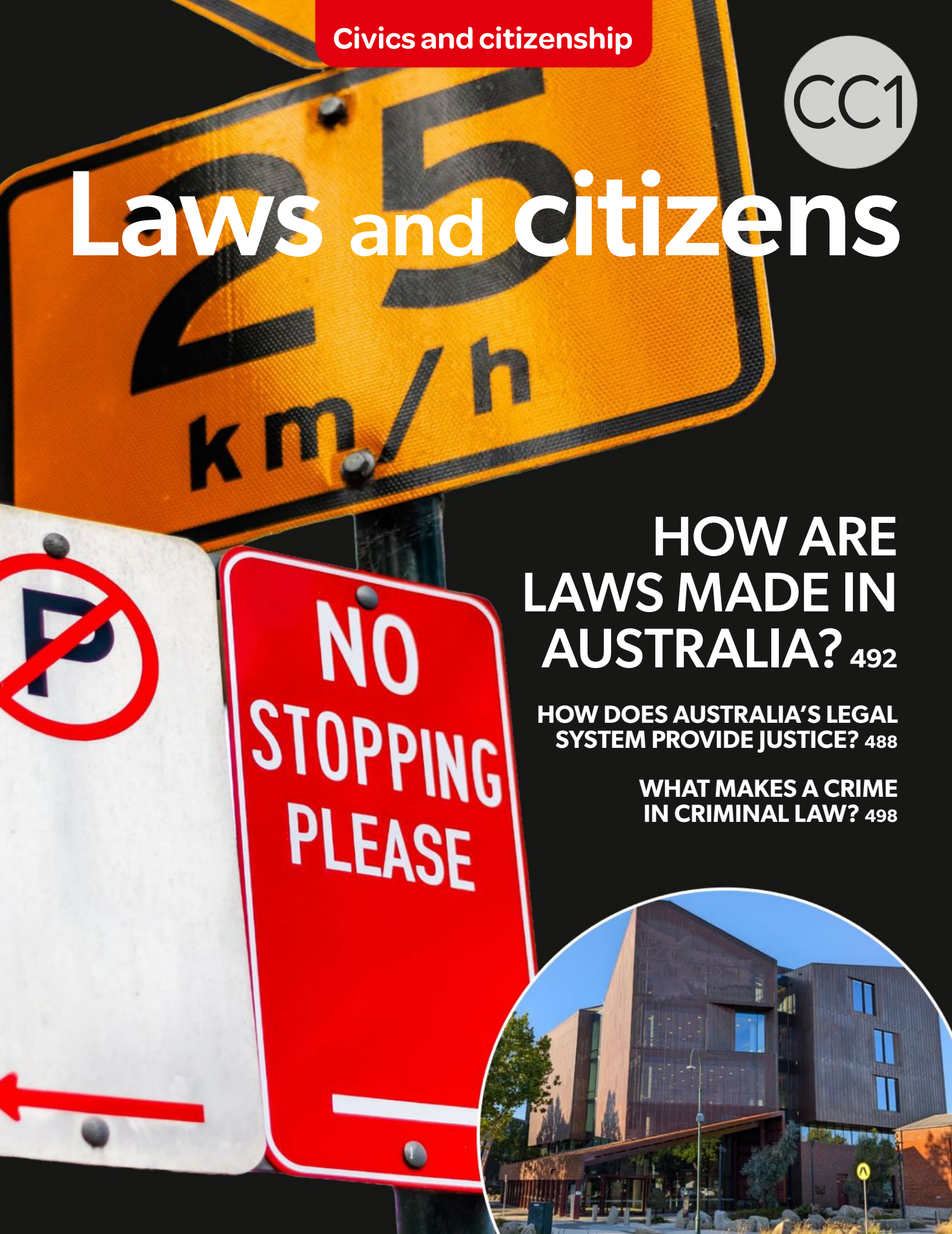
HOW TO

- Making conclusions
- Strategies

Civics and citizenship

CC1

Laws and citizens



HOW ARE LAWS MADE IN AUSTRALIA? 492

HOW DOES AUSTRALIA'S LEGAL SYSTEM PROVIDE JUSTICE? 488

WHAT MAKES A CRIME IN CRIMINAL LAW? 498

CC1.0

How can I study laws and citizens?

Learn about the importance of the judiciary in Australia and the characteristics and types of laws it interprets and creates. Investigate the principles and features of the Australian legal system, and how citizens participate in the lawmaking process.

Learning ladder

The Learning ladder lists the knowledge and skills you will learn. Each has five levels of difficulty. Learning skills at the bottom of the ladder will help you to master the skills at the top of the ladder.

Steps in knowledge progression	Australian legal system	Citizens participating in lawmaking	Lawmaking	Types of laws
5	I can examine legal processes that reflect values.	I can analyse interest group influence in lawmaking.	I can evaluate the fairness of laws.	I can analyse cases and their outcomes.
4	I can explain the factors that guarantee a fair trial and access to legal representation.	I can explain how issues were shaped by the media and interest groups.	I can explain the impact of court judgements.	I can explain the processes and outcomes of criminal, civil and customary law cases.
3	I can explain legal principles.	I can explain the roles of lobbyists and interest groups.	I can explain laws.	I can explain roles of key players in different branches of the law.
2	I can describe legal processes.	I can describe how people influence lawmaking.	I can describe how laws are made and enforced.	I can describe laws.
1	I can identify legal principles.	I can identify forms of democratic participation.	I can identify where laws come from.	I can list types of laws.

Knowledge

Source 1: Australia's legal system depends on a hierarchy of courts that hear different types of cases.

	Investigating	Evaluating	Participating	Communicating ideas
5	I can evaluate information from a range of sources.	I can evaluate how institutions enhance democratic values and participation.	I can evaluate the strategies used to make decisions.	I can use sources to construct evidence-based arguments.
4	I can sort and represent data and information.	I can analyse the reliability of information.	I can design strategies to achieve outcomes.	I can explain different perspectives using data.
3	I can gather information from secondary sources.	I can write evidence-based conclusions.	I can discuss the impact of a strategy.	I can compare different methods of communication.
2	I can plan an investigation.	I can describe different interpretations.	I can describe a strategy to achieve outcomes.	I can reflect on my own and others' perspectives.
1	I can ask open-ended questions.	I can identify data relevant to a question.	I can identify outcomes.	I can describe civics and citizenship issues.

Steps in skills progression

Skills

CC1.1

How is the rule of law applied in Australia?

The rule of law is the principle that everyone is equal before the law. The rule of law had its beginnings in the Magna Carta document signed in 1215, which offered people protection under the law after suffering a period of inhumane torture through trial by ordeal and other unjust treatment.

Rule of law

The **rule of law** is the principle that everyone is ruled by the law regardless of their status or position within society. To make sure everyone understands the law and their rights, laws should be easy to understand and enforced. The foundation of our modern legal system comes mostly from a dispute more than 800 years ago that ended in the signing of The Magna Carta.

The Magna Carta

In 1215, rebel lords in England, backed by the Church, called for the protection of Church rights, legal rights for all and reduced taxation to the king. The lords forced the unpopular King John to sign a document called The Magna Carta. The document outlined basic rights for all people with the principle that no-one was above the law, including the king. The Magna Carta is seen as one of the first steps in the development of legal and political rights for common people and the start of modern **democracy**.

Source 1: King John reluctantly signs The Magna Carta in 1215.

No free man shall be taken or imprisoned, or be disseised [dispossessed] of his freehold, or liberties, or free customs, or be outlawed, or exiled, or in any other wise destroyed; nor will we pass upon him, nor condemn him, but by lawful judgement of his peers, or by the law of the land. We will sell to no man, we will not deny or defer to any man either justice or right.

Source 2: The Magna Carta, Chapter 29

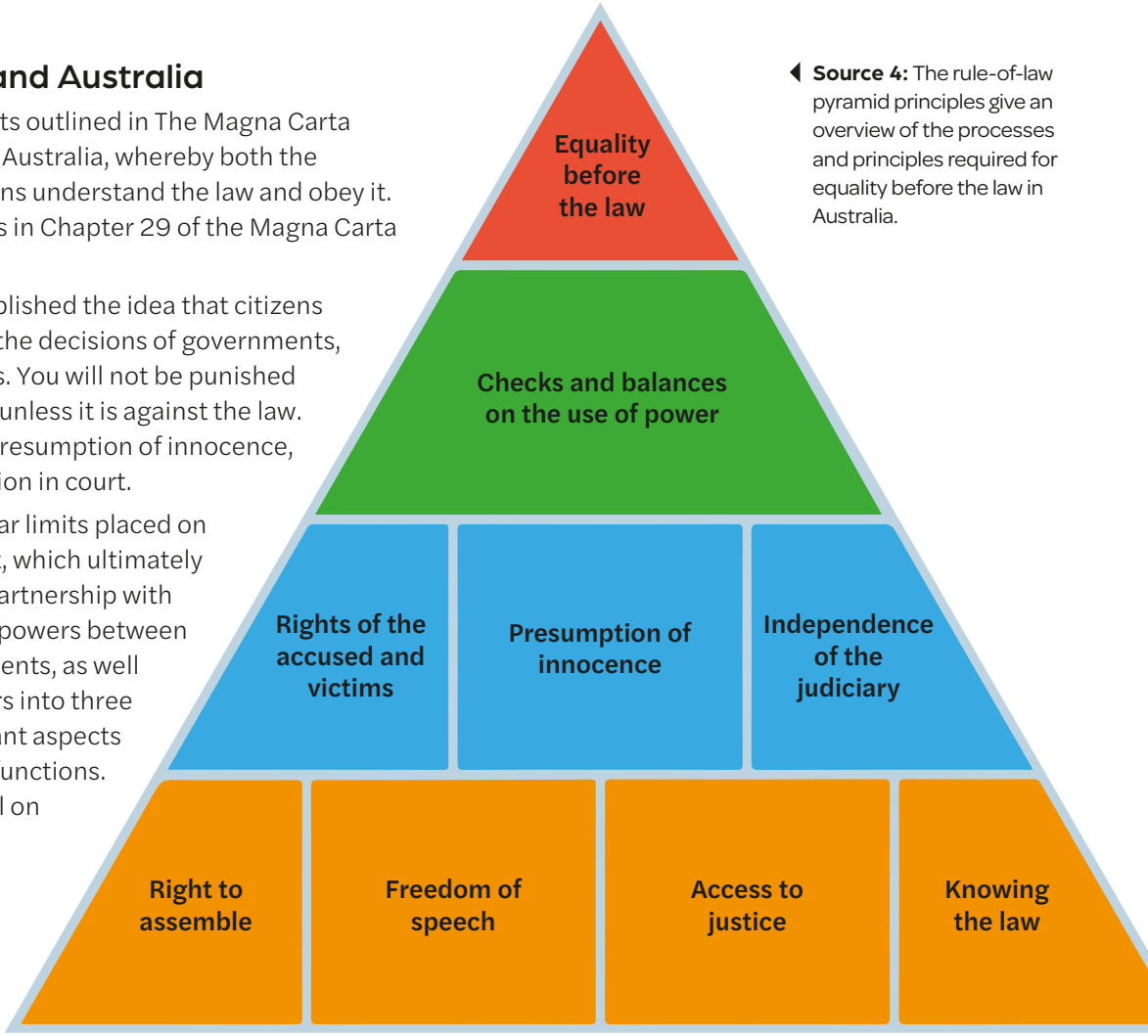
Source 3: The Magna Carta also abolished trial by ordeal. People could no longer be tortured or killed on the grounds of suspicion or treated as guilty until proven innocent. One trial by ordeal involved the accused carrying a red-hot bar of iron for three metres. If the wound healed within three days, they were innocent, and if not, they were guilty.

The Magna Carta and Australia

The legal and political rights outlined in The Magna Carta underpin the rule of law in Australia, whereby both the government and the citizens understand the law and obey it. The rule of law has its roots in Chapter 29 of the Magna Carta (Source 2).

The Magna Carta established the idea that citizens are governed by laws, not the decisions of governments, corporations or individuals. You will not be punished by a court for your actions unless it is against the law. You have the right to the presumption of innocence, a fair trial and representation in court.

There are also particular limits placed on the powers of government, which ultimately creates Australian law in partnership with the courts. The division of powers between state and federal governments, as well as the separation of powers into three branches, are also important aspects in relation to how the law functions. These are covered in detail on pages 496 and 498.



Source 4: The rule-of-law pyramid principles give an overview of the processes and principles required for equality before the law in Australia.

Learning ladder CC1.1

Australian legal system

1. **a** Source 1: Identify the changes that the Magna Carta made to English society in the Middle Ages.
   b What is the rule of law?
2. Source 3: In Australia today, a person is considered innocent until proven guilty. Describe the experience in medieval society, and what impact it had on punishments.
3. Source 2: Explain, in your own words, what Chapter 29 of the Magna Carta means for modern Australians.
4. Source 4: Carefully study the overview of processes shown in the rule-of-law pyramid. Explain why the blue and orange groups are coloured differently. What rights does each group refer to?
5. Examine how access to justice through the rule of law represents the democratic values of equality and fairness.

Participating

1. How can the rule of law help with fairness?
2. How can campaigns (such as TV ads or school programs) help people understand their legal rights?
3. How can learning about the Magna Carta help you better understand your rights?
4. Create a plan to help people learn about their legal rights under the rule of law. What messages would you share, and how would you share them?
5. Do you think using old documents like the Magna Carta is a good way to teach people about democracy and their rights today? Why or why not?

Participating, page 511

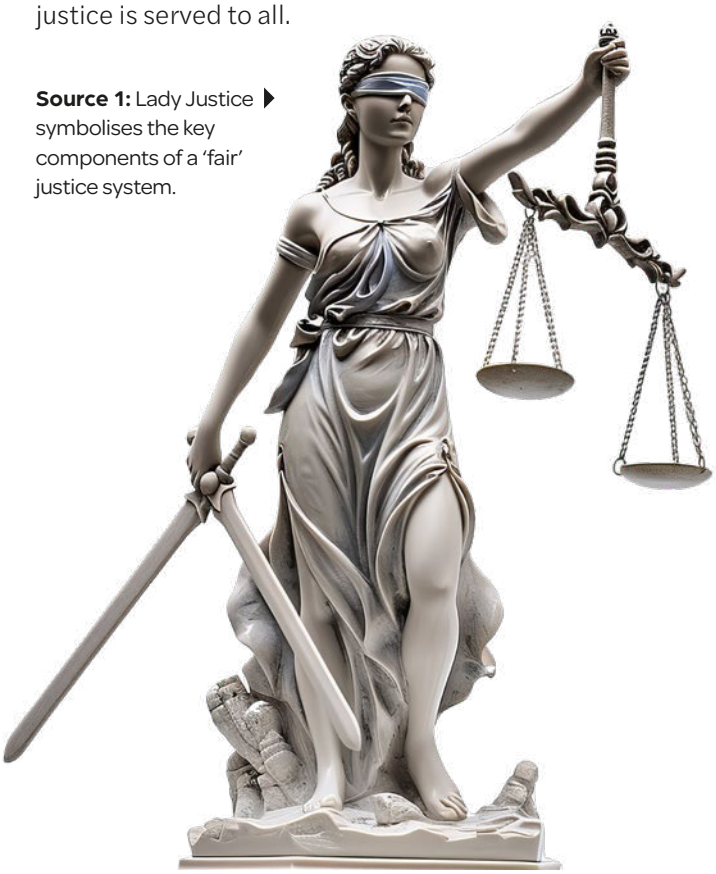
HOW TO

How does Australia's legal system provide justice?

The Australian legal system emphasises justice by ensuring fair treatment and equality according to social laws and values.

Law and justice

Justice is the idea that all people should be treated fairly and equally according to the laws and values of society. Lady Justice (Source 1) best summarises the key elements of a justice system: holding a sword and scales, and sometimes wearing a blindfold. Her image evokes a sense of impartiality, fairness and the pursuit of justice. The sword symbolises authority and respect, the blindfold symbolises objectivity and the scales remind us to consider guilt, innocence and the law itself during legal deliberations.The Australian legal system has developed a number of guidelines to ensure that justice is served to all.



Source 1: Lady Justice symbolises the key components of a 'fair' justice system.

Presumption of innocence

Any accused person is presumed to be innocent until proven guilty. This means that the prosecutor (the lawyer conducting the case against the accused person) needs to produce **evidence** that will prove the claims against the accused person. So it is up to the prosecutor to prove or disprove any disputed facts in court.

The right to a fair trial

Any Australian accused of breaking a law has the right to be given a fair chance to prove their innocence. Every accused person has the right to receive a fair trial held before an unbiased **judge** and **jury**, who should know nothing about the case before evidence is presented.

Source 2: Accused murderer Gregory Lynn is led into the Supreme Court of Victoria in 2024. The trial attracted huge media attention, leading to the dismissal of the first jury. Juries must remain impartial and ensure their decisions are based only on evidence.

A jury hears evidence and decides if a person is guilty or not guilty of a crime. It is sometimes difficult for jurors to not know about a high-profile case that has been discussed widely in the **media**. Jurors need to ensure that their decision is based entirely on the evidence presented in court. They can only discuss details of the case with other jurors.

When juries fail to meet the above criteria, they can be 'dismissed'. This has happened on many occasions throughout the history of Australia's justice system. In 2024, during the trial of accused murderer Gregory Lynn, the jury was dismissed because there were concerns that jurors might not be able to remain impartial. Their impartiality was brought into question due to the extensive media coverage surrounding the investigation into the alleged murders of Russell Hill and Carol Clay.

Legal Aid Victoria

We help people with legal problems involving family breakdown, child protection, family violence, criminal matters, social security, mental health, discrimination, guardianship and administration, fines, immigration, tenancy and debt.

Our clients are often people who are socially and economically disadvantaged, people with a disability or mental illness, children, the elderly, people from culturally and linguistically diverse backgrounds and those who live in remote areas.

As an independent statutory authority, we are set up to meet the following statutory objectives:

- provide legal aid in the most effective, economic and efficient manner
- manage resources to make legal aid available at a reasonable cost to the community and on an equitable basis throughout the state
- provide to the community improved access to justice and legal remedies.

Source 3: Legal Aid Victoria supports the right to legal representation.

The right to legal representation

Understanding our complex laws is difficult. Every accused person has the right to present their own case in court or hire a lawyer to represent them. People who cannot afford a lawyer can access free help from Legal Aid.

Learning ladder CC1.2

Australian legal system

1. Identify the meaning of the presumption of innocence.
2. **a** What are three ways that the Australian legal system ensures that justice is served to all?
   b Describe the role of juries in a criminal case.
3. **a** Source 2: Why might Gregory Lynn have thought that he may not receive a fair trial?
   b Explain why the jury was dismissed during the trial of Gregory Lynn.
4. Source 3: Explain why the right to legal representation is important to ensure justice is done. How is legal representation provided to people who are socially and economically disadvantaged?
5. Source 1: Statues and images of Lady Justice are often displayed at courts. Examine how Lady Justice symbolises the democratic values of equality and fairness, and respect for the rule of law.

Communicating ideas

1. What does it mean for a jury to be fair and unbiased? Why is this important for someone getting a fair trial?
2. Why might some people think juries can be easily influenced?
3. How do different things such as the Lady Justice statue, what happens in court, or posters and ads help people understand the idea of justice?
4. Source 3: How might people from the country, people with disabilities, or people new to Australia find it harder to get legal help? How does Legal Aid try to help them?
5. Using Source 3 and the textbook, explain why Legal Aid is important. Give reasons and examples to support your answer.

HOW TO

Communicating ideas, page 513

How can citizens participate in lawmaking?

Citizen participation in lawmaking ensures laws promote fairness and inclusivity. It enhances the legitimacy and accountability of the government, because laws created with public input are more likely to be respected and followed.

Organised protests

A **protest** is a public demonstration where individuals or groups express their objection or disapproval of certain policies, actions or situations. Protests can take various forms, such as marches, sit-ins, rallies or even online campaigns. They aim to raise awareness, influence public opinion and pressure decision-makers to enact changes. Protests can significantly impact lawmaking by bringing attention to issues that may not be widely known. Protests can also influence how the public perceives an issue, which can lead to increased support for change and then apply pressure on lawmakers to act.

The filmed death of African-American man George Floyd in the United States in 2020 sparked large protests around the world. The Black Lives Matter protest movement that grew from the incident highlighted the need for racial justice. In Australia, the Black Lives Matter protests highlighted Indigenous deaths in custody. These protests have spurred ongoing discussions and some reforms regarding police practices and the treatment of First Nations Australians.

Activism

Activism refers to efforts aimed at promoting, impeding, directing or intervening in social, political, economic or environmental reform to bring about change in society. Activists use various methods, such as protests, petitions, **lobbying** and social media campaigns, to advocate for their causes.

The #BlackLivesMatter movement began in 2013 after the **acquittal** of George Zimmerman in the shooting death of 17-year-old African-American man Trayvon Martin, and gained significant momentum in 2020 following the death of George Floyd. The movement used social media platforms to organise protests, share information and raise awareness about police brutality and systemic racism, leading to global demonstrations and policy discussions.

Media

In democracies like Australia, the media plays a crucial role in the lawmaking process by acting as a watchdog, informing the public about legislative developments and holding lawmakers accountable. Through investigative journalism, debates and discussions, the media can highlight issues that require legislative attention, thereby influencing the public agenda and policy priorities. Additionally, the media provides a platform for diverse voices and opinions, fostering public engagement and ensuring that a wide range of perspectives are considered in the lawmaking process.

An example of this is the 2019–2020 Australian bushfire crisis. The media played a significant role in highlighting the severity of the fires, the impact on communities and the need for urgent government action on climate change. Extensive coverage and public pressure led to increased funding for firefighting resources and a renewed focus on environmental policies.

Source 1: Formula One racing driver Lewis Hamilton of Britain wears a Black Lives Matter shirt in the pit lane in 2020. The #BlackLivesMatter movement begun by activists in 2013 ballooned into worldwide protests in 2020.

Lobbying parliamentarians

Lobbying parliamentarians influences the lawmaking process by providing lawmakers with information, expertise and perspectives that can shape their understanding of issues and the potential impact of legislation. Lobbyists often represent specific interest groups, such as businesses, non-profits and advocacy organisations, and work to ensure that their clients' views are considered in policy decisions. This can lead to the introduction of new **bills**, amendments to existing legislation or changes in regulatory practices that align with the interests of those being represented.

Amnesty International

Amnesty International has effectively influenced the lawmaking process through lobbying by highlighting human rights issues and advocating for legislative changes. For example, it has organised meetings with parliamentarians, provided detailed reports on human rights violations and mobilised public opinion to pressure governments into action. Its efforts have led to increased awareness and legislative discussions on various human rights concerns, such as the treatment of refugees and the protection of civil liberties.

One example of Amnesty International influencing a law is its campaign against early and forced marriage in Burkina Faso. In 2016, following extensive advocacy and a petition signed by more than half a million supporters, the government pledged to raise the legal age of marriage for girls to 18 and to clearly define forced marriage in the law. This commitment was a direct result of Amnesty's 'My Body My Rights' and 'Write for Rights' campaigns.

In Australia, Amnesty International made a submission in 2021 to the Parliamentary Joint Committee on Human Rights regarding the Religious Discrimination Bill. In this submission, Amnesty International outlined its concerns about the potential impacts of the bill on various human rights, including freedom of expression and protection against discrimination. It provided detailed recommendations to ensure that the legislation would align with international human rights standards.

Learning ladder CC1.3

Citizens participating in lawmaking

1. Identify some ways citizens can participate in lawmaking in Australia.
2. Describe how Amnesty International had input in a parliamentary committee.
3. Explain how organised protests impact the lawmaking process in a democracy like Australia.
4. Source 1: Explain the different approaches used to influence lawmakers through the #BlackLivesMatter movement.
5. Analyse the activities of Amnesty International. What strategies does it use to successfully influence lawmakers to improve human rights?

Evaluating

1. What parts of the text help answer this question: 'How can groups try to change human rights laws?'
2. What are two different opinions about the media's role in making laws?
3. Write a short paragraph about how protests in Australia have helped people talk more about the rights of First Nations Peoples. Use examples like Black Lives Matter.
4. What are the good and bad things about using news stories to learn about the 2019–2020 bushfires, compared to reading official government reports?
5. How do groups like Amnesty International help Australian democracy? Think about how they share ideas with the government and speak up for people.

Evaluation, page 509

HOW TO

How are laws made in Australia?

The rule of law ensures that all individuals, including lawmakers, must obey the law, and no one can be punished without a court proving they broke the law. This principle underpins Australian law, exemplified by statutory laws such as the *Fair Work Act 2009*, and common law, which evolves through judicial decisions based on precedents.

The rule of law

The rule of law (see page 486) is a principle that states all people must obey the law, including those who make and enforce the laws. No-one can be punished or have their rights affected unless it is proven in a court that they have broken the law. The rule of law ensures that both the government and its citizens are bound by and accountable to the law, fostering a system where laws are transparent, publicised, stable and just, and where rights are protected against abuse of power.

Abuses of power do sometimes happen, ignoring the rule of law. An example of an abuse of power in Australia is the 'Robodebt' scandal.

The Australian Government, through Centrelink, used an automated system to incorrectly calculate and demand repayment of welfare debts from citizens between 2016 and 2020. This system generated thousands of incorrect debt notices, leading to significant stress and hardship for many individuals. The scheme was found to be unlawful because it reversed the **burden of proof**, requiring individuals to prove they did not owe the alleged debts rather than the government proving they did. The scandal resulted in a **class action** lawsuit and a substantial settlement from the government, highlighting significant issues of accountability and abuse of power within the welfare system.

Statute law

Statute laws are made and passed by parliament whereas **common law** is created when a judge makes a decision in a case not clearly covered by statute law.

Australia's **Federal Parliament** makes statutory laws about things that apply to the whole nation, such as taxation and migration. State parliaments make statutory laws about things like education and health.

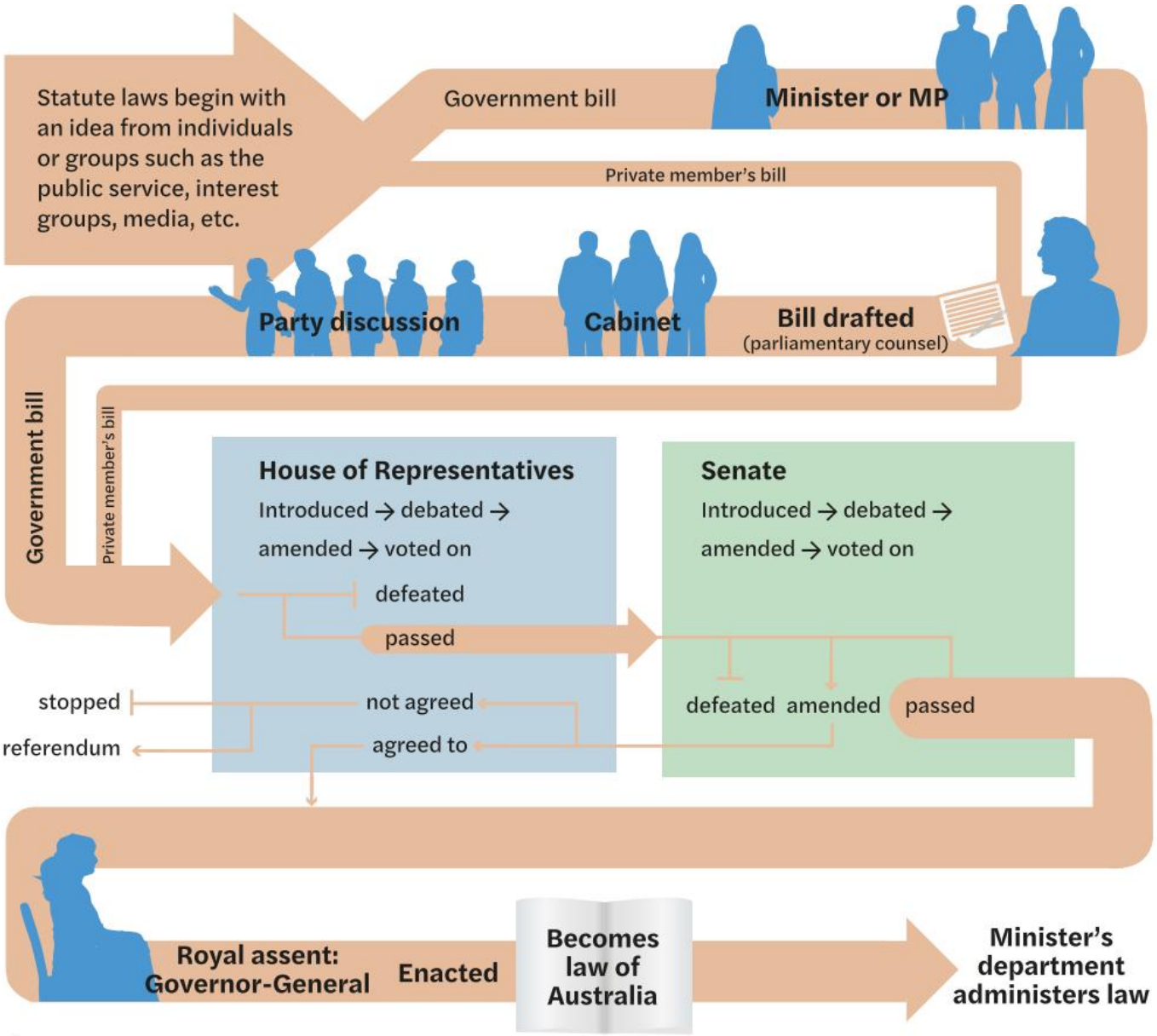
In Federal Parliament, a proposed new law or change to an existing one is known as a bill. A bill only becomes a statutory law after it has been passed with a majority of votes by the **House of Representatives** and then by the **Senate**. Before becoming an official Act of Parliament, the bill must be given royal assent by the **Governor-General**.

An example of a statute law in Australia is the *Fair Work Act 2009*. This law regulates employment conditions and workplace relations in Australia. It establishes minimum standards for wages, working hours and conditions of employment, and provides mechanisms for resolving workplace disputes. The Fair Work Act also outlines the rights and responsibilities of both employers and employees, and it is enforced by the Fair Work Ombudsman and the Fair Work Commission. This statute is legislation aimed at ensuring fair treatment and equity in the Australian workforce.

Common law

Laws passed by parliament are known as statute laws. Courts interpret these laws and settle any disputes that arise from them. The judges' interpretations of the statutes then become laws in their own right. These laws are known as common laws.

Source 1: Stephen Gagelar was appointed as the Chief Justice of the High Court in 2023. Chief Justice is the highest-ranking judicial officer in Australia.



▲ **Source 2:** The path of a statute law in Federal Parliament

Learning ladder CC1.4

Lawmaking

1. Identify the two key sources of law in Australia.
2. Describe how statute laws are made in Australia.
3. Explain how the *Fair Work Act 2009* attempts to control employment conditions and workplace relations in Australia.
4. Explain how court judgements impact the development of the law and create precedents.
5. Evaluate why the Robodebt scheme failed to uphold the rule of law.

Communicating ideas

1. What was the Robodebt scandal?
2. Why might some people think that some laws aren't fair? Do you think there are some laws that should be made that aren't currently law?
3. How could you campaign for the creation of your law?
4. Using examples from the Robodebt case and the *Fair Work Act 2009*, how might different people, such as everyday citizens, workers, or the government, see these laws and the results of them?
5. Explain why the rule of law (following laws fairly) is important in Australia. Give reasons and examples.

Communicating ideas, page 513

HOW TO

How are laws interpreted by the courts?

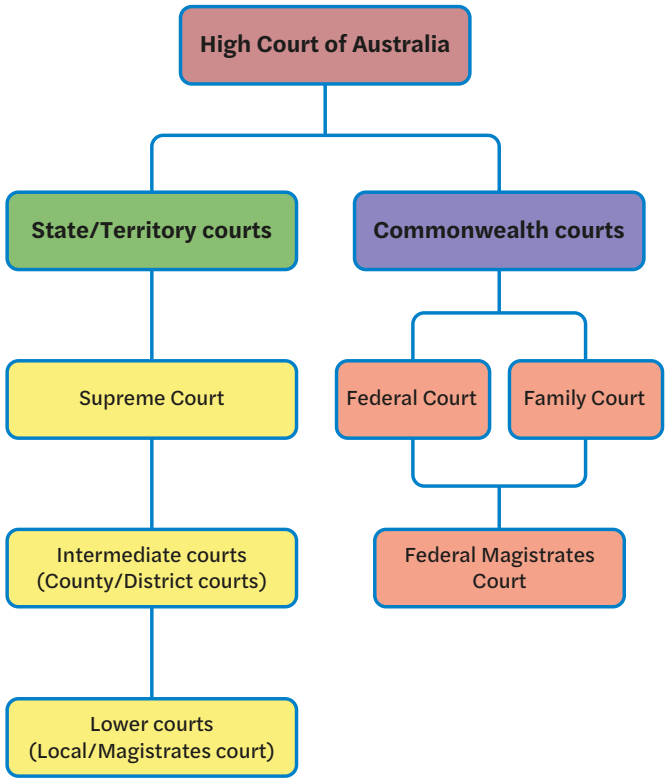
Courts interpret laws and settle disputes, with lower courts handling less serious cases and higher courts dealing with more serious criminal cases. The High Court of Australia is the highest court. It ensures that laws align with the Australian Constitution.

Australia's court hierarchy

The role of the court is to interpret laws and settle disputes. A person who has been accused of a crime, known as the **defendant**, can have their case heard by a court. The court listens to the facts in the case and decides if the accused is guilty or not.

Less serious cases are heard by a **magistrate** in the Magistrates' Court. After listening to the cases of the **prosecution** and the **defence**, the magistrate decides if the person is guilty or not guilty. If the defendant is found guilty they will receive a penalty known as the **sentence**.

Higher courts such as the County Court and Supreme Court hear more serious criminal cases.



Source 1: Australian court hierarchy

In these cases a jury of at least 12 citizens listens to the evidence and decides on the guilt of the defendant. If guilty, the judge delivers the sentence.

The High Court of Australia is the highest court in the Australian judicial system and serves as the final court of **appeal**. It interprets and applies the law of Australia, decides cases of special federal significance, including challenges to the constitutional validity of laws, and hears appeals from lower courts. The High Court ensures that laws and judicial decisions are consistent with the Australian Constitution. Its rulings are binding on all other courts in the country.

Source 2: Catholic Archbishop George Pell was the subject of enormous media attacks before he stood trial in 2018–2019 on counts of historical child sexual assault. There was great concern that he may not receive a fair trial based on a **presumption of innocence**. The guilty decision by a jury in the County Court was overturned by the High Court, which ruled that the jury 'ought to have entertained a doubt' about his guilt.

The system of a **court hierarchy** allows for legal cases to be heard in different courts according to their seriousness. More complex and time-consuming cases that require greater expertise in the law are heard in higher courts such as the High Court and Supreme Courts. Minor cases can be heard in lower courts such as Magistrates' Courts.

Appeals against verdicts

All convicted people can appeal against a **conviction** or sentence if they believe the verdict of the judge or jury is unreasonable, inaccurate or not supported by the evidence. Appeals are heard by the next highest court in the hierarchy to ensure fairness and allow any legal mistakes to be corrected. The higher court can allow or dismiss an appeal based on whether there are grounds to relook at the case.

The Supreme Court has a special Court of Appeal that hears appeals from the Supreme Court Trial Division, County Court and some appeals from the Magistrates' Court and the Victorian Civil and Administrative Tribunal.

Catholic Archbishop George Pell was convicted by a jury of historical counts of child sexual assault in the County Court of Victoria in 2018. Pell was granted an appeal against his convictions before the Supreme Court of Appeal on the grounds that the verdicts were unreasonable and could not be supported by evidence. The Supreme Court of Appeal upheld the decision of the County Court, so George Pell appealed to the High Court to have the charges dropped. In 2020 the High Court heard the appeal and found that:

> While the Court of Appeal majority assessed the evidence of the opportunity witnesses as leaving open the possibility that the complainant's account was correct, their Honours' analysis failed to engage with the question of whether there remained a reasonable possibility that the offending had not taken place, such that there ought to have been a reasonable doubt as to the applicant's guilt.
>
> **Source 3:** Excerpt from High Court judgement summary

The High Court upheld Archbishop George Pell's appeal against conviction and acquitted him of five offences. Pell left prison as a free man on 7 April 2020.

Learning ladder CC1.5

Lawmaking

1. Identify the meaning of 'defendant' and 'prosecution'.
2. Describe the role of Magistrates' Courts in Australia.
3. Source 1: Explain why it is important to have a hierarchy of courts, rather than just one type of court.
4. Explain why we have a system of appeals and how the system works in Australia's judicial system.
5. Sources 2 and 3: Evaluate the trial of Archbishop George Pell to determine whether or not the judicial system was fair and effective in his case. What action did Pell have to take to overturn the convictions given to him by the lower courts? What was the ultimate ruling of the High Court and why did it reach that decision?

Investigating

1. How does having different levels of courts help make sure laws are applied fairly in Australia?
2. Plan how you would find out more about Australia's court system. What questions would you ask, and where would you look for information?
3. Using the text, explain why 'appeals' are an important part of the legal system.
4. Recreate the diagram shown in Source 1. Under each court heading, list what kinds of cases that court handles.
5. Look at a news article and a court summary (such as Source 3) about George Pell's appeal. Which one gives a better explanation of the court's decision, and why?

HOW TO Investigating, page 506

How do courts impact the development of law?

Court judgements impact the development of law through their interpretation of laws set by parliaments and the creation of legal precedents.

The roles of parliaments and courts

The Australian **Constitution** separates the powers of government into three branches to prevent one group having power over both the law-making and law-judging systems:

- **executive**: the prime minister and senior ministers of the government come up with ideas for new laws and, along with the Governor-General, have the power to implement laws
- **legislature**: parliament has the power to make laws, but not to judge whether the law has been broken. The Australian Parliament also has the right to change or remove laws within the limits of the Constitution
- **judiciary**: the courts have the power to interpret and apply the law. The High Court can judge that any law made by parliament that is inconsistent with the Australian Constitution is invalid.

Common law

Courts interpret and clarify the laws passed by parliament and through their decisions they create common law. Over time, common law has developed through the decisions of judges, building on the **precedent** of earlier court decisions. Precedents help to promote consistency and predictability in the law. If a legal principle was established by a court that is superior in the court hierarchy, it is a **binding precedent** on the lower court. For example, High Court decisions are binding on Australian courts, but Supreme Court decisions are not binding on the High Court.

The Federal Court interpreted the *Competition and Consumer Act 2010* passed by Federal Parliament in the case of the *Australian Competition and Consumer Commission v Reckitt Benckiser (Australia) Pty Ltd 2015*. The court ordered Reckitt Benckiser to pay a penalty of $6 million to support the ACCC's desire to send a strong message to other companies which might make misleading claims in an attempt to make a profit. A number of previous cases were cited as precedents for the decision.

Reckitt Benckiser made representations that Nurofen Specific Pain products, which sold at a much higher price than Nurofen, targeted specific types of pain, such as back pain and period pain. Nurofen Specific Pain products contained the same active ingredient as Nurofen and were no more effective at treating the specific pain described on their packaging and website than any of the other Nurofen products.

Source 1: The Federal Court interpreted the *Competition and Consumer Act 2010* in fining Reckitt Benckiser $6 million for making misleading claims about Nurofen Specific Pain products.

Source 2: Traditional Mer (Murray Island) dancers, 1921. After a 10-year fight, Meriam people took legal ownership of the island of Mer in the Torres Strait when the High Court ruled in their favour against strong opposition from the Queensland Government.

Native Title Act 1993

When the British explorer James Cook set foot on the Australian continent in 1770, he declared the land to be ***terra nullius*** ('no-one's land'). He was under instruction to take possession of the land if it was unoccupied or with the consent of the native population. Cook ignored the fact that there were up to one million people living on the land, and declared it to be the property of King George III of Great Britain.

The late Beryl Beller, an **Elder** of the Dharawal people, commented:

> They were so ignorant, they thought there was only one race on the earth and that was the white race. So when Captain Cook first came, when Lieutenant James Cook first set foot on Wangal land over at Kundul, which is now called Kurnell, he said, 'Oh let's put a flag up somewhere, because these people are illiterate, they've got no fences.' They didn't understand that we didn't need fences ... that we stayed here for six to eight weeks, then moved somewhere else where there was plenty of tucker and bush medicine and we kept moving and then came back in 12 months' time when the food was all refreshed ...
>
> **Source 3:** Beryl Beller quoted in *Bo-r-ne Ya-goo-na Par-ry-boo-go: Yesterday Today Tomorrow – an Aboriginal History of Willoughby*, Jessica Currie, 2008.

In 1982, Eddie Mabo and four other Meriam people from the Torres Strait Islands took their claim for traditional land rights to their islands in the Torres Strait to the Queensland Supreme Court, and eventually to the High Court of Australia. They claimed that their islands had been continuously inhabited and possessed by their people. In 1992, the High Court of Australia decided that *terra nullius* should not have been applied to Australia, and that Aboriginal and Torres Strait Islander peoples have rights to the land.

The decision of the High Court in *Mabo v Queensland 1992* overturned the legal concept of *terra nullius* and established the concept of **native title**. The case rewrote national land law and recognised First Nations Australians as the original inhabitants of Australia. The landmark Mabo decision prompted the Australian Parliament to pass the *Native Title Act 1993*, which recognises the traditional rights to land and waters. First Nations Peoples can apply to the Federal Court to have their native title recognised under Australian law.

Learning ladder CC1.6

Lawmaking

1. Identify the meaning of 'common law'.
2. **a** Describe the different roles of parliaments and courts.
   b Source 1: Describe the role of the Federal Court in *Australian Competition and Consumer Commission v Reckitt Benckiser (Australia) Pty Ltd 2015*.
3. Explain why the Federal Court supported the ACCC's position to hit Reckitt Benckiser with a heavy penalty for misleading conduct.
4. Explain how the judgement of the High Court in *Mabo v Queensland 1992* impacted the development of the law and created a precedent.
5. Evaluate how the principle of *terra nullius* and the decision of the High Court in *Mabo v Queensland 1992* were affected by different cultural perspectives.

Evaluating

1. Which parts of the text help answer this question: 'How can court decisions help make laws fair and just in Australia?'
2. Describe two different views about terra nullius: one from British leaders in 1770, and one from First Nations people such as Beryl Beller.
3. Write a short conclusion about how the Mabo case changed Australian law and society. Use examples from the text to support your answer.
4. If you were reading about the Reckitt Benckiser court case, how would you tell if a source is trustworthy? What makes a source fair and reliable?
5. How did the courts and parliament work together in the Mabo case and the *Native Title Act* to support fairness, justice and rights for all Australians?

HOW TO

Evaluation, page 509

What makes a crime in criminal law?

Criminal law is crucial in Australian society as it maintains social order by defining acceptable behaviour and deterring criminal activities. It also protects individuals' rights and safety, ensuring justice is served and offenders are held accountable.

Criminal law

Criminal law in Australia is the body of law that defines criminal offences, regulates conduct to protect the community and provides sanctions against those who commit crimes. Responsibility for criminal law is divided between state and territory parliaments and the Commonwealth Parliament, with each jurisdiction having its own set of laws and procedures. Some states follow a common law system, while others have codified their criminal laws by collecting and restating laws into a **legal code**.

Criminal offences range from serious crimes such as murder to less serious crimes such as jaywalking. In criminal cases the judge or jury must believe the accused person (defendant) is guilty beyond reasonable doubt. If guilty, they will receive a punishment such as community service, a fine of money or a prison term. The offender receives a punishment to deter them and others from committing a crime again.

Federal criminal law

Criminal law decided by the Federal Parliament in Australia primarily addresses offences that fall under federal jurisdiction, such as terrorism, drug trafficking and cybercrime. The main pieces of legislation include the *Crimes Act 1914* and the *Criminal Code Act 1995*, which outline federal offences and their penalties. These laws are enforced by federal agencies such as the Australian Federal Police and are designed to complement state and territory criminal laws. Federal criminal cases in Australia are primarily heard by the Federal Court of Australia and the High Court of Australia.

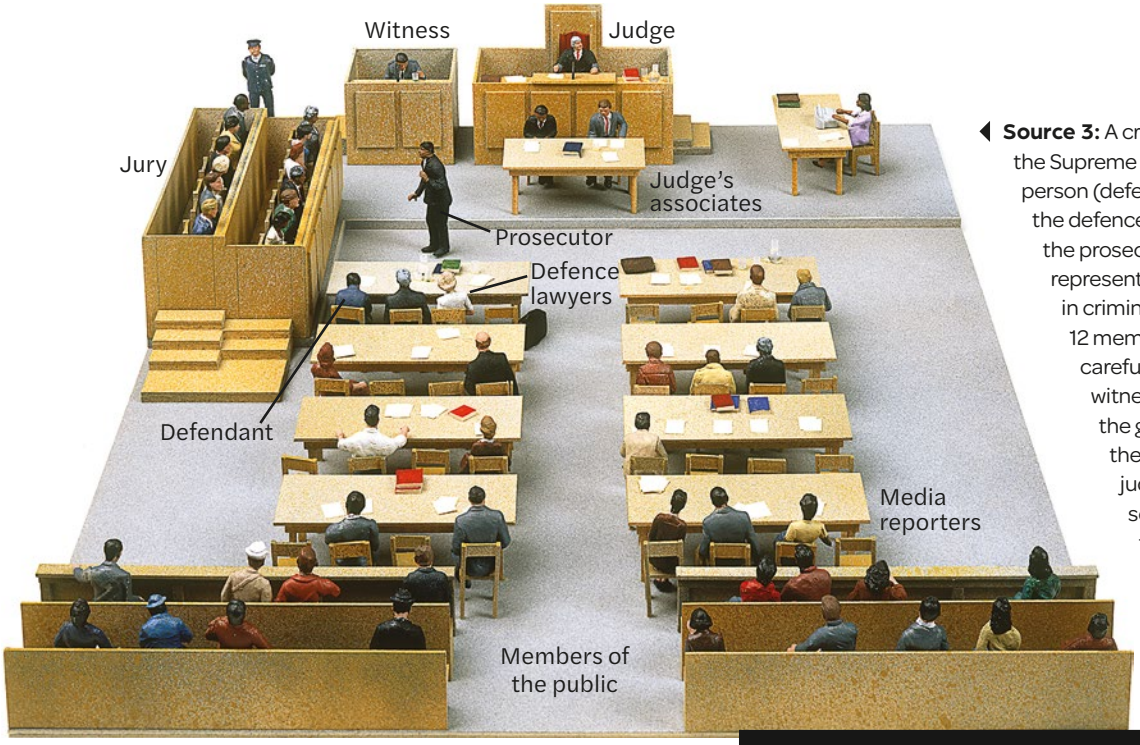
State and territory criminal law

State and territory criminal law in Australia is primarily responsible for defining and prosecuting most criminal offences, such as theft, assault and murder. Each state and territory has its own criminal code or legislation, which outlines the specific laws and procedures for handling criminal cases. State and territory criminal cases in Australia are heard in a tiered court system. Minor offences are typically handled by the Magistrates' Courts, which are the lowest level of courts. More serious offences are heard by the District Courts (or County Courts in some states), and the most serious cases, such as murder, are dealt with by the Supreme Courts of each state or territory

In Australian criminal law, the jury plays a crucial role in ensuring a fair trial. Composed of 12 randomly selected citizens, the jury listens to the evidence presented by both the prosecution and the defence, deliberates on the facts and determines whether the defendant is guilty or not guilty beyond a reasonable doubt. The judge provides legal guidance and ensures proper procedures are followed, but the jury's verdict is based solely on their assessment of the evidence.

The role of juries in the legal system

Juries play a vital role in the justice system by allowing members of the community to participate directly in legal proceedings. In Victoria, juries are used in nearly all criminal trials in the Supreme and County Courts, and in some civil trials. Criminal trials typically involve 12 jurors, although up to 15 may be empanelled for longer cases in case a juror becomes unable to continue. The jury's role is to determine the facts of the case, apply the relevant law and deliver a verdict. Jurors are randomly selected from the electoral roll, meaning they are Australian citizens aged 18 or older. In theory, this random selection helps ensure that juries reflect a broad cross-section of society, reducing the risk of bias.



Source 3: A criminal case trial in the Supreme Court. The accused person (defendant) sits with the defence lawyers, opposite the prosecution lawyers, who represent the police or the State in criminal matters. The jury of 12 members of the public listen carefully to the evidence of witnesses and decide on the guilt or innocence of the defendant. If guilty, the judge will decide on the sentence to be given in the case.

Source 2: Criminal law decided by the Federal Government, such as drug trafficking, is enforced by federal agencies such as the Australian Federal Police.

Learning ladder CC1.7

Types of laws

1. List the main responsibilities of criminal laws in Australian society.
2. Describe two important pieces of legislation.
3. Explain the role of the prosecution and the defence in Australian criminal law.
4. Outline which courts handle criminal matters.
5. Explain the role of a judge in the Australian criminal justice system.

Participating

1. What can happen to a person and to the community when someone is found guilty of a serious crime?
2. What role do juries play in enforcing the law?
3. How does the jury selection process aim to help our legal system operate in a fair way?
4. Create an idea for a campaign that teaches people about the fairness of our justice system. What would your message be, who is your audience, and how would you share your message?
5. Do you think the legal system is set up to deter most crime? Why or why not?

HOW TO

Participating, page 511

What is civil law?

While criminal law deals with offences against society with penalties such as imprisonment or fines, civil law addresses disputes between individuals or organisations, often resulting in compensation or other remedies for the injured party.

Civil law

Civil law attempts to resolve disagreements between people. A person (the **plaintiff**) will file a lawsuit against another party (the defendant) if they think they have been treated unfairly or suffered a loss. Examples of civil cases include accidents, contracts and issues over money and property.

A judge who finds the defendant was responsible will decide on a penalty such as a payment to the plaintiff (known as **damages**), a ban, loss of licence or an order for repair. Civil law cases do not include penalties of imprisonment.

Civil law is crucial for resolving disputes between individuals and organisations, ensuring that legal issues such as unpaid debts, **discrimination** and property disputes are addressed fairly. It plays a key role in protecting individual rights and maintaining social order by providing a structured way to handle conflicts. Additionally, civil law supports economic stability by enforcing contracts and legal obligations, which is essential for both personal and business relationships.

Unpaid debts

Civil law can enforce unpaid debts through court judgements and subsequent enforcement actions. For example, a **creditor** (organisation or person who has provided a loan) can obtain a judgement against a **debtor** (organisation or person who has taken out a loan) who has failed to repay a loan. When the debtor does not comply with the court order to pay, the creditor can apply for enforcement actions such as a **warrant**, which is a document from a government or legal official to authorise police to take action such as the seizure of property. These measures can allow the creditor to recover the owed amount by legally seizing the debtor's assets or recovering money from the debtor's wages.

Discrimination

Civil law protects against discrimination through legislation like the *Disability Discrimination Act 1992*. For instance, in the case of *Ryan v Sunshine Coast Hospital and Health Service 2021*, Mr Ryan, who had a severe vision impairment, faced indirect discrimination due to the hospital's design. The court found that the hospital's design did not meet accessibility standards, and as a result, the hospital was required to make necessary modifications to ensure it was accessible to individuals with disabilities.

Source 2: The NSW Supreme Court ruled that the $51 million donated to the Rural Fire Service trust could only be spent on equipment, training and administration costs.

Source 1: A sheriff locks the wheel of a car belonging to a person with an outstanding warrant. If you do not pay an infringement warrant on time, the sheriff can take money or property from you to pay the fine .

Contract law

Civil law protects against **breaches of contract** through court enforcement of contractual obligations. For example, in response to Australia's catastrophic bushfires during the summer of 2019–2020, Australian comedian Celeste Barber used her 7 million followers on Instagram to crowdfund a staggering $51 million for the NSW Rural Fire Service & Brigades Donations Fund trust (RFS Fund) via PayPal. Due to the surprisingly large sum of money raised, it was hoped by some, including Barber herself, that the money would be distributed to a variety of causes related to the fires; however, the NSW Supreme Court found that the entire amount must go to the RFS Fund. The court's decision emphasised the importance of adhering to the specific terms and conditions set out in the trust, similarly to how parties must comply with the terms of a contract.

Learning ladder CC1.8

Types of laws

1. List the people typically involved in a civil lawsuit. What roles do they play?
2. Describe the main objective of civil law in resolving disputes between individuals or organisations.
3. Source 1: Explain the ways in which civil law can enforce unpaid debts and ensure creditors are compensated.
4. **a** Explain how the *Ryan v Sunshine Coast Hospital and Health Service 2021* case illustrates the role of civil law in protecting against discrimination.
   b Source 2: What is the significance of the court's decision in the Celeste Barber crowdfunding case in terms of contract law and civil obligations?
5. Research and analyse one of the following civil cases and explain the importance of the outcomes:
   - *Waltons Stores (Interstate) Ltd v Maher, 1988*
   - *ACCC v Reckitt Benckiser, 2016*
   - *ASIC v RI Advice Group Pty Ltd 2020.*

Communicating ideas

1. How does civil law help solve problems such as discrimination, unpaid bills, or broken agreements?
2. Why might some people think civil law is fair and helpful, while others feel unhappy with court decisions?
3. How are civil law cases shown in court papers, in news stories and on social media? How might each one change how people understand the issue?
4. In the Ryan case, how were rights upheld?
5. Use examples from the text, such as discrimination, debts, or contracts, to explain why civil law is important for protecting people's rights.

HOW TO Communicating ideas, page 513

What is customary law?

First Nations Peoples have developed their own system of laws and punishments, passed down through generations by word of mouth. Different groups have developed laws to help understand their responsibilities to other people and the land.

'Law' and 'lore'

In the English language, 'law' refers to rules that people must follow. Laws are interpreted by the courts and enforced through the police. Failure to obey laws may result in a punishment such as a fine or a prison sentence.

'**Lore**' refers to the stories, customs, beliefs and spirituality stemming from **The Dreaming** and passed down through the generations. Lore guides First Nations Peoples in how they live their lives and interact with the land and community. The rules that Aboriginal communities follow are connected to their cultures and taught through Dreaming stories. In Australia, this system of rules and lore is referred to as **customary law**.

Customary law

Customary law is the accepted set of customs, practices and beliefs of a community of people. Practising customary law is a human right of the world's Indigenous peoples. In Australia, customary law relates to the practices developed by First Nations Peoples over time that connect people and the land, regulate acceptable behaviour and set appropriate penalties for non-compliance.

There is not one set of customary laws for all First Nations Peoples, and what applies within one group or region may not apply in another. Customary laws have been passed down through generations by word of mouth and are not codified. Customary laws and the role of Elders in Aboriginal societies are now gaining more interest from the legal system. This is because the criminal justice system is failing First Nations Peoples. They make up just 3 per cent of Australia's population, but 29 per cent of the prison population.

Customary law operates in various parts of Australia, particularly in regions with significant First Nations populations. This includes areas in the Northern Territory, Western Australia and Queensland, where First Nations communities maintain traditional practices and lores. Customary law is often considered in legal proceedings, especially in sentencing, to respect and integrate First Nations cultural practices.

Customary law in Australia includes an emphasis on:

- restoring relationships rather than punishing offenders
- the contributions of Elders in resolving conflicts
- using symbolism and ceremony in dispute resolution
- trusting collective action rather than individual rights.

Source 1: Residents of Bourke in central NSW are involved in a community project that pulls together the government, welfare organisations and Indigenous people. The Maranguka Justice Reinvestment Project (*Maranguka* means 'caring for others' in the local Ngemba language) has led to large drops in the Aboriginal crime rate. The project is guided by the Bourke Tribal Council (representing Bourke's 22 language groups) and the Maranguka community hub, where local First Nations officers meet with police daily to monitor any issues that crop up with young people.

Koori Court

The **Koori Court** is a court for First Nations Peoples in Victoria who have pleaded guilty to a criminal offence. It integrates customary law within the mainstream legal system to provide a culturally sensitive approach for First Nations offenders. The Koori Court involves Aboriginal Elders or respected persons in the sentencing process, allowing them to provide cultural context and support to the offender. This court operates with less formality, using plain language and a more inclusive setting to ensure that the accused understands the proceedings and feels respected. The aim is to reduce reoffending and improve outcomes by addressing the underlying issues contributing to the offending behaviour.

Source 2: The County Koori Court in Bendigo. This specialist court gives Aboriginal Elders an important role in the sentencing process for the Bendigo region.

Learning ladder CC1.9

Types of laws

1. List the people who play a central role in the maintenance and application of customary law in Aboriginal communities.
2. Describe the difference and similarities between 'law' and 'lore'.
3. Source 2: Explain how the Koori Court in Victoria integrates customary law into the mainstream legal system, and what the benefits of this approach are.
4. Source 1: Explain how the Maranguka Justice Reinvestment Project offers a different approach to reducing the crime rate in Bourke, where 30 per cent of the population is Aboriginal.
5. Analyse the approaches of the Maranguka Justice Reinvestment Project and Koori Courts for improving justice outcomes for First Nations Peoples. Which approach is likely to deliver longer-lasting benefits?

Investigating

1. How does customary law deal with justice?
2. Plan how you would find out how the Koori Court operates. What questions would you ask, and where would you look for information?
3. Use the text to find out the main features of customary law. How does it help reduce crime?
4. Make a Venn diagram comparing customary law and Australian criminal law. Think about things like the role of Elders, the types of penalties, and whether the focus is on healing or punishment.
5. Consider three sources about the Koori Court: a government report, a First Nations leader's speech and a news article. How might each of these sources help you understand the topic in a different way?

Investigating, page 506

HOW TO

How do I conduct an investigation?

Now that you've finished the chapter, it is time to conduct your own investigation on laws and citizens. Throughout the chapter you have developed knowledge and understanding of laws and citizens. Background knowledge is important because it helps you make connections to new information, ask better questions and consider different perspectives. As you progressed through the chapter, you have gathered information through classroom discussion, highlighting, note taking and answering questions. Now you are ready to start planning your own investigation into contemporary issues!

An investigation gives you the opportunity to be an active participant in contemporary civics and citizenship issues: investigating, interpreting and communicating your findings.

The chapter has covered the rule of law, how laws are made and interpreted in Australia, and the different types of law: criminal, civil and customary. What would you like to know more about?

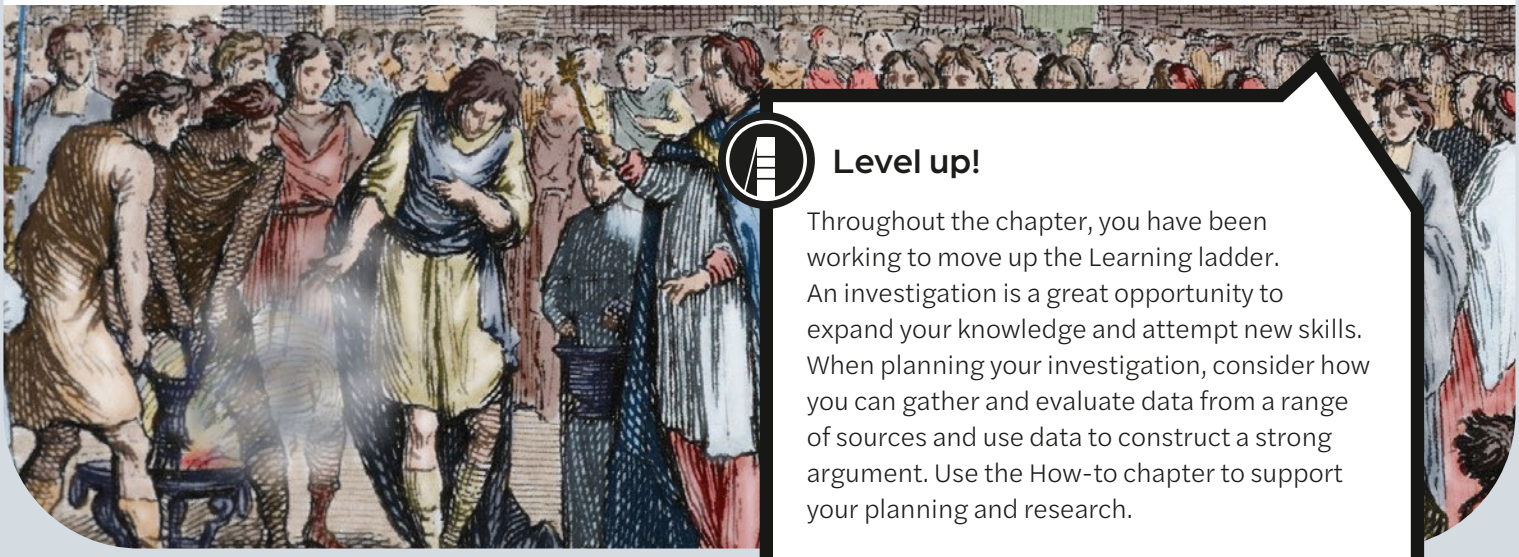
- How can citizens participate in lawmaking?, page 490
- How are laws made in Australia?, page 492
- What makes a crime in criminal law?, page 498
- What is civil law?, page 500
- What is customary law?, page 502

Return to the relevant pages in the chapter and read them again.

Next, complete the 'see, think, wonder' process to help develop ideas you might cover in your inquiry.

Jot down your answers to these questions. Your answers will help you to formulate your own research ideas. Once you have worked through this process, you are ready to start your investigation.

Refer to pages 506–8 of the How-to chapter for a step-by-step guide to this process.



Level up!

Throughout the chapter, you have been working to move up the Learning ladder. An investigation is a great opportunity to expand your knowledge and attempt new skills. When planning your investigation, consider how you can gather and evaluate data from a range of sources and use data to construct a strong argument. Use the How-to chapter to support your planning and research.

Civics & Citizenship

How-to

CC2

Civics and citizenship skills are based on investigating issues to evaluate different perspectives, actively engaging in democratic decision-making, and effectively communicating ideas.

How to develop civics and citizenship skills

The skills described in this How-to will help you participate in Australia's democracy as an active and informed citizen who questions, understands and contributes to your community and beyond. There are five levels of difficulty for each skill. Each skill is described and a model is provided that demonstrates how to master the skill at each level. Learning skills at the lowest level of difficulty will help you to master the skills at the highest level.

Investigating

Investigating is an important skill in civics and citizenship. It allows us to ask questions, gather information and evaluate different perspectives. By developing strong investigative skills, we can understand how democracy works, how people express their identities, and how to assess issues such as diversity, inclusion and active citizenship.

1 I can ask open-ended questions

Open-ended questions help us explore issues in detail. They do not have a simple 'yes' or 'no' answer. Instead, they begin with words like *why*, *how*, *what* or *to what extent* and encourage discussion and deeper research.

Example

Instead of asking 'Is Australia a multicultural country?' (which can be answered with yes or no), you could ask:

- How has multiculturalism shaped Australian identity?
- What challenges do migrants face when integrating into Australian society?
- In what ways does the Australian citizenship pledge reflect the country's values?

2 I can plan an investigation

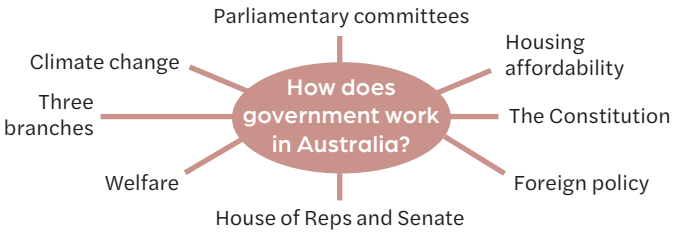
Planning an investigation involves selecting a topic, deciding what information you need and choosing where to find it. A well-planned investigation ensures you gather relevant and reliable data.

Example

Inquiry question: How does active citizenship improve social cohesion?

Planning steps:

1. Identify key aspects of the question (e.g. what is active citizenship, what is social cohesion, and how are they linked?).
2. Consider sources:
   - primary sources: government websites, interviews with community leaders
   - secondary sources: news articles, reports, academic studies.
3. Develop sub-questions:
   - What examples of active citizenship exist in Australia?
   - How do community groups help to build inclusion?



Source 1: Jot down key information in a brainstorm cloud.

3 I can gather information from secondary sources

Secondary sources are sources that have already been created by someone else. These include books, articles, government reports and databases.

Example

Inquiry question: Why do migrants become Australian citizens?

You might gather information from:

- the Australian Bureau of Statistics (ABS) for migration trends
- government websites explaining the citizenship process
- news articles about recent citizenship ceremonies.

Tip: Always check if your sources are up to date and come from trustworthy organisations.

4 I can sort and represent data and information

Once you gather information, you need to organise it in a way that makes sense. This may include using tables, graphs, charts or summaries to present key findings.

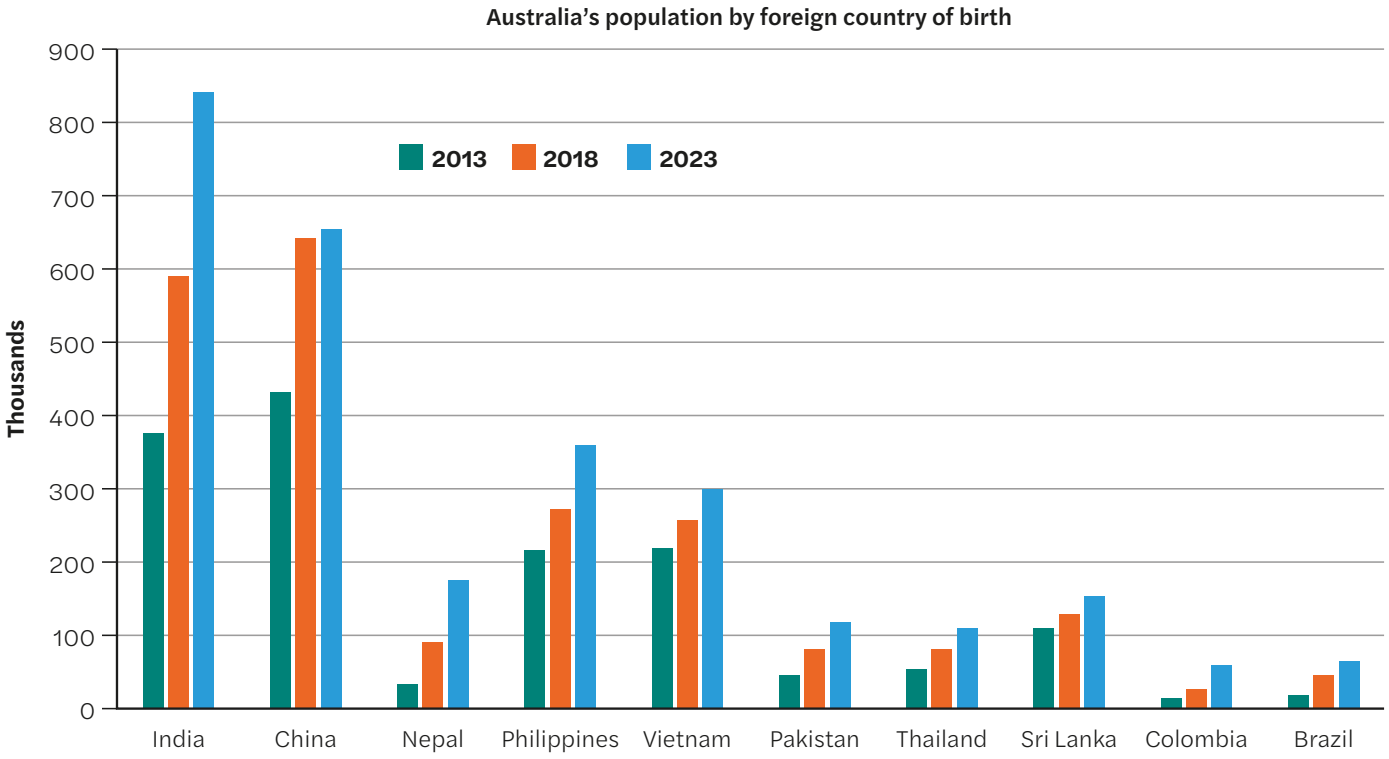
Source 2 shows the top 10 countries of birth for migrants to Australia from 2013, 2018 and 2023. This information could be represented as:

- a bar graph comparing migration numbers over time
- a table listing the top countries and their population changes
- a short summary explaining trends (e.g. 'Migration from Nepal has increased significantly in the last decade').

5 I can evaluate information from a range of sources

Evaluating sources means checking whether information is reliable, biased or outdated. It also involves comparing different perspectives to form a balanced understanding of an issue. Reliable information comes from trustworthy sources, is supported by evidence and is as up-to-date as possible.

Bias occurs when information is presented in a way that favours a particular viewpoint. This can happen deliberately (to persuade or influence) or unintentionally (due to personal experiences shaping the way someone interprets information). Even researchers must be aware of their own personal bias when evaluating sources, as our background, beliefs and experiences influence how we interpret information.



▲ **Source 2:** Top 10 countries of birth for migrants to Australia, 2013–2023

Source: Australian Bureau of Statistics

Example

Inquiry question: Is First Nations identity represented in Australian identity?

To evaluate this issue, you need to assess different types of sources:

- statements from First Nations leaders (perspective from First Nations Peoples)
- government policies on reconciliation and recognition
- public opinions from social cohesion reports.

Each source has different levels of reliability and potential bias.

How to evaluate bias and reliability in sources

When analysing sources, you can ask the following questions:

1. Who wrote this?
   - Was it created by the government, an academic, an activist group or a journalist?
   - Does the author have a particular agenda or motivation?
   - Are they an expert in the field, or are they expressing a personal opinion?
2. What is their perspective?
   - Every source is influenced by the author's background, values and beliefs.
   - Government sources may present official policies in a way that highlights achievements while downplaying ongoing issues.
   - Activist groups may focus on problems that still exist and argue that more action is needed.
   - First Nations leaders may provide first-hand perspectives, but different individuals and communities may have varying views on identity and representation.
3. Is the information current?
   - Policies and public attitudes change over time, so older sources may not reflect the current situation.
   - Checking publication dates helps determine if information is still relevant.

Personal bias

Even when evaluating sources objectively, you must recognise your own personal bias.

- Background and experiences: Someone with strong connections to First Nations communities may be more understanding to First Nations perspectives, while someone without personal experience may struggle to fully appreciate the issue.
- Preconceived beliefs: Someone who already believes that First Nations identity is not represented in Australia may only focus on evidence that supports their view and ignore sources that suggest otherwise (this is called confirmation bias).
- Choice of sources: The selection of sources influences the conclusion. For example, using only government reports on a land management issue without First Nations perspectives may not give a balanced view.

Example

Source type	Strengths	Potential biases and limitations
First Nations leader statement	First-hand perspective from a First Nations person. Represents lived experience.	May focus on a specific viewpoint within First Nations communities. Different leaders may have different opinions.
Government policy on First Nations recognition	Official stance of Australia's legal and political system. Shows what laws or policies are in place.	May be written to make the government look successful in addressing issues, downplaying criticisms.
Public opinion poll on First Nations identity	Reflects the feelings of a broad section of society. Can show trends in changing attitudes.	People's opinions can be influenced by media, misinformation or lack of knowledge. Some voices may be overrepresented or underrepresented.

Evaluating

Evaluating information is an essential skill for understanding government decisions, foreign policy and international relations. By developing this skill, you can assess key ideas such as Australia's role in the Asia–Pacific region, determine the reliability of sources and form well-supported conclusions about how Australia engages with the world.

1 I can identify data relevant to a question

Not all information is useful for answering a question. This skill helps you choose relevant data from sources such as government reports, statistics and expert analysis. Being selective about data ensures you focus only on what answers the question.

Example

Inquiry question: How does Australia support Pacific nations through foreign aid?

Relevant data includes:

- the total amount of aid Australia gives to Pacific nations
- specific projects funded, such as infrastructure, education and disaster relief
- statements from the Department of Foreign Affairs and Trade (DFAT) about aid priorities.

Irrelevant data might include:

- Australia's domestic welfare policies (which are not related to international aid)
- military spending that is unrelated to aid programs.

2 I can describe different interpretations

The same information can be interpreted differently. Recognising multiple perspectives helps you understand debates on government policies. Source 3 shows an example of multiple perspectives on an issue.

A news article might say:

'Pacific nations argue that Australian aid focuses too much on economic interests and not enough on addressing climate change, their biggest concern.'

A government report might say:

'Australia is the largest aid donor to the Pacific and plays a key role in economic development and climate resilience.'

Is Australia a good partner to Pacific nations?

Different interpretations:

- Positive view: 'Australia's aid demonstrates strong regional leadership and a commitment to stability in the Pacific.'
- Critical view: 'Australia's aid priorities sometimes favour its own economic and security interests over the needs of Pacific nations.'

Source 3: Mind map examining multiple perspectives on an issue

3 I can write evidence-based conclusions

Evidence-based conclusions are supported by facts, rather than opinions or assumptions. A strong conclusion summarises key findings and is backed by data.

Example

Inquiry question: How does Australia contribute to regional security through ASEAN?

Evidence

- Australia has been a dialogue partner of ASEAN (Association of Southeast Asian Nations) since 1974.
- It supports counter-terrorism, cybersecurity and maritime security programs.
- It participates in joint military training and disaster response initiatives.

Conclusion

Australia plays a key role in strengthening security in the Asia–Pacific region by working with ASEAN on counter-terrorism and disaster response. While this strengthens regional partnerships, some critics argue that Australia should also prioritise human rights and environmental issues in its ASEAN engagement.

4 I can analyse the reliability of information

Not all sources are reliable. Being critical of sources helps avoid misinformation. Analysing credibility involves checking:

- Who wrote it? (Government, academic, media, social media?)
- Is it recent? (Outdated data can be misleading.)
- Does it present bias? (Does the author have a particular agenda?)

Example

Inquiry question: How does Australia's trade relationship with China impact diplomacy?

Sources:

- Australian Government website: highlights benefits of trade with China, such as economic growth.
- Independent think tank report: examines both positive and negative aspects, such as trade disputes and political tensions.
- Social media post: claims 'Australia is too dependent on China', but provides no data.

Which source is most reliable?

- The think tank report is likely the most balanced.
- The government website may be reliable but could be biased in promoting only positive aspects.
- The social media post lacks evidence and should be fact-checked.

5 I can evaluate how institutions enhance democratic values and participation

Democratic institutions (such as parliaments, courts and foreign affairs agencies) help uphold Australia's role in global diplomacy and regional stability. Evaluating them means assessing how well they support democratic values.

Example

Inquiry question: How does Australia support democratic values through the United Nations (UN)?

Australia's contributions:

- Human Rights Council: advocates for freedom of speech and gender equality
- UN peacekeeping missions: sends personnel to help stabilise conflict zones
- Climate agreements: signs global agreements, but faces criticism for domestic policies.

'Australia plays an active role in the UN by promoting democratic values and human rights. However, its global leadership is sometimes questioned due to its environmental policies and stance on refugee issues.'

Participating

Participation in civics and citizenship involves actively engaging in democratic decision-making, such as reaching consensus, voting and contributing to civic discussions. It means taking part in processes that shape laws, policies and community decisions at the local, state and national levels.

Participation can include:

- voting in elections to choose representatives
- engaging in discussions and debates about civic issues
- reaching consensus through collaboration and compromise
- taking action on community concerns, such as signing petitions or attending public meetings.

By participating, you can help shape society and influence decisions that impact your life and the wider community.

1 I can identify outcomes

Identifying outcomes means understanding how democratic participation – such as reaching consensus and voting – affects decision-making on civic issues. This involves recognising the results of different methods of civic engagement at local, state and national levels.

Example

Inquiry question: How has social media influenced public attitudes towards multiculturalism in Australia?

Outcomes of social media influence:

- ✓ Positive: platforms like TikTok and Instagram celebrate multicultural festivals (e.g. Lunar New Year, Diwali), increasing public awareness of cultural diversity.
- ✓ Positive: campaigns like #RacismNotWelcome highlight discrimination and promote inclusion.
- ✗ Negative: misinformation spreads quickly, reinforcing stereotypes and fuelling division.
- ✗ Negative: some online platforms allow the spread of hate speech and extremist views.

By identifying these outcomes, you can assess whether social media is helping or harming attitudes towards diversity.

2 I can describe a strategy to achieve outcomes

A strategy is a planned action to influence attitudes or behaviours. Describing a strategy involves explaining how a media campaign or initiative works. By describing the impact, you can begin to determine whether a strategy is truly effective or needs improvement.

Example

Inquiry question: How can media platforms help prevent misinformation about migrants and refugees?

Strategy used:

- Fact-checking partnerships: Facebook works with fact-checkers to flag false posts.
- Educational content: NGOs and government agencies share real stories of migrants to combat stereotypes.
- Community guidelines and moderation: social media companies remove hate speech and misinformation.

Why this strategy?

- ✓ Helps people identify and reject false information.
- ✓ Encourages more positive and fact-based discussions about migration.
- ✓ Reduces online harassment and hate speech.

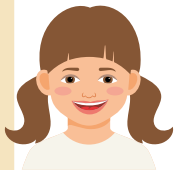
3 I can discuss the impact of a strategy

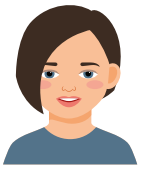
The impact of a strategy is measured by how much it changes attitudes or behaviour.

Does positive social media representation change attitudes towards diverse communities?

There was a range of positive impacts:

- ✓ There is increased visibility of diverse voices and stories in the media.
- ✓ More young Australians are engaging with multicultural content.
- ✓ There are reports of lower levels of discrimination in online spaces.





There was a range of challenges:

- ✗ Some users still face online hate and cyberbullying.
- ✗ Not all platforms enforce community guidelines effectively.

4 I can design strategies to achieve outcomes

Designing a strategy means developing a plan to respond to an issue and its effects. You need to think about what has already happened, what needs to change and how to make that change happen. A strong strategy is clear, realistic and based on good information, not just opinions.

When you design a strategy, ask yourself:

- What is the issue I'm trying to fix?
- What has already happened because of this issue?
- Who is affected, and what do they need?
- What actions will actually make a difference?
- How will I know if my strategy is working?

Example

Inquiry question: How can media better represent diverse identities in Australia?

Proposed strategy:

- diversity quotas in TV, film and newsrooms to ensure different communities are represented
- public campaigns encouraging brands and influencers to feature diverse voices
- educational programs teaching media literacy in schools to help students spot bias
- government policies that support diverse and inclusive media content.

Expected outcomes:

- greater representation of different cultural backgrounds in media
- reduction in harmful stereotypes and biases
- more inclusive content reflecting diversity.

5 I can evaluate the strategies used to make decisions

Evaluating strategies means assessing their effectiveness, strengths and weaknesses.

Example

Inquiry question: Has TikTok successfully reduced racist content and promoted diversity?

Key strategies used:

- Banning hate speech: TikTok removes racist and harmful content.
- Promoting diverse creators: TikTok's algorithm highlights content from minority voices.
- Collaborating with advocacy groups: groups advise TikTok on anti-racism policies.

Evaluation:

- ✓ Many users feel safer and more included.
- ✓ Positive campaigns like #BlackVoices and #IndigenousTok have increased awareness.
- ✗ Some racist content still slips through moderation.
- ✗ Algorithm bias may still exist, limiting exposure for minority voices.

While TikTok has taken important steps to reduce racism and promote diversity, there is still work to be done in improving content moderation and addressing bias.

Communicating ideas

Communication is a key part of being an active citizen. Whether you are discussing a legal issue, debating a civic topic or analysing political decisions, how you communicate your ideas matters. It is important to be able to describe, reflect, compare, explain and construct arguments.

1 I can describe civics and citizenship issues

Being able to describe civics and citizenship issues means explaining what a legal or political issue is, who it affects and why it matters. A good description is clear, factual and based on reliable sources.

Example

What are the key differences between criminal and civil law in Australia?

- Criminal law deals with offences against society (such as theft, assault or murder). The government prosecutes the accused, and punishments can include fines, community service or imprisonment.
- Civil law deals with disputes between individuals or organisations (such as contract disputes, property damage or defamation). The goal is usually compensation, not punishment.

2 I can reflect on my own and others' perspectives

Reflecting on perspectives means thinking about how different people see the same issue. It helps you understand why people have different views and how your own experiences shape your opinions. Reflecting on these perspectives helps you see the bigger picture, avoid bias (see page 508) and engage in more informed discussions.

Inquiry question: Should Aboriginal and Torres Strait Islander customary law be recognised alongside Australian law?

I think it's important to recognise customary law because it respects Indigenous traditions and allows First Nations peoples to have a justice system that reflects their cultural values.

I think some First Nations leaders argue that customary law helps resolve conflicts in culturally appropriate ways.

I think others worry that it could conflict with national laws, especially in cases involving human rights.

Some legal experts believe that elements of customary law should be included in sentencing decisions, but within the framework of Australian law.

3 I can compare different methods of communication

Different legal and civic issues are communicated in different ways – some formal, some informal. Comparing these methods helps us understand how information is shared, who it reaches and whether it is effective.

Example

Inquiry question: How do courts and the media communicate legal issues differently?

Method of communi-cation	Strengths	Weaknesses
Court judgment (official legal document)	Provides detailed, factual and legally accurate information	Uses technical legal language that may be hard to understand
News article	Translates legal language into simpler terms for the public	May focus on dramatic details instead of facts, leading to bias
Social media posts	Quick and easy to share Can spread awareness about legal issues	Often lacks full context Can spread misinformation

A high-profile criminal trial may be explained in a judge's sentencing remarks, summarised in a news article and debated on X. Each format influences public perception differently.

4 I can explain different perspectives using data

Instead of relying on opinions, strong communication uses facts to explain why different people see an issue in different ways. By using real data, you can explain perspectives fairly, without bias, and let the audience draw their own conclusions.

Example

Controversial topic: Should Australia introduce tougher penalties for youth offenders?

One perspective: Harsher penalties reduce crime.
Data:

- Data from government crime reports shows that increasing police presence has lowered youth crime rates in some areas.
- Surveys indicate that many Australians believe tougher sentences deter crime.

Another perspective: Rehabilitation is more effective than punishment.
Data:

- Studies show that countries focusing on rehabilitation (such as Norway) have lower reoffending rates.
- Youth diversion programs in Australia have reduced repeat offences in some communities.

5 I can use sources to construct evidence-based arguments

An evidence-based argument uses facts, legal cases and statistics to support a claim. It is not just about stating an opinion – it is about proving your point with reliable information. By using reliable sources, you can create a convincing, fact-based argument that can be used in debates, essays or civic discussions.

Example

Inquiry question: Should Australia raise the age of criminal responsibility from 10 to 14?

Claim: 'Australia should raise the age of criminal responsibility to 14 because scientific and legal evidence shows that young children lack the capacity for full criminal responsibility.'
Evidence:

- Medical research: Studies show that children's brains are still developing, affecting decision-making.
- International law: The UN recommends 14 as the minimum age for criminal responsibility.
- Legal precedent: Countries such as Germany and Sweden have already raised their criminal responsibility age.

Business and entrepreneurship

EB1

WHAT IS AN ENTREPRENEUR? 522

WHAT ARE THE DIFFERENT PURPOSES OF BUSINESSES? 520

HOW DO YOU IDENTIFY BUSINESS OPPORTUNITIES? 524

EB1.0

How can I study business and entrepreneurship?

Learn about different types and goals of businesses and discover how entrepreneurship helps to contribute to their success by taking advantage of market opportunities.

Learning ladder

The Learning ladder lists the knowledge and skills you will learn. Each has five levels of difficulty. Learning skills at the bottom of the ladder will help you to master the skills at the top of the ladder.

Steps in knowledge progression	Businesses	Entrepreneurship	Investigating
5	I can analyse how businesses exploit market opportunities.	I can evaluate the correlation between entrepreneurship and opportunity.	I can evaluate information from a range of sources.
4	I can discuss the characteristics of different businesses.	I can discuss the role that entrepreneurship plays in business.	I can sort and represent data and information.
3	I can explain how businesses operate.	I can explain how businesses become successful.	I can gather information from secondary sources.
2	I can describe different business ownership models.	I can describe entrepreneurial characteristics.	I can plan an investigation.
1	I can list reasons why businesses exist.	I can identify examples of entrepreneurship.	I can ask open-ended questions.
	Knowledge		

Source 1: A business produces goods or services to make a profit, employ people or further a social cause. The Salvation Army is a not-for-profit business, with all profits made through its stores and donations used for its charity work, not for its own profit. The Salvation Army is an example of a business that operates in the tertiary sector.

I can evaluate data and data sources for authenticity and validity.	I can draw conclusions and justify responses.	I can use evidence from sources to evaluate economic and business issues.	5
I can predict change to patterns.	I can evaluate responses using cost–benefit analysis or other criteria.	I can explain arguments using data.	4
I can explain cause-and-effect relationships.	I can develop responses to economic and business issues.	I can support explanations with data.	3
I can describe trends.	I can describe the criteria to respond to an issue.	I can explain arguments.	2
I can read tabulated data and graphs.	I can identify an economic and business issue.	I can describe economic and business issues.	1
Interpreting	**Decision-making**	**Communicating ideas**	Steps in skills progression

Skills

EB1.1

What are the different types of businesses?

Businesses in the primary, secondary and tertiary sectors of the market produce goods and services for customers. Each business is structured to help it succeed, from one-person businesses to large companies with specialised functions.

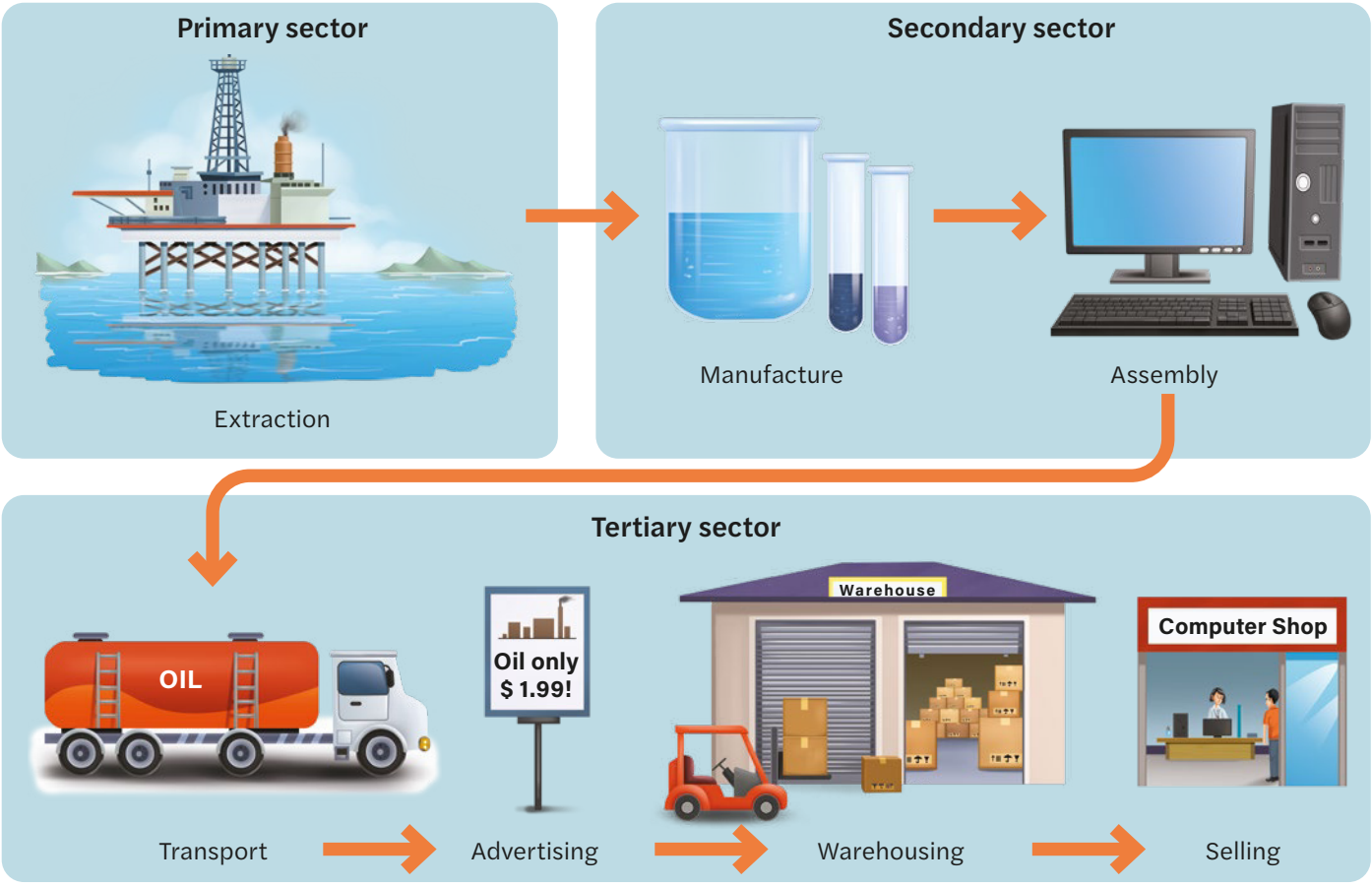
What is a business?

The term **business** refers to an individual or organisation that produces goods or services to make a profit, employ people or further a social cause. **For-profit** businesses are involved in the sale and purchase of goods and services. **Not-for-profit** businesses do not operate for monetary or other benefits. These businesses fulfil a charitable mission or exist to further a social cause.

Businesses are categorised into different sectors and industries:

- **primary sector:** industries involved in the extraction and production of **raw materials**, e.g. farming, forestry, mining and fishing
- **secondary sector: manufacturing** industries involved in the production of **products**, e.g. construction, shipbuilding, baking, textile production and printing
- **tertiary sector:** businesses providing **services** instead of end products, e.g. hospitals, schools, transport, plumbing, accounting, retail and garbage collection.

Source 1: An example of how the different business sectors work together, with the secondary sector relying on the primary sector for raw materials and the tertiary sector containing industries that provide services to distribute and market the products from the secondary sector.



How are businesses structured?

When starting a business, you need to decide what structure it will take. The business ownership structure impacts decision-making, how business costs and profits are shared, and your legal and **tax** obligations. Business ownership structures can change as a business evolves. There are three key types of business ownership, each with its own advantages and disadvantages:

- **sole proprietorship:** owned and operated by one individual person, who is the sole decision-maker and responsible for the tax and legal **liabilities** of the business
- **partnership:** where two or more people (up to 20) go into business together. Each partner contributes expertise and **capital** to the business and receives a share in the business' profits and losses. In forming a partnership it is important to reach agreement on the decision-making authorities and liabilities of each partner, and how business profits and losses will be distributed
- **company:** where a business forms a separate legal entity. A company has **shareholders** who own the company and **directors** who operate it. Companies are more complex to run and have different taxation rules.

At age 24, **entrepreneur** Peter Alexander began his own sole proprietorship business by designing and making women's pyjamas from his mother's dining table. He began as a wholesaler, selling pyjamas to department stores. To make the business seem larger, Peter and his mother would pretend to be other people when they answered the phone.

When a department store cancelled a large order, Peter was left with stock to clear and he started a mail order business. 'Then our business changed to be more about catalogues and direct selling and we got out of wholesale,' he explained.

In 2000 Peter Alexander sold his business to the Australian retail company Just Group. He was happy for experts to take over the finances and the distribution and warehousing parts of the business that he had controlled as a sole proprietor. Peter took a role as general manager with Just Group. He stated, 'Now I'm just in charge of design, and advertising and promotion, and they're the two areas I like.'

Source 2: Quotations from *Peter Alexander, the pyjama man behind the brand*, Dynamic Business, 2005

Learning ladder EB1.1

Businesses

1. **a** Source 1: Using examples, list the three main business sectors.
   b Source 2: In which sector of the market does Peter Alexander operate?
2. Describe the three different business ownership models.
3. Explain the advantages of having a partnership over a sole proprietorship.
4. Source 2: How did Peter Alexander's role in the business change when he moved from sole proprietorship to a company structure? Discuss the advantages of each business ownership model.
5. Source 2: Analyse how Peter Alexander's business evolved to take advantage of market opportunities.

Decision-making

1. What problem did Peter Alexander face when a department store cancelled a big order, and how did it affect his business?
2. What things would Peter Alexander have thought about when deciding whether to keep selling to stores or switch to mail orders?
3. What are two things a small business owner could do if they lose a big customer? What are the good and bad sides of each option?
4. What were the pros and cons of Peter Alexander selling his business to the Just Group? Think about how it affected his control, access to help, and business growth.
5. Should a small but growing business stay owned by one person, or become a company? Use what happened to Peter Alexander to explain your answer.

HOW TO

Decision-making, page 546

What are the different purposes of businesses?

Businesses have existed in Australia for thousands of years to create value for enterprises and their customers. Businesses set goals to achieve financial benchmarks, customer satisfaction, staff training, and social and environmental improvements.

Early First Nations trade networks

First Nations Peoples have been running businesses for thousands of years, including the establishment of a large trading network that connected different clans throughout Australia. The purpose of trade among different First Nations Peoples was to obtain goods that were not available in their **Country**. Trade wasn't just about goods; it also enabled social interaction and sharing of stories and cultural knowledge.

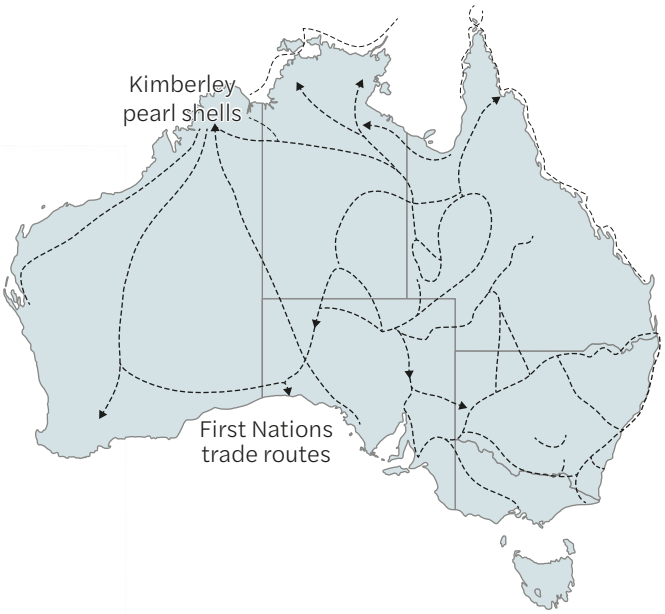
First Nations Peoples traded **natural resources** like ochres (painting material), pearl shells used for decoration, and stone and timber used for making tools such as axes and boomerangs. They even traded with international visitors from South-East Asia for delicacies such as sea cucumbers. Scarce items that were only found in a few locations were traded over very long distances. For example, pearl shells from the Kimberley region in north-western Australia were traded through networks into Central Australia, South Australia and western Queensland.

The **economy** developed by First Nations Peoples involved swapping, or **bartering**, one item for another. The extensive trade network helped enable the exchange system, and events such as exchange ceremonies allowed larger groups to come together to barter for goods and exchange cultural knowledge.

Business purpose and goals

Businesses exist to create value for owners, **customers** and employees. For example, businesses can create value by making financial gains or by introducing innovation or making a positive social impact.

Businesses set goals to help them work towards achieving their purpose. They review the success of the plans to reach these goals at regular intervals.



Source 1: Pearl shells from the Kimberley region were widely traded along the First Nations trade routes throughout much of Australia. Pearl shell is still an important cultural and religious artefact to some First Nations people. Here, Terry Hunter, a Bardi man from the Kimberley region, holds a *pinctada maxima* oyster shell.

Financial goals are directly related to money, such as sales, costs and profits. Businesses set financial goals to increase sales, improve efficiency or increase profits by reducing costs. Australia's largest business is BHP, a mining company with $65 billion of revenue in 2023.

Organisational goals are goals that help businesses to become (or remain) successful, but are not measured in dollars; for example, training staff, having satisfied customers or improving safety and environmental sustainability.

Thank you

Thankyou is a not-for-profit Australian **social enterprise** with very clear business goals. Its original financial goals were to tap into the global billion-dollar bottled water business. To compete with large multinational corporations such as Coca-Cola, Thankyou promised **consumers** that 100 per cent of the profits from the business would go to helping the 700 million people around the world without access to safe water.

Setting the goals

Co-founder Daniel Flynn had a clear organisational goal for the business. Profit from the sale of every bottle of Thankyou water would be used to fund water wells, filters, safe toilets and hygiene education in countries that need help. 'We wanted to tackle a huge global problem with a huge global product, and the product to get us there was bottled water. We felt the link was very important for customers: buying water and funding water, and buying food and funding food, and so on.'

Setting the strategy

Thankyou used social media to show retailers there was a demand for a product that would help people in need around the world. Before an important meeting with the 7-Eleven chain of convenience stores, Thankyou asked its Facebook followers to jump onto 7-Eleven's Facebook wall to tell them that if they stocked Thankyou water, the followers would buy it. Within a day, 7-Eleven was inundated with Facebook posts – and within weeks Thankyou water was on its shelves.

Updating the strategy

The company eventually decided to stop production of Thankyou water to reduce the environmental impact of single-use bottled water. Thankyou continues with other products such as hand wash to empower consumers to help end poverty through their purchases.

Source 2: Thankyou co-founder Daniel Flynn

Learning ladder EB1.2

Businesses

1. List some of the reasons why businesses exist.
2. Describe the original organisational goal for Thankyou.
3. **a** Source 1: Explain how and why pearl shells from the Kimberley region were traded so widely across Australia.
   b What business opportunity did Thankyou see to help tackle the safe water crisis?
4. Discuss how the goals of not-for-profit businesses such as Thankyou are similar to and different from for-profit businesses.
5. Interview someone you know who works in a business about financial goals, organisational goals and strategies to help reach business goals. Analyse how organisational goals such as customer satisfaction and staff training are important for a business to remain successful.

Communicating ideas

1. How did First Nations trade do more than just help with money or goods? How did it also help with sharing culture and building relationships?
2. Explain the idea that not-for-profit businesses can still do well if their products match their goal to help others.
3. What sort of data would help show the positive impact that Thankyou has had on water projects over time?
4. Use sales or donation numbers (real or made up) to explain how Thankyou was able to make money and also help people at the same time.
5. How was Thankyou able to use social media to get its bottled water stocked by 7-Eleven?

HOW TO Communicating ideas, page 548

What is an entrepreneur?

Successful entrepreneurs recognise business opportunities and are passionate about taking their ideas to the market. They are prepared to take risks and need to show resilience to overcome rejection and recover from failures.

Entrepreneurs

An entrepreneur is a person who sets up a business, taking on risks to explore an opportunity that will earn a profit or satisfy a personal goal. Successful entrepreneurs have these characteristics:

- a passion for what they do
- a willingness to take risks
- resilience to recover from failures
- the ability to work hard
- sound financial judgement.

Tim Sweeney – gaming entrepreneur

In 1991, at age 20, Tim Sweeney began Epic Games in his parents' basement with $4000 from his personal savings. Sweeney now has an estimated wealth of nearly $10 billion. Sweeney is an entrepreneur best known as the man behind the world's most played video game, Fortnite, played by 350 million registered users around the world.

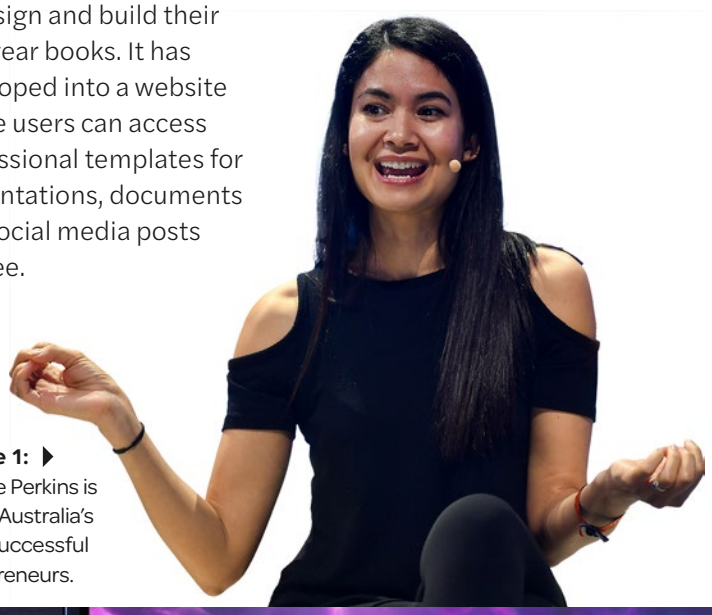
Like all entrepreneurs, Sweeney has a great passion for what he does. At the age of 11, Sweeney used his computer to program video games. In an interview with *The Wall Street Journal*, Sweeney said that he spent more time 'programming than I think I was sleeping or in school or doing any other one thing in the world'.

Sweeney has shown a willingness to take risks. Epic Games made the popular shooter game format less violent, and bloodless battles were welcomed by parents. Fortnite added colourful characters who competed with dance moves as well as weapons. Unlike other games, Fortnite was free and available on all platforms and devices, because Sweeney wanted players using different platforms to be able to battle with each other.

He showed resilience by constantly overcoming rejection from large tech giants Microsoft and Sony to eventually become the first video game creator to remove barriers between players using different types of devices. Fortnite has become a massive social network as groups of friends chat while playing the game.

Melanie Perkins

Melanie Perkins is co-founder and chief executive officer of Canva, with a net worth of more than $5 billion. Canva began as a business that gave schools the tools to design and build their own year books. It has developed into a website where users can access professional templates for presentations, documents and social media posts for free.



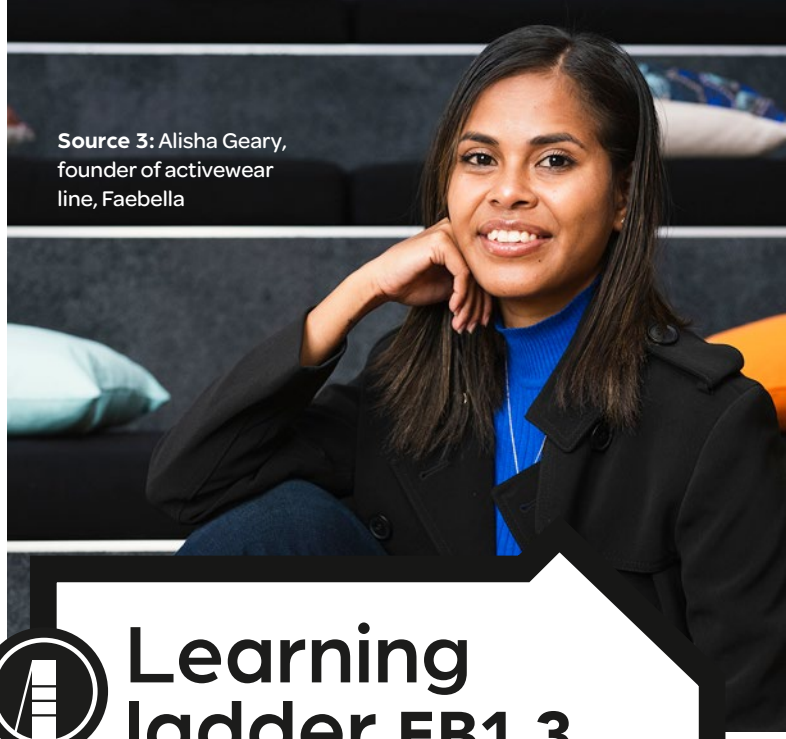
Source 1: ▶ Melanie Perkins is one of Australia's most successful entrepreneurs.

Perkins had a strong vision for the product she wanted to create, but had to convince **investors** to back her. She slept on the floor of her brother's house and spent three months in the United States meeting with every person she could to find investors for her idea of a free online design hub. She was knocked back by more than 100 investors before receiving funding to build the Canva platform. Perkins had to show great resilience and understand that rejection was part of the process.

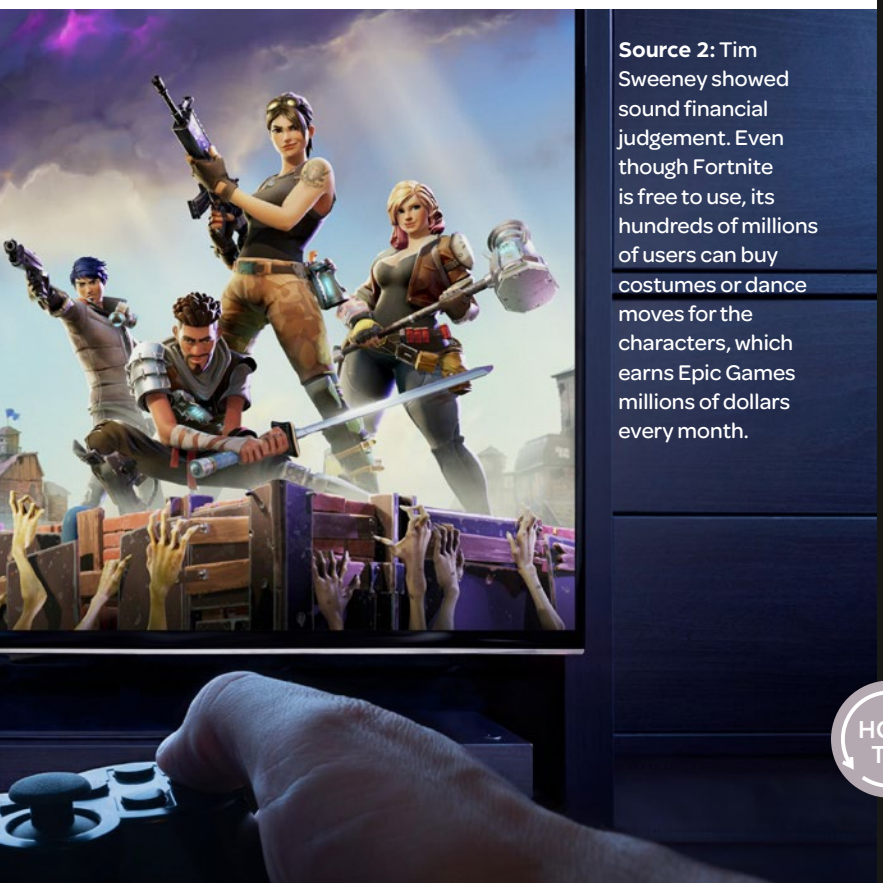
Alisha Geary

Alisha Geary is a First Nations entrepreneur. 'I just have a creator mindset. I've always loved creating things that weren't there before,' Geary says. While studying commerce and law at Bond University, Geary started her own activewear brand, Faebella, featuring authentic artworks from Aboriginal and Torres Strait Islander artists.

Geary's experience with Faebella fuelled her passion of wanting to enable First Nations artists across Australia to find new opportunities to sell their artworks. She began mediating for artists with companies that wanted to license their works. Geary launched a digital platform called Provvy in 2022 to ensure First Nations artists get paid for their work. Contracts for artworks are linked to non-fungible tokens (NFTs), which are digital records of ownership that enable artists to not only be paid once for their artwork, but also sell usage rights to their art wherever it is used.



Source 3: Alisha Geary, founder of activewear line, Faebella



Source 2: Tim Sweeney showed sound financial judgement. Even though Fortnite is free to use, its hundreds of millions of users can buy costumes or dance moves for the characters, which earns Epic Games millions of dollars every month.

Learning ladder EB1.3

Entrepreneurship

1. Identify the characteristics of successful entrepreneurs.
2. Source 1: Describe how Melanie Perkins became a successful technology entrepreneur.
3. Using examples from two entrepreneurs, explain why resilience is an important attribute of a successful entrepreneur.
4. Source 3: Discuss how Alisha Geary's entrepreneurial projects helped other First Nations businesses to develop.
5. Evaluate the importance of entrepreneurship in uncovering new market opportunities.

Investigating

1. What helps someone turn a good idea into a successful business?
2. How would you research how being resilient (not giving up) helps people succeed in business? What would you ask, and where would you look for information?
3. What trustworthy websites, videos or books could you use to learn about how Melanie Perkins started Canva or how Alisha Geary worked with First Nations artists?
4. Make a table to compare how Tim Sweeney, Melanie Perkins and Alisha Geary started their businesses. Include what motivated them, what problems they faced, what they did to succeed, and what happened in the end.
5. You find a tech news article, a written interview, and a company press release about Epic Games. Which one gives the most trustworthy information, and why?

HOW TO Investigating, page 540

How do you identify business opportunities?

Successful businesses identify new market opportunities and gaps in existing markets. They test their ideas by surveying what customers want and watching the successes and failures of competitors.

Identifying business opportunities

Aspiring entrepreneurs may come up with an idea for a new business, but they need to test whether or not it has a real chance of success. To be successful, all businesses rely on their customers to use their service or buy their product. By choosing to spend money, customers let businesses know their needs and wants, which encourages the producer to keep making the product or delivering the service.

To test a new business idea, use these three questions to help establish whether the business idea has a real chance of success with customers:

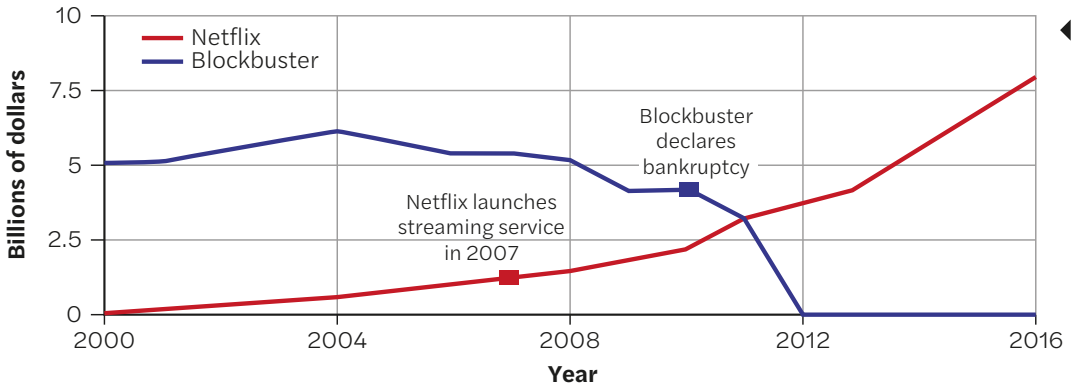
1 Does it solve a customer pain point?

Customer pain points are problems customers experience when using a product or interacting with a service. Enterpreneur and inventor Fred van der Weij identified that many people who enjoyed fried food were unhappy with the high fat content of cooking oil. In 2010 he released the first airfryer, using hot air to fry food, through the Philips technology company. The product rapidly gained popularity for delivering fried food with up to 80 per cent less fat, taking away a major customer pain point.

2 Does it fulfil a market need?

Market research is used to help prove whether a business idea is fulfilling a market need. You need to understand both your competitors and your target audience by studying industry trends and gathering feedback from potential customers. Surveying people in your **target market** helps you to gain a better understanding of whether or not your product offering will be welcomed by customers. The idea for a product or service can change based on the results of the market research.

Source 1: Nornie Bero is an entrepreneur who recognised a growing demand for Australian bushfoods. She connects to her Meriam (Torres Strait Islands) culture through her businesses Mabu Mabu, which sells condiments and spices featuring bushfood ingredients, and Big Esso, a restaurant showcasing a menu inspired by the Torres Strait Islands.



Source 2: Blockbuster and Netflix revenue from 2000 to 2016

Source: Cloud Technology Partners 2017

3 Does it improve an existing product or service?

Entrepreneurship doesn't only involve brand-new ideas; it also includes innovations to existing products and services. Product and service improvement involves changing an existing product or service to make it more effective. It can involve changing a design, improving performance or adding new features and capabilities to a product – for example, a longer battery life or an improved camera for a mobile phone. Product and service improvements aim to increase appeal to consumers and therefore increase sales.

Netflix

Despite having a successful DVD rental service, Netflix recognised that its customers would prefer easy-to-access entertainment streamed into their homes. In 2007 Netflix launched an online streaming platform that changed how we consume entertainment. Its larger rival at the time, Blockbuster, failed to see the shift in what customers expected and crashed from a $5 billion business to a bankrupt one in just three years (Source 2).

Innovation of First Nations businesses

First Nations businesses face similar challenges to other businesses, but they have some unique insights to help them thrive. First Nations Peoples have a deep cultural relationship with the land. They have a long tradition of innovation in Australia, where they have developed sustainable and culturally rich enterprises based on available resources.

Modern First Nations entrepreneurs have identified niche markets where they can introduce unique products and services. Culturally-based businesses in education, art, tourism and bushfoods give First Nations businesses a unique marketing advantage over non-Indigenous companies due to their deep cultural relationship with the land (Source 1).

Learning ladder EB1.4

Entrepreneurship

1. Identify the features that all businesses need in order to be successful.
2. Describe how businesses test new ideas.
3. Source 2: Explain how Netflix recognised and exploited a new market opportunity.
4. **a** Source 1: What advantage do First Nations businesses such as Mabu Mabu have over non-Indigenous businesses?
   b Research a First Nations business and discuss the goods and services offered as well as the target market.
5. Evaluate the importance of entrepreneurship in bringing innovation to existing products and services. How does it help you break into a market or increase the market you have?

Interpreting

1. If you saw a graph showing DVD rentals going down and streaming services going up over 10 years, what would it tell you about how people's choices have changed?
2. Why did Netflix become popular while Blockbuster shut down? What changed about what customers wanted?
3. How did people not liking greasy food lead to the invention and success of the airfryer?
4. If more people care about the environment and buying products that respect culture, how might that help First Nations bushfood businesses grow?
5. You find two sources about why Netflix became successful: one is a blog from Netflix, and the other is from a global research company. Which one would you trust more, and why?

HOW TO

Interpreting, page 543

How do I conduct an investigation?

Now that you've finished the chapter, it is time to conduct your own investigation on business and entrepreneurship. Throughout the chapter you have developed knowledge and understanding of business and entrepreneurship. Background knowledge is important because it helps you make connections to new information, ask better questions and consider different perspectives. As you progressed through the chapter, you have gathered information through classroom discussion, highlighting, note taking and answering questions. Now you are ready to start planning your own investigation into contemporary issues!

An investigation gives you the opportunity to be an active participant in contemporary economics and business issues: investigating, interpreting and communicating your findings.

The chapter has covered the different types and purposes of businesses, the characteristics of entrepreneurs, and how to identify business opportunities. What would you like to know more about?

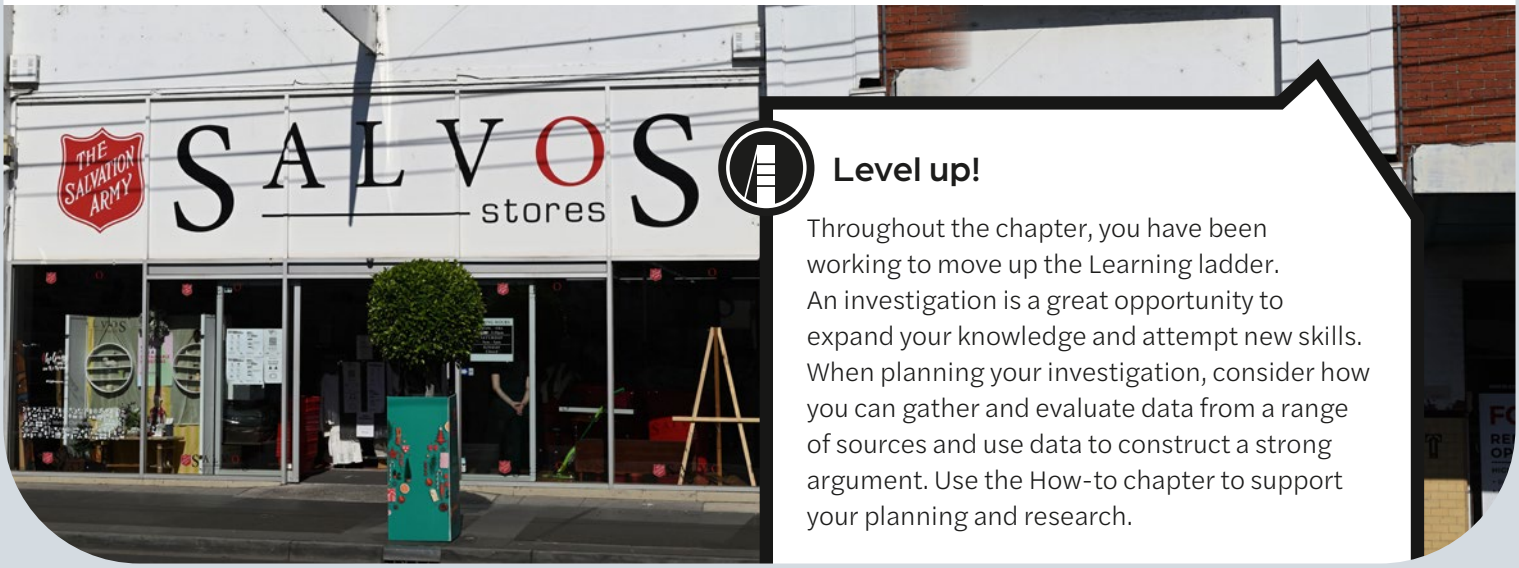
- What are the different types of businesses?, page 518
- What are the different purposes of businesses?, page 520
- What is an entrepreneur?, page 522
- How do you identify business opportunities?, page 524

Return to the relevant pages in the chapter and read them again.

Next, complete the 'see, think, wonder' process to help develop ideas you might cover in your inquiry.

Jot down your answers to these questions. Your answers will help you to formulate your own research ideas. Once you have worked through this process, you are ready to start your investigation.

Refer to pages 540–2 of the How-to chapter for a step-by-step guide to this process.



Level up!

Throughout the chapter, you have been working to move up the Learning ladder. An investigation is a great opportunity to expand your knowledge and attempt new skills. When planning your investigation, consider how you can gather and evaluate data from a range of sources and use data to construct a strong argument. Use the How-to chapter to support your planning and research.

Economics and business

Work

EB2

HOW DO WE WORK IN AUSTRALIA? 532

HOW IS WORK CHANGING IN MODERN AUSTRALIA? 534

HOW ARE WORKPLACES IMPROVING? 536

EB2.0

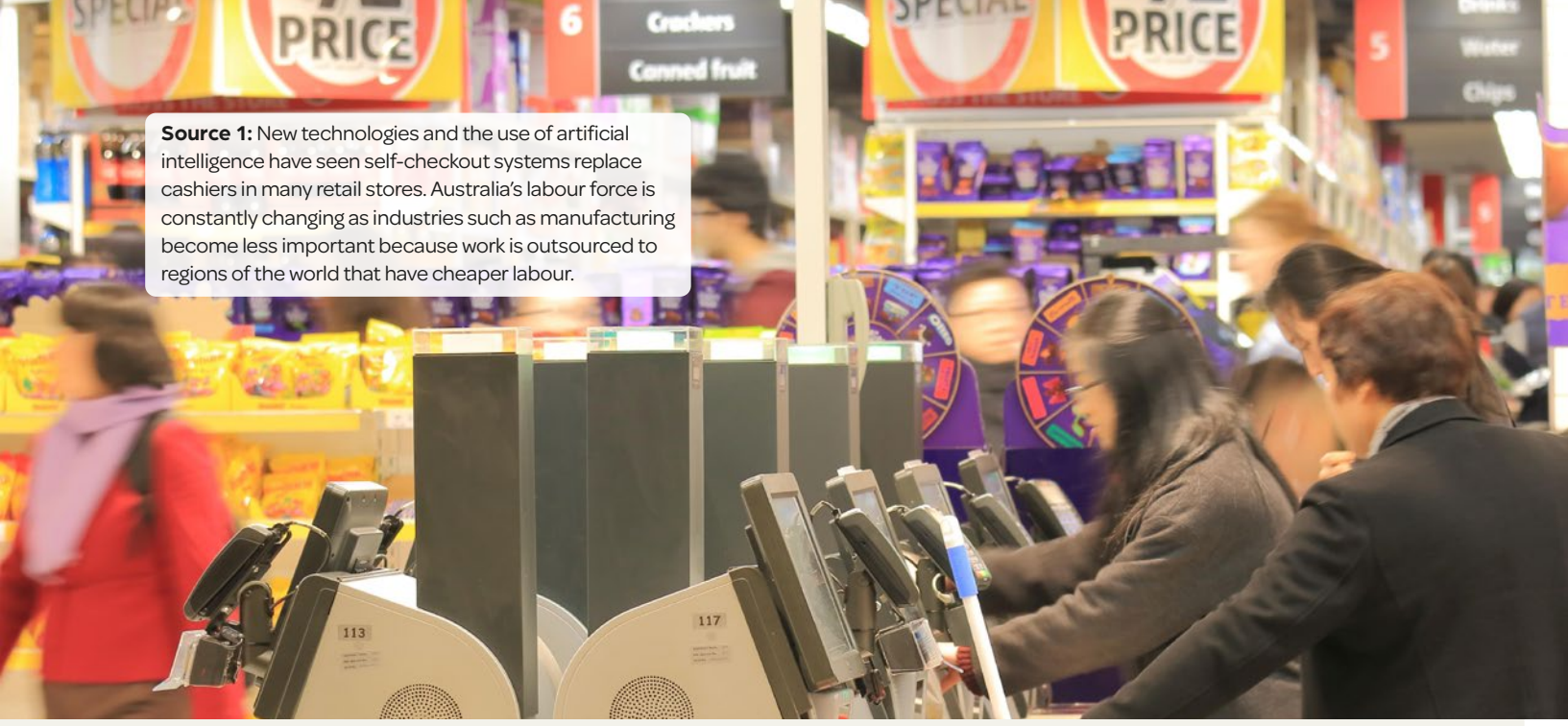
How can I study work?

You will learn about the changes in the workforce over time and predict how work will continue to change through changing technologies and demands. You will analyse the importance of work and the rights and responsibilities of businesses and workers.

Learning ladder

The Learning ladder lists the knowledge and skills you will learn. Each has five levels of difficulty. Learning skills at the bottom of the ladder will help you to master the skills at the top of the ladder.

Steps in knowledge progression	The workforce	Changes to work	Investigating
5	I can analyse how work contributes to identity.	I can predict the impact of changes to work.	I can evaluate information from a range of sources.
4	I can discuss the importance of work and how it impacts living standards.	I can assess the factors contributing to changes to work.	I can sort and represent data and information.
3	I can explain how people earn money.	I can explain the impact of change in the workplace.	I can gather information from secondary sources.
2	I can describe why people work.	I can describe changes to work.	I can plan an investigation.
1	I can identify types of work.	I can identify changes to work.	I can ask open-ended questions.
	Knowledge		



Source 1: New technologies and the use of artificial intelligence have seen self-checkout systems replace cashiers in many retail stores. Australia's labour force is constantly changing as industries such as manufacturing become less important because work is outsourced to regions of the world that have cheaper labour.

Interpreting	Decision-making	Communicating ideas	Steps in skills progression
I can evaluate data and data sources for authenticity and validity.	I can draw conclusions and justify responses.	I can use evidence from sources to evaluate economic and business issues.	5
I can predict change to patterns.	I can evaluate responses using cost–benefit analysis or other criteria.	I can explain arguments using data.	4
I can explain cause-and-effect relationships.	I can develop responses to economic and business issues.	I can support explanations with data.	3
I can describe trends.	I can describe the criteria to respond to an issue.	I can explain arguments.	2
I can read tabulated data and graphs.	I can identify an economic and business issue.	I can describe economic and business issues.	1

Skills

Why do we work?

In Australia, most people work to earn an income. Work also provides other important outcomes, such as developing new skills and increasing confidence and self-esteem. More than 160 million children around the world are forced to work to support their families.

Income

The key reason people work is to receive a **wage** or **salary** to purchase the goods and services they need and want. A salaried worker is paid a fixed amount per week, fortnight or month and a wage worker is paid by the hour. People can also derive an **income** from owning a business, investing in shares, rent from properties or a social security benefit such as a **pension**.

The amount of income a person receives depends on a number of factors, including:

- their education and qualifications
- the amount of experience they have
- the difficulty of the work they undertake
- the number of hours they work.

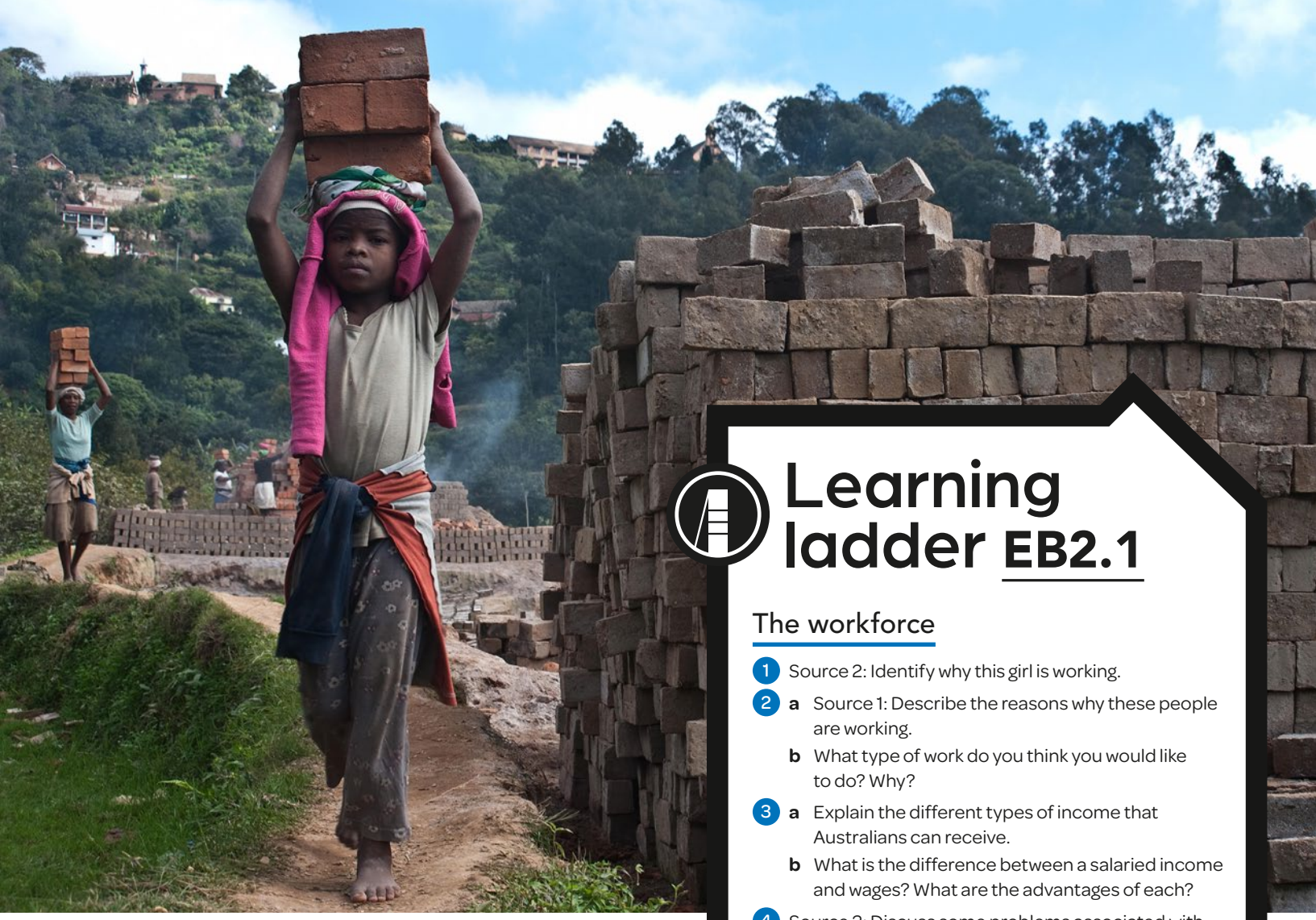
A sense of purpose

Workers gain a sense of purpose from working. For example, teachers might get enjoyment from knowing they are making a difference to young people's lives. **Volunteers** such as charity workers, community firefighters and drivers work for free to give something back to the community or make a difference to people in need.

There are many rewards other than income that people get from work, such as:

- doing a job well and receiving praise for their effort
- doing something they are passionate about
- increasing confidence and self-esteem
- developing skills and talents
- being part of a team.

Source 1: Interacting with work colleagues can be a very enjoyable part of work.



Source 2: A young Madagascan girl carries bricks at a brickworks. Madagascar is one of the poorest countries in the world, where millions of people suffer from hunger. Children in Madagascar are forced to work in unsafe places such as quarries, brickworks, mica mines and farms to help support their families. In 2022 it was estimated that 43 per cent of Madagascan children aged 5 to 14 were working and just 63 per cent completed primary school. Many of the tasks involve children lifting heavy loads and using sharp or dangerous tools. Children have little or no safety equipment, including basics such as shoes.

Some people don't have a choice

In some countries children are forced into work at a young age to help support their families. Child **labour** is cheap and children work in dangerous jobs such as shipyards, mines and quarries. A modern version of slavery has developed in Madagascar, Africa, where a quarter of children aged 5 to 17 have to work to support their families.

Outsourcing work from rich countries like Australia to countries with low labour costs raises concerns about the exploitation of poor workers. Many workers in low-income countries may be forced to work long hours in unsafe working conditions. Up to 168 million children aged 5 to 14 around the world are being forced to work.

Learning ladder EB2.1

The workforce

1. Source 2: Identify why this girl is working.
2. **a** Source 1: Describe the reasons why these people are working.
   b What type of work do you think you would like to do? Why?
3. **a** Explain the different types of income that Australians can receive.
   b What is the difference between a salaried income and wages? What are the advantages of each?
4. Source 2: Discuss some problems associated with businesses outsourcing work to countries with low labour costs, such as Madagascar.
5. Analyse the role of volunteers. What individual and community benefits do they bring?

Interpreting

1. If you saw a bar graph showing average pay for different jobs, how might factors like education, qualifications and/or experience affect how much people earn?
2. How do reasons for working change between people who work for money and those who volunteer to help others?
3. How can moving jobs from rich countries to poorer ones lead to unsafe workplaces and unfair treatment of workers?
4. If more companies are asked to buy products from fair and safe workplaces, how might this change child labour or working conditions in poorer countries?
5. If you saw two different sets of facts about child labour – one from the United Nations and one from a clothing company – which one would you trust more, and why?

HOW TO Interpreting, page 543

EB2.2

How do we work in Australia?

In Australia, people work in various employment types including full-time, part-time and casual roles, each with different hours, job security and benefits. Additionally, many Australians contribute to their communities by engaging in volunteer work.

The Australian labour force

If you are working, then you are part of the **labour force**. People are in the Australian labour force if they are over 15 years of age and either **employed**, or **unemployed** but looking for work. The size of the Australian labour force has steadily grown from 9.5 million participants in 2001 to more than 13 million in 2021.

The **unemployment rate** is the number of unemployed persons expressed as a percentage of the labour force. The rate of unemployment rises during poor economic times such as **recession**, when an **economy** shrinks. In 2020 the COVID-19 pandemic triggered a global recession and caused Australia's unemployment rate to jump from 5.1 per cent in February to 7.4 per cent in July. By April 2021 the unemployment rate had returned to 5.5 per cent as vaccines began to roll out across Australia.

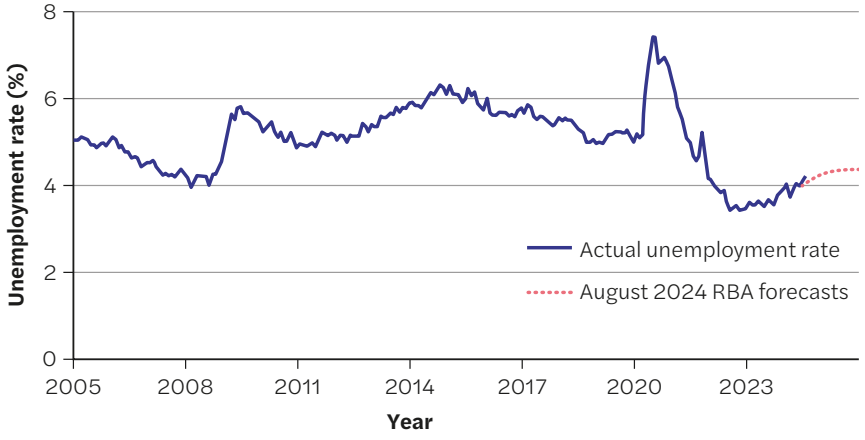
Different categories of work

Working **full time** for a wage or salary can enhance material living standards by providing a stable income, which allows people to afford essential goods and services such as housing, food and healthcare. It also enables people to save and invest, leading to financial security and the ability to purchase non-essential items that improve quality of life. In terms of non-material living standards, full-time employment can provide a sense of purpose and fulfillment, contributing to overall mental wellbeing (see page 530).

In Australia, full-time work generally involves working between 35 and 40 hours per week. Full-time **employees** can be on permanent, fixed-term, **freelance** or contract arrangements, and they are entitled to benefits such as **paid leave** and **overtime** pay, depending on their industry and employment contract.

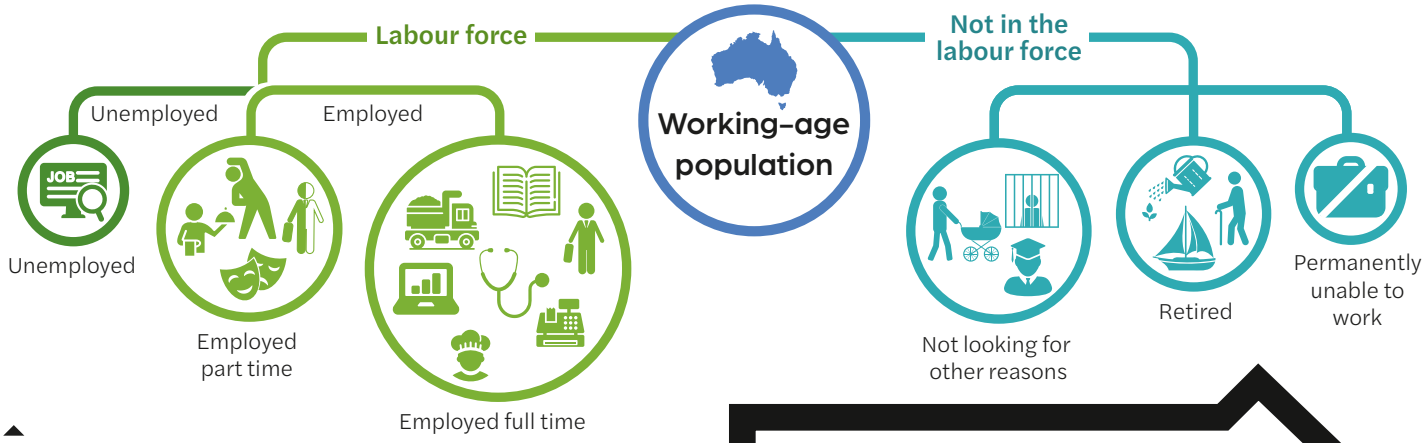
On the other hand, **part-time** work is defined as working fewer than 38 hours per week, with hours typically being regular each week. Part-time employees receive the same minimum entitlements as full-time employees, such as paid leave, but on a **pro-rata** basis. For example, if a full-time employee receives 10 days of paid sick leave per year, a part-time employee working half the hours would receive five days. Part-time work can vary significantly depending on the industry and employer, with some industries having set minimum hours for part-time employees.

Casual employment in Australia differs from part-time work primarily in terms of job security and entitlements. Casual employees do not have a firm commitment to ongoing work and their hours can vary significantly from week to week. They are typically paid a higher hourly rate, known as casual loading, to compensate for the lack of benefits such as paid leave. Casual employment is available across a wide range of industries, but casual work is particularly common in the retail, hospitality, accommodation and food services sectors.



Source 1: Australia's unemployment rate from 2013 to 2023.

Source: Australian Bureau of Statistics; Reserve Bank of Australia



Source 2: Groups in the labour market

Casual and part-time work can significantly contribute to the community by providing flexible employment opportunities that cater to diverse needs and lifestyles. This type of work often supports local businesses, especially in sectors like retail and hospitality, which are vital for the community's economic health. Additionally, they offer employment to students, parents and others who may not be able to commit to full-time roles, thereby fostering a more inclusive workforce.

Volunteer work, much like casual and part-time employment, plays a crucial role in strengthening communities. Volunteers contribute their time and skills to various causes, from supporting local charities to participating in community events, which enhances social cohesion and addresses community needs. Engaging in volunteer work not only benefits the community but also provides individuals with a sense of purpose and fulfillment, similar to the non-material benefits of paid employment. There are numerous volunteer opportunities available that cater to a wide range of interests and skills in areas such as environmental conservation, animal care and community development.

Finally, owning a business can be an alternative to traditional employment by providing individuals with the opportunity to be their own boss and make independent decisions. It allows for greater flexibility in work hours and the potential to earn higher profits compared to a fixed salary. Business owners can pursue their passions and interests, creating products or services that align with their personal values and goals. Additionally, owning a business can contribute to job creation and economic growth within the community.

Learning ladder EB2.2

The workforce

1. Source 2: Identify how the 'labour force' is defined in Australia.
2. Source 1: Describe the changes to Australia's unemployment rate over time.
3. In what ways does casual employment offer flexibility for workers, and how does this flexibility impact their earnings and job security compared to full-time or part-time roles?
4. **a** Discuss why fast food restaurants have such a high percentage of casual employees.
   b The average age of McDonald's employees is 18. What does this tell you about the type of workers at McDonald's?
5. Analyse the impact that a labour shortage might have on the unemployment rate.

Investigating

1. How do different types of jobs (full-time, part-time, casual and volunteer) help people and communities in Australia with money and social needs?
2. Plan how you would research how casual work affects young people's ability to earn and manage money. What questions would you ask, and where would you look for answers?
3. What types of sources (such as websites, news articles or government reports) could help you find out how employment types have changed in Australia over the last 10 years?
4. Make a table that compares full-time, part-time and casual jobs. Include how many hours are worked, what benefits are offered, how secure the job is, and what types of industries they are in.
5. You read three things about casual work: a government report, a blog post by someone looking for a job, and a news article from a business website. Which one would you trust most, and why?

HOW TO Investigating, page 540

How is work changing in modern Australia?

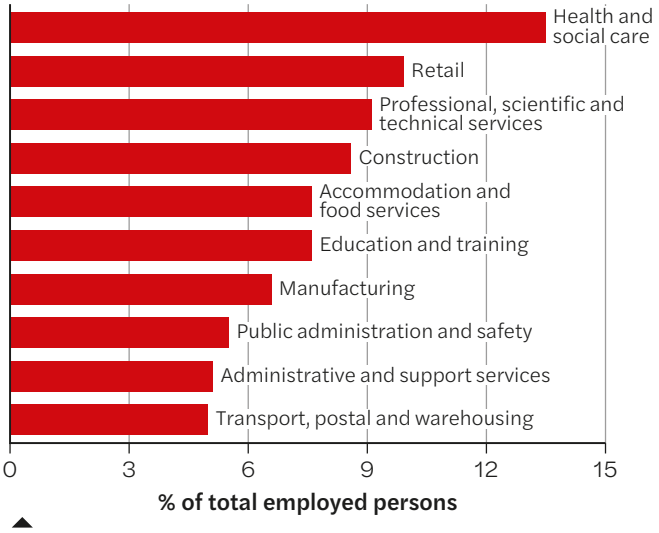
The largest sector of the workforce in 1900 was agriculture and in the 1960s it was manufacturing. Today, only one in 10 workers is involved in these industries due to rapid changes in technology and the globalisation of industries.

Industries people work in

The nature of work in Australia has changed dramatically in Australia over the past century. The census of 1901 showed that 23.4 per cent of all Australian workers were employed in **agriculture**. In 2020 just 3.2 per cent of employed Australians work in the agriculture industry as machinery has replaced labour and farms have increased in size.

Manufacturing in Australia accounted for a quarter of the workforce in the 1950s and 1960s, but by 2020 just 6.6 per cent of employed Australians worked in the manufacturing industry. Since the 1970s, competition from countries with lower wages and the growth of **multinational corporations** has seen manufacturing's share of Australia's workforce decline. Today, the largest employer in Australia is the health care and social assistance industry: doctors, hospitals, medical laboratories, nursing homes, and youth and family services.

Source 2: The very last Holden car built in Australia was made at the Elizabeth factory in South Australia.



Source 1: Percentage of employed Australians in the top 10 Australian industries in 2020. *Source: Australian Bureau of Statistics*

The demise of car manufacturing

After 100 years of manufacturing cars in Australia, the last Holden car was built in 2017, leaving 2500 people without a job. Australia was the 10th largest automobile manufacturer in the world in the 1970s, producing nearly half a million cars. By 2009, total production was 175 000 as the Australian market was dominated by imported cars from Asia and Europe.

Australia's population was too small to support the car industry and production was too expensive to build large numbers of cars for export. Car manufacturing plants in Asia had labour costs that were up to 75 per cent cheaper than Australia, so it became very difficult to compete. Large government **subsidies** and **grants** were paid to car manufacturers to keep the industry going, but Ford closed in 2013 and Toyota and Holden followed in 2017.

The impact of technology

Changes in technology have helped to automate many tasks and have drastically impacted the types of jobs performed. Automation of factory work and warehouses by robots and smart systems has increased productivity, saved costs and reduced the need for human workers. Automation through computerisation and software has made data-entry tasks more accurate and efficient. It has spelled the end for typists, as the typewriter was replaced by computers and voice-activated typing has replaced the use of the keyboard.

Technology in the travel industry has led to huge changes in the jobs and roles performed. Automated baggage-handling systems and passenger check-in has reduced the need for check-in staff. Many travel agents have lost their jobs to online comparison sites that make travel booking accessible for consumers.

Source 3: A 1970s typing pool, where teenage girls would often get their first office job. Before computers were widely used in businesses, typing was a valuable workforce skill. Larger companies had typing pools to prepare typed documents for the business. Girls were taught shorthand (a rapid writing system) and typing skills at school.

In the next decade we will see a further shift in the Australian labour market as **artificial intelligence (AI)** technologies have the potential to automate tasks that take up to two-thirds of a worker's time today. Millions of people worldwide may need to change occupations or upgrade skills as AI technologies help improve speed and productivity in businesses.

Learning ladder EB2.3

Changes to work

1. Source 1: Identify the three largest Australian industries in 2020.
2. Source 3: Describe how and why the work of a typist has changed.
3. Source 2: Explain the reasons behind the decline of the automotive industry in Australia.
4. Assess how automation through technology is having an impact on different industries in Australia today.
5. Predict the impact of artificial intelligence on future work in Australia by researching examples of jobs that may disappear and new skills that will be needed.

Communicating ideas

1. How have global competition and new technology changed the kinds of jobs people can get in Australia?
2. Explain the idea that machines and automation can help businesses work faster but might also take away some jobs.
3. If you saw a line graph showing that manufacturing jobs have gone down since the 1970s, how could this help explain why workers might need to learn new skills?
4. Use job data from different industries, like in Source 1, explain how moving toward service jobs (such as health or education) has changed Australia's economy.
5. Should Australia keep supporting old industries like mining and manufacturing, or focus more on areas like health and technology? Use information from the text to back up your answer.

HOW TO Communicating ideas, page 548

EB2.4

How are workplaces improving?

Source 1: WorkSafe Victoria's role is to reduce injuries in the workplace and improve outcomes for injured workers. To reduce workplace harm, WorkSafe provides education programs, inspects workplaces and uses graphic advertisements to remind businesses and workers of the importance of safety at work. WorkSafe Victoria also gives warnings and enforces laws when businesses do not provide a safe working environment.

Stricter laws and improved monitoring have helped businesses to become more inclusive, safer and more socially responsible. There is now greater flexibility to support workers, particularly working from home (WFH), which grew significantly during the COVID pandemic.

Responsible businesses

Laws have been developed to protect workers from being treated unfairly by employers. Businesses have both legal and social responsibilities to their staff and to the environment.

Safety

It is the responsibility of every employer to provide a safe and healthy workplace for its employees. WorkSafe Victoria is a government agency that regulates health and safety in the workplace. To make sure businesses are following **occupational health and safety (OHS)** laws and regulations, WorkSafe Victoria inspects workplaces to enforce the law and embed a proactive, prevention-led approach to workplace health and safety.

If a workplace incident occurs, WorkSafe Victoria manages Victoria's **workers compensation scheme**. This ensures that employees who are injured at work can get medical treatment and other assistance, including rehabilitation, to help them get back to work quickly.

Discrimination

In Australia it is illegal to discriminate in the workplace due to race, religion, nationality or ethnic origin, sex, marital status, pregnancy, age, disability, sexual orientation or gender identity. **Discrimination** can happen to a person when they are applying for a job, when asking for a promotion or pay rise, when selecting people for training or special programs, and in many other situations.

Employers have a legal responsibility to ensure all employees are treated fairly and without discrimination, **harassment** or **bullying**. These responsibilities are part of Australian federal and state laws such as *The Fair Work Act 2009*.

Social responsibility

A business demonstrates social responsibility by considering the impact of decisions on people and the environment. **Socially responsible businesses** implement environmentally friendly practices such as reducing waste and recycling as well as working with charitable organisations.

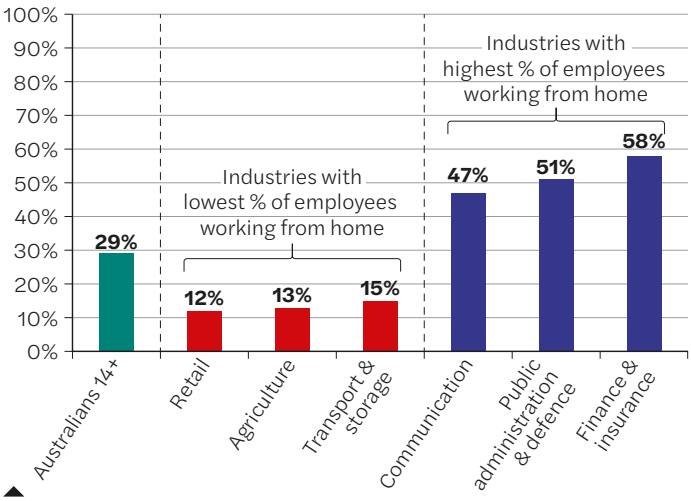
Working from home

Nearly 40 per cent of Australians regularly work from home in 2025, up from only 25 per cent a decade earlier. The large jump in people working from home was driven by the COVID-19 pandemic, which saw many workers, such as teachers (due to the closure of schools), forced to work from home. The quick transition to remote work led to many difficulties for workers at home, including lack of a dedicated workspace, poor Internet connection, increase in electricity usage and distractions from other family members.

Since the end of the pandemic in 2023, the large shift to people working from home has continued. Sixty per cent of managers and professionals now regularly work at home. Other workers, such as teachers, nurses, farmers, builders, shop assistants and truck drivers, do not have the same flexibility to work at home, as they are required in their workplace.

Some advantages of working from home are:

- **saving time and money:** working at home saves the time and expense of travelling to work and gives workers the flexibility to be home when children arrive home from school. Employers can have smaller offices, with smaller rental and running costs
- **focus:** there are generally fewer distractions at home, enabling workers to concentrate on completing tasks.



Source 2: Australians working from home in 2020 based on a survey of 6637 working Australians by Roy Morgan

Some disadvantages of working from home are:

- **trust:** working at home involves a great deal of trust that the employee will work and not spend the day on other activities
- **isolation:** working at home can be quite lonely without regular interactions with others in a workplace. Online video meetings with other workers can help
- **blurring of boundaries:** it can be hard to switch off from work when your home is also your office. Sometimes it is hard to switch off from what is happening at home to focus on work.

Learning ladder EB2.4

Changes to work

1. Identify the advantages and disadvantages of many more employees working from home.
2. Describe the difference between the legal and social responsibilities of businesses. Give an example of each.
3. Explain what action is undertaken by governments, businesses and employees to reduce discrimination in the workplace.
4. Source 1: Why do you think there is a need for a regulator like WorkSafe to enforce safety laws?
5. Predict the changes to workplaces and home offices as a greater percentage of the workforce works from home.

Decision-making

1. What problems can happen when a business doesn't keep its workers safe or treat them fairly?
2. What things should a boss think about before letting employees work from home?
3. What could a business do to help workers feel less lonely or stressed when working from home?
4. What are the good and bad sides of letting people work from home? Think about money, getting work done, talking with others, and feeling well.
5. Do you think all jobs should offer flexible work options? Use facts from the text to explain your opinion.

HOW TO Decision-making, page 546

How do I conduct an investigation?

Now that you've finished the chapter, it is time to conduct your own investigation on work. Throughout the chapter you have developed knowledge and understanding of work. Background knowledge is important because it helps you make connections to new information, ask better questions and consider different perspectives. As you progressed through the chapter, you have gathered information through classroom discussion, highlighting, note taking and answering questions. Now you are ready to start planning your own investigation into contemporary issues!

An investigation gives you the opportunity to be an active participant in contemporary economic and business issues: investigating, interpreting and communicating your findings.

The chapter has covered how and why we work, and how work is changing in modern Australia. What would you like to know more about?

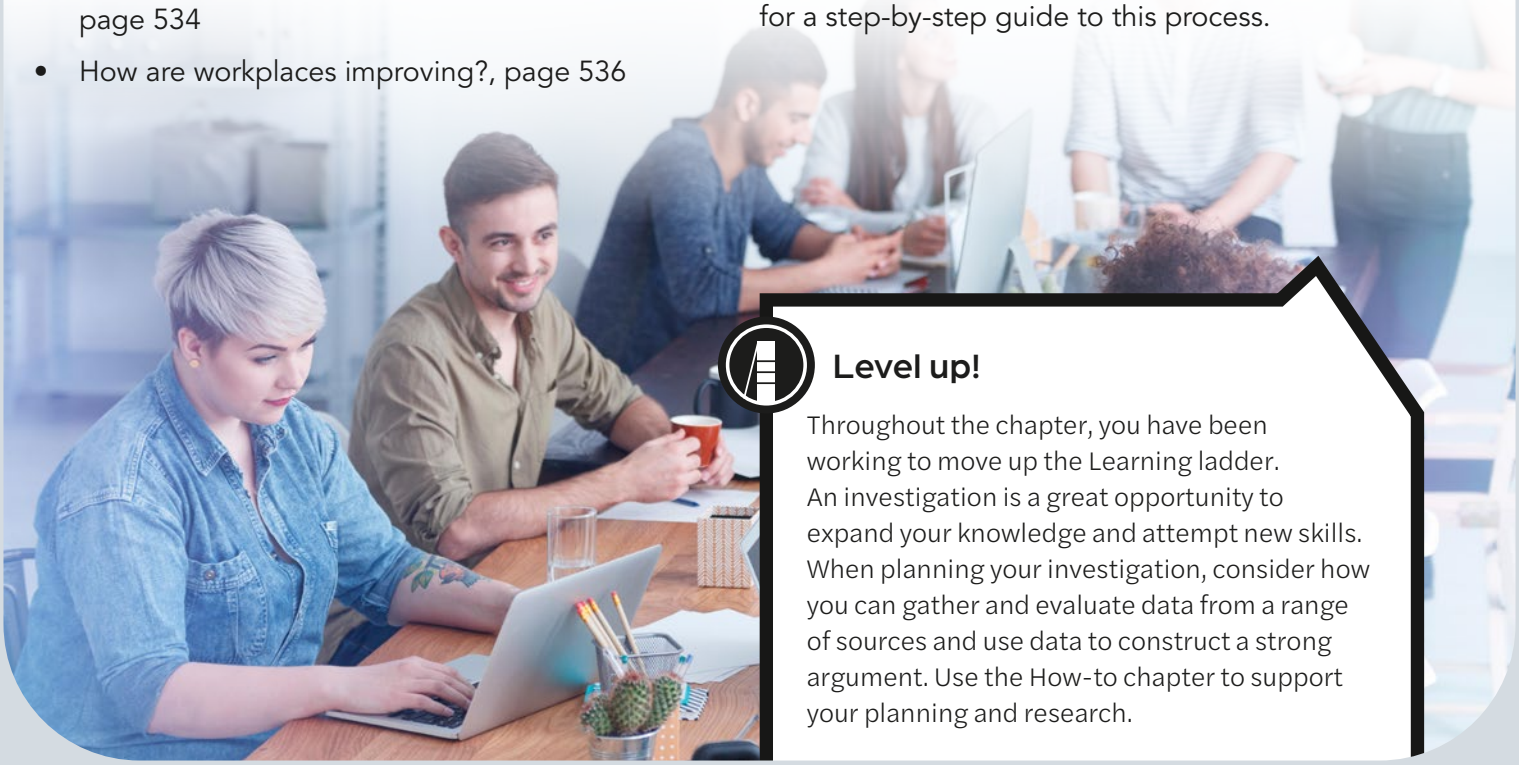
- Why do we work?, page 530
- How do we work in Australia?, page 532
- How is work changing in modern Australia?, page 534
- How are workplaces improving?, page 536

Return to the relevant pages in the chapter and read them again.

Next, complete the 'see, think, wonder' process to help develop ideas you might cover in your inquiry.

Jot down your answers to these questions. Your answers will help you to formulate your own research ideas. Once you have worked through this process, you are ready to start your investigation.

Refer to pages 540–2 of the How-to chapter for a step-by-step guide to this process.



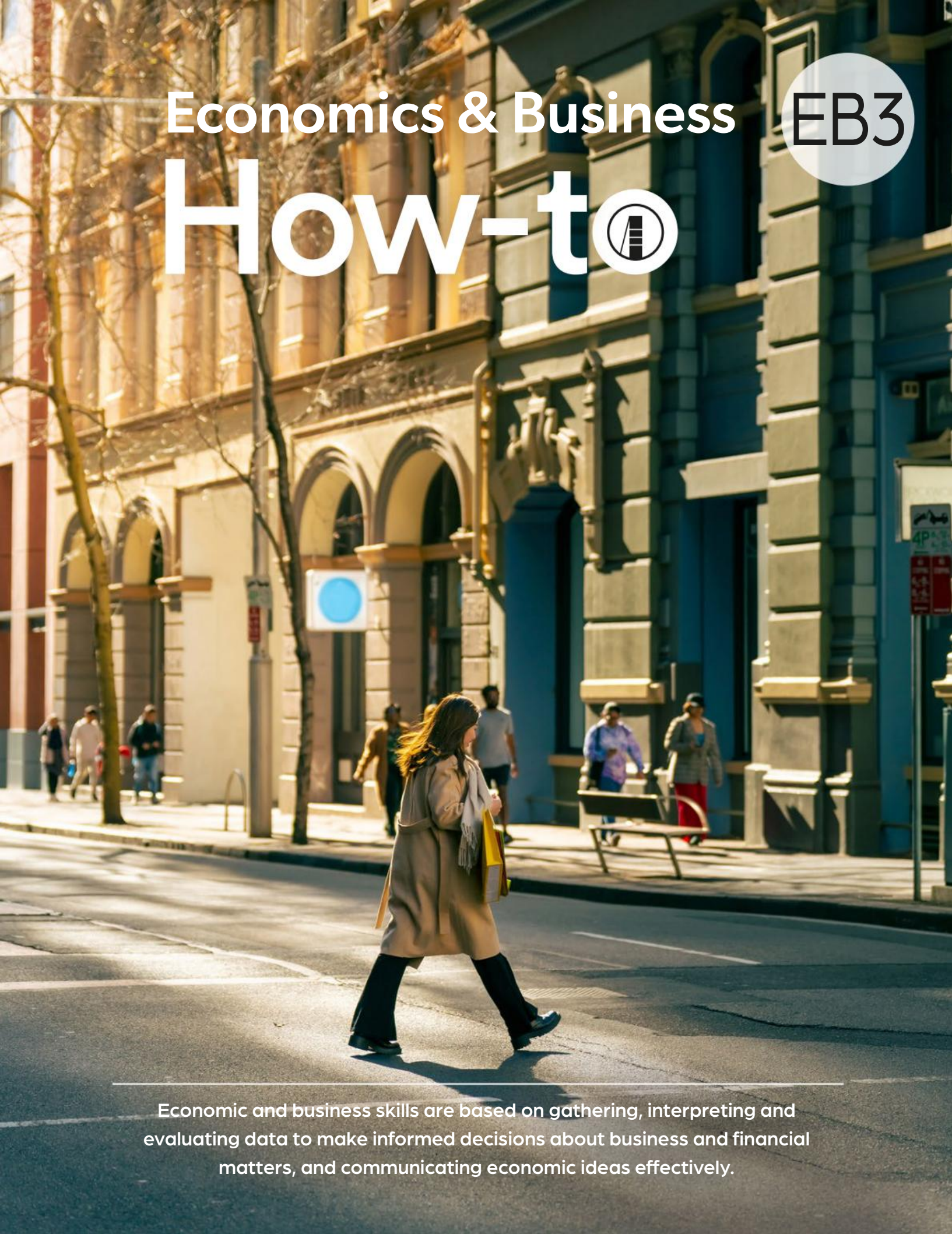
Level up!

Throughout the chapter, you have been working to move up the Learning ladder. An investigation is a great opportunity to expand your knowledge and attempt new skills. When planning your investigation, consider how you can gather and evaluate data from a range of sources and use data to construct a strong argument. Use the How-to chapter to support your planning and research.

Economics & Business

How-to

EB3



Economic and business skills are based on gathering, interpreting and evaluating data to make informed decisions about business and financial matters, and communicating economic ideas effectively.

How to develop economic and business skills

The skills described in this How-to will help you to lead a productive and financially stable life as an Australian citizen, voter and participant in the economy. There are five levels of difficulty for each skill. Each skill is described and a model is provided that demonstrates how to master the skill at each level. Learning skills at the lowest level of difficulty will help you to master the skills at the highest level.

Investigating

Developing strong investigative skills in economics and business enables you to ask meaningful questions, locate reliable information and analyse data effectively. These skills are essential for understanding economic and financial systems, evaluating business decisions and recognising market trends.

1 I can ask open-ended questions

Open-ended questions encourage deeper thinking and cannot be answered with a simple 'yes' or 'no'. They require explanation, reasoning or further investigation. Well-structured questions guide research and help you explore complex economic and business issues.

Example

If you are investigating supermarket success, you might ask:

- What factors influence consumer choices in grocery shopping?
- How do pricing strategies impact customer loyalty?

2 I can plan an investigation

Planning an investigation ensures that your research is structured and relevant. This process includes defining a clear research question, identifying key variables and selecting appropriate research methods.

Example

If you are examining the effects of inflation on young consumers, your plan might include the following elements:

- Research question: How does inflation affect the spending habits of teenagers?
- Key factors to consider: inflation rates, disposable income levels, spending patterns
- Methods of data collection: surveying peers, analysing consumer spending reports, reviewing news articles.

3 I can gather information from secondary sources

Reliable sources provide accurate and objective information. These sources may include government reports, economic research and reputable news organisations.

Example

If you are researching fuel price fluctuations, you may refer to:

- Australian Bureau of Statistics (ABS) for historical fuel price data
- Reserve Bank of Australia (RBA) for insights on inflation and interest rate influences
- news publications such as the ABC or *The Age* to examine recent economic developments.

4 I can sort and represent data and information

Organising data effectively helps you identify patterns, trends and relationships in economics and business studies. Sorting data involves categorising and structuring information so that it is easier to analyse. Representing data visually, through graphs, charts or tables, makes complex information clearer and more accessible. Collecting data from multiple sources allows you to compare perspectives and draw more reliable conclusions.

How do you sort economic data?

Economic data can be sorted in various ways.

- **Categorise by time period:** arrange data chronologically to identify trends over time, such as inflation rates or employment figures.
- **Group by economic sector:** separate data into relevant sectors, such as retail, finance and manufacturing, to compare industry performance.
- **Use statistical measures:** calculate averages, percentages and growth rates to summarise key findings.
- **Compare across regions:** identify economic differences between locations, such as city and rural employment rates.
- **Analyse different sources:** collect and compare data from multiple sources, such as official inflation rates as well as personal experiences of price changes, to highlight differences in perspectives.

How do you represent economic data?

There are multiple ways of representing economic data visually:

- **Line graphs** show changes over time, such as trends in petrol prices or consumer spending habits.
- **Bar charts** compare different categories, such as GDP per industry or company profits.
- **Pie charts** illustrate proportions, such as household spending on various expenses.
- **Tables** present precise numerical data, such as exchange rates or inflation figures.
- **Scatter plots** show relationships between two variables, such as income and savings rates.

Example

If you are investigating price rises for a group of products, you might:

- collect data from multiple sources, such as government reports, news articles and personal observations
- present this information in a table to compare price changes over different time periods or between locations
- identify patterns or differences, such as higher price increases in urban areas compared with rural areas
- use a line graph to show the trend of price changes over time
- compare official inflation rates with personal experiences and highlight these differences in a visual representation.

5 I can evaluate information from a range of sources

Ensuring that the data and information you use is accurate, up to date and reliable is crucial in economics and business research. Different sources may present varying viewpoints, so it is important to check for consistency and bias. Evaluating sources helps you make informed judgements about the credibility of the information and prevents misinformation from influencing your conclusions.

How do you evaluate economic and business sources?

There are several important factors to consider when evaluating resources.

- **Check the source's credibility:** identify whether the source is a government report, academic research, a reputable news outlet or a commercial blog. Government and academic sources are generally more reliable than opinion-based sources.
- **Assess for bias:** consider whether the source has a particular agenda. For example, a business advocating for deregulation may present data in a way that favours its position.

- **Compare multiple sources:** cross-check data from different sources to ensure consistency. If one report claims inflation is 3 per cent while another source says it is 6 per cent, investigate why there is a discrepancy.
- **Verify statistical data:** look at how data was collected, who conducted the research and whether the methodology is sound. Data from independent research institutes is generally more reliable than data from social media or informal reports.
- **Consider timeliness:** ensure that the data is recent and relevant to your investigation. Economic trends and business conditions change quickly, and outdated data may not reflect current realities.

How do you compare data from different sources?

Data from different sources can be compared using the following methods:

- Collect data on an issue such as property price changes over time from different sources (for example, government housing reports, real estate websites and newspaper articles).
- Present the information in a table to highlight similarities and differences in the data.
- Identify patterns, such as there being price increases in some areas while other areas remain stable.
- Compare official statistics with personal experiences, such as inflation rates reported by government agencies versus individual perceptions of price rises.

Example

If you are analysing the impact of fast fashion on small businesses, you might review:

- a government trade report on retail sector trends – offering objective economic data
- an industry journal article from an independent economic research institute – providing analysis and expert opinion
- a blog post from a fashion retailer – potentially biased in favour of the industry.

By comparing these sources, you can determine which information is most reliable.

Interpreting

Interpreting economic and business information is a key skill that helps us make sense of the world around us. It allows us to examine data, understand trends and make informed decisions about financial and business matters. Whether you are looking at a supermarket price comparison, analysing how consumer behaviour shifts over time or evaluating the impact of government policies, the ability to interpret information effectively is essential.

This section will guide you through five levels of interpreting economic data, from basic comprehension to advanced analysis. By mastering these skills, you will be better equipped to understand market forces, business strategies and economic policies that affect individuals and society as a whole.

1 I can read tabulated data and graphs

Understanding economic information often starts with interpreting data in tables and graphs. These can show economic indicators such as inflation rates, employment figures and supply and demand patterns.

To effectively read data, follow these steps:

1. **Identify the data source.** Is the table or graph from a reliable source, such as the Australian Bureau of Statistics (ABS) or the Australian Competition and Consumer Commission (ACCC)?
2. **Understand labels and units.** Check the title, axes labels and units of measurement.
3. **Look for key figures and comparisons.** Identify the highest and lowest values, as well as any averages or totals.
4. **Note patterns and outliers.** Are there any unusual data points?

Example

This graph shows how grocery prices and wages have changed over time from 2014 to 2024. From 2014 to 2021, both lines move up at about the same speed. This means that as food prices increased, wages also increased at a similar rate. People could still afford groceries without a big change in their budgets.

In 2024, the grocery price line is not rising as quickly as it did in 2022; however, grocery prices are still much higher than they were before 2022, while wages have not increased at the same rate, meaning that food is now more expensive compared to wages.

▲ **Source 1:** Wages have not kept up with grocery price inflation since late 2021.

These sentence starters may help you structure a response:

- 'This table shows that ...'
- 'According to the graph, the trend in prices suggests ...'
- 'The highest/lowest value recorded is ...'

2 I can describe trends

A trend is a pattern in data that shows how something changes over time. Describing trends involves identifying increases, decreases, fluctuations or stability. To do this effectively, follow these steps:

1. **Identify the general direction of change.** Is it increasing, decreasing, fluctuating or remaining stable?
2. **Use specific time periods.** Mention whether the trend occurs over months, years or decades.
3. **Compare different categories.** Are there differences between groups or regions?
4. **Identify key drivers of the trend.** What factors are influencing the change?

Example

Over the past five years, the cost of nearly everything in Australia has increased. The cost of food and drinks (measured by the Consumer Price Index, or CPI) has increased even more than other goods, and is about 24 per cent higher than five years ago. However, wages (how much people earn) haven't increased as quickly. From 2018 to 2021, food prices and wages were increasing at a similar pace. But after that, food prices started rising much more quickly than wages – more than double the rate of wage growth by 2022–2023. While price increases have slowed slightly since 2024, groceries are still much more expensive compared with wages than they were a few years ago.

These sentence starters may help you structure a response:

- 'Over time, the data shows ...'
- 'There is a clear upward/downward trend in ...'
- 'The data fluctuates between ... and ...'

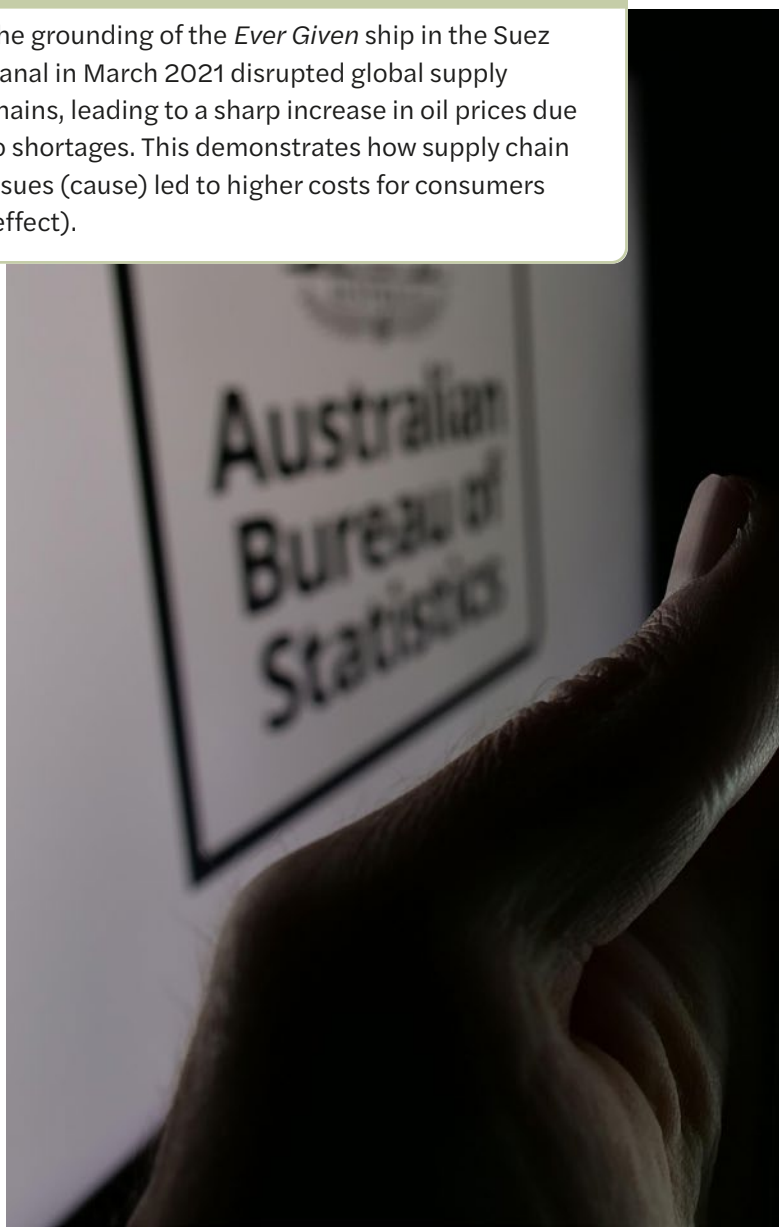
3 I can explain cause-and-effect relationships

Economic changes often have identifiable causes and consequences. Understanding these relationships helps explain why certain patterns occur. To do this, follow these steps:

1. **Identify the cause (why the change happened).** What factors contributed to this change?
2. **Identify the effect (what happened as a result).** What were the consequences of this change?
3. **Use real-world examples.** Refer to case studies or news reports.
4. **Support with data.** Use numbers or graphs to justify explanations.

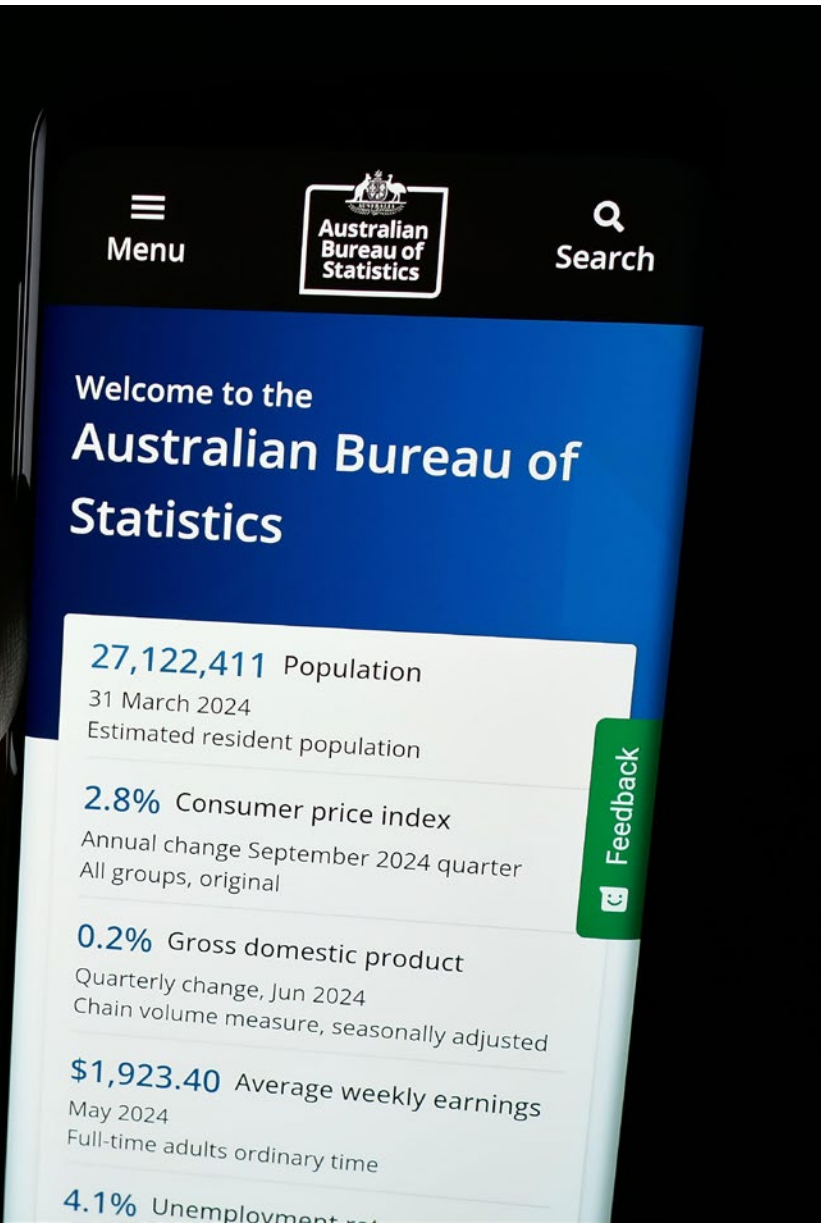
Example

The grounding of the *Ever Given* ship in the Suez Canal in March 2021 disrupted global supply chains, leading to a sharp increase in oil prices due to shortages. This demonstrates how supply chain issues (cause) led to higher costs for consumers (effect).



These sentence starters may help you structure a response:

- 'If this trend continues, we can expect ...'
- 'Based on past data, it is likely that ..."
- 'An increase in ... may result in ...'



4 I can predict change to patterns

By analysing past trends and current data, we can make informed predictions about future economic changes. To do this effectively, follow these steps:

1. **Review historical trends.** What has happened in the past in similar situations?
2. **Consider influencing factors.** Look at government policies, technological advancements and global events.
3. **Use models or theories.** Economic principles such as supply and demand can help predict changes.
4. **Account for uncertainty.** Acknowledge that multiple factors can influence predictions.

Example

If grocery prices continue rising at their current rate, many consumers will switch to discount supermarkets such as Aldi. A consumer trend graph already shows increasing market share for Aldi in response to higher food costs.

5 I can evaluate data and data sources for authenticity and validity

Evaluating sources ensures that economic information is reliable, unbiased and based on accurate data. To evaluate sources, follow these steps:

1. **Check the publisher.** Government agencies, academic institutions and reputable organisations are more trustworthy than unknown blogs.
2. **Look for bias.** Is the source funded by a company that benefits from the data?
3. **Compare multiple sources.** Are other reports showing similar findings?
4. **Check the date.** Economic data changes quickly; outdated data may no longer be relevant.

Example

A report from the Australian Bureau of Statistics on employment trends is more reliable than a social media post about job losses. The ABS provides regularly updated data based on national surveys.

Decision-making

Economic and business decision-making involves analysing information, assessing options and making choices that impact individuals, businesses and governments. Every decision has consequences, and understanding how to approach decision-making systematically is crucial.

1 I can identify an economic and business issue

The first step in decision-making is recognising an issue that affects individuals, businesses or governments. Economic and business issues often arise from factors such as changing consumer behaviour, shifts in market conditions or government policies.

1. **Observe real-world economic events.** Look for headlines about inflation, employment, business closures or new government regulations.
2. **Identify who is affected.** Consider whether consumers, workers, businesses or policymakers are involved.
3. **Recognise the cause of the issue.** Determine what factors are influencing the problem, such as supply chain disruptions, changing consumer preferences or new competitors.
4. **Use data to confirm the issue.** Economic issues often have supporting evidence, such as unemployment statistics or sales figures.

Example

A fast-food chain notices that fewer people are buying its meals. After analysing the market, it realises a new health-conscious competitor is attracting its customers. This highlights how businesses must adapt to changing consumer preferences to stay competitive.

2 I can describe the criteria to respond to an issue

It is important to establish criteria to evaluate possible responses. Criteria help in comparing different options based on their impact, cost and feasibility.

1. **Consider economic efficiency.** Will the response make the best use of resources?
2. **Evaluate financial impact.** How much will it cost, and who will pay for it?
3. **Assess social and ethical implications.** Will it benefit people fairly?
4. **Look at sustainability.** Will it have long-term positive or negative effects?

Example

To compete with a new healthy food trend, a fast-food company decides whether to add more nutritious menu items or invest in a marketing campaign to improve its image. A key criterion would be whether the strategy attracts health-conscious consumers without losing existing customers.

3 I can develop responses to economic and business issues

Solutions should address the problem effectively while considering potential trade-offs.

1. **List possible solutions.** Consider different ways to address the issue.
2. **Weigh advantages and disadvantages.** Compare the benefits and drawbacks of each response.
3. **Consider short-term and long-term effects.** Will the response be effective immediately, or will it take time?
4. **Use real-world examples.** Refer to case studies or economic principles that support the response.

Example

A business facing competition could:

- improve its marketing by using social media influencers to reach younger customers
- offer discounts or loyalty rewards to attract returning customers
- expand its product range to include healthier options.

Each response has trade-offs. While marketing increases visibility, it requires a large budget. Discounts may attract customers but reduce profits.

4 I can evaluate responses using cost–benefit analysis or other criteria

Economic and business decisions require careful evaluation of responses. Cost–benefit analysis (CBA) is a common tool used to compare the advantages and disadvantages of each option.

1. **Identify costs.** What are the financial, social or environmental costs?
2. **Identify benefits.** What are the positive outcomes, and who benefits?
3. **Use quantitative data.** If possible, assign monetary values to the costs and benefits.
4. **Compare options.** Which response provides the greatest overall benefit?

Example

A clothing brand wants to increase sales and considers two strategies: launching a new eco-friendly clothing line or offering a major sale on existing stock.

Response	Costs	Benefits
Launching an eco-friendly clothing line	New product development requires research and sustainable materials.	Eco-friendly products appeal to environmentally conscious customers.
Offering a major sale on existing stock	Sales reduce profit margins.	Discounts attract budget shoppers.

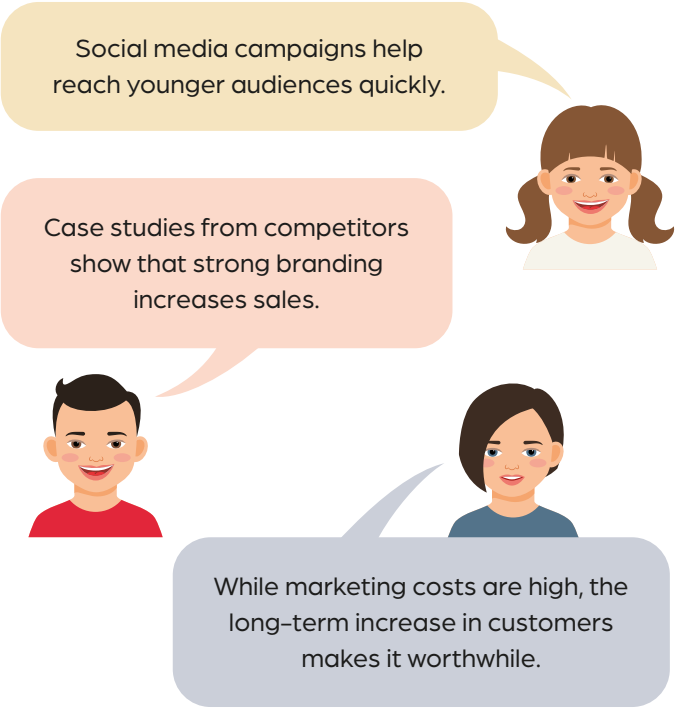
Evaluating these factors helps determine which strategy provides the best long-term advantage.

5 I can draw conclusions and justify responses

A strong conclusion should be supported by data and logical reasoning. This structured approach to decision-making will help you analyse economic and business issues critically, particularly in understanding how businesses create and maintain a competitive advantage.

1. **Summarise findings.** What did the evaluation reveal about the best response?
2. **Justify the decision.** Use data, economic principles or case studies to explain why this is the preferred response.
3. **Acknowledge limitations.** Recognise any uncertainties or challenges in implementing the decision.
4. **Consider alternative perspectives.** Would different groups (for example, businesses, consumers, government) see this decision differently?

After evaluating strategies, a company may decide that investing in marketing is the best way to attract new customers and maintain a competitive advantage.



Communicating ideas

Communicating economic ideas clearly and effectively is a crucial skill in economics and business. It involves using correct terminology and structured reasoning, and supporting your points with evidence. Whether presenting an argument, writing a report or participating in a class debate, strong communication skills help you explain economic issues with confidence and credibility.

1 I can describe economic and business issues

The first step is being able to describe what is happening in the economy or a business context using clear and accurate language.

1. **Identify the issue.** What is the economic or business problem?
2. **Use economic vocabulary.** Use terms appropriate to the topic you are discussing, such as 'inflation', 'unemployment', 'monetary policy', 'interest rates' and 'subsidies'.
3. **State who is affected.** This might be individuals, businesses, governments or communities.
4. **Use real examples.** Refer to current events or textbook case studies.

Example

The Reserve Bank of Australia (RBA) increased interest rates to combat inflation. This policy affected households with mortgages, as their mortgage repayments increased, leading to reduced spending in the economy.

These sentence starters may help you structure a response:

- 'An economic issue that is currently affecting people is ...'
- 'This issue is important because ...'
- 'The key people or groups affected are ...'

2 I can explain arguments

Explaining arguments means giving reasons for why an issue is occurring or why a response may or may not work.

1. **Give logical reasons.** Explain why something is happening.
2. **Link to economic principles.** Use ideas such as supply and demand, inflation control or fiscal policy.
3. **Develop both sides of the argument.** What are the benefits and potential drawbacks?

Example

One argument in favour of the government offering rebates for solar panel installation is that it encourages clean energy use and reduces long-term electricity bills. A counter-argument is that such schemes cost taxpayers money and may not reach low-income households effectively.

- What is the reasoning behind this argument?
- Who benefits from this policy, and who might be disadvantaged?
- Are there alternative viewpoints or opposing arguments?

3 I can support explanations with data

Adding evidence makes your argument stronger and more convincing.

1. **Use statistics and examples.** Find relevant graphs, tables or real-world data.
2. **Quote credible sources.** Use reports from the Australian Bureau of Statistics (ABS), the Reserve Bank of Australia (RBA) or Treasury.
3. **Show how the data supports your argument.** Explain what the numbers mean.

Example

According to ABS data, inflation reached 7.8 per cent in late 2022. In response, the RBA raised the cash rate multiple times in 2023. This data supports the idea that the RBA uses monetary policy to reduce inflation and stabilise prices.

4 I can explain arguments using data

It's not enough to have an opinion – you need to back it up with facts. Being able to explain arguments using data means you can take complex information, such as statistics, graphs or tables, and use it to strengthen your reasoning. This shows that your conclusions are not just guesses but are supported by real-world evidence.

Explain what the data shows using the following steps.

1. **Spot the pattern or trend**. Instead of just saying 'unemployment was 7 per cent', you might say: 'Unemployment rose from 5 per cent to 7 per cent between March and July, which shows a sharp increase that was likely caused by business closures during the COVID-19 lockdowns.'
2. **Explain the cause or effect**. Link the data to what's happening in the economy. For example: 'The rise in unemployment suggests that fewer people were working, which would reduce household income and impact living standards.'
3. **Make a judgement or comparison**. Use the data to compare different time periods, policies or options. For example: 'After the JobKeeper program started, unemployment fell from 7 per cent to 6 per cent. This suggests that the policy helped people stay employed.'
4. **Connect to a bigger idea**. Show why the data matters in context. For instance: 'Lower unemployment helps maintain living standards and supports economic stability, so the JobKeeper program played an important role in economic recovery after the COVID-19 pandemic.'

You may also use data to compare options: how does the data support one response over another?

Example

During the COVID-19 pandemic, the Australian Government introduced the JobKeeper wage subsidy to protect employment. ABS data shows that unemployment remained lower than expected in 2020 due to this support. A line graph comparing unemployment rates before and after JobKeeper was introduced supports the argument that government fiscal intervention helped maintain economic performance and protect living standards. Similarly, RBA cash rate charts from 2022 to 2024, alongside consumer spending data, help explain how monetary policy was used to slow inflation.

5 I can use evidence from sources to evaluate economic and business issues

In the real world, economic and business decisions are rarely simple. There are usually multiple viewpoints, conflicting data and different priorities involved. Being able to assess all of this information and come to a balanced conclusion is a powerful skill. It shows that you can think critically, consider different perspectives, and communicate clearly based on the *quality* of the evidence, not just the quantity.

Example

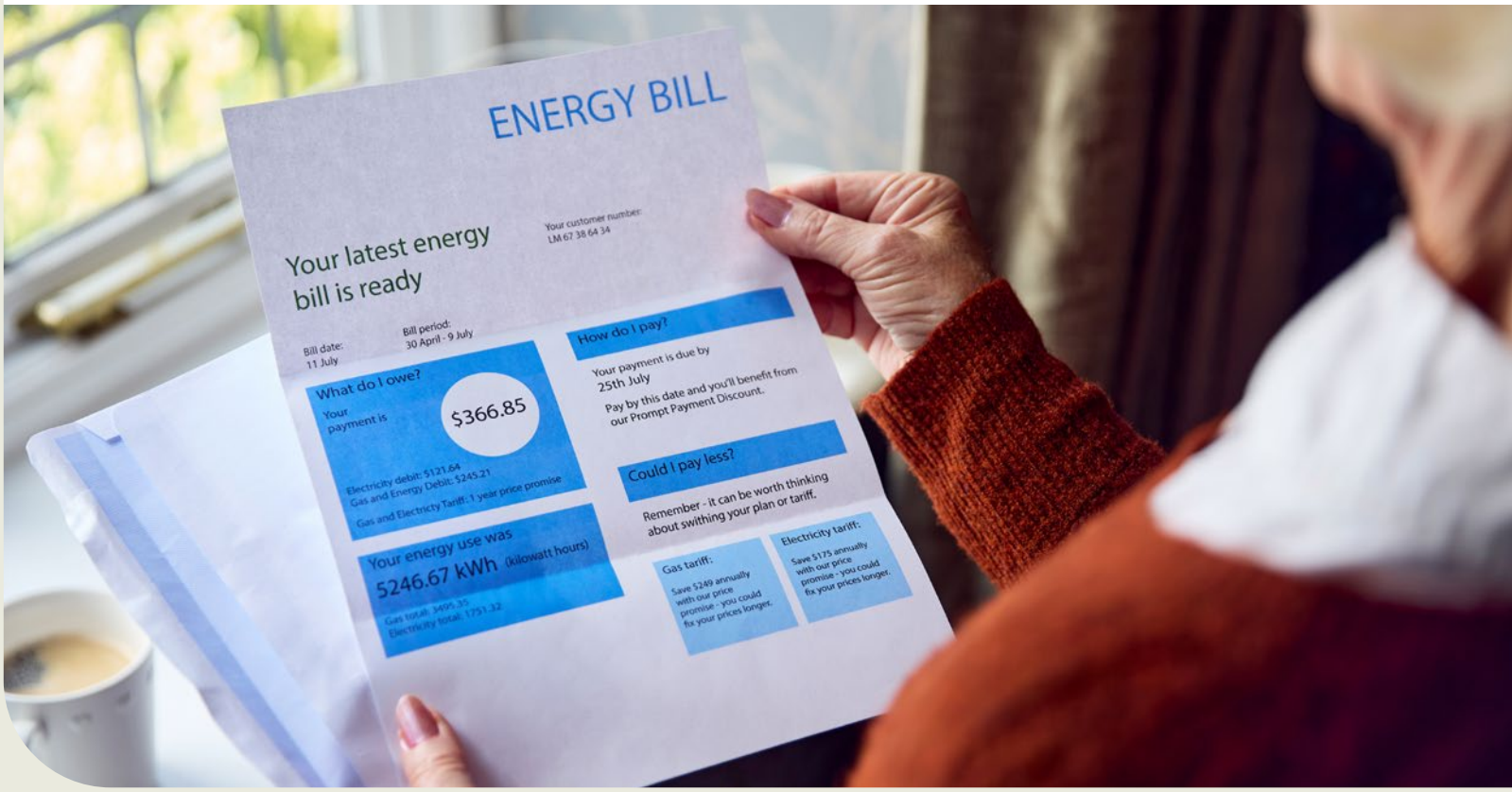
In 2023, in response to the rising cost of living, the government introduced targeted energy bill relief. To evaluate its effectiveness, you could examine ABS data on energy price trends, a Treasury report on household savings and an article from the ABC summarising public responses. If all sources indicate a reduction in pressure on low-income households, you can conclude that the policy improved living standards for those most affected.

Use this table to help structure your evaluation of an economic or business issue. It guides you through collecting evidence, comparing sources, checking reliability and drawing a well-reasoned conclusion.

Step	What to do	Helpful prompts	Example
1 Identify the issue.	Clearly state the economic or business issue you are evaluating.	What is the key question or problem?	Is the government's energy bill relief effective in reducing cost of living pressures?
2 Gather sources.	Find at least 2–3 different types of sources (e.g. data, reports, media).	Are the sources recent, reliable and relevant?	ABS energy prices data, Treasury report, ABC News article on public opinion
3 Summarise each source.	Briefly explain what each source says about the issue.	What is the key message from each source?	ABS data: energy prices stabilised in 2023. Treasury: household savings slightly improved.
4 Compare the evidence.	Look for similarities or differences between sources.	Do they agree? Do any contradict each other?	All sources suggest reduced pressure on low-income households.
5 Assess reliability.	Evaluate how trustworthy each source is.	Who created it? Is there bias? Is it up to date?	ABS and Treasury are government sources (highly reliable), ABC is a reputable news outlet.
6 Draw a conclusion.	Decide which argument is best supported and explain why.	What does the strongest evidence show?	Based on all sources, the energy bill relief appears to have improved living standards for vulnerable households.

Key questions:

- How reliable and up to date are the sources used?
- What evidence supports each point of view?
- Does the data from different sources agree or conflict?



Glossary

A

absolute location precise point on the Earth's surface, usually defined by coordinates such as latitude and longitude or a specific address

absolute monarchy a form of government in which the sovereign (king or queen) has unlimited power

absolutism the belief that absolute power to govern a society should lie in the hands of one person

acquit to free a defendant from a criminal charge through a verdict of not guilty

activism using vigorous action to bring about change

aftershock a smaller earthquake that follows a major earthquake, occurring in the same area as the mainshock

agriculture the practice of farming

allegory a story, poem or artwork that has a symbolic or hidden meaning

Anglo-Saxons a cultural group who inhabited England from the 5th century CE; a merging of the Angle and Saxon peoples

appeal an application to a higher court to review a decision of a lower court

aqueducts structures built to channel water to settlements in ancient Rome; they had to be built accurately as the water had to run downhill over large distances

archaeology the study of human history through the excavation of sites and the analysis of artefacts and physical remains found there; people undertaking archaeology are called archaeologists

archipelago a group of islands

artefact an object made by a person, such as a tool or implement, usually of historical interest

artificial intelligence (AI) technology to perform tasks that usually require human intelligence, like learning, analysing and decision-making

artisan a skilled craftsperson who makes things by hand

asceticism the practice of living a simple life without physical pleasures

assassinate to murder a leader or important official for political reasons

Aztec a member of the indigenous people dominant in Mexico before the Spanish conquest of the 16th century

B

backwash water returning to the sea from the beach

bailey a protected courtyard within the outer castle wall of a medieval castle

baray a large water reservoir that was a common feature of the architecture of the Khmer Empire

barbarian a term used to describe different non-Latin- and Greek- speaking groups such as the Celts, Franks, Saxons, Angles, Visigoths and Huns who moved into Western Europe in the Early Middle Ages; also used to describe people in general thought to be unsophisticated

barbican a towered wall to protect the main gate of a medieval castle

bartering exchanging a good or service for other goods or services without the use of money

basqaq a Mongolian military governor put in charge of conquered territory

bas-relief a type of sculpture or carving in which the figures are raised against a flat background to give a three-dimensional effect

battlement the top of a stone castle wall that contained gaps called crenels to allow defenders to shoot arrows or throw spears at the enemy while sheltering behind the higher parts of the wall (the merlon)

bazaar a marketplace with many small shops, common in the Middle East

beach a sandy or pebbly area along the edge of a body of water, such as an ocean, lake, or river, often formed by waves and currents. It is a popular place for recreation and can vary in size and type depending on the location

beach nourishment replenishment of a beach by sand from another source

Before Common Era (BCE) the name of the period of time up until the birth of Jesus

beliefs a set of principles or tenets that, together, form the basis of a philosophy, moral code, religion or worldview

beqlare-beq a Mongolian prime minister and chief advisor to the Great Khan

berserker an elite Viking soldier who could enter a trance-like 'berserker' state where they charged forward with no fear, hacking at their foes; the modern term 'berserk' comes from the berserkers.

besiege to attempt to overcome by siege; Joan of Arc led an army to help the besieged city of Orléans.

bias to be for or against an idea, a person or a group, especially in a way that could be thought of as unfair

bill a proposed law

binding precedent where a legal principle was established by a superior court

biodiversity variety and abundance of species within an ecosystem

Black Death the bubonic plague, a pandemic that swept through Europe in the middle of the 14th century, killing one-third of the population

blacksmith a craftsperson who creates objects from iron or steel by heating the metal and shaping it

block mountain a mountain formed when large blocks of the Earth's crust are uplifted or tilted by tectonic forces along faults

blót a Viking sacrifice to the gods where pigs or horses were killed, and the blood was sprinkled on statues of the gods and on the participants themselves

breach of contract failure to comply with the agreed terms of a contract

breaking wave a wave that is forced to spill forward as the bottom of the wave orbit comes into contact with the sea floor and slows down

breakwater a rock wall built parallel to the beach and located in the water, designed to direct the force of the waves at the wall and not at the beach and sand dunes behind it

Buddhism a philosophy that began in India and arrived in China via the Silk Road in the first century CE. Buddhists believe that after people die, they are reincarnated – reborn into another life. Living a proper life would stop the cycle of rebirth, and this stage, called nirvana, could be reached by leading a good life and no longer wanting things

bullying causing distress and helplessness to a person through the repeated and intentional use of words or actions by an individual or group of people

burden of proof duty of the prosecutor to prove the accused guilty

Bushidō the ethical code of the samurai that stressed loyalty, respect and courage at all times

business an individual or organisation that produces goods or services to make a profit, employ people or further a social cause

butte an isolated hill with vertical sides and a small flat top; smaller than a mesa

C

caliph title for a leader or ruler of an Islamic political region

calpulli the Aztec commoners or ordinary people

capital money or assets owned by a person or business that can be invested

carbon dating estimating the age of historical material (such as archaeological or palaentological items) by calculating the item's content of carbon-14

carbon dioxide emissions the release of CO_2 into the atmosphere, often from burning fossil fuels, which contribute to climate change

casual employment a job with no commitment to ongoing work or an agreed pattern of work

Catholicism the faith and practice of the Roman Catholic Church

cause a factor, such as the actions of an individual or group, or a condition that contributes to a historical development; causes may be long- or short-term factors; historical changes are typically attributed to multiple causes, with political, societal, economic, cultural and environmental considerations

cavalry soldiers or warriors mounted on horseback

census a periodic governmental count of a population that usually includes social and economic information (such as occupations, ages and incomes)

chemical weathering when rocks are broken down by a chemical change

chinampas floating gardens used in the Aztec city of Tenochtitlan

Christianity a religion based on the teachings of Jesus Christ; Catholic and Protestant religions both preach Christianity

cihacoatl the 'snake woman' who was actually a man; he was the advisor to the Aztec king

city-state an independent city (and surrounding lands) with its own government; it is linked to other cities by trade, language and culture, but is not under a centralised government.

civil law addresses disputes between individuals and organisations

civil war a conflict between groups within the same country, often due to political, economic or social tensions

class action where one person brings a claim on behalf of a wider group of people affected by a similar issue

climate graph a graph showing the average temperature and precipitation of a location over time

coat of arms a shield with symbols and colours that represent a family, group or organisation through the process of heraldry

Common Era (CE) the name of the period of time from the birth of Jesus (year 1) until now

common law judge-made law in cases not clearly covered by statutory law. Common law decisions set precedents for similar cases to follow in the future

commuter towns towns where people live but travel daily to work in a nearby city

company a business structure where a business forms a separate legal entity to its owners. A company has shareholders who own the company and directors who operate it.

concentrated urban areas densely populated regions within a city where economic, residential and commercial activities are clustered

Confucianism a philosophy taught by Confucius (551–479 BCE) that taught that people should be honest, brave and knowledgeable and never violent or arrogant; the path to happiness lay in obeying the law, doing one's duty and respecting older people – especially parents and grandparents

congestion overcrowding in urban areas, leading to traffic delays, pollution and pressure on infrastructure

Connection to Country the deep spiritual, physical, social and cultural relationship between First Nations Peoples and the land

conquistador a fortune-hunting soldier from Spain

constitution a document stating the fundamental principles by which a nation, state or organisation is governed

constructive wave a small and infrequent wave that deposits sand on the beach rather than scouring it away; responsible for creating depositional landforms such as beaches, sand dunes, sand bars, spits and tombolos

consumer a person or an organisation that purchases products or services

contestability the interpretive nature of history; contestability relates to the differences between historical interpretations that may result from different evidence or historical explanation

context (sources) the social and historical time, place and conditions in which a historical source was created; the context of a historical source is considered a factor in the evaluation of that historical source

continuity a form of historical process in which there is no change over time

conurbation a large urban area formed by the merging of multiple cities or towns

converging margin an area on Earth where tectonic plates collide

conviction decision that the defendant is guilty of a criminal offence

core the innermost layer of Earth, consisting of a liquid outer core and a solid inner core, primarily made of iron and nickel

corvée labour when a person is forced to work on public projects for a government

Country for many First Nations people, 'Country' refers to the lands, waterways and skyscapes of a particular geographical location. These locations are associated with identity and belonging and cover all parts of the continent of Australia and the adjacent islands. Country encompasses both the physical environment and also cultural connections, stories, lore, law, and traditions related to Caring for Country and its resources, for future generations

court hierarchy the seniority of each court, which determines the type of cases they can hear

creditor a person or business to whom a debt is owed

crest the top of a wave, where it peaks

criminal law involves an action that is considered to be harmful to society, such as murder or armed robbery

crusade a religious war to regain control of the Holy Land for Christians

crust the outermost layer of Earth, made up of solid rock

customary law the laws that regulate behaviour and punishments in Aboriginal society

customer an individual or business that purchases another business's goods or services

customer pain point problems customers experience with a business's product or service

D

daimyō the noble class in medieval Japanese society who were granted land by the emperor in return for military protection

damages a payment to the plaintiff in a civil case

debtor a person or business that owes money

decentralisation a strategy to encourage population and economic activity to move from major urban centres to regional areas, reducing pressure on city infrastructure

defence the arguments and evidence made by the defendant, or their legal practitioner, in the court room to challenge the claims made against them

defendant the accused person in a criminal or civil case

deforestation the clearing of a forest to make room for a different land use such as farming

democracy rule by the citizens, who elect officials and leaders

deposition formation over time of a layer of soil or rock

desert area that receives less than 250 millimetres of rain every year

desertification the process whereby land along the edge of a desert becomes damaged by drought and through overuse by humans, and is replaced by desert

destructive wave a large and powerful wave that constantly crashes onto the coastline, wearing away cliffs and digging out areas of beach

dharma the idea (in Hinduism) that if people follow rituals and live in the right way, the order of the world will be maintained

dhimmi a non-Muslim living under the protection of an Islamic state

diarchy rule by two rulers who inherited the role

director company directors make the key decisions for a business

discrimination treating a person or group unfairly or as if they are inferior, especially if based on their race or gender

diverging margin where tectonic plates move apart

dogma a system of principles relating to faith or morals that is held to by a church

dohyō the sacred ring in which sumō contests take place

domain a feudal territory ruled by a daimyō in shōgunate Japan

dome mountain a mountain formed when magma pushes up from beneath the Earth's crust, creating a dome shape

donjon a fortified tower inside a castle wall in medieval Japan; it served as the daimyō's residence and the last place of refuge when defending the castle

dormant (volcano) an inactive volcano that may erupt in the future

drainage basin area of land where precipitation collects and drains into a river, bay, or other body of water

Dreaming, The an all-encompassing term to describe Aboriginal spiritual beliefs

dredge to clear or deepen an ocean or river bed by scooping up material with a machine known as a dredger

duchy a territory ruled by a duke or duchess, who is not elected, but inherits their position

dune a mound or ridge of sand or loose sediment piled up by the wind, especially on beaches or in deserts

E

earthquake the sudden shaking of the ground as a result of movement in the Earth's crust

economy the sum of all activities involved in the production, distribution and consumption of the goods and services we need and want

effusive eruptions volcanic eruptions where lava steadily flows out of the volcano with less explosive activity

Elders highly respected members of First Nations communities who hold and share cultural knowledge, including lore, law, story, song, dance, and other highly specialised and complex knowledge and wisdom, and have important responsibilities to guide younger generations

emissions the release of gases, particles or substances into the air, often from vehicles, factories or natural sources such as volcanoes

emperor a ruler or monarch of an empire

empire a number of nations or states ruled by a single leader such as an emperor, king, queen or an oligarchy (e.g. the Roman Empire and Aztec Empire)

employed when a person is working in a job

employee a person who is paid to work for someone else

encomienda a grant by the Spanish king to colonists in America to give them the right to demand tributes and forced labour from the Indigenous people of an area

endangered species a species at risk of extinction due to habitat loss, hunting, climate change, or other environmental threats

Enlightenment the philosophical movement that began in the 17th century in Europe that emphasised a belief in human reason

entrepreneur a person who sets up a business, taking on risks to explore an opportunity that will earn a profit or satisfy a personal goal

epicentre the central point of a difficult or unpleasant situation, such as an earthquake or a pandemic

erosion removal and relocation of soil or rock by water, wind or ice

evidence (history) the information obtained from historical sources that are used to support an interpretation of the past; evidence can be used to help construct a historical narrative, to support a hypothesis or to prove or disprove a conclusion

evidence (law) an item or information put forward in legal cases to establish or support facts

excommunicate to cut off a Christian from the Church, which would leave them with no chance of salvation after death

executive the Prime Minister and senior ministers of the Australian Government and the Governor-General, who have the power to administer or implement the law

explosive eruptions volcanic eruptions that release large amounts of ash, gas and rock violently into the air, often forming pyroclastic flows

export where goods or services produced in one country are shipped to another country for sale or trade

F

fealty formal acknowledgement of a vassal's loyalty to a lord

Federal Parliament the legislative branch of the government of Australia

feudalism a system of rights and obligations throughout society, where lords in Europe and *daimyō* in Japan were granted land in exchange for military service; peasants worked on the lord or *daimyō*'s property in return for the chance to grow their own food and receive protection from the lord's knights or the samurai

fief a parcel of land given by a lord to a knight in exchange for military support and allegiance

fieldwork practical, hands-on geographical investigation conducted in the real world to collect primary data

financial goal a business goal directly related to money, such as sales, costs and profits

firman a royal decree issued in the Ottoman Empire

fissures narrow cracks in the Earth's surface caused by volcanic activity, tectonic movements or the drying and shrinking of the Earth

fjord a long, narrow body of water with steep sides created by a glacier

flow landslide the movement of earth, rock or debris down a slope because of excessive rainfall or an earthquake

fold mountain a mountain that forms when two tectonic plates collide and rock is folded upwards

for-profit a business that aims to earn a profit for its own benefit

freelancer an independent contractor who earns wages on a per-task basis

full time working 35–40 hours per week on a permanent basis or fixed-term contract

G

geisha an unmarried female entertainer and companion, highly trained in Japanese dance, poetry and playing musical instruments

geographic information system (GIS) a system used to capture, analyse and display geographic data

geographical characteristics the physical and human features that define a place, such as landforms, climate, population and infrastructure

geographical inquiry the process of investigating spatial phenomena using observation, data collection and analysis

geological fault fractures in the Earth's crust where movement has occurred, often causing earthquakes

geomorphic hazard a danger that originates at or near Earth's surface, such as a volcanic eruption, an earthquake or a landslide

Gothic style an architectural style, popular from the 12th century onwards, that used vertical proportions, pointed arches and external buttressing

Governor-General the royal representative in Australia who must approve all bills before they become law

graben dropped blocks along a fault line in the formation of block mountains

grand vizier the highest-ranking government official in the Ottoman Empire

grandi the nobility in Italy

grant a sum of money provided to an individual, business, or organisation that doesn't have to be repaid

greenfield undeveloped land, usually in rural or suburban areas, that has not been previously built on and is considered for future construction

groundswell wave a steep and fast wave formed by a strong wind storm in the open ocean that creates long wavelength waves that move quickly into shallow water before breaking

groyne a wall that extends out from a beach into the sea, designed to trap the sand moving along the beach and also direct waves away from the shore, reducing erosion

guild a type of trade union established for each skilled craft to guarantee workmanship, oversee the training of apprentices and settle disputes between employers and skilled workers; guilds were like modern trade unions except they also included employers

gyōji a Shintō ceremony to bless and purify the *dohyō* before a sumō contest

H

hapu 'clan' in the Māori language; the basic unit in Māori society

harassment aggressive pressure or intimidation that humiliates or embarrasses a person, such as sexual harassment (unwelcome behaviour of a sexual nature)

harquebus a long gun that was invented in the 15th century and which was portable

headland narrow, high land jutting out into the sea, formed of harder rock that resists erosion

heraldry the system by which coats of arms are created, described and regulated; used to signify different noble families

heretical a person or group following incorrect beliefs (according to the Catholic Church)

hieroglyphics a writing system using pictures and symbols, such as the system used by ancient Egyptians and Mayans

historian a person who specialises in the study of history by using evidence to answer questions about the past

historical inquiry the process of investigation undertaken to understand the past

horst uplifted blocks along a fault line in the formation of block mountains

hot spot a location on Earth where tectonic plates move over very hot parts of Earth's mantle and rocks melt to generate magma for volcanic activity

House of Representatives the lower legislative branch of the federal parliament of Australia

Huguenots French Protestants who were persecuted in the 16th century

humanism a philosophy that emerged during the Renaissance; humanists believed in studying a wide range of subjects to fully realise their potential as humans

humanitarian organisation organisation that provides aid or assistance to people in need, for example, Red Cross

hypocentre the point underground where an earthquake starts

I

imperial court the ruling government in Japan based in Kyoto and then Edo (Tokyo)

import a good or service brought into one country from another country; along with exports, imports are the other key element of international trade

Inca a member of a South American people living in the central Andes before the Spanish conquest

income money an individual or business receives in exchange for labour or producing a good or service

infographics visual representations combining text, graphs and images to summarise complex information

informal settlements unregulated or unofficial buildings and settlements that develop without formal planning approval, often lacking essential infrastructure and services

infrastructure physical and organisational requirements needed for the operation of a society; for example, roads and water supplies

inquiry question an open-ended question to prompt an investigation

Inquisition an organisation run by the Catholic Church from the 15th to 19th centuries that sought to find and punish people who opposed its beliefs

inselberg an isolated, steep-sided mountain, uncovered as the softer land around it is eroded away

internal migration migration of people within the boundaries of a country or region

international agreement a formal agreement or treaty between countries on particular issues

interpretation an explanation of the past, for example about the significance of an individual, event or development, and its relationship to continuity and change and/or causes and consequences, based on evidence from historical sources; there may be more than one interpretation of a particular aspect of the past

investor a person or business who provides capital with the expectation of gaining a financial return

Islam faith of Muslims taught by the Quran and based on the religion founded by the prophet Muhammad

iwi 'people' or nation in the Māori language

J

jarl a wealthy Viking noble who could become rich and powerful enough to eventually become a king

jihad derived from the Arabic root *jahada*, meaning 'to exert strength and effort'; in its expanded sense, it can be fighting the enemies of Islam, as well as adhering to religious teachings

joust a tournament where mounted knights used a lance to try to knock their opponent off their horse

Judaism a religion based on the Torah, with origins to 5781 before the present; followers believe in one God, who is spiritual and eternal

judge a public official appointed to decide cases in a court of law

judiciary the Australian courts that have the power to interpret and apply the law

jury a panel of people (usually 12) selected to decide a legal case on the basis of evidence submitted in court

justice the idea that all people should be treated fairly and equally according to the laws and values of society

K

kami in the Japanese Shintō religion, sacred ancestor spirits that took on forms in nature such as the Sun or rivers

kampaku in Japanese history, office of chief councillor or regent to an adult emperor; the post was created in the Heian period (794–1185 CE) and was thereafter customarily held by members of the Fujiwara clan

karl an everyday Viking farmer, craftsperson, warrior or sailor

karve a Viking cargo ship used to transport heavy cargo around coastlines and up rivers

keep a fortified tower inside a medieval castle wall; the keep served as the lord's residence and the last place of refuge when defending the castle

kendo a safe form of sword training for samurai using bamboo sticks

khan a Mongolian tribal chief or leader

khanate a political region ruled by a khan; the large Mongol Empire split into four separate khanates after the death of Kublai Khan

knarr a broad Viking cargo ship designed for overseas trade

knight a heavily armoured soldier who rode on horseback; a member of a privileged class in medieval European society, who received a grant of land known as a fief from a lord in return for their protection

knighthood the official declaration that a person is a knight

Koori Court a sentencing court that involves Aboriginal Elders

L

labour workers used to produce goods and services in an economy

labour force supply of workers available for the production of economic goods and services

lahar a fast-moving mudflow of volcanic ash and rock that flows down the slopes of a volcano, either during an eruption or following heavy rains after an eruption

lance a long spear used by a mounted warrior

landform a natural feature of Earth's surface, such as a mountain, valley, sand dune or cliff

landscape all the visible features of an area of land, including landforms; different types of landscapes include coastal, desert, riverine, mountain and polar

landslide the mass movement of soil, rock and debris down a slope

latitude a measurement in terms of something's distance north or south of the Earth's equator

lava the name given to magma when it reaches Earth's surface

legacy something handed down from one generation to the next

legal code a collection of laws that provides an organised framework for legal principles

legislature the Parliament of Australia, which has the power to make the law

liability money that an individual or business owes to other parties

lobby an attempt by individuals or groups to influence the decisions of government and public opinion on issues such as deforestation, pollution and the impact of introduced species

longhouse the largest Viking building, with no windows, a thatched roof and a large fireplace in the middle for heating, lighting and cooking; one end of the longhouse could be used as a barn to shelter livestock in the winter, and the other end could be used as a workshop

longitude the geographic coordinate that specifies a location's east–west position on Earth

longship a fast, versatile Viking ship with a very shallow draft, which was able to travel in shallow water

longshore drift the movement of sand in a zigzag fashion along the beach until it meets an obstacle such as a headland or groyne

loot to take valuable goods in a battle, raid or attack

lore body of traditions and knowledge passed on through generations

M

magistrate a person who acts as a judge in a law court that deals with crimes of a less serious nature

magma liquid rock from the mantle beneath Earth's crust that rises through volcanic vents to Earth's surface

Magna Carta a document signed in 1215 in England that outlined basic rights for all people with the principle that no-one was above the law, including the king

magnitude the measurement of the energy released by an earthquake, commonly recorded using the Richter scale

maiko a young geisha in training from the age of six

mainshock the largest and most significant earthquake in a sequence, occurring before aftershocks

mana the sacred power believed to be possessed by Polynesian chiefs

mangonel a weapon that used the power of twisted rope to make a wooden arm spring up and hurl an object

manor a parcel of land given by a king to a lord in exchange for military support and allegiance

mantle the solid layer under Earth's crust in which parts can melt into magma and move to the surface through volcanoes

manufacturing the making of goods by hand or by machine for a business to sell to a customer

market research the process of analysing information about a target market to inform decisions about a product or service to be offered for sale

mass wasting the movement of rocks downhill due to gravity, such as rock falls and landslides

matrilineal the system of tracing descent through the mother's line; in Khmer culture a king claimed his right to the throne through his mother's royal line

mechanical weathering a process whereby rocks are broken into pieces by changes in temperature, being split open by expanding roots or ice

media mass communication through broadcasting, publishing and the Internet

megacity highly urban places with 10 million people or more

meritocracy a system of promoting those with talent, or rewarding those with skill, rather than those with a senior position in society

mesa a broad, isolated flat-topped landform found in desert areas; the eroded remains of a wide plateau

midden waste deposits from meal preparation, often containing bones and shells, which provide evidence of what the people living in a certain area ate

migration the movement of people from one place to another, either within a country (internal migration) or across borders (international migration)

milpas a small field in Mexico or Central America that is cleared from the forest, cropped for a few seasons, and abandoned for a fresh clearing

mining The extraction of valuable minerals or materials from the earth

moai the original name for the statues of Rapa Nui

monarchy rule by a single ruler who inherited the role

motte within a medieval castle, a raised hill with a wooden or stone keep (a fortified tower) on the top

mountain a large landform that sits above the surrounding land, usually in the form of a peak; steeper than a hill

mountain range a series of peaks and high land linked in a line

multinational corporation a large business that owns or controls the production of goods or services in more than one country

Muslim a follower of the Islam religion

N

native title recognition that First Nations Peoples have traditional rights to the land and the water

natural resources resources from nature, such as coal, fish, timber, wheat and milk

natural rights the idea that a person has rights from birth (such as the right to liberty) that cannot be removed by any government

natural sciences the study of how the world works; there are five branches; physics, astronomy, Earth science, chemistry and biology

ninja a highly trained warrior who was a specialist spy and assassin

ninjutsu the art of becoming a ninja and perfecting specialist fighting and spying skills

noble a person who belongs to the aristocracy (usually wealthy)

nomad/nomadic people with no permanent home, who often herd animals from place to place to find fresh pasture

non-renewable resource resource that cannot be regenerated or replenished within a human timescale once it is used up (for example, coal, oil)

Normans Viking settlers in the French region of Normandy who adopted the French language, customs and religion

northern hemisphere the half of the Earth located north of the equator

not-for-profit a business that is operated for social welfare rather than for profit

O

obsidian a form of igneous rock that is usually black in colour

occupational health and safety (OHS) laws, regulations and guidelines to ensure good standards of health and safety in the workplace

Old World the parts of the world that were known to Europeans (including Africa, Asia and Europe) before the discovery of the Americas

oligarchy the government of a state or country by a small group of people

Olmec the Olmec were among the first Mesoamerican complex societies, appearing around 1600 BCE; they may have been the first people to convert latex from the rubber tree into material that could be shaped, cured and hardened

onna-musha female warriors in medieval Japan

organisational goal non-financial goal of a business that will help it to become successful; for example, training staff, customer satisfaction, safety

outrigger canoe a canoe with a log attached to one or both sides of the hull to prevent the canoe from tipping over in rough seas; the log is attached using wooden beams

outsource where businesses send some of their operations to areas of the world where they can take advantage of cheaper labour

overtime time worked in addition to normal working hours

P

pagan someone who doesn't follow the major religions of the world or believes in more than one god

page the son of a lord who, at age seven, was sent to another lord's family to undertake training as a knight

paid leave time allowed for holidays (annual leave) and illness (sick leave) where you receive your normal pay

paiza the official metal pendant carried by riders in the *Yam* in the Mongol Empire, to show they were messengers of the Khan

palisade in a medieval castle, a defensive wall made of wooden stakes

papacy the office of the Bishop of Rome; the pope is the leader of the Catholic Church

Parliamentarians supporters of the Parliament during the English Civil War; they wanted to end the absolute monarchy

part time working less than 38 hours per week on a permanent basis or fixed term contract

partnership where between two and 20 people go into business and share the profits and losses

patron someone who gives support or money to somebody or something

peasant the lowest class in medieval European and Japanese society; peasants farmed the land for their lords or emperor in return for protection

pension a regular payment made by the government to people at the official retirement age and to some returned service personnel and people with a disability

perspective the outlook of an individual or group that is shaped by their worldview and context; it includes ideas, beliefs and attitudes, the cultural context and other factors including age, gender, social status, locality, ethnicity or national identity

phenomenon something that is observed to exist or happen

physical weathering the breakdown of rocks by wind, water, and temperature changes

pilgrimage a spiritual journey to a place of religious importance

pillage a violent robbery where the attacker takes everything from the place and people they have conquered

pilli the regular nobles in the Aztec social system

plaintiff the person who files a lawsuit against a defendant in a civil law case

plateau a large flat area of land that is high above sea level

polymath a person with wide knowledge or learning

polytheistic religion the belief in or worship of more than one god

popolo grasso the social class in Renaissance Italy that consisted of wealthy professionals and guild members

popolo minuto the social class in Renaissance Italy that consisted of skilled workers

population density a measure of how many people live in a particular region or area

population profile a pyramid-shaped graph that shows the distribution of age and gender within a population

precedent common law decisions by a judge that are followed in similar cases

precipitation water that falls from the atmosphere to the ground as rain, snow, hail or sleet

presumption of innocence the principle that one is considered innocent unless proven guilty

primary dune a mound of sand at the rear of a beach

primary methodology methods of collecting firsthand data, such as through fieldwork, surveys, experiments or interviews

primary sector industries involved in the extraction and production of raw materials, such as mining and farming

primary source a source that was created or existed at the time under study, such as books, letters, artefacts and buildings

pro rata income earned as a portion of a full-time salary, adjusted according to the hours worked

product a good or service sold to consumers

prosecution the lawyer who conducts the case against the accused person in the court room; it is their job to produce evidence to prove their claims against the accused or disprove any disputed facts

protest a public demonstration to express disapproval of policies, actions or situations

Protestantism a form of Christianity that arose during the Reformation in Northern Europe and which emphasises the importance of the Bible as the source of authority, rather than the Church hierarchy

pull factors positive conditions that attract people to migrate, such as better job opportunities or living conditions

puppet emperor (generally young) emperors in medieval Japan who carried the official title while the real power lay with the shōgun

push factors conditions that encourage people to leave their homes, such as lack of jobs or natural disasters

pyroclastic flow a huge avalanche of hot gas and tephra that can move at speeds of up to 700 kilometres per hour and heat to temperatures of 1000°C, destroying everything in its path

Q

qualitative data non-numerical data based on observations, interviews and written accounts

quantitative data numerical data based on measurements or counts

R

rangatira a Māori person of high rank

raw materials materials in their natural state that are processed to make goods

recession a period of negative economic growth

redeveloped the process of improving or rebuilding an area, often involving new infrastructure, housing or commercial developments

reef a long line of jagged rock, coral or sand sitting just above or below the surface of the ocean

Reformation the 16th-century movement that aimed to reform the Catholic Church

regent a person appointed to rule a country if the monarch is sick, or too young to rule themselves

relative location the position of a place in relation to other locations, described using distance, direction or landmarks

renewable energy energy that comes from natural sources such as the Sun, wind or water, which can be continuously replenished

renewable resource a natural resource that can regenerate or replenish within a human timescale (for example, trees)

republic a form of government in which the head of government is elected by the people

retreat the process of land or ice moving backwards due to erosion, climate change or rising sea levels, often impacting coastal and glacial areas

Richter scale a logarithmic scale used to measure the magnitude of earthquakes

rift valley a valley with a wide, flat floor caused by dropped blocks known as graben from the formation of block mountains

Romanesque style a European artistic and architectural style popular from the mid-11th century that was based on Roman architectural elements (architecture) and focused on religious themes (art)

rōnin a samurai without a master who could hire himself out as a warrior

Royalists people who supported the monarchy as a form of government

rule of law the principle that people should be ruled by law and should all obey it

ruler a person who governs

runes Viking symbols used as part of their writing system

rural areas located outside cities and towns, often characterised by low population density, agriculture and natural landscapes

rural-to-urban migration a form of migration where large numbers of rural-dwellers move to urban areas with the promise of better job opportunities and services

S

sacrament an important religious ceremony in the Christian Church, such as baptism or communion

saga a medieval Viking story of achievements and historical events

sakoku a policy that shut off Japan to the outside world during the Tokugawa Shōgunate

salary where a worker is paid a regular income weekly, fortnightly or monthly

SALTS an acronym used in geography for structuring graph analysis: Scale, Axis, Legend, Title and Source

samurai medieval Japan's warrior class; samurai worked for daimyō and were similar to knights in medieval Europe

sand bars ridges of sand built up by waves and currents over time

sand dunes hills of sand formed over time by the wind

satellite cities smaller cities located near major urban centres that provide similar services and employment opportunities, helping to reduce congestion in primary cities

Saxon a member of a Germanic people who settled in England in the 5th century CE; they merged with the Angles to become the Anglo-Saxon people

scribe a well-educated and highly regarded person who could read and write

sea wall a wall that runs parallel to the shore at the back of a beach, designed to stop erosion by waves and storms and protect the paths, roads and houses built along the shore

secondary methodology research methods that rely on previously collected data, including government reports, academic sources and historical records to analyse geographical data

secondary sector manufacturing industries involved in the production of goods, e.g. bakery or car plant

secondary source a source created after the time under study, such as textbooks, websites and documentaries

sedimentary rock a rock that forms when layers of sediment are pressed together by the weight of overlying rock

seeress a woman that Vikings believed had the ability to see the future

seismic wave a wave generated from the sudden release of energy in or beneath Earth's crust during an earthquake

Senate the house of parliament in Australia that reviews legislation passed in the House of Representatives

sensei the teacher of a martial art

sentence the punishment given to a defendant found guilty by a court

seppuku ritual suicide practised by samurai rather than facing the humiliation of defeat at the hands of the enemy

serf a member of the poorest of the peasant class who received food, shelter and protection from the lords and knights in return for their work on the land and rent payments

service an act that is useful to a consumer, such as a plumber

shah title given to the leader of Iran; the country was also known as Persia

shareholder an owner of shares in a company

SHEEPT acronym for Social, Historical, Environmental, Economic, Political and Technological factors

Shintō Japan's ancient religion based on sacred ancestor sprits known as *kami*, which took on forms in nature such as the Sun or rivers

shōgun the military and administrative leader of Japan; shōguns ruled Japan for approximately 700 years from 1192

shōgunate the government of the shōgun in medieval Japan (e.g. the Tokugawa Shōgunate was the government controlled by shōguns during the Tokugawa period)

siege a military operation where enemy forces surround a town or building with the aim of cutting off supplies and forcing a surrender

siege engine a large weapon used to break castle doors and city walls; used in warfare during the medieval period

siege tower a high wooden platform on wheels that was pushed against castle walls so the attackers could climb into the castle

significance the importance that is assigned to a particular historical

phenomenon; establishing historical significance is an evaluative process that uses questions and criteria

Silk Road a 6500-kilometre trading network of routes over land and sea that connected China to Asia, Europe and the Mediterranean

slave a person who is owned by another person and forced to work for nothing; in medieval society, slaves were at the lowest level of the societal hierarchy

smallpox a contagious viral disease introduced by the Spanish that wiped out large numbers of people in Mesoamerica and South America

social contract the agreement between the state and members of society about how they should be governed

social enterprise a business whose objective is to benefit the community as well as to make a profit, where surplus income is reinvested into social projects

socially responsible business an obligation by an organisation or business to improve society or the environment, such as reducing waste and recycling or working with charitable organisations

sod turf made of grass and soil that was used by Vikings for housing materials

sole proprietorship a business owned and operated by a single person

southern hemisphere the half of the Earth south of the Equator

spheroidal weathering the rounding of rocks caused by chemical weathering where rocks disintegrate along the edges and corners are rounded by water coming from more than one direction

SPICESS an acronym for the seven geographical concepts of Space, Place, Interconnection, Change, Environment, Scale and Sustainability, used to understand and examine geographic issues and relationships

spit a narrow bar of deposited sand linked to the coast

squire a stage of training on the way to becoming a knight, achieved at the age of 14; squires were treated as men and their training became far more dangerous

stack a pillar of rock separated from cliffs or created from a collapsed arch

stakeholder a person or group who has an interest or concern in a decision or place, such as residents, businesses or government

statute law laws created and passed by parliament

stele an upright stone or column bearing inscriptions; plural stelae

steppe a large area of flat, unforested grassland

stereotype a widely held but generalised idea of a particular type of person or thing

strike-slip faulting a type of fault in the Earth's crust where two plates move horizontally past each other

subduction the process whereby a continental plate meets an oceanic plate, and the oceanic crust bends and moves down towards the upper mantle, where the edge of the plate melts into magma that feeds volcanoes along the converging margin

subjugated oppressed or held down

subsidy benefit given by the government to an individual, business or institution

suburb a medium-density region of housing that surrounds the central business district of a city

suburbanisation the expansion of residential areas on the outskirts of cities, often leading to urban sprawl

sultan the ruler of the Ottoman Empire

sumō a martial art practised by sumō wrestlers that is linked to Shintō traditions

sustainability protecting and maintaining environments, communities and economies for future generations

sustainable able to be maintained at a certain level, such as energy or air quality

sustainable transport a type of transportation that has minimal impact on the environment and can be maintained without depleting resources for future generations; it includes walking, cycling, using public transportation and electric vehicles, all of which help reduce pollution and conserve energy

swash water and suspended materials such as sand flowing onto the beach

swell a collection of waves formed by winds that can travel for long distances through the ocean; measured from the crest to the trough

T

tā moko traditional Māori tattooing

tapu something that is restricted, forbidden or sacred; we get the modern word 'taboo' from this term

target market a group of consumers who are the most likely potential customers for a product

tax a compulsory payment to the government from a worker's income or business profits, or added to the cost of goods and services

tectonic plate massive slab of solid rock that moves extremely slowly across the surface of the Earth

tecuhtli the high nobility in the Aztec social system; they were judges and high priests

temporary migration short-term movement of people with the intention of returning home after a period of time

tephra solid material ejected from a volcano during an eruption, such as volcanic bombs and ash

terra nullius a Latin term meaning 'nobody's land', historically used to describe land seen as uninhabited or without recognised ownership

tertiary sector businesses such as schools that provide a service

Thing a local Viking meeting that took place over a few days every autumn and spring to decide guidelines for how the chief or king was to rule

thrall a Viking slave who had been abducted in a Viking raid, purchased overseas or had sold themselves into slavery to pay a debt

tithe a tax paid to the Church in medieval Europe, usually one-tenth of a person's yearly earnings paid in money or in goods (such as animals, seeds or grain)

tlatoani the king of the Aztec people

TOASTIE an acronym for a method for structuring field sketches using Title, Orientation, Annotations, Scale, Time, Information and Edge

tohunga a Māori class of people that included priests and skilled artisans

tombolo a landform that forms when waves deposit a bar of sand to link an island to the coast

tortilla (in Mexican cooking) a thin, flat pancake made from maize flour, eaten hot or cold, typically with a savoury filling; (in Spanish cooking) an omelette

training walls walls built on either side of a river mouth to stop sand from blocking it

transportation the movement of people, goods and services from one place to another using vehicles, infrastructure and networks

trebuchet a tall wooden catapult with a swinging arm that could hurl projectiles high in the air at a target as far as

300 metres away

tribute a payment of goods from one country or state to another, usually given to show respect, submission or admiration

tropical describes the climate in the areas of the world between the Tropic of Cancer and the Tropic of Capricorn

trough the bottom of a wave

tsunami a huge ocean wave generated by an offshore earthquake, volcano or landslide

Twelfth-day the twelfth day after Christmas, 6 January, on which the festival of the Epiphany is celebrated – the last day of the Christmas festivities

tyranny rule by an individual who seized power illegally

U

uji Japanese clans made up of family groups related by blood or marriage

ulema a group of scholars, administrators and judges who interpreted the law and advised the sultan in the Ottoman Empire and in the early Islamic empires

unemployed people of working age who are without a job, but available to work

unemployment rate the number of unemployed persons expressed as a percentage of the labour force

urban based in or relating to a city or large town

urban greening the creation and maintenance of green spaces in cities to improve the environment and provide recreational areas

urban growth the physical expansion of a city or town due to an increasing population

urban heat island effect the phenomenon where urban areas absorb and retain more heat than surrounding rural areas due to concrete surfaces and reduced vegetation

urban renewal the redevelopment of deteriorating urban areas to improve living conditions

urban sprawl the spread of urban development into surrounding rural areas

urbanisation an increase in the proportion of people living in urban areas

V

valide sultan the title of the mother of the reigning sultan; valide sultans held significant power, particularly when the sultan was too young to rule

vassal in medieval Europe, someone who received land in return for providing military service and allegiance**vassal state** a country/state that is somewhat independent, but that is dominated by a more powerful state or kingdom

vizier a government official in the Mongol Empire and Muslim empires such as the Ottoman Empire

volcanic bomb large rocks launched high into the air during an explosive volcanic eruption

volcano a vent in Earth's crust from which lava, gas and ash can pour during a volcanic eruption

volunteer an individual or group who freely gives time and labour for community service

W

wadi a dry watercourse in a deep gorge that divides a plateau

wage where the worker is paid by the hour

warrant a document issued by an official, authorising law enforcement officers to take action

warrior a person who is an experienced fighter or soldier

wastewater injection the disposal of wastewater by injecting it into deep underground wells, sometimes causing environmental issues

water column the vertical section of water from the surface to the bottom of a body of water, important for studying marine and freshwater ecosystems

wave-cut platform flat eroded areas of rock found at the base of coastal cliffs

weathering a process where rock is worn away, broken down or dissolved into smaller and smaller pieces by water, heat and cold; chemical weathering is a chemical change in a rock, while mechanical weathering involves rocks being broken into pieces

Witan the council that advised the Anglo-Saxon kings of England until the 11th century; Witan means 'wise men'

workers compensation scheme a form of insurance that provides financial and medical support to workers who become sick or injured as a result of their work

Y

Yam a system of relay stations every 30–50 kilometres across the Mongol Empire, which enabled messages to travel 200–300 kilometres per day, as riders handed their message to a fresh rider, or chose a fresh horse and rode on

Yassa the code of laws used throughout the Mongol Empire

yurt a portable tent covered in felt and used by nomadic Mongolian herders

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Acknowledgements

The authors and publisher are grateful to the following for permission to reproduce material:

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Civics and citizenship

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World political map

1	Abkhazia	10	Austria	20	Bosnia and Herzegovina	28	Comoros	38	El Salvador	48	Guinea-Bissau	57	Kuwait
2	Adjara (Geor.)	11	Azerbaijan	21	British Virgin Islands (UK)	29	Côte d'Ivoire	39	Equatorial Guinea	49	Haiti	58	Lebanon
3	Albania	12	Bahrain	22	Brunei Darussalam	30	Crimea (Disputed)	40	Eswatini	50	Howland Island (USA)	59	Lesotho
4	American Samoa (USA)	13	Baker Island (USA)	23	Bulgaria	31	Croatia	41	French Guiana (Fr.)	51	Hungary	60	Liberia
5	Andorra	14	Barbados	24	Burkina Faso	32	Curaçao (Neth.)	42	Gabon	52	Israel and the Palestinian Territories	61	Liechtenstein
6	Anguilla (UK)	15	Belgium	25	Burundi	33	Cyprus	43	Georgia	53	Jamaica	62	Lithuania
7	Antigua and Barbuda	16	Belize	26	Cameroon	34	Czechia	44	Germany	54	Jordan	63	Luxembourg
8	Armenia	17	Benin	27	Cayman Islands (UK)	35	Djibouti	45	Gibraltar (UK)	55	Kaliningrad (Rus.)	64	Malta
9	Aruba (Neth.)	18	Bhutan			36	Dominica	46	Grenada	56	Kosovo	65	Martinique (Fr.)
		19	Bonaire (Neth.)			37	Dominican Republic	47	Guadeloupe (Fr.)			66	Mauritius

67	Mayotte (Fr.)	77	Puerto Rico (USA)	86	Saint Martin (Fr.)	94	Sint Maarten (Neth.)	103	Turks and Caicos Islands (UK)		
68	Moldova	78	Qatar	87	Saint Vincent and the Grenadines	95	Slovakia	104	United Arab Emirates		
69	Monaco	79	Republic of the Congo	88	San Marino	96	Slovenia	105	United States Virgin Islands (USA)		
70	Montenegro	80	Réunion (Fr.)	89	São Tomé and Príncipe	97	South Ossetia	106	Vatican		
71	Montserrat (UK)	81	Rwanda	90	Serbia	98	Switzerland	107	Wallis and Futuna (Fr.)		
72	Naxçıvan (Azer.)	82	Saba (Neth.)	91	Sierra Leone	99	The Gambia				
73	Netherlands	83	Saint Barthélemy (Fr.)	92	Singapore	100	Togo				
74	Niue	84	Saint Kitts and Nevis	93	Sint Eustatius (Neth.)	101	Tokelau (NZ)				
75	North Macedonia	85	Saint Lucia			102	Trinidad and Tobago				
76	Northern Cyprus										

Key & map abbreviations

Aust.	Australia	Neth.	Netherlands
Azer.	Azerbaijan	Nor.	Norway
Ch.	Chile	NZ	New Zealand
Den.	Denmark	PNG	Papua New Guinea
Ec.	Ecuador	Por.	Portugal
Fr.	France	Sp.	Spain
Geor.	Georgia	UK	United Kingdom
		USA	United States of America

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