ANTIQUITY

1

YEAR 11

TONI HURLEY | CHRISTINE MURRAY

OXFORD

FOURTH EDITION

ANTIQUITY

1

YEAR ELEVEN

FOURTH EDITION

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Part A Investigating ancient history – the nature of ancient history

Part B Investigating ancient history – case studies

Part C Features of ancient societies

New South Wales' most trusted Ancient History series has been updated for the new Ancient History Stage 6 syllabus. The first of a two-volume series, *Antiquity 1* offers complete support for Year 11 teachers and their students, providing unparalleled depth and coverage and a range of new chapter features that will give students of all abilities the best chance of achieving success in Ancient History.

Key enhancements:

- All content has been explicitly aligned to the new Ancient History Stage 6 syllabus (Year 11).
- Subject experts, Toni Hurley and Christine Murray, have developed comprehensive, engaging and appropriately levelled content.
- Unambiguous language is used throughout the book, with visuals on every spread to engage students and support learning.
- obook assess provides comprehensive student and teacher digital support including answers to every question in the book, detailed teacher notes, support for assessment and exam preparation, videos and more.

'Focus questions', 'Focus concepts and skills' and 'Learning outcomes' are clearly stated at the beginning of each chapter to guide teachers and students through the content.

Content includes the latest scientific developments, up-to-date case studies, maps and rich visual and written source material.

Margin glossary definitions help students easily find the meaning of unfamiliar words and assist with their understanding.

Many chapters feature a 'Profile' that allows for more in-depth learning about a historically significant person, event or phenomenon.

'Understanding and using the sources' questions throughout each chapter enhance student understanding of how to use and critically analyse historical sources.

Answers to every question in the Student book are provided on Teacher obook assess.
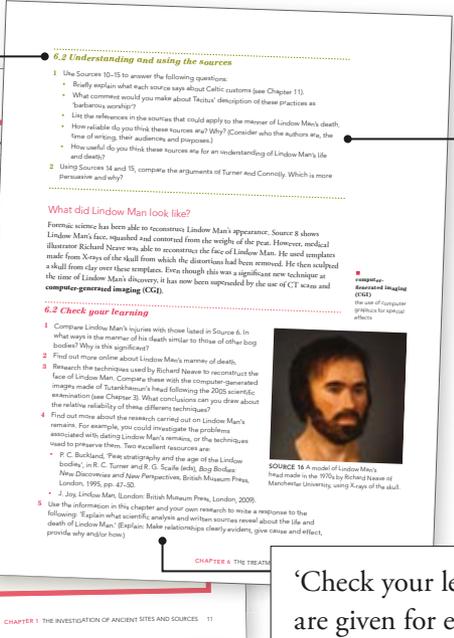
'Check your learning' questions are given for each topic.

obook assess

Antiquity 1 is supported by a range of engaging and relevant digital resources via obook assess.

Students receive:

- a complete digital version of the Student book with notetaking and bookmarking functionality
- targeted instructional videos by two of Australia's most experienced Ancient History teachers
- interactive auto-correcting multiple-choice quizzes
- access to work assigned by their teacher, such as reading, homework, tests and assignments
- the ability to use their cloud-based obook anywhere, anytime, on any device.

In addition to the student resources, teachers also receive:

- detailed course planners and teacher notes
- answers to every question in the Student book
- printable (and editable) class tests with answers
- the ability to set up classes, set assignments, monitor progress and graph results, and view all available content and resources in one place.

The British Museum was founded in 1753 – the first national public museum in the world – and granted free admission to all 'studious and curious persons'. Visitor numbers have grown from around 5000 a year in the 18th century to nearly 6 million today.

PART

A

Investigating ancient history – the nature of ancient history

SOURCE 1 An underwater photographer captures a school of fish swimming over amphorae in Makadi Bay, Egypt.

1

The investigation of ancient sites and sources

FOCUS QUESTIONS

1 How has the nature of archaeological excavation changed over time?

2 How do archaeological and scientific techniques contribute to the discovery and investigation of the ancient past?

3 What are the strengths and limitations of archaeological sources for reconstructing the ancient past?

4 What are the strengths and limitations of ancient texts, inscriptions and iconography for reconstructing the ancient past?

FOCUS CONCEPTS & SKILLS

Evidence

In archaeology, evidence is the information obtained from the analysis of artefacts. Used to interpret a site and to construct a narrative of its history, it can also support or challenge a theory as part of the academic debate surrounding the site. Written sources, such as ancient texts and inscriptions, can also tell us about the ancient past. Each type of source has its own strengths and limitations, and must be interpreted and interrogated to establish the value of the evidence it can provide for the particular investigation being conducted.

LEARNING OUTCOMES

1 Explain how the nature of archaeological excavation has changed over time.

2 Discuss and evaluate the contribution of archaeological and scientific techniques involved in the investigation of the ancient past.

3 Analyse and interpret archaeological and written sources for evidence to support a historical account or argument.

The changing nature of archaeology

Archaeology involves the excavation and study of the physical remains of the past. It is a much younger discipline than history. People have been writing history for about 3000 years, whereas archaeology is less than 300 years old. The word 'archaeology' comes from a Greek word meaning 'the discussion of ancient things'.

Archaeology in its earliest days was mostly concerned with digging up treasures of the past. Today, treasures may still be unearthed, but to the modern archaeologist, every find, even a broken piece of pottery, is a treasure. Alongside the excitement of discovery, there is also the painstaking work of analysis and recording. All aspects of the modern archaeologist's work are aided by sophisticated technology and scientific techniques. Most importantly, archaeology involves interpretation of finds, so that all the work of excavation and analysis might reveal more of the story of our human past.

In more recent times, archaeology has also become concerned with the need for conservation, to protect sites from both natural and human destruction. Beyond adding to our store of knowledge about the past, archaeologists aim to preserve what remains of that past as part of the cultural heritage of humankind.

The history of archaeology

The search for treasure that characterised the early days before the 19th century was haphazard and often very destructive. For example, early treasure hunters used battering rams and dynamite to blast their way into the Egyptian pyramids and tombs. It was not until more systematic and scientific methods were introduced by pioneers such as Giuseppe Fiorelli, Sir Flinders Petrie and Sir Mortimer Wheeler that the discipline of archaeology was born (see Source 2).

These methods were accompanied by some important developments in human knowledge and understanding about the past. Scholars Colin Renfrew and Paul Bahn, in their book *Archaeology: Theories, Methods and Practice*, have identified three significant conceptual developments during the 19th century that laid the foundations for modern archaeology:

- *the antiquity of humankind* – up until the 19th century, the biblical account of creation and human history as only a few thousand years old was widely believed. However, the discovery of the bones of extinct animals and other ancient artefacts began to suggest that human origins might be traced to a very distant past, and so the notion of **prehistory** was born.
- *the concept of evolution* – the idea of ancient origins was reinforced by the publication of Charles Darwin's *On the Origin of Species* in 1859. Darwin's work demonstrated how the concept of evolution accounted for the development of plants and animals over long periods of time. It soon became clear that this same process of evolution could help to explain how the human species had developed. This paved the way for the search for human origins in the archaeological record.
- *the Three-Age System* – Danish scholar Christian Jürgensen Thomsen proposed in 1836 that artefacts excavated in a dig could be organised in a chronological sequence of Stone, Bronze and Iron, beginning with the earliest human technology of stone. This concept, together with the application of **stratigraphy**, contributed to the development of more careful and systematic excavation methods, and continues to be the basis of modern archaeological practice.

prehistory
the period before the invention of writing in about 3500 BC

stratigraphy
the study of the strata in an excavation site to reveal the natural and cultural deposits

SOURCE 2 Pioneers of archaeological excavation

CENTURY	PIONEER	APPROACHES/METHODS	SIGNIFICANCE
18th	Giovanni Belzoni	Treasure hunting	An example of the treasure-hunting school; no scientific techniques used
19th	C. J. Thomsen	Three-Age System: Stone, Bronze and Iron	Classification used by scholars throughout Europe
	Giuseppe Fiorelli	Systematic method of naming and recording buildings at Pompeii; plaster cast technique	Early pioneer of scientific excavation and recording methods
	Heinrich Schliemann	Used crude excavation methods; discovered Troy and Mycenaean civilisation	Pioneered the interpretation of stratigraphy to reconstruct the past
	General Pitt-Rivers	Used military precision and surveying methods; thorough recording	Pioneered modern field techniques of archaeology
	Sir Flinders Petrie	Organisation, collection of all artefacts, sequence dating in Egypt and Palestine	Dating techniques enabled chronological order of finds from a site to be determined
	Sir Mortimer Wheeler	Pioneered the box-grid method; excavated Maiden Castle in England	Precision methods revolutionised field archaeology
Early 20th	Sir Arthur Evans	Excavation, conservation and reconstruction at Palace of Knossos, Crete	Revealed and named the Minoan civilisation
	Howard Carter	Meticulous recording and conservation; discovered tomb of Tutankhamun	Almost intact tomb provided valuable information on royal burials
	Leonard Woolley	One of first 'modern' archaeologists; excavated at Ur in Mesopotamia	Put Sumerians on map of ancient world
	Kathleen Kenyon	Applied Mortimer Wheeler's box-grid method at Jericho and Jerusalem	Pushed back date of occupation at Jericho to the end of the Ice Age
	Vere Gordon Childe	Developed a system to organise artefacts indicating ownership and period of time	Developed concept of a 'culture', i.e. assemblage of artefacts identifying a particular group of people

The contribution of science

The impact of science can be seen today in nearly every area of archaeology, from the location of sites to the analysis of the excavated finds. The last 50 or so years have witnessed the development of a wide range of new scientific techniques, including the use of computers, satellites, molecular DNA analysis and many other sophisticated technologies.

Archaeologists call on many branches of the physical and social sciences to help them analyse their finds. These finds can include artefacts, human and animal remains, and the soil or other material in which they have been deposited. Physical sciences, such as botany, zoology and biology, are used to analyse the material remains of the past. Social sciences, such as anthropology, geography, linguistics and sociology, focus on the development of societies and human relationships.

1.1 Check your learning

1 Consider the important conceptual developments in human knowledge and understanding about the past. Why was the new thinking about the antiquity of humanity important in the early development of archaeology?

2 Choose two pioneers from the table in Source 2 and investigate their contributions to the development of archaeology.

Archaeological techniques

Despite what some people think, archaeologists are not Indiana Jones-type men in brown fedora hats cracking whips and fighting off Nazis. This is not what archaeology is about. Rather, it is about investigating how people lived in the past, where they lived, how and where they worked, what they believed and how they organised their lives. Source 3 shows the sequence of procedures used by field archaeologists excavating sites.

Finding archaeological sites

Potential archaeological sites are revealed in a variety of ways. Traditional human activities such as ploughing or construction of roads have led to many chance finds.

Modern warfare has sometimes revealed artefacts and potential archaeological sites. For example, soldiers in the Gallipoli campaign found ancient artefacts that had been exposed when the trenches were dug. The use of aircraft during World War I led to aerial photography, which opened up new possibilities for archaeology. During World War II, the construction of airfields and the bombing of buildings exposed many potential archaeological sites.

Clues to the location of ancient sites can sometimes be found in ancient literature. Heinrich Schliemann used Homer's **epic** poem *The Iliad* to find the ancient city of Troy, supposed site of the Trojan War (see Chapter 10). Ancient maps, legends, folklore and place names can all provide clues to the archaeologist about where to begin excavation.

Methods of locating ancient sites

Potential archaeological sites may also be discovered using modern technology and some of the very latest scientific developments. Source 4 outlines a range of these methods, including **aerial surveys** and **geophysical surveys**.

Finding
archaeological sites

↓

Excavation

↓

Recording techniques

↓

Analysis of finds

↓

Interpretation

↓

Publication

SOURCE 3
Method of the field archaeologist

epic
a long poem, usually derived from ancient oral tradition, narrating the deeds and adventures of heroic or legendary figures or the past history of a nation

aerial survey
the use of aircraft or satellites to create images of the land to be interpreted for archaeological information

geophysical survey
ground-based physical sensing techniques used in archaeology for imaging or mapping

SOURCE 4 Methods of locating archaeological sites

AERIAL SURVEY	*Crop marks* are irregularities in crop growth observed from the air or another high position that reveal archaeological features. Crops that are planted in shallow soil above remains of buildings, walls or roads ripen late and do not grow tall. Conversely, crops planted in ancient ditches or pits ripen early and do grow tall. From the air, crop marks outlining ancient remains can be detected clearly.
	Soil marks are differences in soil colour caused by archaeological features. They can be seen from the air after a field has been ploughed. Where a ditch, pit or mound once existed, the soil that has been turned over may be darker in colour than the soil of the rest of the field. This can expose the outline of buried features such as walls, buildings or even entire settlements.
	Shadow marks are surface shadows that indicate possible underground features such as earthworks and ditches. These marks are visible from the air when very low earthworks or mounds cast shadows at dawn, sunset or in winter months when the sun is low in the sky.
	Satellite photography locates sites from space using satellite remote sensing technology. Satellite imaging is more efficient than aerial photography because it takes over 200 aerial mapping photos to cover the same area as a single satellite image.
	LiDAR (light detection and ranging) mapping is an optical remote sensing technology that uses laser light to map the ground surface and objects present on or just below the surface of the Earth.

GROUND SURVEY	*Field walking* involves walking systematically across a site to note its physical features and record surface finds such as pottery fragments, differing soil colours or remains of buildings. **Findspots** are plotted on a site map. Concentrations of finds indicate good places to start excavation.	
	Geophysical survey	*Ground-penetrating radar (GPR)* is a geophysical method in which radar pulses are used to produce images of the subsurface (see Source 5). Radar signals in the form of electromagnetic pulses are directed into the ground. A receiver records the reflections from buried objects as well as changes in soil composition. The time taken for the signal to reflect to the receiver indicates the depth. Data received are plotted on a profile map of the site. GPR is most useful in uniform sandy soil conditions, like those found in Egypt.
		Resistivity is a survey method in which a resistivity meter is used to pass an electric current between two metal probes in the ground to measure the resistance of the soil to the current. Buried walls are indicated by a high resistance, whereas pits and ditches have a lower resistance.
		Magnetometry is a survey technique used to identify areas of human activity by mapping variations and contrast in the magnetic properties of soil and subsoil (see Source 6). These magnetic properties can be detected using a proton magnetometer. The highest readings come from iron, brick, burnt soil and rock, so archaeological features made of these materials can easily be detected. Lower readings indicate disturbed soils or decayed organic materials.

■ **findspot**
the place where an artefact is found in a dig
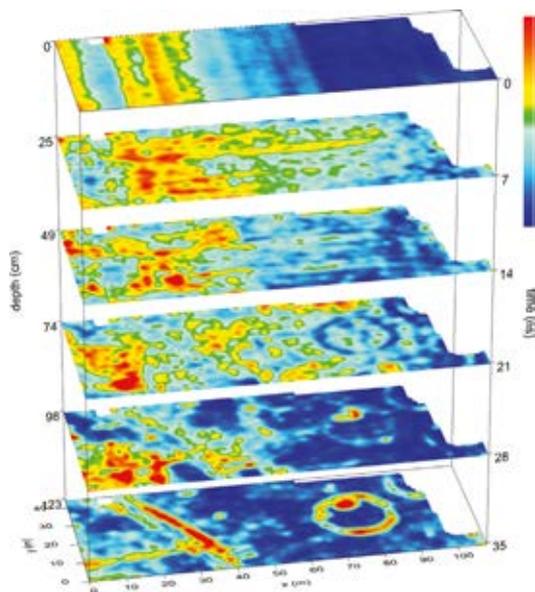
SOURCE 5 The results of this GPR survey conducted in Japan show different layers below the surface represented as slices. It revealed a circular burial mound containing the remains of a warrior with a variety of artefacts, including bronze swords. This can be seen clearly in the bottom slice.

SOURCE 6 This archaeologist is using a magnetometer to detect and map archaeological artefacts and features. Both land and marine sites can be surveyed using this method.

1.2 Check your learning

1   What role has modern warfare played in revealing archaeological sites?
2   Find three examples of archaeological sites that have been discovered using aerial and ground survey methods.
3   What are the benefits for the modern archaeologist using the GPR survey method? How deep can it go?

What lies beneath: LiDAR mapping and the Angkor complex

The temples of Angkor were built between AD 802 and 1220 by the **Khmer** civilisation, whose kings ruled over a vast domain that reached from Vietnam to China to the Bay of Bengal. The surviving structures are the remains of a religious, social and administrative complex. The palaces, public buildings and houses, built of wood, have long since disappeared, leaving only the stone temple structures still standing.

Khmer
an ancient South-East Asian kingdom that ruled over the Mekong valley from its capital at Angkor in the 11th century AD

SOURCE 7 Part of the Angkor Wat temple complex set amid the dense Cambodian rainforest

2.4 km
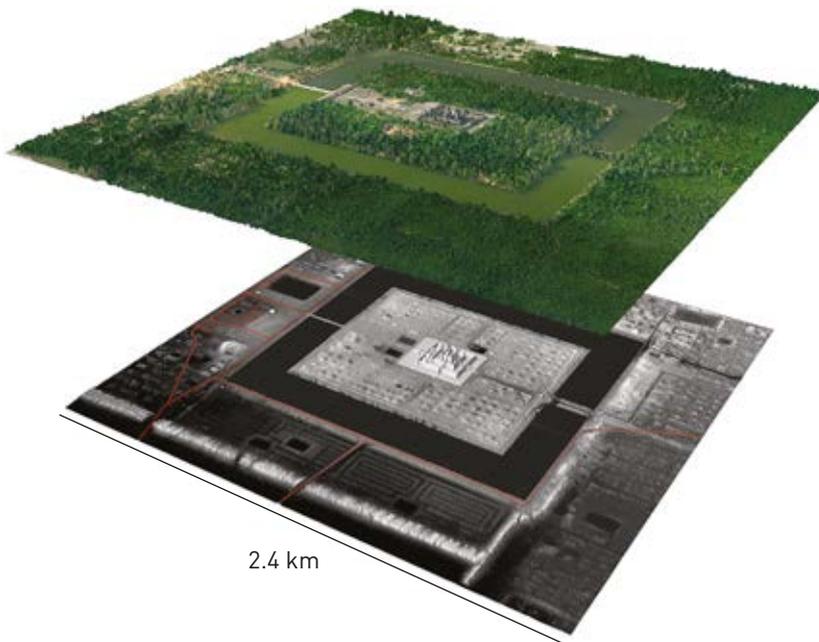
SOURCE 8 These LiDAR mapping images show what lies beneath the dense forest surrounding the Angkor Wat temple complex. In the top image, the site's moat can be seen as well as the urban block system within it. The bottom image shows the block system extending beyond the moat.

LiDAR mapping of the Angkor region, a project led by Australian archaeologists Professor Roland Fletcher and Dr Damian Evans, revealed that the temple complexes and the urban landscapes surrounding them were much more extensive than previously thought. Angkor Wat is now known to have had urban areas on both sides of its famous moat. The former Khmer capital, Angkor Thom, which included Angkor Wat, now covers an area of more than 33 square kilometres, four times larger than original estimates. These discoveries support existing theories about the decline and collapse of Angkor. Its growth was ultimately **unsustainable.**

■ **unsustainable** unable to be maintained

According to Dr Evans, 'What you have is an urban structure that is analogous [similar] to the giant, low-density megacities that have developed in the twentieth century with the advent of the car. [It is] a dense urban core surrounded by a vast lower-density periphery, or sprawl.'
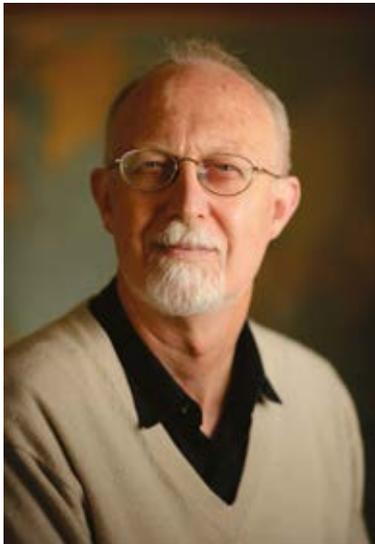
SOURCE 9 Professor Roland Fletcher
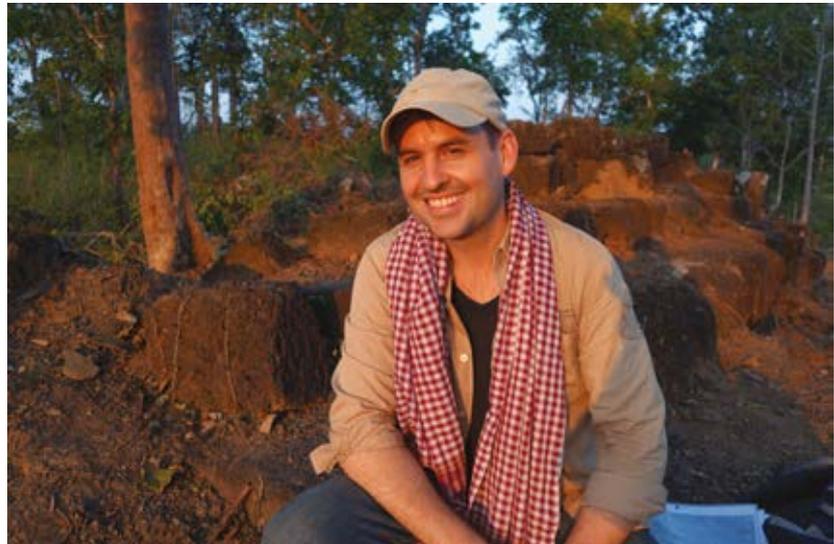
SOURCE 10 Dr Damian Evans

1.2 Profile tasks

1 Carry out research on the Angkor temples in Cambodia and the work of Australian archaeologists Roland Fletcher and Damian Evans. Use 'Greater Angkor Project' and 'LiDAR map Angkor Wat' for your online searches.

2 Watch the short online film *How LiDAR Scans Reveal Angkor's Hidden City.* See also the Smithsonian Channel's program *Angkor Revealed* for details of LiDAR scanning and the modern remains of Angkor Wat.

3 Search online for the phrase 'Angkor Wat – Google Arts & Culture' to take a virtual tour of the complex or view an aerial animation of a 3D model of the site.

4 The causes of the collapse of the Angkor and the Khmer Empire in the 15th century are still being contested. Investigate the various theories concerning the collapse. Search online for the phrase 'What caused the collapse of Angkor?'.

Excavation

hypothesis
a proposed explanation based on limited evidence that is used as a starting point for further investigation

Most archaeological excavations are conducted for research purposes. Often an archaeologist has questions to ask about past civilisations or a **hypothesis** to test. Today, with greater emphasis on the conservation and preservation of the past, excavation is often carried out when significant sites are threatened, for example by urban development such as the construction of buildings, roads and tunnels.

Archaeologists conduct a salvage dig in a more limited time frame than is available for a research dig. Sometimes there is only time to remove as many artefacts as possible before the development resumes. An example of this took place in 1999 when construction work for the new Athens metro began in preparation for the Athens Olympic Games of 2004. The excavations uncovered remains spanning a period from 10 000 BC to the present. Many of the valuable artefacts retrieved were displayed in purpose-built cabinets at different metro stations so that commuters could appreciate something of the history of the site before its destruction.

SOURCE 11 Underground remains of Athens from classical and Roman times were the biggest obstacle in the construction of the city's new metro in the late 1990s. What was discovered is now on display to metro users.

Many people work on an archaeological dig. The work is coordinated by a director who is usually a very experienced scholar working and teaching in a university or an employee of a government authority. Not only must the director be an expert in their field, but they must also be able to convince governments, sponsors or benefactors to fund the dig.

Many specialists in different disciplines are employed to carry out the wide range of activities essential to an excavation. Experts such as **ceramicists** and anatomists, for example, contribute specialised knowledge used in the interpretation of pottery and of human and animal remains. The heavy digging in an excavation is done by workers who may be students, interested members of the public or hired labourers.

ceramicist
a pottery expert

Excavation techniques

Once a site has been chosen, a site plan is drawn up. Before the major work of excavation begins, trial trenches are dug to enable the archaeologists to select the best place on the site to begin digging. There are two main techniques used in archaeological excavation: the grid system and open-area excavation.

The grid system

The grid system allows archaeologists to study the vertical dimension of a site by revealing the time sequence in the layers exposed. Using this method, surveyors divide the site into a grid of squares or boxes. Each square to be excavated is marked out on the ground using string. It is numbered and then excavated leaving a wall or **baulk** in between. Each baulk provides a vertical record of the sequence of layers in relation to each other. The baulks may later be removed to reveal the overall nature of the site.

The layers exposed during an excavation are called **strata** (a single layer is called a **stratum**). These are tagged with labels to differentiate them from each other. The study of these strata is called stratigraphy, which is based on the principle that the oldest material is in the lowest layers and the youngest is closest to the surface.

When artefacts and other features are unearthed during excavation, archaeologists use the coordinates of each grid to record the location of the finds on a map, or plan of the site. This allows patterns of artefact distribution to appear. These patterns can provide insights into the activities that may have occurred in different parts of the site. The grid coordinates also provide valuable information about the findspot and context of artefacts, which enables their **provenance** to be established.

■ **baulk**
a strip or wall of earth left between trenches to enable study of the complete stratigraphy of a site

■ **stratum (*pl.* strata)**
layers in an archaeological site revealed by excavation

■ **provenance**
the origins and published ownership history of an archaeological artefact
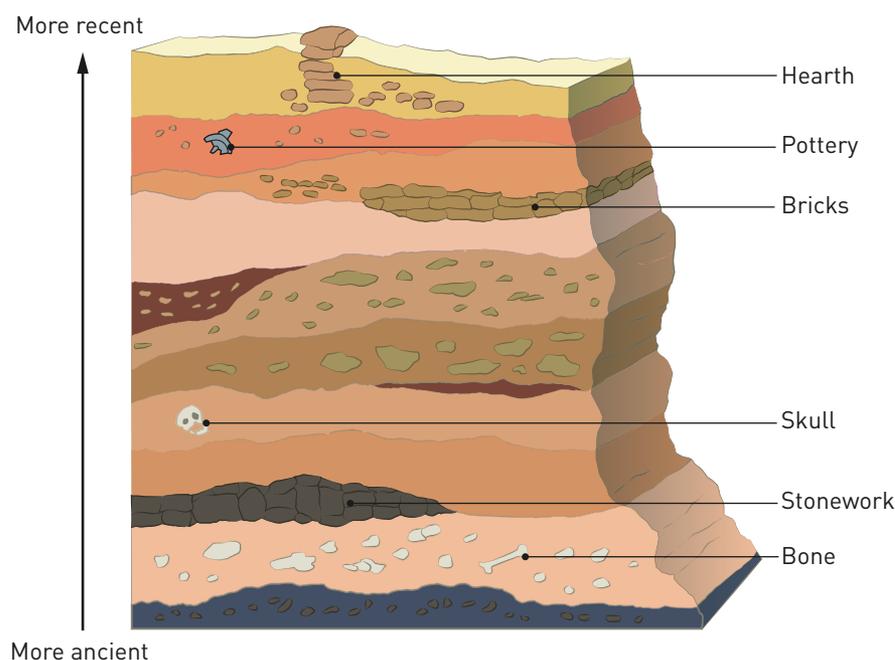
SOURCE 12 The principle of stratigraphy – the sequence of deposits in an archaeological site – can be clearly seen in this diagram.

Open-area excavation

This method of excavation focuses on the horizontal dimension of a site by uncovering the whole site layer by layer. The emphasis is on understanding the relationships between the things found in each layer or stratum. Each succeeding stratum is not exposed until the one above it has been completely examined and recorded. Some sites lend themselves to a combination of different methods depending on the terrain, the research focus and the complexity of the site.
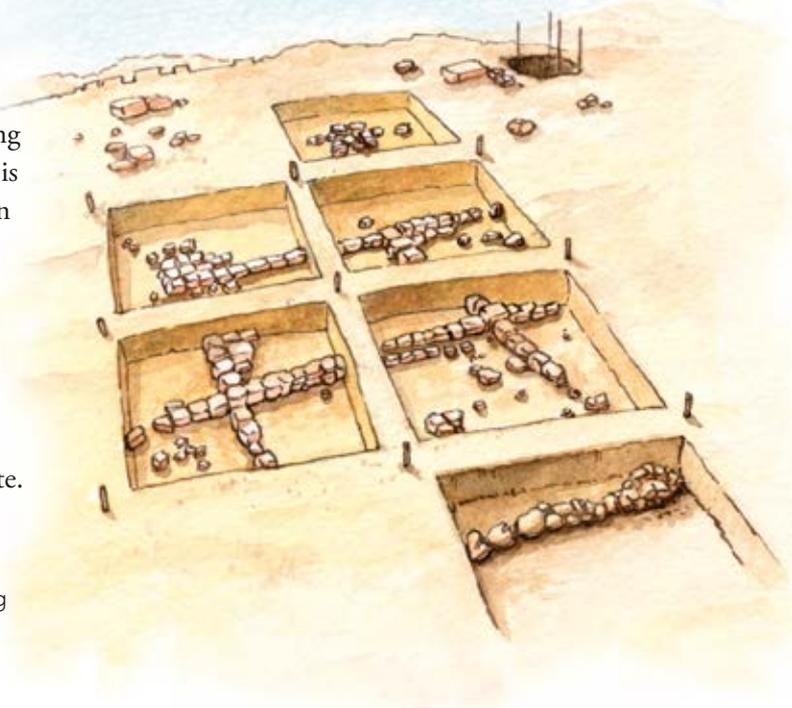
SOURCE 13 This is a site being excavated using the box or grid system. Wooden pegs at the corners of the boxes are reference points for surveying. They also provide the coordinates for recording finds.

SOURCE 14 An archaeologist works with a brush on a male skeleton in Insheim, Germany. The bones are more than 1000 years old.

Excavation tools

A variety of large and small tools is used to remove the soil from a dig site. Initially, heavy earth-moving machinery can be used to clear the surface and remove topsoil. The major work of excavation is carried out using picks, shovels and trowels. Once finds appear, finer tools such as paintbrushes, toothbrushes and even dental picks are employed to carefully expose remains without moving them or causing damage. They must remain *in situ* (that is, in their original position) so that their exact location and description can be recorded before they are removed. Dirt or sand that has been removed at all stages of the dig is sieved to reveal tiny fragments that might otherwise be lost.

1.3 Check your learning

1   Explain the main differences between the grid system and open-area excavation.
2   Identify the baulks in Source 13. Explain two purposes they serve in an excavation.
3   If you were the director of this dig, would you remove the baulks? Why or why not?
4   What is provenance? Why is it important?

1.4 Recording techniques

Archaeology is a destructive process: after excavation, a site can never be restored. It is therefore essential to record the locations and details of all finds as each stratum is destroyed. Along with grid coordinates, visual records are made by artists and photographers to record the location of findspots. Written records, such as the labels on strata and finds, are also kept, as well as the detailed day book kept by the director.

All finds are carefully washed, sorted and catalogued. Pottery was the chief material used for all kinds of containers in ancient times and could be easily made, but also easily broken. For these reasons, it is one of the most common finds on ancient sites. Ceramic experts can often reconstruct a pot from many fragments, called **potsherds**, enabling them to determine its original shape and even its function. All of the different artefacts on a site are grouped into collections called **assemblages**, for example a pottery assemblage or an assemblage of stone tools.

potsherd
a pottery fragment that has archaeological significance

assemblage
group of different artefacts found in association with one another or in the same context

template
a shaped piece of rigid material used as a pattern

geographical information systems (GIS)
a computer-based tool that analyses, stores, manipulates and visualises geographical material

topography
the physical appearance of the natural features of an area of land

computer-aided design (CAD)
the use of computer technology to design and model parts, products or structures

SOURCE 15 Dr Gae Callender, an Australian Egyptologist working on the Old Kingdom royal burial site at Abusir in Egypt, is measuring a potsherd against a **template** to determine the shape of the original pot.

SOURCE 16 The archaeological team from the University of Cincinnati working on the Porta Stabia Project at Pompeii has replaced paper with the use of tablet devices.

Computers are indispensable tools for keeping records both in the field and in the laboratory. They have a wide range of uses including:

- maintenance of databases, such as excavation records and official site databases
- statistical analysis using spreadsheet software
- linking data to maps using **geographical information systems (GIS)**
- graphic display of surveying including site **topography**
- reconstructions using computer graphics, for example 3D models, simulations and **computer-aided design (CAD)** images.

1.4 Check your learning

1 Explain the importance of keeping records during excavation.
2 Why do archaeologists draw sketches as well as take photographs on sites?
3 What kinds of clues can pottery provide?
4 Suggest other uses for computer technology on an archaeological site.

Analysis of finds

Everything found during excavation has to be sorted, identified, cleaned and catalogued. Some artefacts require scientific analysis in specialist laboratories to answer questions about their age and the materials from which they are made. A current example of such work is the collaboration between Macquarie University scholars Dr Jaye McKenzie-Clark of the Ancient History Department and Professor John Magnussen of the Australian School of Advanced Medicine. They have recently pioneered the use of dual-energy computed tomography (DECT) to analyse the composition of ancient artefacts, including ancient Roman ceramics on which Dr McKenzie-Clark is a world authority. DECT analysis is totally non-destructive compared to traditional analytical techniques. This is an important factor in the handling and analysis of valuable ancient artefacts.

A prime concern of archaeologists when analysing a site is establishing dates. This includes working out dates for finds from the various strata. Two methods of dating are used: archaeological and scientific dating.

Archaeological dating

Archaeological dating is based on the principle of stratigraphy and is relative in nature. This means that anything discovered is considered in relation to the strata above and below.

Stratigraphic dating

This method relies on the relationship between the successive strata or layers of a dig, with the oldest material being in the lowest strata. As the dig progresses, and each stratum is revealed, careful analysis and recording of the artefacts, both *in situ* and once removed from their context, is carried out. Sometimes, more accurate dates can be determined if artefacts such as coins are found.

Typology dating

The principle of organising finds in a chronological sequence is also the basis of typology dating. Groups or types of artefacts such as pottery, tools or weapons can be arranged in a sequence from the earliest to the latest types based on the following principles:

- Artefacts belonging to a particular period have distinctive features based on the materials from which they are made, the method used to make them and their shape and decoration.
- Over a long period of time, these artefacts show gradual changes, or evolution, in style and decoration. The materials from which they are made and their production techniques may also vary.

red-slip pottery a type of Roman pottery produced from the mid-1st century AD into the 7th century, also known as *terra sigillata* ware

SOURCE 17 The distinctive **red-slip pottery** from ancient Roman times, known as *terra sigillata* ware, was widely used in Pompeii. Dr McKenzie-Clark's scientific analysis of the composition of this clay has shed new light on the manufacture of Pompeiian pottery and its role in the economy of Pompeii.

As a general rule, the earliest artefacts in the sequence tend to be simpler, while the latest samples will be more sophisticated. We are familiar with this principle in our own times. Few of us would have any difficulty in arranging a chronological sequence of personal computers beginning with the large grey box on the desk and progressing to laptops, tablets and smartphones.

Thomsen's Three-Age System

One of the most useful systems for organising finds in sequential order was the Three-Age System devised in 1836 by C. J. Thomsen (1788–1865). He established a three-part organisation of ancient artefacts based on the technology of stone, bronze and iron. Widespread excavation confirmed that stone artefacts pre-date bronze artefacts, and iron artefacts came after bronze ones.

Each of these three ages has been further divided into early, middle and late periods. These periods reflect specific technological developments within each age. The oldest period is the Old Stone Age or **Palaeolithic** time (*palaeo* = old + *lithic* = stone). The middle period is called **Mesolithic** ('middle stone') and the later period is referred to as **Neolithic** ('new stone'). Similarly, the **Bronze Age** is divided into Early, Middle and Late periods that reflect important phases in its culture and technology. Despite scientific advancements in the dating of artefacts, this basic ordering of finds is still the most common method of dating used by archaeologists.

BC	
1000	Iron Age
3000	Bronze Age
	Copper Age
5000	
	Neolithic (New Stone Age)
9000	
10 000	Mesolithic (Middle Stone Age)
	Upper Palaeolithic (latest period of Old Stone Age)
30 000	
	Middle Palaeolithic (middle period of Old Stone Age)
100 000	
	Lower Palaeolithic (earliest period of Old Stone Age)
2 million	
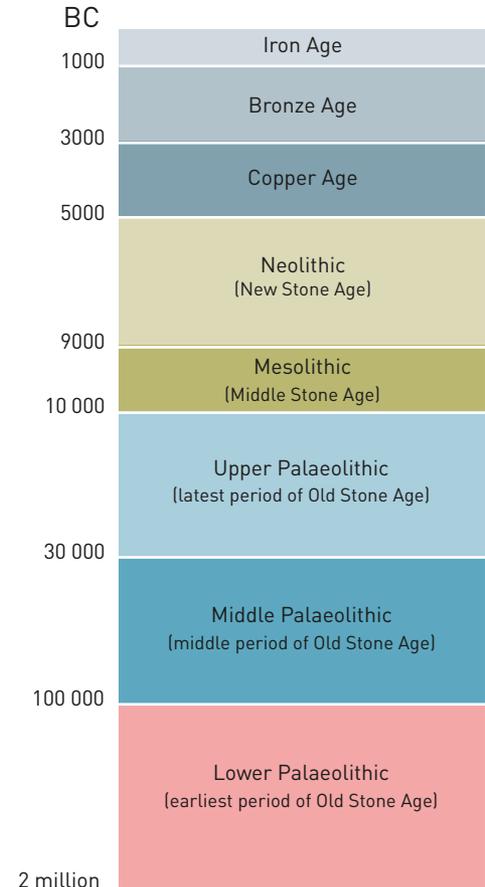
SOURCE 18 Chronology of the Three-Age System

1.5a Check your learning

1 Apply your own skills of typology dating. In small groups, work out a sequence for each of the following classes of objects beginning with the earliest type and ending with the most recent: cars, writing implements, timepieces, devices for cooking, telephones.
2 Search online for 'Pompeii pottery may rewrite history' to read more about Dr McKenzie-Clark's analysis of the pottery from Pompeii.

Scientific dating

Scientific dating using laboratory analysis can often provide more accurate dates and is often referred to as 'absolute dating'. Science has made a major contribution to the dating of archaeological material. Of the many different scientific dating techniques developed during the 20th century, radiocarbon dating remains the most widely used. In the 1940s, Willard Libby led a team of scientists in introducing this technique. This was the beginning of a revolution in dating because, for the first time, it was possible to determine more exact or absolute dates by strictly scientific methods. Libby was awarded the Nobel Prize for Chemistry in 1960 for his discovery.

Palaeolithic
relating to the Old Stone Age, which began about 2.5 million years ago

Mesolithic
relating to the middle part of the Stone Age

Neolithic
relating to the New Stone Age, which began about 10000 years ago

Bronze Age
a historical age characterised by the use of cast bronze to make tools and weapons

Radiocarbon dating

Radiocarbon dating, also known as carbon-14 dating, dates organic material between 50 000 and 400 years old. It works on the principle that all living things (organic material such as plants and animals) interact constantly with the atmosphere, absorbing carbon-14, which is a radioactive **isotope** of carbon. When the organism dies, this process ceases and the carbon-14 absorbed during its life is 'frozen'. It then begins to decay at a known and constant rate. After 5730 years, half of the carbon-14 has decayed. After about 40 000 to 50 000 years, the level of carbon-14 is almost zero. Scientists can measure the radioactive emissions of the carbon in a sample of the organism to determine when the organism died. In this way, they can estimate its age. Many different types of organic materials can be radiocarbon dated. They include bone, hair, leather, blood residues, paper and parchment, charcoal, wood, soil and coprolites (preserved faeces).

isotope
one of the forms of a chemical element that have an equal number of protons, but differ in their number of neutrons, and therefore have a different mass

master sequence
a record of annual tree-ring widths made by cross-linking core samples from living and dead trees

geological
relating to the science of geology, which is the study of the earth, the rocks of which it is composed and the changes it has undergone
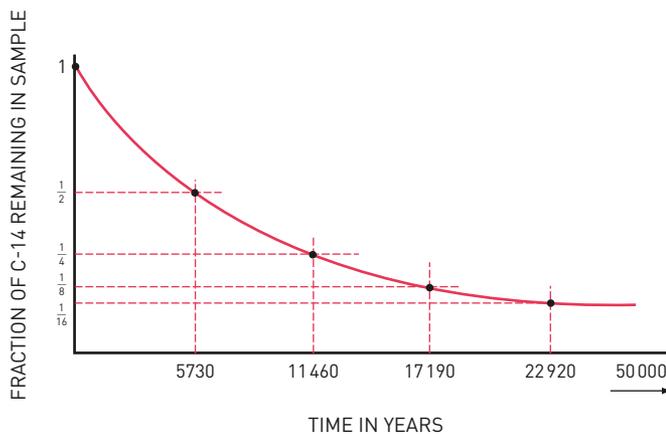
SOURCE 19 This graph shows the rate at which carbon-14 decays. Radiocarbon in a sample will be reduced from 100 per cent to 50 per cent after 5730 years. In 11 460 years, half of the 50 per cent will remain, i.e. 25 per cent of the original, and so on.

Other scientific dating methods

Other scientific methods for dating different materials are shown in Source 20.

SOURCE 20 Scientific dating methods

DATING METHOD	DETAILS
AMS radiocarbon dating	AMS stands for accelerator mass spectrometry. This method is an improvement on traditional radiocarbon dating because it can date material back to about 70 000 years, is more accurate, requires much smaller samples for testing (e.g. a human hair) and produces results in a shorter time. Contamination of samples, which can produce inaccurate results, is reduced by this method.
Dendrochronology (tree-ring dating)	Trees develop a ring for each year of growth. Dendrochronologists measure these rings or a cross-section of a timber artefact to determine the age of the timber. Older trees of the same species growing in the same region will show a similar pattern of growth rings (see Source 21). Scientists compare overlapping ring patterns to establish a continuous or **master sequence** for a region going back thousands of years. The pattern of growth rings in timber artefacts from an excavation site can be matched with the master sequence for that region. In this way, a date for the stratum in which the timber artefacts were found can be calculated.
Potassium-argon dating	Geologists use this method to date volcanic rock up to millions of years old. It is one of the most useful methods for dating human evolution, especially at sites such as Olduvai Gorge in eastern Africa, an area of high volcanic activity, where the remains of our earliest human ancestors have been found as fossils embedded in **geological** strata. Scientists dating the various rock layers have been able to arrive at dates older than 3 million years for these fossil remains.

DATING METHOD	DETAILS
Thermoluminescence dating (TL)	This is another form of radioactive dating; however, unlike radiocarbon dating, it can date pottery and inorganic material that is more than 50 000 years old. TL dating is often used to date artefacts from sites where radiocarbon dates cannot be obtained or where carbon-14 dates may be unreliable. It can also be used on fakes to establish their authenticity or otherwise. TL testing is able to determine the original firing date of the pottery.
Tephrochronology	This technique uses layers of volcanic ash (**tephra**) deposits to create a chronological sequence, which can be used to date archaeological material from the deposits. The principle underlying this technique is that the ash produced from each volcanic eruption has a unique chemical fingerprint that can be readily identified across a large fallout area. This acts as an indicator of the date of the eruption.
Uranium-thorium dating	This method dates **calcite** layers in caves that are on top of prehistoric rock paintings, for example the cave paintings at Altamira in Spain. Traditional radiocarbon dating can date only the organic **pigment** (e.g. charcoal used in the paintings). However, the uranium-thorium method dates the calcite, giving a minimum age for any paintings underneath.
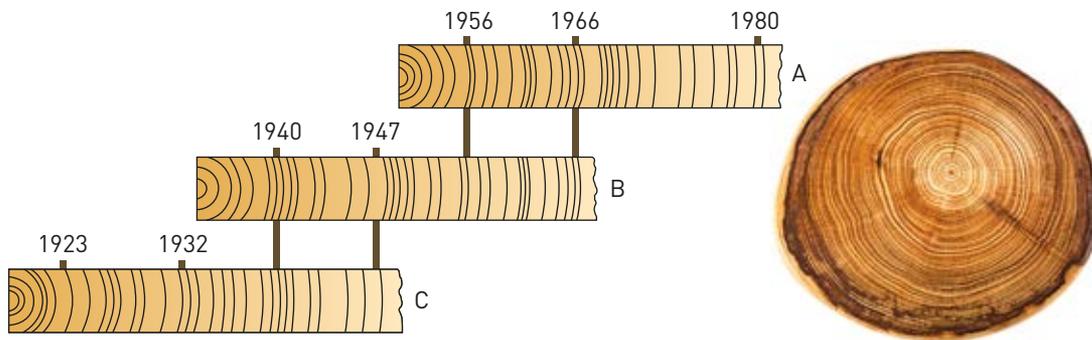
SOURCE 21 Dendrochronologists can establish a master sequence for a region by correlating the patterns of annual growth rings in trees of different ages.

■ **tephra**
pieces or rock and other particles ejected from a volcano

■ **calcite**
a crystalline form of natural calcium carbonate that is the basic constituent of limestone, marble and chalk

■ **pigment**
a natural substance that gives colour to animals and plants

More recent methods of scientific dating

A range of new techniques can be used both to check the dates obtained by established methods and to determine dates for materials that, because of their composition or age, cannot be dated by existing scientific techniques. Some of these newer dating methods include:

- electron spin resonance (ESR)
- fission-track dating
- fluorine-uranium-nitrogen dating.
- archaeomagnetic dating
- amino acid racemisation

1.5b Check your learning

1 Research the newer scientific methods listed above. Find out how they work and give examples of their application in archaeology.
2 What method(s) of scientific dating could be used to date each of these: a human jawbone, a wooden coffin, a Greek vase, a leather belt, a fossil?
   a Which of these artefacts could also be dated by the typology method?
   b Does an artefact have to be found in an archaeological excavation in order to be reliably dated? Give reasons for your answer.

DNA analysis

DNA analysis is only 30 years old, making it one of the youngest branches of modern science. It has revolutionised the study of human behaviour, disease, evolution and ageing. We are all familiar with the contribution it has made to forensic investigation, for example in criminal cases. DNA analysis is also making a significant contribution to archaeological and historical investigations (see 'DNA disputes' below).

DNA (deoxyribonucleic acid) is the genetic or hereditary material contained in all living things. It is like a blueprint of the organism, showing all the characteristics and features of that organism. Nearly every cell in a person's body has the same DNA. Most DNA is located in the cell nucleus (where it is called nuclear DNA), but a small amount of DNA, called **mitochondrial DNA**, can also be found in the **mitochondria** located elsewhere in the cell. DNA is usually extracted from human teeth, bones and tissue.

DNA can be recovered from material such as skeletons, mummies and preserved plant remains. In a more recent scientific breakthrough, scientists have been able to extract human DNA from ancient artefacts that have been handled by humans, such as tools and weapons. However, analysis of ancient DNA is often inhibited by the low quality of the DNA available, which can limit the scope of the analysis and the **reliability** of the results. Factors such as time and temperature cause degradation of the DNA molecules. Despite the problems associated with the testing of ancient DNA, it can often help to answer historical, archaeological or evolutionary questions.

DNA disputes

Experts often disagree with the interpretation of DNA studies, giving rise to even more questions and debates. An interesting example is the great DNA hunt for the origin of modern humans, which has focused on the debate between the supporters of the 'Out of Africa' theory and the 'Multiregional theory'. Another fascinating case involves attempts to identify the family relationships of the boy-king Tutankhamun, one of the great mysteries of Egyptology (see Chapter 8).

1.5c Check your learning

1 Consider the different kinds of evidence available for the study of human origins: the anatomical, archaeological and genetic. What does each kind of evidence contribute to our understanding of human origins and evolution? There are numerous websites on this topic. Here are two to get you started:
- 'Origins of Modern Humans: Multiregional or Out of Africa?' – a comprehensive, readable survey of the two theories
- 'Using DNA to Trace Human Migration'.

2 Find the reasons why genetic experts have challenged the findings of Tutankhamun's 2010 DNA tests in these online articles:
- 'Ancestry and pathology in King Tutankhamun's family' by Zahi Hawass et al.
- 'Tutankhamun's blood: Why everyone from the Mormons to the Muslim Brotherhood is desperate for a piece of the Pharaoh' by Jo Marchant.

DNA (deoxyribonucleic acid)
a self-replicating genetic or hereditary material present in nearly all living organisms

mitochondrial DNA
the small amount of genetic material or DNA found in mitochondria that is inherited through the maternal line

mitochondria
structures within cells that convert the energy from food into a form that cells can use

reliability
the accuracy of a source judged on its context, purpose, origin and intended audience

Interpretation

Archaeologists prepare reports on their excavations. These provide detailed records of the excavation together with scaled drawings and photographs of all the structural features and finds, as well as the results of scientific analysis of material. This data can then be used to draw conclusions about the site and its occupants, and even to construct a narrative of its history. This interpretation includes conclusions about significant developments, changes to the site over time and possible reasons for the changes. At this point, it is often necessary to consult archaeological reports from other sites and published histories. This cross-referencing can provide added information about the site and its context.

Publication

Once published, the excavation reports are available to other archaeologists and historians who use them in their own research. These reports are published in scholarly journals, such as *The Journal of Field Archaeology*. Archaeologists also share their research by giving lectures and seminars at universities and museums. These presentations are often open to interested members of the general public.

Popular archaeology

franchise
a collection of related media, e.g films, in which several have been produced from an original creative work

romanticised
modified to give a view of reality that is not based on fact

Today, archaeology enjoys a widespread following in many countries. Films such as the 'Indiana Jones' series starring Harrison Ford as the charismatic archaeologist have been among the top-grossing films of all time. Other popular **franchises** include *Lara Croft: Tomb Raider* starring Angelina Jolie and *The Mummy* starring Brendan Fraser. These films present a highly **romanticised** version of archaeology and have little to do with the reality of the day-to-day work of the archaeologist. The high-rating *Time Team* television series featuring Tony Robinson, however, portrays a more realistic picture of archaeological practice. This series has been instrumental in promoting archaeology in the UK and worldwide.

SOURCE 22 A movie poster for the 1981 Indiana Jones film *Raiders of the Lost Ark*, directed by Steven Spielberg

You be the archaeologist

Now it is your turn to conduct your own dig. Source 23 is a cross-section of a hypothetical dig. Study the diagram carefully and draw your own conclusions from the evidence to answer the questions in '1.6 Understanding and using the sources'.

1.6 Understanding and using the sources

1 Which layer (stratum) is the oldest? Why?

2 Would a real site have such regular, even strata? Give reasons for your answer.

3 Explain the presence of layers of clay and ash at the site.

4 What evidence in stratum 5 suggests that the people of this period were more advanced in their technology than the people of stratum 6?

5 Explain the presence of 'pottery different from local'. Suggest reasons for its presence.

6 What does the copper spearhead in stratum 4 suggest about people's activities in this period?

7 What new development appears in stratum 3? Why would this be a valuable find? What technological developments are evident?

8 What significant event has happened in stratum 2? Explain your answer.

9 Suggest reasons why this site was abandoned after stratum 2.

10 What are the most important technological developments on this site?

Layer of sand and dirt

1

2 — unburied bodies / spearheads / iron axe

3 — jewellery / monumental gate / inscribed stone tablet / local pottery

4 — pottery different from local / copper spearhead / pieces of local pottery

layer of ash

5 — copper fish hook / wall of stones / necklace / bits of pots

6 — animal bones / human skull / wooden bowl / stone figure

thin layer of clay

7 — flint tool / animal tusk / human jawbone

SOURCE 23 A hypothetical dig

1.6a Check your learning

1 In groups, imagine you are part of a team that has excavated the hypothetical dig in Source 23. Discuss your finds and develop your theories about the histories and cultures of the inhabitants of the site.

2 Using the results of your discussion write an excavation report in which you:

 a describe the finds in each stratum

 b interpret the finds by explaining what they reveal about relevant aspects of culture and technology

 c explain change and continuity at the site over time by identifying what has changed and what has stayed the same. Suggest reasons for these and support your reasons with specific evidence.

 Hints to help you plan your report:

 • Use the terms 'describe', 'interpret', 'draw meaning from', 'explain'.

 • Provide characteristics and features.

 • Relate cause and effect.

 • Make the relationships between things evident.

 • Provide why and/or how.

3 Compare your report with others and account for any different interpretations.

4 Follow the progress of some recent excavations around the world by visiting the 'Interactive Digs' website.

Marine archaeology

Underwater archaeologists using standard scuba equipment employ the same principles as archaeologists on land. An underwater site such as a shipwreck or submerged ruins can often be detected using geophysics, for example remote-sensing equipment. The site is then surveyed with tape measures and grids using simple geometry, and with photography and video. The aim is to produce an analytical map so that the wreck or site can be assessed. In this way, the site can be recorded and its significance interpreted without disturbing it. Historic shipwrecks are excavated and their contents recovered only in very rare cases.

Underwater archaeology was pioneered by George Bass. During his 40-year diving career he made some major discoveries and was the first person to excavate an ancient shipwreck in its entirety. Among his most famous discoveries are the Bronze Age shipwrecks of Uluburun and Cape Gelidonya off the southern coast of modern Turkey.

Exciting discoveries have been made in the harbour at Alexandria and nearby Heracleion in Egypt. Remains of the palace of Cleopatra VII and other monuments of the late **Ptolemaic** period have been recovered from the seabed. Two marine archaeologists who have led the investigation of these sunken sites are Jean-Yves Empereur and Franck Goddio. The most recent excavations at the mouth of the Nile Delta have revealed the remains of the legendary lost city Thonis Heracleion, which was an important hub of Mediterranean trade before the founding of Alexandria.

SOURCE 24 Underwater archaeologist Franck Goddio in Alexandria (Egypt) uses GPS to locate the exact position of a **sphinx** representing Cleopatra's father, Ptolemy XII.

■ **sphinx**
a mythical creature with the head of a human and the body of a lion

■ **Ptolemaic**
relating to the period of time when Egypt was ruled by the dynasty founded by Ptolemy I in 305 BC

1.6b Check your learning

1 Go online and find out about the discovery and excavations of the Uluburun and Cape Gelidonya shipwrecks.

2 Learn more online about George Bass and his career in underwater archaeology.

3 To find out about the work of Jean Yves Empereur, look up 'Mapping the Treasures' by Colin Clement on NOVA Online.

4 For Franck Goddio's report on his recent discoveries at Thonis-Heracleion, search online for 'Franck Goddio: Projects: Sunken Civilizations: Heracleion'.

5 Photo essay: Design a presentation for your class on the methods used by marine archaeologists to investigate underwater sites or shipwrecks. Use presentation software of your choice and illustrate with specific examples.

6 Use the flow chart in Source 3 to summarise what you have learnt about the work of an archaeologist.

Using archaeological and written sources to reconstruct the past

A source is anything that has survived from the past. It can be either archaeological or written. It is important not to confuse sources with evidence. The information gained from the interrogation of sources is called evidence when it is used to reconstruct an aspect of the past. For example, if archaeologists find large, well-built houses as well as small, poorly built ones at a site, they may draw the conclusion that there were different social classes in that society. In this example, the houses are the sources that provide evidence about the nature of the society.

All sources, whether **primary** or **secondary sources**, can be valuable to historians. It is important to remember primary sources are not necessarily more valuable or trustworthy just because they come from the time being studied. A primary source may even be untrustworthy because it is incomplete or biased. However, it may still be valuable in revealing some aspect of the topic being investigated. The same is true of secondary sources. Source 25 shows a range of archaeological and written sources.

■ **primary source**
source that comes from the time being studied

■ **secondary source**
source that has been created after the time being studied

ARCHAEOLOGICAL			WRITTEN		
Artefacts	Built structures	Organic remains	Official documents	Literary texts	Private documents
tools weapons jewellery statues household utensils coins tomb paintings, **reliefs** and **iconography**	temples houses and palaces bridges **aqueducts** tombs obelisks pyramids **stelae**	human and animal remains plant remains (e.g. pollen, seeds, textiles)	contracts **annals** decrees inscriptions **papyri** law codes lists of transactions records	plays **chronicles** poems speeches histories biographies	letters diaries graffiti religious texts

SOURCE 25 Types of archaeological and written sources

Archaeological sources

Archaeological sources provide evidence of everyday life that is not usually available from written sources. As well as grand structures such as pyramids, palaces and temples, archaeological sources can also provide evidence of household activities, ancient customs, religious beliefs, warfare and other aspects of daily life in ancient times. However, there are limitations in reconstructing the past using archaeological sources, because they all require interpretation. Archaeological sources do not speak for themselves. For example, the meaning and significance of wall paintings in tombs and other structures cannot always be understood at first sight; their interpretation may depend on specific symbols or **motifs** that must be decoded. For example, the Egyptian symbol of the Eye of Horus has a number of specific meanings when it is used in jewellery and art (see Source 26).

SOURCE 26 Eye of Horus

Checklist of questions for interrogating archaeological sources

1 What is it?
2 What was its context?
3 Can it be accurately dated?
4 How does its condition affect its interpretation?
5 Is it valuable in providing evidence about the past?
6 What evidence does this source provide about the past?

1 What is it?

It is important to determine what an artefact actually is. Sometimes artefacts found in a dig may not be easily identified, so archaeologists have to ask questions about their nature and function. An artefact might resemble those found in other excavations or perhaps be similar to something used in the present. Using this knowledge, the archaeologist can make an educated guess about the find. Archaeologists also need to know what the artefact is made of, who might have made it and for whom, and what it represents.

SOURCE 27 Archaeological sources include built structures, such as this Roman aqueduct in Tarragona, Spain.

reliefs
wall sculptures, sometimes painted, where the sculpted or carved elements are left attached to a solid background, giving the impression that the relief has been raised above it

iconography
the representation of abstract ideas in drawings, paintings or carved figures

aqueduct
artificial channel for conveying water

stela (*pl.* stelae)
an upright stone slab or pillar bearing inscriptions or designs and serving as a monument

annal
yearly historical record

papyri
ancient documents written on papyrus, a writing material made from thin strips of the papyrus plant

chronicle
a record of events in chronological order

motif
dominant or recurring idea or image in an artistic work that forms a pattern

2 What was its context?

The particular location in which an artefact is found is important in identifying it and understanding its function. All finds from archaeological digs must be carefully recorded *in situ* and located on the site plan at the time of excavation. The place where an artefact is found is called the findspot. Archaeologists use this information to establish the provenance of finds and to reach some conclusions about their nature and purpose. For example, a small female figurine made of wood or clay could be an important **cult** or religious statuette (see Source 28), or it could just as easily be a child's toy. Where it was found may help to understand its possible function.

SOURCE 28 These marble **Cycladic** figurines are the earliest sculptured representations of the human form and date to the Mediterranean Bronze Age.

SOURCE 29 The Mildenhall Great Dish is now in the British Museum. This magnificent silver platter, skilfully engraved in **low relief**, features themes associated with the worship of the Roman god Bacchus.

Sometimes the context in which an artefact is found is different from its place of origin. A famous example is the Mildenhall Treasure, particularly the great silver dish, found accidentally by a farmer ploughing his field at Mildenhall in England in 1942 (see Source 29).

3 Can it be accurately dated?

It is important to know when an artefact was made so it can be accurately placed in its historical context. Artefacts can be dated by both archaeological and scientific methods.

4 How does its condition affect its interpretation?

The state in which an artefact is found is important in its identification and interpretation. Problems can arise when the artefact is either incomplete or damaged. For example, ancient inscriptions on stone or papyri may often be damaged or incomplete, which makes the work of translation and interpretation difficult.

5 Is it valuable in providing evidence about the past?

All of the questions asked so far have an important bearing on the value of sources. Where the answers are uncertain, the trustworthiness of the source is obviously in question. Artefacts may sometimes be more difficult to interpret than written sources: because they require more interpretation, there is more room for error.

We can be more certain of the value of an artefact if we can clearly establish what it is, the context in which it was found and its purpose. However, even when it is not possible to confidently identify an artefact, it might still have value. For example, it might reveal the technology involved in its construction, whether it was traded, and the details of its artistic style and manufacture.

6 What evidence does this source provide about the past?

After the previous questions have been asked, historians can draw some conclusions about the period or society being studied. Conclusions drawn may be **tentative** or **speculative.** Historians publish their findings as contributions to scholarly debate, recognising that there will be other interpretations.

■ **tentative**
not certain or definite

■ **speculative**
based on guesswork

1.7 Understanding and using the sources

Source 28

1 Describe the figurines. What distinguishing features can you notice?
2 What different conclusions might you draw about the nature and purpose of these figurines if they were found in each of the following locations: a tomb, a religious (cult) area, a kitchen, a living or sleeping area?

Source 29

3 Who might have owned this dish?
4 Under what circumstances might it have reached England from Constantinople?
5 Suggest reasons why it was in the ground.
6 What does it suggest about how it was made and the society from which it came?

1.7a Check your learning

1 Find out what the Eye of Horus means in Egyptian iconography.
2 Research Cycladic art. Find out about the Cycladic Islands from which it came and the Cycladic culture of the Bronze Age.
3 Research the Mildenhall Great Dish and its context in Roman Britain. What else was in the Mildenhall Treasure?

Written sources

Written sources can contribute a great deal to an understanding of the ancient past. They contain firsthand accounts, **opinions** and details not usually available in archaeological sources. However, there are limitations; for example, texts may be incomplete or damaged. As well, ancient texts represent the **perspectives** of a small, educated **elite**, most of whom were men. The majority of these texts deal with public rather than private life. These include official documents, accounts of warfare, contracts, historical records and literary works. Ancient writers rarely recorded details of everyday life. See Source 25 for a range of typical written sources from the ancient world.

Checklist of questions for interrogating written sources

1 What type of text is it?
2 What is the context of the writer? What is their perspective?
3 What is the writer's purpose?
4 Who is the intended audience?
5 Is it trustworthy?
6 Is it valuable in providing evidence about the period?

1 What type of text is it?

General categories for classifying ancient written sources include literary, **epigraphic** and **numismatic**. Literary sources include letters, histories, biographies, plays and poetry, as well as everyday commercial and legal transactions and records. Epigraphic sources refer to texts inscribed on clay, metal, stone or papyrus. For example, the **cuneiform** script of the ancient Sumerians was inscribed on clay tablets. Many Egyptian records were written on papyrus scrolls or inscribed on stone slabs called stelae. Coins often contain images of key people, religious symbols, legends, special events and sometimes even a date. A knowledge of the iconography used in the coins is essential to their interpretation. For example, the coin in Source 30 is significant in depicting the Roman emperor Nero's mother, Agrippina. Roman women were not usually shown on coins, so the iconography has political and religious significance.

SOURCE 30 A coin depicting Agrippina the Younger from the reign of the emperor Nero

2 What is the context of the writer? What is their perspective?

When we use written sources we need to ask questions about the author or authors. For example:

- Who were they?
- Were they male or female?
- When did they write?
- What culture and social class did they come from?

- What positions or offices did they hold?
- What were their political views?
- What relevant life experiences have they had?

Answers to these questions provide the context of the writer and help us understand their perspective. Sources are often a mixture of **fact** and opinion. Which facts are selected and the opinions given will reflect the perspective of the author, and the nature and extent of any bias that may be evident.

3 What is the writer's purpose?

A writer may want to:

- explain an event that has occurred
- justify a personal or public action
- promote a personal or political viewpoint
- preserve the memory of the past
- entertain (e.g. plays, poems and other literary forms)
- earn money (e.g. paid to write by a sponsor or patron)
- leave a lasting impression
- teach a lesson.

What were the motivations of different writers from the past? The writer's purpose has an important impact on the reliability of what they have written.

4 Who is the intended audience?

It is also important to know for whom the author was writing. A private letter written to a friend, for example, will be different from a government decree, in language choice, **tone** and purpose. The writer may be selective in what is included and what is omitted depending on who is likely to read the text. Once again, this is important for making judgements about the value of the source for the historian.

5 Is it trustworthy?

When analysing a written source we want to know how far we can trust it to give us accurate or credible information about the past. Many factors affect a source's value in this respect.

6 Is it valuable in providing evidence about the period?

All sources have some value in providing evidence about the past. The historian must make a judgement about the degree of value. Even if a source has some limitations, for example bias, it can still have value depending on the questions the historian is asking. For example, in our own times, we are familiar with the way in which politicians and other high-profile community leaders can be attacked by media personalities and opponents. Although the attacks may be inaccurate and unjustified, they reveal much about the perspectives, attitudes and values of the attackers and sections of the community who support them. The historian wanting to present a comprehensive, balanced account of the times would find these sources valuable.

- -

1.7b Check your learning

1 Research the reverse side of the coin depicted in Source 30 by reading the online article 'The Cart Before the Mule: Carpenta on Roman Coinage'. Explain the elements of the coin's iconography and their significance.

- -

Analysing written sources

Use the previous checklist questions to interrogate some ancient texts in Sources 32 to 36. The table in Source 31 contains information about the contexts of the ancient and modern writers of these texts that will be useful for your analysis.

SOURCE 31 Context of writers

WRITER	BIOGRAPHICAL DETAILS	TEXT	PERSPECTIVE
Herodotus 484 – c. 425 BC	Greek historian from Ionia; Cicero called him 'the father of history'	*The Histories*	Interested in the deeds of elite groups and individuals; admirer of Athens; a traveller
Cicero 106–43 BC	Famous Roman orator, lawyer, politician and philosopher; **senator** of the late Roman Republic; wrote famous legal, political and philosophical works and letters	Orations: *In Verrem, In Catilinem I–IV Philippicae* Philosophy: *De Oratorae, De Republica, De Legibus, De Finibus, De Natura Deorum, De Officiis*	Educated member of a wealthy **equestrian** family; defender of the republican system of government; uneasy about Caesar's rise to power
Plutarch AD 45–120	Greek historian, biographer and essayist	*Parallel Lives* (biographies of famous Greeks and Romans)	More interested in morality and virtue than history
Tacitus c. AD 56–117	Most famous Roman historian of the **imperial period**; senator in **imperial service** as **proconsul** of Asia AD 112–113 (reign of Domitian)	*The Annals of Imperial Rome*	Generally hostile to imperial rule, which he regarded as a form of **tyranny**; republican sympathiser and admirer of the old **senatorial** system
Sir Alan Gardiner 1879–1963	Modern historian and Egyptologist	*Egypt of the Pharaohs* (1961)	Traditional, conservative historian of the pre-feminist era

Source 32 is by Marcus Tullius Cicero. In this source, Cicero writes to Titus Pomponius Atticus, a personal friend and prominent Roman, about an occasion when **Julius Caesar**, a leading Roman senator and general, visited him at one of his villas.

SOURCE 32

A formidable guest, yet no regrets! For everything went very pleasantly indeed. However, when he reached Philippus on the evening of the 18th, the house was so full of soldiers that there was hardly room free for Caesar himself to have dinner. Two thousand men! … He had an oil-massage and then sat down to dinner … It was a sumptuous dinner and well-served, and more than that, well-cooked and seasoned, with good talk and in a word agreeable … In other words, we were human beings together. Still, he was not the sort of guest to whom you would say 'do please come again on your way back'. Once is enough! We talked no serious politics, but a good deal about literary matters. In short, he liked it and enjoyed himself … There you have the story of how I entertained him – or had him billeted on me; I found it a bother, as I have said, but not disagreeable.

Cicero, 'Letter to Atticus (at Rome) Puteoli, 19 December, 45 BC'

senator
a member of the senate, an advisory body for the emperor

equestrian
relating to the lower of the two aristocratic classes in ancient Roman society, also known as knights or equites

imperial period
the period of time when Rome was ruled by emperors (27 BC – AD 284)

imperial service
Romans of rank and wealth who served in the civil and military administration of the Roman Empire

proconsul
a governor of an ancient Roman province

tyranny
an absolute form of rule in which one individual exercises power without any legal restraint

senatorial
relating to an aristocratic class whose ancestors had served in the Roman Senate

Julius Caesar
a significant Roman general and statesman of the late Roman Republic

An important factor that helps determine value is the need to distinguish between fact and opinion. In Source 33, Herodotus gives an account of the Battle of Marathon fought in 490 BC, at the beginning of the Persian Wars. His account begins with a description of the deployment of troops before the battle.

SOURCE 33

One result of the disposition of Athenian troops before the battle was the weakening of their centre by the effort to extend the line sufficiently to cover the whole Persian front; the two **wings** were strong but the line in the centre was only a few ranks deep. The dispositions made, and the preliminary sacrifice promising success, the word was given to move, and the Athenians advanced at a run towards the enemy, not less than a mile away. The Persians, seeing the attack developing at the double, prepared to meet it, thinking it suicidal madness for the Athenians to risk an assault with so small a force – rushing in with no support from either cavalry or archers. Well, that was what they imagined: nevertheless the Athenians came on, closed with the enemy all along the line, and fought in a way not to be forgotten. They were the first Greeks, so far as I know, to charge at a run, and the first who dared to look without flinching at Persian dress and the men who wore it; for until that day came, no Greek could hear even the word Persian without terror.

Herodotus, *The Histories*, Book 6, 114

wings
the troops deployed in the outermost positions of an army's line-up facing the enemy

In Source 34, Tacitus gives his interpretation of the methods used by Agrippina, a high-ranking woman of the Roman **imperial family**, to persuade the emperor Claudius to marry her.

SOURCE 34

Agrippina's seductiveness was a help. Visiting her uncle [Claudius] frequently – ostensibly as a close relation – she tempted him into giving her the preference and into treating her, in anticipation, as his wife. Once sure of her marriage, she enlarged the scope of her plans and devoted herself to scheming for her son Lucius Domitius Ahenobarbus, whose father was Gnaeus Domitius Ahenobarbus. It was her ambition that this boy, the future Nero, should be wedded to the emperor's daughter Octavia. Here criminal methods were necessary, since Claudius had already betrothed Octavia to Lucius Junius Selanus Torquatus …

Tacitus, *The Annals of Imperial Rome*, Chapter 10

imperial family
the family of an emperor or empress

1.8a Understanding and using the sources

1 What does Source 31 reveal about Cicero's context? How does this help to explain why he is hosting a dinner for Caesar?

2 What is Cicero's attitude to Caesar in Source 32? Comment on his tone, purpose and audience.

3 Make a copy of Sources 33 and 34. Using different coloured highlighters, identify the facts and opinions in each source.

4 For each opinion, identify examples of language that indicate the perspectives of the writers.

5 Using the information from Source 31, explain how the writers' contexts affect the trustworthiness of their sources.

6 In what ways can the information in these sources, whether fact or opinion, be valuable to historians investigating the Battle of Marathon and the role of Agrippina in her time?

Bias

Bias occurs when a writer offers opinions or judgements that reflect their particular attitudes or prejudices in relation to aspects such as gender, race, culture or politics. A writer can be biased in favour of or against the subject they are writing about. Bias is also present in one-sided accounts where a writer presents an interpretation of a person or event that ignores other possible perspectives and interpretations. There can be a number of reasons for this. Not all ancient societies were literate or left written records. For example, the Celts, who were conquered by the Romans, had no written tradition but had a rich oral one that has not survived. Therefore, our only knowledge of their defeat at the hands of the Romans comes largely from Roman sources. The following are explanations of the common types of bias you will find in historical sources.

Gender bias

As previously noted, most of our ancient written sources were composed by men, and therefore provide a largely male perspective. Most ancient women were illiterate, so they had no voice and remain invisible. The few prominent women who do appear in ancient sources are often portrayed in a negative light, generally because they were not performing stereotypical female roles.

Racial and cultural bias

Writers display racial bias in their work when casting people in a positive or negative light because of their race or ethnicity. Such bias is characterised by generalisation and stereotyping. Cultural bias is similar and is evident when writers make judgements about people's beliefs and customs, comparing and contrasting them favourably or unfavourably with their own.

Political bias

Political bias occurs when a writer either promotes or attacks individuals or groups because of their political views and or alliances. Today, we are familiar with **spin doctors**, people employed to cast the actions of a government or its ministers in as favourable a light as possible. In the ancient world, writers were sometimes employed by influential patrons to do the same thing, but the media employed could be poetry or other literature. Political bias is also about power – who has it and who doesn't. For example, the losers in a war often do not tell their side of the story. The victors' interpretation of the event goes unchallenged. The following sources contain examples of bias.

In Source 36, Gardiner offers his interpretation of Hatshepsut, a pharaoh of **18th Dynasty** Egypt during the **New Kingdom**. Despite the fact that it was rare for a woman to rule, Hatshepsut became pharaoh when Thutmose II, her husband died. She ruled Egypt for 20 years.

SOURCE 35 Hatshepsut depicted herself as a traditional pharaoh in her statues and reliefs. These statues are from her mortuary temple at Deir el-Bahri.

spin doctors
people who are skilled in public relations who advise political parties on the positive presentation of their policies and actions

18th Dynasty
the first dynasty of the New Kingdom in Egypt

New Kingdom
a period of Egyptian history extending from the 16th century BC to the 11th century BC, covering the 18th, 19th and 20th dynasties

dormant
asleep; temporarily inactive

necropolis
a cemetery

cringing deference
overly submissive and embarrassing behaviour displayed to a person

SOURCE 36

Meanwhile, however, her ambition was by no means **dormant**, and not many years had passed before she had taken the momentous step of herself assuming the double crown [i.e. the throne of Egypt]. Twice before in Egypt's earlier history a queen had usurped [took illegally] the kingship … in many inscriptions she flaunts a full titulary [titles of a pharaoh] … It is not to be imagined, however, that even a woman of the most virile [masculine] character could have attained such a pinnacle of power without masculine support. The Theban **necropolis** still displays many splendid tombs of her officials, all speaking of her in terms of **cringing deference**.

Sir Alan Gardiner, *Egypt of the Pharaohs*,
Oxford: Oxford University Press, 1961, pp. 183–4

Source 37 is by Herodotus, the 5th century BC Greek writer and traveller, who visited Egypt during his travels and gave a detailed description of the country and its inhabitants.

SOURCE 37

About Egypt I shall have a great deal more to relate because of the number of remarkable things which the country contains, and because of the fact that more monuments which beggar description are to be found there than anywhere else in the world … Not only is the Egyptian climate peculiar to that country, and the Nile different in its behaviour from other rivers elsewhere, but the Egyptians themselves, in their manners and customs, seem to have reversed the ordinary practices of mankind. For instance, women attend market and are employed in trade, while men stay at home and do the weaving … Men in Egypt carry loads on their heads, women on their shoulders; women pass water standing up, men sitting down. To ease themselves they go indoors, but eat outside in the streets ...

Herodotus, *The Histories*, Book 2, 34

1.8b Understanding and using the sources

1 Summarise Sources 36 and 37.
2 Identify the facts and the opinions in each source.
3 What kinds of bias are evident? Support your answer with examples.
4 Using the information in Source 31, explain how the context of each writer helps to explain their bias.
5 How might Gardiner have written Source 36 if Hatshepsut had been a male pharaoh?

1.8 Check your learning

1 Use the checklist of questions for interrogating archaeological and written sources to write a summary of the key issues involved in the analysis of these sources.

SOURCE 37 A wooden cosmetic spoon from the 18th Dynasty (1391–1353 BC) in New Kingdom Egypt, showing a woman carrying a load on her shoulder

In this chapter we have examined the changing nature of archaeological excavation and the contribution of archaeological and scientific techniques to the discovery and investigation of the ancient past. Recently developed techniques, such as site surveys using radar, scientific dating methods, forensic examination and DNA analysis, continue to make important contributions to archaeology and to our understanding of the ancient world.

This chapter has also examined the use of a range of sources to reconstruct the past. We have seen how ancient texts, inscriptions and iconography all contribute to an understanding of the past. However we have also taken notice of their limitations. Like archaeological sources, written texts never speak for themselves. We must interpret them, keeping ancient customs and religious beliefs in mind. Interpretation, however, always leaves room for disagreement and contestation.

FOR THE TEACHER

Check your o̲book a̲ssess for the following additional resources for this chapter:

Answers

Answers to each *Check your learning*, *Understanding and using the sources* and *Profile task* in this chapter

Teacher notes

Useful notes and advice for teaching this chapter, including syllabus connections and relevant weblinks

Class test

Comprehensive test to review students' skills and knowledge

a̲ssess quiz

Interactive auto-correcting multiple-choice quiz to test student comprehension

2

Historical authentication and reliability

FOCUS QUESTIONS

1 What problems are involved in the authentication of ancient artefacts, human remains and documents?

2 How can scientific and comparative dating techniques and cross-referencing contribute to the authentication of ancient sources?

3 What are the difficulties of authentication associated with suspected fakes or forgeries?

4 Why do people forge ancient artefacts?

FOCUS CONCEPTS & SKILLS

Evidence

Evidence is important information obtained from sources such as artefacts, human remains and documents. Before the evidence can be used in a particular enquiry, it has to be authenticated. Questions must be asked to determine whether the sources actually come from the time being investigated, and whether they belong to, are made by or written by the people they claim to be. Expert and scientific opinion can be used to verify these sources.

LEARNING OUTCOMES

1 Explain the problems involved in the authentication of ancient artefacts, human remains and documents.

2 Analyse the contribution of scientific and comparative dating techniques and cross-referencing to the authentication of ancient sources.

3 Discuss the difficulties of authentication associated with suspected fakes or forgeries.

4 Account for the forgery of ancient artefacts.

SOURCE 1 Dubbed 'The Mask of Agamemnon' by Heinrich Schliemann after its apparent discovery at Mycenae in Greece in 1876, this gold mask has since come under suspicion of being a fake.

Problems of authenticity

From ancient times, artefacts have been copied or forged for varying reasons. Collections of art and antiquities became common in the Middle Ages and the **Renaissance** when interest in the classical world was widespread. The rarity of authentic relics from the past and a ready market for them encouraged the production of fakes and forgeries.

Unscrupulous people intent on deceiving buyers and raking in huge profits have taken advantage of the modern hunger for authentic artefacts by making their own and releasing them onto the world market. Fake archaeological artefacts are flooding the market. Often these artefacts are so convincing that they are unwittingly displayed in museums.

Reputable and disreputable collectors alike buy fake artefacts at exorbitant prices. The problem has become so widespread that some commentators believe that up to 90 per cent of all artefacts sold on internet auction sites are fakes.

Sometimes fakes are part of elaborate hoaxes designed by amateurs to embarrass the academic world. Notable examples include the Calaveras Skull, which came to light in California in the mid-19th century, and the Cardiff Giant, a 3-metre 'petrified' man found in New York state, also in the mid-19th century. Today, advances in scientific techniques provide evidence that often enables such fakes to be exposed much more readily than in the past.

What is a fake? What is a forgery?

An investigation of historical authentication and **reliability** requires knowledge of some basic terminology. The most important distinctions to make are between relics, fakes, replicas and forgeries.

RELIC	An authentic, original artefact that has survived in whole or in part from a time in the ancient past. It was made or altered by ancient humans in the context of their daily lives.
FAKE	An object that has been altered deliberately to deceive others into believing it to be an original and therefore valuable. Often fakes have been elaborately aged to make it difficult to detect them from the original.
REPLICA	A reproduction of the original artefact that has been made for open and honest purposes, labelled as a reproduction, replica or duplicate at all times. Replicas can be displayed, used for teaching purposes and handled by the public.
FORGERY	An entirely new work made to imitate an original.

SOURCE 2 Definitions of terms

The role of provenance

Provenance is the documented history or the record of ownership of an artefact. This is usually in the form of written evidence for works of art, but for an archaeological artefact the term also includes information about who produced it, where it was discovered or excavated and subsequently located, and in whose possession. Provenance plays a very important role in the authentication of artefacts. Scientific techniques and expert **opinion** can be very useful to help determine authenticity, but if an artefact has a complete provenance, there can be little room for dispute about its authenticity.

Without provenance an artefact's authenticity is a matter of doubt and contestability even if it is genuine. Artefacts removed from ancient sites before the development of archaeology as a scientific discipline fall into this category. Often the 'removing' was mere looting, and no records were kept about the artefacts' origins. Artefacts are still looted today and can do the rounds of the antiquities markets without any provenance. If such artefacts remain in private collections, their doubtful identities are not revealed. However, if they come to light in a reputable context, the lack of provenance can have an impact on the value of the artefact and whether it can be displayed in a museum. Provenance can also be faked and can be used to cover up the fact that the artefact is stolen.

Authentication of ancient texts

What do we do when faced with a text written by an author who did not witness the events they describe? We are used to modern historians writing about events that happened well before their lifetime. We know how to assess the accuracy and **usefulness** of what they write by considering the purpose for which they are writing as well as their social, political and historical contexts. The process is the same with ancient texts where the writer did not witness the events they describe. Consider what the ancient Greek historian Thucydides says in the introduction to his work *The Peloponnesian War* in Source 4. Thucydides is considered to be an eyewitness to the Peloponnesian War because he served as an Athenian general during the war. However, his extensive use of speeches, some of which he was not present for, as well as his discussion of the thoughts of generals who had died and whom he would have been unable to interview, make assessment of his accuracy more complicated.
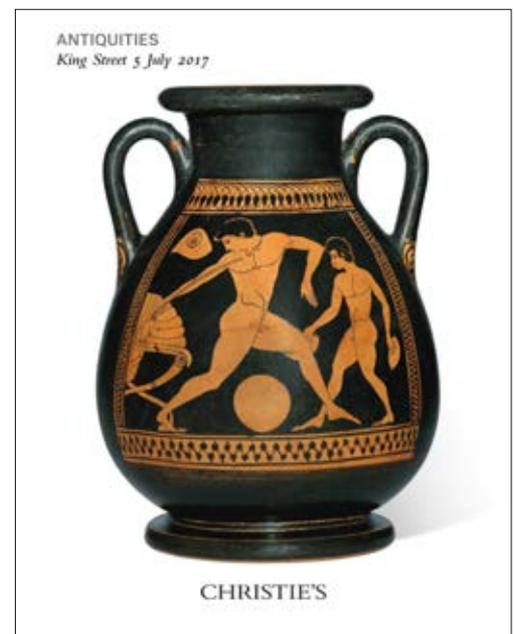
SOURCE 3 Auction house catalogues include details of provenance for each item

With reference to the speeches in this history, some were delivered before the war began, others while it was going on; some I heard myself, others I got from various quarters; it was in all cases difficult to carry them word for word in one's memory, so my habit has been to make the speakers say what was in my opinion demanded of them by the various occasions, of course adhering as closely as possible to the general sense of what they really said. And with reference to the narrative of events, far from permitting myself to derive it from the first source that came to hand, I did not even trust my own impressions, but it rests partly on what I saw myself, partly on what others saw for me, the accuracy of the report being always tried by the most severe and detailed tests possible. My conclusions have cost me some labour from the want of coincidence between accounts of the same occurrences by different eye-witnesses, arising sometimes from imperfect memory, sometimes from undue partiality for one side or the other.

Thucydides, *History of the Peloponnesian War*, Book 1, 1
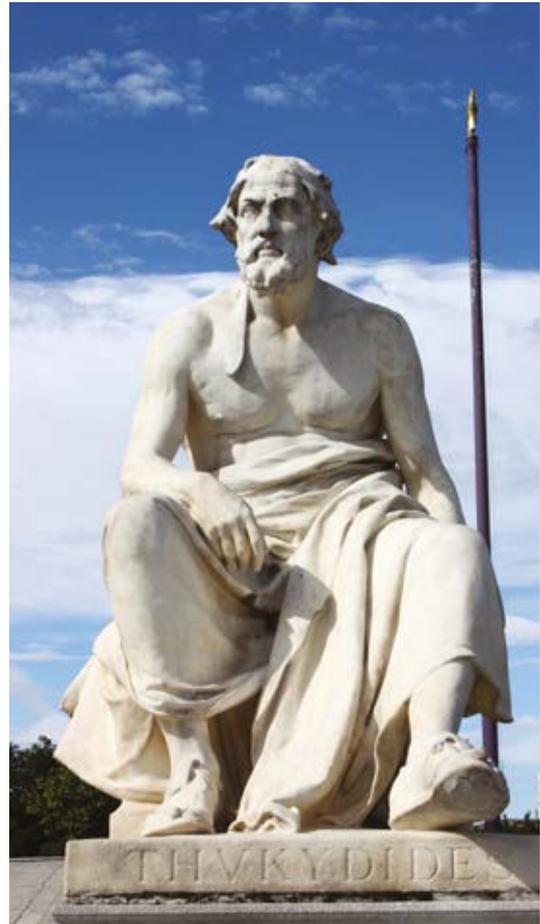
SOURCE 5 A modern representation of the Greek historian Thucydides in Vienna, Austria

2.1 Understanding and using the sources

1 What is Thucydides' method for reporting the speeches in his *History*? How accurate would his reporting be? Explain your reasons.

2 What method has Thucydides used for the 'narrative of events'?

3 How satisfactory is Thucydides' assertion that he has assessed the accuracy of his sources with 'the most severe and detailed tests possible'?

4 What does Thucydides recognise about the difficulties involved in using sources to reconstruct the past?

5 What is your assessment of the reliability of Thucydides' use of speeches in his *History*?

2.1 Check your learning

facsimile
exact copy

1 Fake, forgery, counterfeit, replica, copy, fraud, reproduction, fabrication, hoax, **facsimile**, relic, artefact, authentic, pastiche, simulant – these are all words you will meet when you investigate historical authentication and reliability. What do they mean and what is the difference? Use a dictionary, thesaurus or online source to find definitions for each term.

2.2 Methods of authentication

Detecting fake artefacts and proving them to be so can be a difficult and costly exercise. Some experts are able to identify a fake by observation of stylistic features, using the knowledge and skills they have developed over a long period of time. Proof comes to rely on scientific testing methods, which can give an objective assessment of authenticity. These methods usually require samples to be removed from the artefact for testing, which is not always acceptable to museums and collectors. Even when testing has been carried out, there can still be disagreement among the experts on the interpretation of the results.

Archaeometric assessment or scientific testing methods are shown in Source 6. You can also refer to the section on archaeological dating in Chapter 1.

archaeometric
relating to the use of scientific techniques to date archaeological remains

electron microscopy
the use of an extremely high-powered microscope that uses beams of electrons focused by magnetic lenses instead of rays of light

pigment
a natural substance that gives colour to animals and plants

mosaic
picture or design made of small pieces of coloured tile, glass or other material

radiocarbon dating
a method of determining the age of organic material by analysing the amount of carbon-14 remaining in a sample

SOURCE 6 Authentication methods

METHOD	EXAMPLES	WHAT CAN BE REVEALED
Visual examination	• *Naked eye* – some important features of a fake artefact are visible to the naked eye • *Light microscopy* – the use of visible light to detect small details • ***Electron microscopy*** – the use of an electron microscope, which has higher magnifications than a light microscope, enables minute details to be detected • *Radiography* – X-rays enable a view of the internal structure of an object which can reveal a fake	Construction methods, evidence of wear, repair or alteration
Materials analysis	• ***Pigment*** *analysis* of painted artefacts such as pottery, **mosaics** or paintings. The paint cannot contain a pigment type that was not developed at the time it was made, so if this is the case the artefact is likely to be fake. • *Atomic absorption spectrometry* uses the theory that different elements burn with a different coloured flame. Scientists carry out a controlled burning of portions of the artefact observing the colour of the flame. If the colour of the flame belongs to an element not found in original artefacts of the type, then the artefact is likely to be a fake.	This can reveal the composition of the original materials as well as that of later additions. The source of the materials is important and whether they fit with the right period of time for the artefact.
Determination of age	• ***Radiocarbon dating*** – measuring the radioactivity of the carbon content of samples of organic materials • *Dendrochronology* – the study of growth rings in wood • *X-ray diffraction* – high-energy X-rays are sent into the artefact or a sample that then bounce off internal crystals in a particular pattern. These diffraction patterns are compared to known patterns of genuine artefacts.	Radiocarbon dating and dendrochronology can help determine the age of the material independent of its stylistic features.

Science versus expert opinion

When scientific methods of authentication first became available, from about the 1950s onwards, it was thought by some that these objective methods would make obsolete the expert opinion of art historians, which is based on stylistic considerations. Subsequently, however, it was found that the two methods needed to work together to be effective. The scientific data can extend the range of the information we already know, instead of replacing it altogether. For example, the art historian considers the stylistic qualities of an artefact based on colour, texture and dimensions, and compares them mentally to a range of genuine artefacts. This is essentially what the scientist does, using methods such as the ones listed in Source 6.

The fact that there is still no agreement on many questionable artefacts, despite scientific testing, shows that science cannot always solve the problems of authenticity. In the case study of the Getty *kouros* presented later in this chapter, scientific assessment of the marble from which the statue was made showed that it was the right kind of marble from the right period for the disputed artefact. However, this alone was insufficient to prove that it was a genuine ancient artefact. In reality, museums could be full of artefacts of doubtful authenticity.

SOURCE 8

So the next time you're perusing a museum collection, remember that some of the labels may not be telling you the full story. The artifact you're looking at might have been the subject of an intensive scientific study, employing half a dozen different characterization and analysis techniques to determine the date, composition, and method of manufacture. Large databases may have been trawled to find results from similar studies of comparable artifacts from around the world. The combined expertise of art historians, conservationists, materials scientists, and museum curators might have been pooled to come to the conclusion that the information on the label is overwhelmingly convincing. Or it might just be that this artifact has evaded attention and is a forgery waiting to be found.

Elen S. Humphreys, 'How to spot a fake', *Materials Today*, vol. 5, issue 11, 2002, p. 32

SOURCE 7 The Getty *kouros*

2.2a Understanding and using the sources

1   List the scientific techniques referred to in Source 8.
2   Which experts might be involved in writing the information on the labels of museum artefacts?
3   Why might it be useful to remember that museum labels might not tell the whole story?

2.2a Check your learning

1 Why might scientific testing be unacceptable to museums and collectors?
2 Why would the combination of objective scientific testing and subjective expert opinion make for a more effective authentication method?
3 Why might the proof that an artefact was made of the right material for its time be insufficient to prove it to be genuine?
4 Find out about these additional techniques that are used by museums to test artefacts for their authenticity:
   a X-ray radiography
   b optical microscopy
   c scanning electron microscopy (SEM).
5 Research these cases in which scientific testing has proved the artefacts to be fakes.
   a The Shroud of Turin
   b The Persian Princess, daughter of Xerxes
6 Research the following cases of artefacts that may or may not be fakes. Why have experts been unable to discover for certain whether or not they are authentic?
   a The Boston goddess statuette – an ivory and gold statue thought to be either from the Minoan Bronze Age (1600–1500 BC) or else an early 20th-century fake.
   b The James Ossuary – a limestone box thought either to have held the bones of the Apostle James, brother of Jesus, or to be a mid 20th-century fake.
   c The Oxus Treasure – a hoard of about 180 gold and silver artefacts from the Persian **Achaemenid** period, or a treasure with questionable provenance containing several fakes.

Achaemenid
relating to the dynasty that ruled the Persian Empire from Cyrus I to Darius III (553–330 BC)
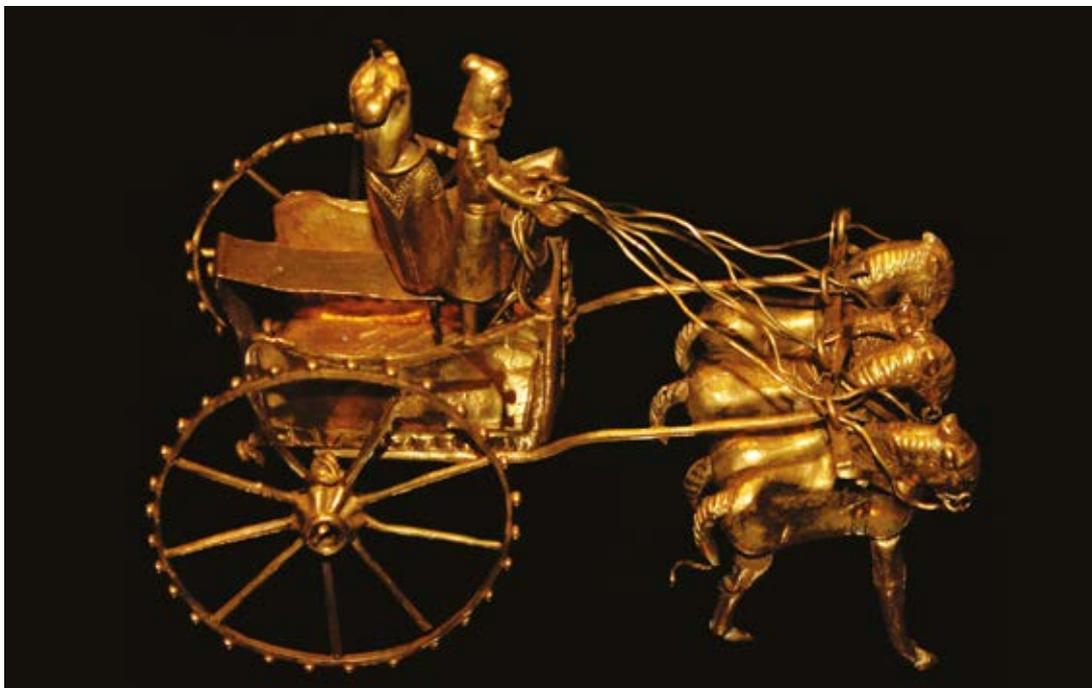
SOURCE 9 One of the gold artefacts that form part of the Oxus Treasure

Cross-referencing of ancient sources

Ancient written sources can also be authenticated by the use of scientific methods. Sometimes, however, this can be achieved by cross-referencing; that is, by checking one source for accuracy against an older version of the same text. One example is the impact made on assessments of the accuracy of Hebrew Old Testament scriptures by the discovery of the **Dead Sea Scrolls**.

The Dead Sea Scrolls

The Dead Sea Scrolls are a collection of approximately 900 manuscripts found in 1946–47, 1956 and as recently as 2017 in the Qumran Caves in the eastern Judaean desert in Israel. Radiocarbon dating, as well as **paleographic** analysis, has dated the scrolls to between c. 250 BC and AD 68. Before the discovery of the Dead Sea Scrolls, the earliest Old Testament manuscripts were dated to the early 10th century AD. As a result of the discovery, scholars are now more than 1000 years closer to the origins of these texts. You would suppose that during this long period of time, large changes would have occurred in the wording of the texts. This was not the case, however. Many of the scrolls confirm both the accuracy and age of the text found in modern Bible editions. The Dead Sea Scrolls are also significant in that some of them shed light on scholars' understanding of the historical context of Jesus and the early Christian Church. Although the scrolls pre-date the time when Jesus lived, some of them describe the works and wonders that will occur in the time of the **Messiah**. The language used, for example 'will bring good news to the poor' and 'set the captives free' is almost identical to the words given to Jesus in the gospels of Luke and Matthew in the New Testament. Scholars of early Christianity can now show that the prophecies of the Messiah were not introduced after the beginning of the Church to validate Jesus' ministry, as some might have argued, but had pre-dated it by a long time.

SOURCE 10 One of the Dead Sea Scrolls

Battle of Marathon

A further example of the benefit of cross-referencing for authentication comes from the records of the Battle of Marathon, a major battle of the **Graeco-Persian Wars** of 490 BC. In this example it is not a case of an older version of a text providing an accuracy check, but the case of one text substantiating an event that is not reported in the main text.

Herodotus is our main source for the events of the Battle of Marathon, an event he did not witness, however. He reports that after the Persian fleet landed at the Bay of Marathon,

on the east coast of the Greek mainland, just 42 kilometres from the city of Athens, the Greek defenders held a council of war. The Athenian general, Miltiades, persuaded the other commanders to march out and meet the invaders. The Athenians took up a position in the foothills at the southern end of the plain of Marathon, while the Persians were camped on the plain itself. Miltiades was unwilling to risk an attack because he knew that the Persian cavalry would have an advantage on the plain. A **stalemate** ensued, neither side moving, which the Persians attempted to end by sending their cavalry by ship to attack the undefended city of Athens. Miltiades, perhaps tipped off by spies that the cavalry had left, took the opportunity to attack the Persian infantry. The outcome was the famous victory of the 10 000 Athenians against the 25 000 Persians.

Herodotus' account of the Battle of Marathon in *The Histories*, written about 30 years after the event, makes no mention of the absence of the Persian cavalry or of Miltiades' discovery of the fact, prompting his exploitation of the unexpected advantage. Clearly Herodotus did not know about it. However, another source, the biography of Miltiades by the Roman author Cornelius Nepos (1st century AD) tells of deserters from the Persian army who had come to the Athenian camp to inform Miltiades that the cavalry had gone. In addition, the **Byzantine** *Suda*, an enormous 10th-century encyclopaedic **lexicon** of the ancient Mediterranean world, seems to have a reference to the Persian cavalry. It contains the Greek proverb 'the horsemen are away', which is believed to refer to the events at Marathon. These two sources may provide evidence to fill in the gaps left by Herodotus, the main source, and help to give a more detailed account of a significant ancient event.

stalemate
a situation in which no action can be taken or progress made

Byzantine
relating to the ancient city of Byzantium (modern Istanbul) or the Byzantine Empire, the Eastern Roman Empire after the fall of the Western Empire in AD 476

lexicon
a dictionary, especially of Greek, Latin or Hebrew

SOURCE 11 A detail from the Temple of Athena Nike depicting a Persian and an Athenian, possibly at the Battle of Marathon

2.2b Check your learning

1 Explain how the discovery of the Dead Sea Scrolls enabled scholars to verify the accuracy of Hebrew Old Testament scriptures.

2 What questions need to be asked about the reliability of both Nepos' biography of Miltiades and the *Suda*? What are their limitations in providing trustworthy information about the Battle of Marathon?

3 Explain how cross-referencing of ancient sources might help to provide a better understanding of the Battle of Marathon.

2.3

Case study: The Getty *kouros*

Archaic period
the period of Greek history from c. 700 to 480 BC

patina
a thin layer that forms on the surface of stone

dolomitic marble
a crystalline variety of limestone, containing more than 40 per cent magnesium carbonate

The case of the Getty *kouros,* a 2-metre statue of a young man from the **Archaic period** in Greece, is an ongoing example of the difficulties associated with authenticating ancient sources. In 1986, the J. Paul Getty Museum in Los Angeles, California, bought the statue for $9.5 million from a Swiss art dealer, Gianfranco Becchina, after 14 months of extensive legal and scientific testing. It was intended for exhibition. However, questions concerning the authenticity of the *kouros* arose almost immediately. There were three areas of concern:

- *the marble and its* **patina** – the marble the statue is carved from is the right kind for a statue of its apparent age; that is, **dolomitic marble** from the island of Thasos in the Aegean Sea. However, it was demonstrated after the purchase that the patina, or surface ageing of the marble, can be created artificially.

- *provenance* – the documents provided by the dealer at the time of sale attested to the statue being the property of a Swiss collector, who bought it from a Greek dealer in 1930. However, some of the documents concerning its verification and subsequent repairs have been shown to be false. Therefore the statue has no authentic recent history.

- *style* – the statue appears to have been carved in a variety of styles from different times (see Source 12).
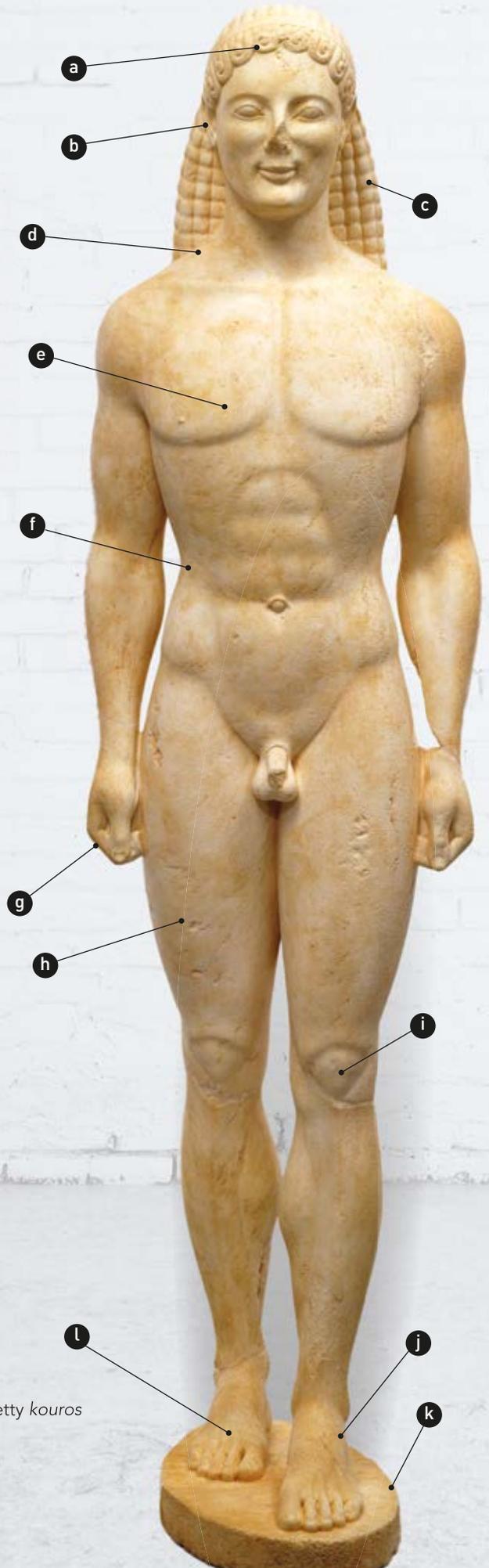
SOURCE 12 A stylistic and technical analysis of the Getty *kouros*

a The curls are similar to other known *kouroi*. However, the curls on the Getty *kouros* are parted in the centre to avoid a flaw in the marble. Usually, a flaw would have caused the statue to be abandoned by the sculptor.

b The ears are set at different heights and are slightly different in shape, suggesting the sculptor was using two different styles.

c The hair is like a wig and is braided into 14 strands, each strand ending in a triangular point. Some other known 7th-century BC *kouroi* also have 14 strands but the Getty *kouros* braiding is more rigid.

d The narrow, sloping shoulders are similar to another authentic *kouros*.

e The torso is flat and **stylised**, showing little understanding of anatomy.

f The slender waist is very unusual in Archaic sculpture.

g The last joints of the fingers turn in at right angles to the thighs, resembling some 6th-century BC *kouroi*.

h The tool marks are consistent with those used in late 6th-century BC sculpture, but are not always used in expected ways.

i The knees are stiffly carved. There are no similar examples.

j The position of the feet suggests that the statue is heading to the right. This suggestion of movement is consistent with authentic *kouroi*.

k The **plinth** is similar to other, late 6th-century BC plinths.

l The feet have a naturalistic style, similar to that of late Archaic sculpture, i.e. 5th century BC.

What is a *kouros*?

A *kouros* is a statue of a standing, nude youth made in Greece in the 6th century BC, also known as the Archaic period. *Kouroi* (plural) stood with their left feet forward, arms by their sides, looking straight ahead. They were dedicated to the gods and used as grave monuments. These statues embodied many ideals of the Archaic Greek culture, for example *arete*, or manly excellence, and *kalokagathia*, the combination of moral and physical beauty.

2.3a Understanding and using the sources

1 What time range is represented by elements of the Getty *kouros*?

2 What is the significance of the statue's feet indicating motion to the right?

3 Why is the flaw on the statue's forehead important?

4 List the features that are consistent with authentic *kouroi* and those that are not.

■ **stylised**
depicted in a non-realistic style

Current status of the *kouros*

The Getty *kouros* has been on display at the J. Paul Getty Museum. However, at the time of publication, it was listed as 'Not currently on view'. The museum describes the *kouros* as 'Artist/Maker unknown, Place Greece (?), Date about 530 BC or modern forgery'. Since the purchase of the *kouros* in 1986, some important considerations have arisen.

■ **plinth**
a square block, usually of stone, used as the base for a statue or pillar

Patina

The patina of the *kouros* was originally thought to be caused by **de-dolomitisation**; that is, the natural chemical process that would occur with this type of marble over a long period of time. It was not thought to be a process that could be done artificially.

■ **de-dolomitisation**
a process in which the magnesium in dolomitic rock forms new minerals and the calcium forms calcite

De-dolomitisation was subsequently found to be possible, but not without considerable expertise and effort. Now it has been found that the patina was not caused by de-dolomitisation at all, but by the exposure of the statue to oxalic acids, causing an outer coating of calcium oxalate. Theoretically, such a process can be carried out artificially in a few months and is therefore achievable by a forger, but so far the process has not been replicated in the laboratory.

Stylistic problems

No progress seems to have been made on the stylistic problems associated with the *kouros*. It must be noted that the sample size the statue is being compared to is very small – there are only 12 authentic *kouroi* in existence. It is possible that the eclectic nature of the *kouros*' style (i.e. the apparent mixture of elements from different periods) means that art experts need to revise their views of Archaic styles in light of insufficient evidence. It could be that the sculptor was adhering to stylistic changes that are unknown at present.

Provenance

The faked papers constituting the 'provenance' of the *kouros* are very important. They do not necessarily mean that the statue is a forgery. If the provenance was invented to pass off a fake as genuine, then its purchase was a very expensive error. However, if the statue is real, the fake papers could indicate that the statue was stolen. This would put the Getty Museum in contravention of the **UNESCO** 1970 Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of Cultural Property. Theoretically, another country could demand the statue's return. No country has done this as yet.

Authenticity

There is still insufficient evidence to make a firm decision on the authenticity of the Getty *kouros*. Source 13, which was written in 1991, is still a relevant summary of the situation regarding the Getty *kouros*.

SOURCE 13

Increasingly over the last half-century, scientific and technical analysis has usurped **connoisseurship** in determining whether a work of art is ancient or modern. Supposedly hard **facts** have come to take priority over the subjective views of archeologists and art historians, on which museums and collectors traditionally relied.

But as the kouros illustrates, objectivity is a **chimera**, even in this age of electron microscopy, **thermoluminescence** and carbon-14 dating. Science may be no more certain than the connoisseur's eye in judging a work's authenticity. Even Jerry Podany, the Getty's antiquities conservator … concedes: 'Science isn't the final word. It is flexible and changeable as new evidence comes up.'

Michael Kimmelman 'ART; Absolutely Real? Absolutely Fake?', *The New York Times*, 4 August 1991

UNESCO
United Nations Educational, Scientific and Cultural Organisation

connoisseurship
a method used in art history in which experts pass critical judgements on quality and authenticity

fact
a thing that is known or generally agreed to be true

chimera
an unrealistic idea or hope

thermoluminescence
an archaeological dating method that measures the radiation given off by ceramic materials as they are heated

2.3b Understanding and using the sources

1 What does the author mean when he says, 'scientific and technical analysis has usurped connoisseurship' in determining the authenticity of an artefact?

2 Why are scientific methods seen by some to be superior to those of archaeologists and art historians?

3 What might prevent science from having 'the final word'?

4 Why doesn't science have the final word on the authenticity of the Getty *kouros*?

2.3 Check your learning

1 Watch the Khan Academy 'Anavysos Kouros' online video, which explains the meaning and development of the Archaic *kouros*.

2 Look at some images of other authentic *kouroi*. Search online for '6th century Greek kouros images'.

3 Research the Getty *kouros* to find out more detail about the case. For a reliable online account, look up 'An Introduction to the Case of the Getty Kouros'.

4 The Getty Kouros Colloquium was an important conference held at the Museum of Cycladic Art in Athens in May 1992, which investigated and discussed many aspects of the statue. You can read a report of this conference containing articles by some of the experts who attended by searching online for 'The Getty Kouros Colloquium: Athens, 25–27 May 1992'.

5 Write a few sentences in response to each of the following questions:

   a Why is the patina of the Getty *kouros* significant in the investigation of its authenticity?

   b Why is it important that there is only a small number of authentic *kouroi* in existence?

   c Why is the *kouros* not necessarily a forgery if its papers of provenance are fake?

   d Why is a firm decision on the *kouros*' authenticity still not possible?

6 Do you think the Getty *kouros* is authentic or a forgery? Explain your reasons.

SOURCE 14 A *kouros* from Anavysos in Attica, Greece, which was a grave marker for a fallen young warrior, dated c. 540–515 BC

Case study: The Piltdown Man hoax

One of the most infamous examples of an archaeological fake is the case of Piltdown Man. In 1912, Charles Dawson, an amateur English archaeologist and fossil hunter, found pieces of a human skull and an ape-like jawbone together with some teeth and primitive tools in a gravel pit in Sussex in southern England. When the skull was reconstructed it was claimed that it belonged to a 500 000-year-old human ancestor. Was this the so-called 'missing link' in the evolutionary chain between apes and humans?
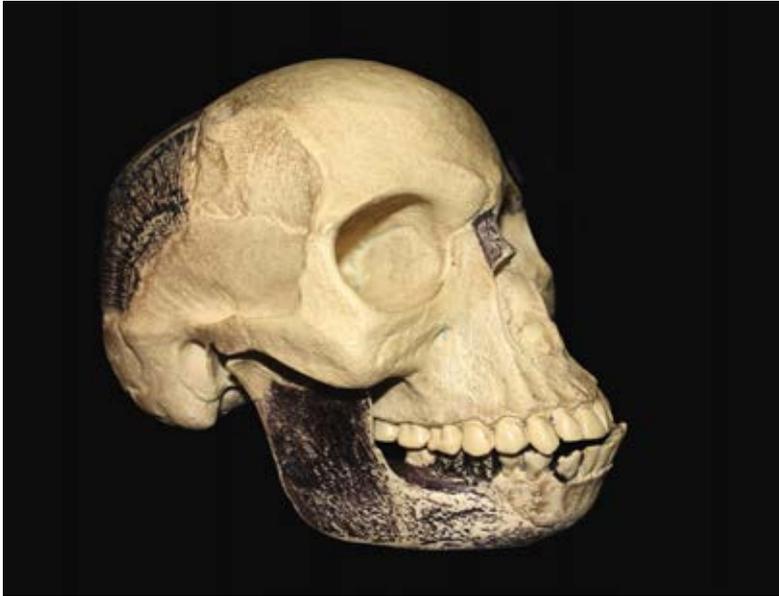
SOURCE 15 Replica of Piltdown Man's skull

The Piltdown discovery made headline news around the world and excited the attention of **palaeoanthropologists**, evolutionists and other experts. The skull was named *Eoanthropus dawsoni* (Dawson's Dawn-man). He soon found his way into textbooks as a genuine human ancestor and also established Britain as an important place in the story of human evolution.

Questions about the authenticity of Piltdown Man began to be asked in the 1920s and 1930s, when other early human remains were discovered around the world. These newly discovered human remains were very different from Piltdown Man; for example, they did not have his large **cranium** or ape-like jaw.

palaeoanthropologists
scientists who study human fossils

cranium
the part of the skull enclosing the brain

The hoax revealed

It was not until about 40 years later, with the development of scientific dating techniques, that Piltdown Man was revealed to be a hoax. A fluorine, uranium and nitrogen test was used to determine the age of the skull fragments and jawbone. The test showed that Piltdown Man's bones were not all the same age. It was also found that the remains were a combination of human and ape bones. The skull was human but of a recent age. Later radiocarbon tests indicated that it was about 600 years old. The jawbone was not human but belonged to an orang-utan. In addition, both the skull and jawbone had been painted with a pigment to give them the appearance of age.

2.4 Check your learning

1 Why do you think the British scientific community and other interested people in the early 20th century were so eager to believe that Piltdown Man was authentic?
2 Could such a hoax be easily perpetrated today? Explain the reasons for your answer.
3 Read the online article 'Study reveals culprit behind Piltdown Man, one of science's most famous hoaxes' for a more detailed report on the Piltdown Man hoax. Who was most likely the perpetrator of the hoax? What were their motivations?

Why make fakes?

The motives for making fakes are as varied as the different kinds of reproductions of original artefacts. The obvious motive is to make a large amount of money by deceiving unwary collectors. There are other motives, however, that are less obvious.

Legitimate, accurate copies of antiquities are frequently made, either for a market that appreciates the ancient style, or for serious collectors, museum display or teaching purposes. Often the same materials and techniques are used as were used on the ancient artefacts, making it possible that they will be mistaken for the real items in future times when they have aged. Artefacts in this category include metal antiquities, bronzes and stone beads.

Copies may also be made to protect the valuable and sometimes fragile originals. For example, expensive pieces of jewellery would remain in the bank while owners wore the fakes. More recent examples are the fake Rolex-type watches that owners wear to protect the highly valuable originals.

In some cases, copies of artefacts have been made to cover up the loss or theft of the originals. In the 1980s, a museum in Peru had 80 per cent of its Inca gold artefacts progressively stolen and replaced with copies.

Genuine artefacts, even in good condition, are sometimes made to appear worn to enhance their authenticity and appeal. Some genuine artefacts have been given obviously fake patinas to get them past the inspection of customs officials.
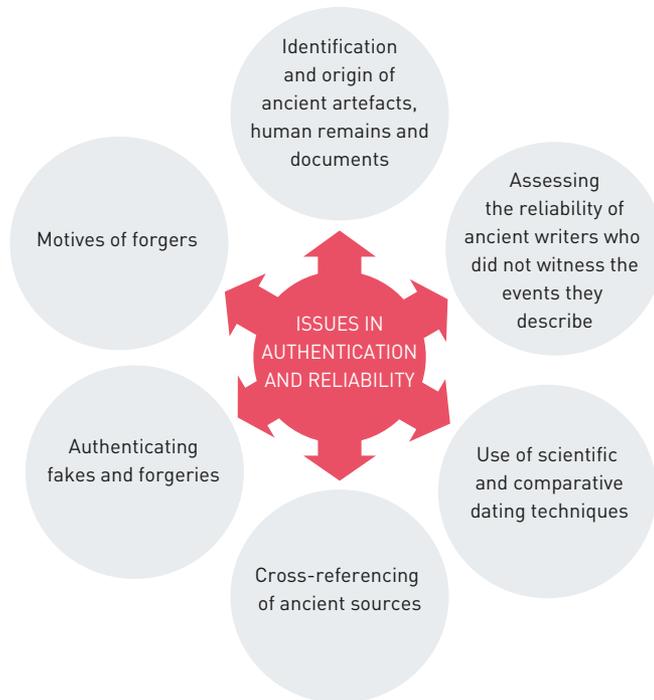
SOURCE 16 A mind map summary of issues involved in authentication and reliability

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2.5 Check your learning

1 Investigate other fascinating cases of fakes and forgeries of ancient artefacts and the methods used to reveal them as fakes. Search online for '10 Fake Archaeological Finds'.

2 Use the mind map headings in Source 16 to summarise the issues you have studied in this chapter.

3 Use what you have learnt in this chapter and your mind map to write a response to the following: 'Explain the main issues in determining the authenticity and reliability of ancient artefacts OR written texts.' (Explain: Relate cause and effect, make the relationships between things evident, provide why and/or how.)

   To help you plan your response:

   • identify some issues in historical authentication and reliability

   • use these issues to structure your response

   • make the relationships between features of the issues evident

   • use specific examples to support your answer.

In this chapter we have looked at the problems relating to the authentication and reliability of ancient sources so that they can be used as evidence in a historical enquiry. We have also noted the differences between relics, fakes, replicas and forgeries, and the role played by provenance in determining what sort of artefact is being dealt with.

Thucydides' *History of the Peloponnesian War*, Herodotus' *The Histories* and the Dead Sea Scrolls have provided examples of how to approach the work of ancient writers who did not witness all the events they describe. We have also looked at how cross-referencing can be used to authenticate ancient sources.

The Getty *kouros* and the Piltdown Man hoax are the two case studies we have considered to examine the difficulties of detecting suspected fakes or forgeries. In both of these cases, scientific and comparative dating techniques have been used, and we have seen a successful outcome in one case, but an inconclusive outcome in the other.

FOR THE TEACHER

Check your <u>o</u>book <u>a</u>ssess for the following additional resources for this chapter:

Answers

Answers to each *Check your learning*, *Understanding and using the sources* and *Profile task* in this chapter

Teacher notes

Useful notes and advice for teaching this chapter, including syllabus connections and relevant weblinks

Class test

Comprehensive test to review students' skills and knowledge

<u>a</u>ssess quiz

Interactive auto-correcting multiple-choice quiz to test student comprehension

3

The representation of the ancient past

FOCUS CONCEPTS & SKILLS

Perspective and representations

A person's perspective is shaped by the time in which they live, and their age, gender, social status, values and motivations. To evaluate representations of the past, we must recognise that they may reflect different world views from our own. For example, the ancient Romans had very different ideas about the role of women in society than are common today. This has to be taken into account when we evaluate Roman representations of the Celtic queen Boudicca.

SOURCE 1 This metal statue in Colchester, Essex, UK is a modern representation of Boudicca

The past in the modern world

Today we are bombarded by a range of representations of the past in a variety of media. Blockbuster museum exhibitions of Tutankhamun artefacts and Egyptian mummy extravaganzas are frequent events. Television series such as *Rome* or *Vikings*, and films such as *Troy* and *Gladiator* are modern interpretations of past eras. These productions are designed to appeal to mass audiences, more often reflecting modern values and world views than those of the eras they portray. Even television documentaries on ancient Egypt, Greece and Rome, for example, are representations. Documentary makers are highly selective in their choice of material and usually represent their contemporary **perspectives**.

When we examine these representations we must consider the perspectives of those who produce them and the sources or interpretations they have used. We will explore various ancient and modern representations of people and events from the past. Our first case study will focus on Boudicca, **Celtic** queen of the Iceni, who waged war against the Romans during their occupation of ancient Britain. In our second case study we examine fascinating modern representations of the Egyptian pharaoh Tutankhamun. Our third case study involves an examination of ancient and modern representations of the Roman siege of Masada in ancient Judaea in the 1st century AD, and the ways in which it has been represented in modern Israeli history.

perspectives
the points of view held by individuals or groups about the past that are based on their contexts and motivations

Celtic
relating to the Celts, pre-Roman inhabitants of Britain and Gaul

Interrogating the sources

Before beginning a study of the representations in this chapter revisit the questions that need to be asked of archaeological and written sources (see Chapter 1 for more information). The questions for interrogating written sources can also be applied to other media such as films and documentaries.

SOURCE 2 Questions to ask of sources

INTERROGATING ARCHAEOLOGICAL SOURCES	INTERROGATING WRITTEN SOURCES
1 What is it?	1 What type of text is it?
2 What was its context?	2 What is the context of the writer? What is their perspective?
3 Can it be accurately dated?	3 What is the writer's purpose?
4 How does its condition affect its interpretation?	4 Who is the intended audience?
5 Is it valuable in providing evidence about the past?	5 Is it trustworthy?
6 What evidence does this source provide about the past?	6 Is it valuable in providing evidence about the period?

3.1 Check your learning

1   Conduct some research and find five further examples of films, documentaries and television series that are examples of modern representation of the ancient past.

2   Choose one of the examples you listed in question 1 and complete the following:
   a   Suggest reasons why this subject was chosen by the film or documentary maker.
   b   Identify the modern perspectives – e.g. in terms of attitudes, values, world views – that are evident in the construction of this representation.
   c   Suggest reasons why the people or events in your chosen film or documentary are represented as they are.

3.2 Representing Boudicca

Ancient and modern sources on the Briton queen Boudicca (also spelled Boudica or Boadicea) offer an opportunity to study changing representations of a personality from the 1st century AD to now. This woman, who was demonised in her own time, has become, almost 2000 years later, a symbol of British national pride.

The Romans in Britain

Julius Caesar
a significant Roman general and statesman of the late Roman Republic

annex
to incorporate, add territory to a country or state, often by military means

In the 500 years before the first attempted Roman invasion by **Julius Caesar** in 55 and 54 BC, the British Isles were inhabited by a number of different Celtic kingdoms and tribes who were often at war with each other. In AD 43, the Romans finally conquered Britain. They named this new province Britannia, and it remained a province of the Roman Empire until AD 410.

The Roman invasion of Britain divided many of the Celtic kingdoms and tribes. Some supported the Romans, others fiercely opposed their occupation and suffered dreadfully for their resistance. Boudicca was queen of the Iceni, a local tribe during the Roman occupation. She led a revolt against Roman rule in AD 60.

The revolt of the Iceni began after the death of Prasutagus, Boudicca's husband. Prasutagus had ruled as a nominally independent ally of Rome and left his kingdom jointly to his daughters and the Roman emperor in his will. However, when he died, his will was ignored, and the kingdom was **annexed** by the Romans. When Boudicca protested against this treatment, the Romans responded by having her flogged and raping her two daughters. In retaliation, Boudicca mobilised a large army and attacked several Roman settlements. They defeated the Roman Ninth Legion and destroyed the capital of Roman Britain, then at Colchester. They went on to destroy London and Verulamium (modern St Albans). The Romans were forced to call in reinforcements to quash the rebellion. According to the Roman sources, Boudicca either took poison or died of wounds sustained in battle.

CELTIC BRITAIN AND NORTHERN GAUL, 1ST CENTURY BC

SOURCE 3 The location of Celtic kingdoms and tribes, and the route of Boudicca's rebellion

Source: Oxford University Press

Ancient representations of Boudicca

We have no written sources recording events from the perspective of Boudicca and her people. Our only knowledge of Boudicca's rebellion comes from two Roman writers, Tacitus and Cassius Dio. Tacitus (c. AD 56 – c. 117) was a famous Roman historian of the **imperial period**. He also served as a **senator** in the **imperial service**. He wrote two histories: *The Annals of Imperial Rome*, a year-by-year account of Roman history from the death of the emperor Augustus in AD 14, and *Agricola,* a biography of his father-in-law, Agricola, governor of Roman Britain in AD 77–85.

Cassius Dio (c. AD 150 – c. 235) was a Roman historian of Greek origin, Greece being a province of the Roman Empire in this period. He was a senator in the reign of Commodus (AD 177–192) and served as governor of Smyrna, an eastern province of the Roman Empire. His 80-volume *Roman History*, of which little survives, covered the history of Rome from its foundation to AD 229.

In Source 4, Tacitus gives an account of Boudicca's speech to her forces before the final battle against the Roman army. In Source 5, Tacitus sketches the historical background of Agricola's governorship of Britain. Source 6 is Cassius Dio's description of Boudicca and her rebellion.

SOURCE 4

Boudicca drove around all the tribes in a chariot with her daughters in front of her. 'We British are used to women commanders in war,' she cried. 'I am descended from mighty men! But now I am not fighting for my kingdom and wealth. I am fighting as an ordinary person for my lost freedom, my bruised body, and my outraged daughters. Nowadays Roman rapacity does not even spare our bodies. Old people are killed, virgins raped. But the gods will grant us the vengeance we deserve! The Roman division that dared to fight is annihilated. The others cower in their camps, or watch for a chance to escape. They will never face even the din and roar of all our thousands, much less the shock of our onslaught. Consider how many of you are fighting – and why. Then you will win this battle, or perish. That is what I, a woman, plan to do! – let the men live in slavery if they will.'

Tacitus, *The Annals of Imperial Rome*, Chapter 14

SOURCE 5

Rousing each other by this and like language, under the leadership of Boudicea, a woman of kingly decent (for they admit no distinction of sex in their royal successions), they all rose in arms. They fell upon our troops, which were scattered on **garrison** duty, stormed the forts, and burst into the colony itself, the headquarters, as they thought, of **tyranny**. In their rage and their triumph, they spared no variety of a barbarian's cruelty. Had not Paulinus on hearing of the outbreak in the province rendered prompt succour, Britain would have been lost.

Tacitus, *Agricola*, Book 1, 16

SOURCE 6

A terrible disaster had taken place in Britain. Two cities had been **sacked**, eight **myriads** of Romans and of their allies had perished, and the island had been lost. Moreover, all of this ruin was brought upon them by a woman, a fact which itself caused them the greatest shame … But the person who most stirred their spirits and persuaded them to fight the Romans, who was deemed worthy to stand at their head and to have the conduct of the entire war, was a British woman, Buduica, of the royal family and possessed of greater judgement than often belongs to women. It was she who gathered the army to the number of nearly twelve myriads and ascended a tribunal of marshy soil made after the Roman fashion. In person she was very tall, with a most sturdy figure and a piercing glance; her voice was harsh; a great mass of yellow hair fell below her waist and a large golden necklace clasped her throat; wound about her was a tunic of every conceivable color and over it a thick **chlamys** had been fastened with a brooch. This was her constant attire.

Cassius Dio, *Roman History*, LXII. 1–2

garrison
troops stationed in a fortress or town to defend it

tyranny
an absolute form of rule in which one individual exercises power without any legal restraint

sacked
destroyed, plundered

myriad
a unit or division of 10 000

chlamys
cloak

3.2a Understanding and using the sources

1 What information does each source provide about Boudicca?
2 What do all the sources agree about?
3 Are there any differences? How do you account for them?
4 What examples of bias (see Chapter 1) can be found in these sources? Explain them.
5 What is the significance of the fact that both Tacitus and Cassius Dio present a Roman perspective?
6 What impression of Boudicca does Cassius Dio convey in Source 6? Why does he emphasise her appearance?
7 What conclusions would you draw about the value of these accounts for the historian investigating Boudicca's rebellion?

SOURCE 7 An 18th century engraving of Boudicca showing her as the leader of the Iceni tribe against the Romans.

appropriated
taken for one's own
purpose, usually
without the owner's
permission

nationalism
the belief that
one's own nation is
better than other
nations, marked by
a devotion to the
culture and interests
of one's nation

Modern representations of Boudicca

Boudicca has been **appropriated** throughout British history for a variety of purposes. At different times she has become a symbol for British **nationalism**, motherly devotion and military leadership. For example, Boudicca has been invoked to represent Elizabeth I, the 16th-century English queen. Like Boudicca, she fought against foreign occupation, this time an attempted invasion by the Spanish Armada.

For late 19th-century Victorian England, Boudicca became a perfect model of British nationalism and **imperialism**. She was identified with Britannia, represented as a female warrior figure in ancient dress. Britannia was both the name and symbol of the British Empire, which was the most powerful empire of its time. Sources 8, 9 and 10 are modern representations of Boudicca, drawing on some of the themes mentioned here.

SOURCE 8 Britannia is often depicted with a lion, the animal that featured on the coats of arms of England, Scotland and the Prince of Wales.

SOURCE 9 This statue in Brecon, Wales, depicts Boudicca clutching a Celtic sword and trampling a Roman shield while sheltering her daughters.

SOURCE 10 The Thomas Thornycroft statue of Boudicca and her daughters was placed near the British Houses of Parliament at Westminster in 1902, the year after the death of Queen Victoria.

imperialism
a policy of extending
a country's power and
influence through
military conquest,
colonisation or
other means

3.2b Understanding and using the sources

1   What aspects of the original story of Boudicca are represented in Sources 8, 9 and 10?
2   What is ironic about the identification of Boudicca with British imperialism?
3   Explain the significance of the following lines from 'Boadicea: An Ode' by William Cowper which are inscribed on the base of the Thornycroft statue: 'Regions Caesar never knew, Thy posterity shall sway'.
4   Discuss the representations of Boudicca and her daughters in Sources 9 and 10.
5   What is the significance of the location of the Thornycroft statue of Boudicca?

Boudicca in the 21st century

The question now being asked by some is whether Boudicca is still a relevant symbol for Britain today. The days of empire are long gone and Britain now faces different challenges. Source 11, written in 2010, raises some of these questions.

The Boadicea statue in Westminster was placed in 1902. Designed by Thomas Thornycroft, it is a beautiful and thrilling work of art, but it is becoming rapidly out of date against our modern sensibilities. Britain is now a country which welcomes guests from abroad and co-operation with other nations. It would be a tragedy if that statue was lost and little kids no longer asked parents 'Who is that?' But perhaps now it would be right to move it elsewhere, where it does not cast its shadow of violence and xenophobia onto the home of our government. Perhaps a better place would be back in Boudicca's native Norwich or on the site of her great final battle, should we ever find it. There it could live solely as a reminder of a compelling historical figure, a wife and mother, who briefly bested the might of Rome.

Nick Gilbert, 'Is Boudicca a poster girl for intolerance and British nationalism?', *The Independent*, 16 March 2010

3.2c Understanding and using the sources

1 Why does Gilbert argue that the Boudicca statue at Westminster is out of date? Where does he suggest the statue should be moved to and why?

2 How useful would each of the sources in this case study be to a historian studying the impact of Boudicca on British history?

3.2 Check your learning

1 In 2003, a film was made of the Boudicca story starring Alex Kingston and Emily Blunt. You can watch the full-length feature online by searching for 'Boudica Warrior Queen'.

2 How has modern **feminist history** influenced the construction of these representations of Boudicca?

3 Use what you have learnt about the ways in which Boudicca has been represented over time to write a response to the following: 'Evaluate ancient and/or modern representations of Boudicca.' (Evaluate: Make a judgement based on criteria; determine the value of.)

    To help you plan your response:

- identify criteria on which to base your evaluation, e.g. perspective, purpose, audience
- use these criteria to structure your answer
- make judgements about the representations of Boudicca based on your chosen criteria
- use specific evidence to support your explanation.

feminist history
the interpretation of history from a female perspective

SOURCE 12 A scene from the film *Warrior Queen*, a modern representation of Boudicca

Representations of Tutankhamun

As well as knowing about the lives and times of people in the past, we are also curious to know what they looked like. Until quite recently, we have been limited to artists' representations of their appearance. Beginning in the 1980s, the science of facial reconstruction has given us much more accurate representations based on the bone structure of the face and other features.

Sophisticated techniques such as **CT scans** and **computer-generated imaging (CGI)** are now providing even more accurate results, but they are not without their limitations. A degree of interpretation is still required. Sometimes, the same remains can produce widely different representations. Tutankhamun, the boy-king of Egypt, is a good example of this. Not only do the latest representations differ markedly from the originals, they have aroused hostile responses from a range of **stakeholders**.

Facial reconstruction of ancient remains

The facial reconstruction techniques for ancient human remains differ little from those used for people from the present. Forensic facial reconstruction of modern humans requires maximum accuracy. However, for ancient people, the focus is on producing the most likely representation. In many cases the archaeologist suggests the most probable hairstyle and hair, skin and eye colour from written and pictorial evidence, if available. Sometimes there is sufficient soft tissue left to suggest some of these features. **DNA** can also supply hair and skin colour. CT scans can be used to produce a 3D digital model, and even replica skulls may be produced from digital data. Three-dimensional digital models of the skull can also be imported into computer-based facial reconstruction programs, such as with the facial reconstructions of Tutankhamun.

CT scan
computed tomography scan; an imaging method using digital geometry processing to produce a 3D image of the inside of an object or body

computer-generated imaging (CGI)
the application of computer graphics to create or contribute to images in a variety of media

stakeholder
someone who has a particular interest an issue, project or organisation

DNA (deoxyribonucleic acid)
a self-replicating genetic or hereditary material present in nearly all living organisms

Facial reconstruction contested

Among the best known reconstructions of ancient human remains are those of Lindow Man and the Iceman (see Chapter 6), whose likenesses, as reconstructed, have generally been accepted.

However, the technique of facial reconstruction is subject to contestability. In fact, it is one of the most controversial techniques in the field of forensic anthropology. It is based on a combination of artistry, forensic science, anthropology and anatomy. It has been argued that it is too subjective and too reliant on the artistic skill of the practitioner. The reconstructions may also be influenced by the cultural, political or other agendas of those who commission them.

SOURCE 13 The latest representation of the Iceman's face under construction. Note the pegs used to determine the depth of muscles at different points on the face.

Representing Tutankhamun – 2005

The remains of Tutankhamun have been used to create representations of his face and most recently, his entire body. These representations have been very controversial. In 2005, a recently reconstructed head of Tutankhamun made headline news around the world. Everyone was keen to see what the young king had looked like before his death over 3000 years ago. This representation (Source 14) depicted Tutankhamun as a dignified, good-looking young man. Read how one news site reported the story of the 2005 facial representation of Tutankhamun in Source 15.

SOURCE 14 The representation of Tutankhamun produced in 2005

SOURCE 15

Under the leadership of Zahi Hawass, secretary general of Egypt's Supreme Council of Antiquities, National Geographic has used the CT data to show the world how Tut looked the day he died, some 3300 years ago …

Using the CT data from scanning done in January, a 'rapid prototype model' of the skull was made and provided to French forensic anthropologist Jean-Noel Vignal, of the Centre Technique de la Gendarmerie Nationale. Vignal … determined from the skull that the person had been male, 18 to 20 years old, with Caucasoid features. 'Caucasoid' describes a major group of peoples of Europe, North Africa, the Near East and India …

From the CT data, Vignal and his team determined basic measurements and features of Tut's face. For example, the size of the narrow nasal opening … allowed them to fix the size range of Tut's nose. Other data guided them on the position of the king's mouth and his receding chin. Vignal also used the data to calculate the correct thickness of skin on Tut's face.

Vignal's skull 'map' then went to one of the world's leading anthropological sculptors, Élisabeth Daynès of Paris. Daynès's job was to combine the science with art to create the most accurate, lifelike face of Tut ever … Daynès used tissue-depth information to lay clay over the plastic skull models and build toward a human image with flesh, filling in the king's eyebrow thickness, precise shape of the nose and lips, as well as the approximate shape and size of Tut's ears.

 Finally, Daynès made a plaster mold of her clay sculpture and created a flesh-toned silicone cast. Attentive to the tiniest detail, she placed glass eyes and implanted a head of hair with surgical precision. … Eyelashes, eye makeup known as 'kohl', and even jewelry were added to adorn the king as he was in life.

National Geographic Society, 'The fresh face of King Tut: famous pharaoh's features reconstructed using high-resolution CT scanner', *ScienceDaily*, 11 May 2005

Representing Tutankhamun – 2014

In 2014, a team carried out a 'virtual autopsy' of the young pharaoh by combining more than 2000 digital scans of his body. These scans were used to create a new, full-body image of Tutankhamun (see Source 16). It depicts a very different young man from the 2005 face. The face in this representation is less than attractive, and the young king's body clearly shows a **club foot** and feminine features.

club foot
a birth defect causing the foot to point inwards

SOURCE 16 The 2014 representation of Tutankhamun

This representation, used in a 2014 documentary titled *Tutankhamun: The Truth Uncovered*, made world headlines like its predecessor in 2005. Some headlines include:

- 'Virtual autopsy' reveals Pharaoh Tutankhamun was the ugly outcome of incest
- Tut, Tut: New View of King Tutankhamun Sparks Debate
- 'Virtual Autopsy' of King Tut Paints Unflattering Picture
- King Tut Re-Creation Presents a Shocking Image.

This representation is dramatically different from the likeness of Tutankhamun as depicted in his famous funerary mask (see Chapter 8, Source 1), which the world has come to accept as a true portrait of the young king. It also differs markedly from the 2005 facial reconstruction shown in Source 14. Some Egyptian archaeologists were very upset by the new representation of Tutankhamun. Zahi Hawass described it as 'a malicious slander on ancient Egyptian civilisation'. His response continues in Source 17.

SOURCE 17

This golden boy has entered the hearts of people all over the world, and this person [a scientist appearing in the documentary] wanted to take him out of our hearts. This person and the film producer have made a huge mistake and in so doing they have lost the respect of all reasonable people. Scholars all over the world disagree with them, and, again, instead of revealing the truth all they have done is to propagate lies.

The UK's *Daily Mail* newspaper has published an article on the new documentary on Tutankhamun, produced by STV and already aired. The documentary distorts what Tutankhamun looked like: the boy king, whose treasure and tomb still fascinate people across the world, was presented in a completely fantastic way, humiliating not only the Egyptian king but also rewriting the history of the ancient world.

The face of the king was reconstructed by a French team that rebuilds the features of the dead using special computer programmes. This reconstruction was not based on science or on the study of the anatomy of the face of the mummy, however. Another Egyptian-American team had already reconstructed the king's face, but for some reason the [documentary] used the image produced by the French.

Zahi Hawass, 'The truth about Tutankhamun', *Al-Ahram Weekly*, 13 November 2014

3.3 Understanding and using the sources

Sources 14–17

1 Describe the contributions of the forensic anthropologist Vignal and the forensic sculptor Daynès to the construction of the 2005 representation of Tutankhamun.

2 How does the article in Source 15 suggest that this representation is 'the most accurate, lifelike face of Tut ever'?

3 How does Zahi Hawass represent Tutankhamun in Source 17?

4 What features of Source 16 is Hawass referring to when he says that the documentary 'distorts' Tutankhamun's appearance?

5 Use the skills you have developed to interrogate a source to analyse Hawass' attack on the 2014 representation of Tutankhamun. Choose examples of his language that support your analysis.

6 How does Zahi Hawass' particular context shape his interpretation?

3.3 Check your learning

1 Find out more online about the techniques used in forensic facial reconstruction.

2 Look for the three facial representations (1993, 1998 and 2011) of Ötzi the Iceman made since his discovery in 1991. How have facial reconstruction techniques changed over the years? Which representation do you prefer? Why?

3 Why do you think the representations of Tutankhamun have resulted in worldwide attention?

4 Suggest reasons why the reconstructions of Lindow Man and the Iceman have not aroused the same controversy as the reconstructions of Tutankhamun.

5 Find out more about the documentary *Tutankhamun: The Truth Uncovered*. It claims to have solved the mysteries of Tutankhamun. Do you think it has?

6 Use the work you have done in this section to write a response to the following question: 'Explain the issues involved in the representation of the remains of Tutankhamun.' (Explain: Relate cause and effect, make the relationships between things evident, provide why and/or how.)

   To help you plan your response:
   • identify one or more of the issues involved in the representation of Tutankhamun
   • use these aspects to structure your answer
   • say how and why these aspects are contested
   • use specific examples to support your answer.

Representing the Siege of Masada

Masada, a fortress in the Roman province of Judea (modern Israel), is famous as the site that was besieged by Roman troops in the 1st century AD as part of the First Jewish–Roman War. The Jewish defenders were members of a group called the Sicarii, who were opposed to the Roman occupation of Judea. In AD 70 they fled Jerusalem and occupied the Roman fortress on the isolated rock plateau of Masada. Three years later the Romans besieged the fortress, building a surrounding wall and huge ramp that enabled them to use a battering ram to breach the walls.

The site has been excavated and interpreted in modern times. In present-day Israel it is a very significant site, not only for its archaeological and historical interest, but also because it has taken on national and political symbolism in the context of Israel's contemporary history.

Historical context

client king
a king who was nominally independent but, in return for Roman support, contributed financial or military resources to Rome or its army

Judea became part of the Roman Empire in 63 BC when it was conquered by the Roman general Pompey. The Romans installed a local leader, Herod (74–4 BC) who ruled as a **client king**. Herod carried out a large-scale building program. It was during his reign that the fortress at Masada was built. The plateau on which Masada is situated occupies an area of about 550 metres by 270 metres. Herod built a wall around the top of the plateau with many towers, and the fortress included palaces, storehouses, barracks and cisterns that were filled with rainwater. Three narrow, winding paths led from below up to fortified gates.

Ten years after Herod's death, Judea came under direct Roman administration. Growing anger against Roman rule resulted in sporadic violence, which escalated into a full-scale revolt in AD 66. Roman forces finally quashed the revolt. In AD 70, Jerusalem was destroyed and the last outpost of resistance at Masada was eventually defeated in AD 73. The outcome of the siege was an apparent mass suicide of its Jewish defenders in the face of imminent defeat.

SOURCE 18 The fortress of Masada is located on a steep isolated rock cliff in the Judean Desert overlooking the Dead Sea.

The ancient written source: Josephus' representation

Our only ancient written source for this event is the account of Flavius Josephus, a contemporary Jewish-Roman historian. He was a Jewish general who had led the Jewish forces against the Romans during the First Jewish–Roman War until his defeat and **defection** to Rome in AD 67. The Roman emperor Vespasian retained him as a slave and interpreter before granting him his freedom two years later. Josephus was granted Roman citizenship and adopted the name Flavius, the family name of Vespasian.

Josephus himself was not an eyewitness of the siege and based his account on the reports of the Roman military commanders who were in charge. Josephus records that when the Romans eventually entered Masada, they found the buildings on fire and most of the defenders dead. He tells of two women who had hidden themselves to escape the mass suicide and who were therefore able to relate what had happened. According to their account, the leader of the Jewish defenders, Eleazar ben Yair, had **exhorted** his followers to draw lots and kill each other in turn so that the last man only would commit suicide. Source 19 is from Josephus' account.

defection
abandonment of your own country, organisation or cause

exhorted
strongly urged

SOURCE 19

Now as Eleazar was proceeding on in this exhortations, they all cut him off short, and made haste to do the work, as full of an unconquerable ardor of mind, and moved with a demoniacal fury … so great was the zeal they were in to slay their wives and children, and themselves also! … Nor was there at length any one of these men found that scrupled to act their part in this terrible execution, but every one of them despatched his dearest relations. Miserable men indeed were they, whose distress forced them to slay their own wives and children with their own hands … They then chose ten men by lot out of them to slay all the rest …

Now for the Romans, they expected that they should be fought in the morning, when, accordingly, they put on their armor, and laid bridges of planks upon their ladders from their banks, to make an assault upon the fortress, which they did; but saw nobody as an enemy, but a terrible solitude on every side, with a fire within the place, as well as a perfect silence. So they were at a loss to guess at what had happened. At length they made a shout, … the women heard this noise, and came out of their underground cavern, and informed the Romans what was done … yet [the Romans] did not easily give their attention to such a desperate undertaking, and did not believe it could be as they said; they also attempted to put the fire out … and they came within the palace, and so met with the multitude of the slain, but could take no pleasure in the fact, though it were done to their enemies. Nor could they do other than wonder at the courage of their resolution, and the immovable contempt of death which so great a number of them had shown, when they went through with such an action as that was.

Flavius Josephus, *The Genuine Works of Flavius Josephus*, trans. by William Whiston, New York: Robinson, Pratt & Co., 1841, pp. 158–60

3.4a Understanding and using the sources

1 What impression does Josephus give of the decision of the Jewish defenders to commit suicide and their subsequent actions? What is suggested by the term 'demoniacal fury'?

2 According to Josephus, what was the Roman reaction? Consider expressions such as 'courage of their resolution' and 'immovable contempt of death'.

3 In assessing the accuracy and **reliability** of Josephus' account, what questions need to be asked about his context and perspective?

reliability
the accuracy of a source judged on its context, purpose, origin and intended audience

Modern archaeological investigation of Masada

The site of Masada was excavated during the 20th century. The major excavation was conducted between 1963 and 1965 by Israeli archaeologist Yigael Yadin. Many artefacts discovered appeared to confirm the broad outlines of Josephus' story, such as scrolls, clothing, living quarters, Jewish coins and weapons. Yadin found two ritual baths and a synagogue at the foot of the mountain. Traces of the Roman siege walls, the ramp built to bring the battering ram up to breach them and the Roman camps were also uncovered. Yadin uncovered two adult skeletons and one of a child within the fortress, as well as 25 skeletons of men, women and children in a cave nearby.

sovereign state
a state or country that administers its own government and is not dependent on, or subject to, another power
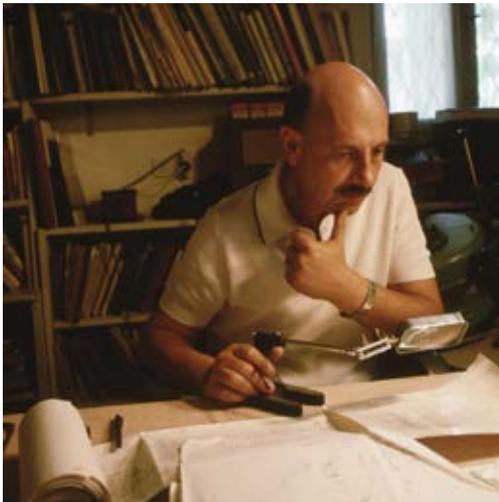
SOURCE 20 Yigael Yadin, Israel's famous archaeologist and statesman

Yigael Yadin, warrior, scholar and nationalist

Yigael Yadin was a nationalist and former chief of operations of the Israel defence forces at the time of the 1948 War of Independence, which created the modern state of Israel. This was a culmination of the mass exodus of Jews from Europe in the years immediately following the Holocaust and the end of World War II. On leaving the military, he pursued a career in archaeology and excavated some of the most important sites in the region, including the Qumran Caves, Masada, Hazor and Tel Megiddo.

Yadin returned to public life as military adviser to the Israeli prime minister during the Six-Day War in 1967. This war was fought between Israel and Egypt over Israel's right to exist as a **sovereign state** in the Middle East. Israel saw itself as besieged by enemies on all sides who were committed to its destruction.
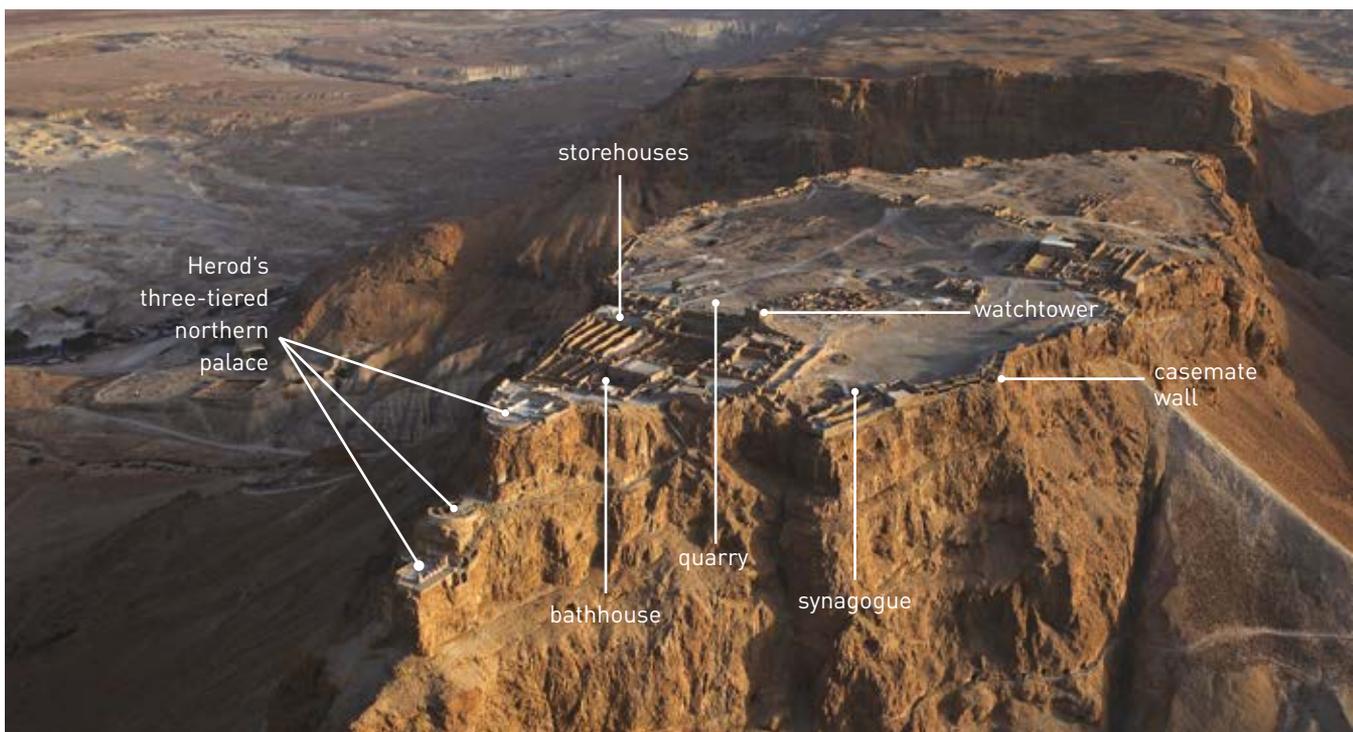
SOURCE 21 An aerial view of the excavations at Masada showing the main features of the site

Issues of contestability

The focus of this study is an exploration of how the siege of Masada has been represented over time and the disputes associated with these representations. The following are some of the key issues of contestability.

The Sicarii

The defenders of Masada have been variously represented in both ancient and modern accounts. They have been described as rebels, freedom fighters, **insurgents**, an extremist **splinter group** and terrorists. Some modern commentators have portrayed them as **uncompromising** patriots, refusing to negotiate with the Roman oppressors despite the ethical and religious issues raised by their mass suicide – a forbidden practice in **Judaism**.

The name Sicarii means 'dagger men' and refers to the small daggers they hid in their clothing and used at public gatherings to attack Romans and other Jews they saw as collaborators. They would then melt into the crowd and join in the general outcry. During the First Jewish–Roman War, they carried out violent attacks in Jerusalem in an attempt to force the local population to take up arms against the Romans. Josephus records that the Sicarii also raided the Jewish settlement of Ein Gedi, near Masada, and massacred 700 of its inhabitants. Today such actions might be regarded as urban guerrilla or terrorist activity.

The accuracy of Josephus' account

The context, perspective, motives and sources of Josephus' account of the siege should be analysed. The fact that he was a Jew who had defected to the Romans raises questions about his perspective. We do not know what his purpose was in writing his account. Josephus was not personally involved in the siege, but relied on the accounts of survivors. Did he hear these firsthand or were they reported to him?

Discrepancies between Josephus' account and the archaeology

Another contested issue concerns some differences between the account of Josephus and the evidence revealed by modern excavation. These include:
*   mention of only one palace by Josephus, while in fact there were two
*   some inaccurate description of the northern palace
*   exaggerated figures for the heights of the walls and towers
*   discovery of the remains of only 28 people compared to the 960 Jewish defenders recorded by Josephus.

insurgent
a person fighting against a government or invading force; a rebel or revolutionary

splinter group
part of an organisation that breaks away from the main body, usually owing to a disagreement

uncompromising
unwilling to negotiate or make concessions to others

Judaism
the religion of the ancient Israelites and modern Jews

Yadin's excavation and interpretation

Yigael Yadin is a significant figure in modern Israel. He is best remembered for his discovery and interpretation of the **Dead Sea Scrolls** at Qumran (see Chapter 2). His excavations succeeded in capturing the public imagination and gave the Israeli people a greater sense of their ancient past. However, Yadin has been criticised for manipulating the findings from his excavation at Masada to give Israelis a heroic narrative on which to base their national identity. For example, the ethnicity of some of the human remains he unearthed is uncertain because the associated evidence suggests that they may not have been Jewish defenders. Despite some dispute over the identity of these remains, they were buried at Masada with full military honours in 1969. Other scholars feel that it is unfair to judge Yadin's 30-year-old archaeology by today's standards, particularly considering the political situation in Israel at the time. In 1967, Israel had fought the Six-Day War with Egypt. This was soon followed by hostilities with Palestine, which remain unresolved to this day. The Israeli people felt their right to exist was being challenged on all sides.

Yadin published the results of his excavation at Masada in a book entitled *Masada: Herod's Fortress and the Zealot's Last Stand.* Source 22 is from a speech given by Yadin at Brigham Young University in the United States in 1976.

SOURCE 22

One of the strangest phenomena in human history is the struggle of the Jewish people for their spiritual independence, always the few against the many. And one of the most amazing, heroic, alas tragic episodes in this struggle is no doubt the story of Masada.

Masada is not just another archaeological site. For many of us it is a sort of **mausoleum** of the nation's martyrs.

Masada today, for many of us, for all of us in Israel … is a symbol, it is a challenge, and it is also a reminder. This is why to this very day, three or four times a year, the recruits of the armored **corps** of the Israeli army take the oath of allegiance to the state of Israel on top of Masada, saying three times, 'Masada shall not fall again'.

Yigael Yadin, 'Masada: Herod's fortress and the zealot's last stand',
BYU Studies Quarterly, vol. 36, issue 3, Article 3, 1996. p. 17

3.4b Understanding and using the sources

1 What does Yadin consider to be the significance of Masada? How can we account for his view?

2 Comment on the language used by Yadin. Consider his purpose and audience.

3 What does Yadin mean when he says 'Masada shall not fall again'?

3.4b Check your learning

1 How does the modern Israeli heroic representation of the Sicarii fit with the description of their actions at Masada?

2 What questions do we need to ask about the written and archaeological sources about Masada? For example, if 960 people died at Masada at the end of the siege, where are their remains? What possible explanations are there?

3 Read the full text of Yadin's speech at Brigham Young University. Search online for 'Masada: Herod's Fortress and the Zealot's Last Stand'.

Representations of Masada in popular culture

The identification of Masada as the symbol of the struggle of the Jewish people for a national identity was already being developed in the early 20th century as part of the **Zionist movement**. The poem 'Masada', written by Yitzhak Lamdan (1899–1954), comes from this time. Lamdan was a Russian-born Israeli poet, translator, editor and Hebrew columnist. He migrated to Palestine in the aftermath of the Russian Revolution and the wave of **anti-semitic pogroms** across Eastern Europe. The famous line from this poem, 'Masada shall not fall again', became a rallying cry for Israeli nationalists for decades to follow.

The siege at Masada has also been depicted in film. The 1981 Hollywood production *Masada* starred Peter Strauss as the leader of the Jewish rebels, Eleazar ben Yair, and Peter O'Toole as the Roman general Flavius Silva who defeats them.

Changing representations of Masada over time

Today, in response to changing political developments in Israel, some voices are challenging the continued symbolic use of the heroic interpretation of the Masada story with its emphasis on lack of compromise. Referring to this story as a fable or **myth**, these voices call for a new interpretation, seeing the refusal of the ancient Jewish defenders to negotiate as the cause of their own destruction. Parallels are drawn with current **hardline** government policies on the **occupied territories**, for example, which leave no room for negotiation. For these new voices, Masada offers a compelling reminder of the importance of the need for compromise. In fact, the term 'Masada complex' is sometimes used to refer to those advocating such hardline policies.

SOURCE 23 *The Dovekeepers* by Alice Hoffman is a historical novel based on Josephus' account. It tells the story of life and death at ancient Masada through the eyes of four of the Jewish women who were present during the siege.

myth
an ancient traditional story about gods, heroes and magic

hardline
referring to an uncompromising or unyielding stand, especially in politics

occupied territories
the territory occupied by Israel after the Six-Day War of 1967 (originally included the Syrian Golan Heights, the Egyptian Sinai Peninsula and the Jordanian-occupied West Bank)

3.4c Check your learning

1 Watch the 1981 film *Masada* by searching online for 'Masada the movie'.
2 Find out more about changing Israeli views of Masada. Look up 'Masada complex' online.
3 Paul Bahn, a well-known archaeologist, calls Yadin's excavation of Masada, 'the late 20th century's most potent example of a "political" excavation'. Do some research on the excavation to find out what evidence Bahn uses to support this view.
4 Write a response to the following question: 'Explain the issues of contestability in the ancient and/or modern representations of Masada.' (Explain: Relate cause and effect, make the relationships between things evident, provide why and/or how.)

   To help you plan your response:
   • identify the issues involved in the ancient and modern representations of Masada
   • use these issues to structure your answer
   • say how and why these aspects are contested
   • use specific examples to support your answer.

A variety of representations of the ancient world have been explored in this chapter. You should now have a better understanding of the concepts of perspective, interpretation, representation and contestability, and the links between them. We have seen how modern representations of ancient human remains, particularly those of Tutankhamun, have recently been the subject of widespread debate. Political and cultural agendas have been responsible for much of the debate around the representations of personalities and events such as Boudicca and the Siege of Masada. An interesting feature of these studies is the way in which the representations of both have changed over time. In each case, contemporary national interests have played a significant role in their development. Both Boudicca and Masada have been adopted in modern times as symbols of national identity in their respective countries.

FOR THE TEACHER

Check your obook assess for the following additional resources for this chapter:

Answers	Teacher notes	Class test	assess quiz
Answers to each *Check your learning*, *Understanding and using the sources* and *Profile task* in this chapter	Useful notes and advice for teaching this chapter, including syllabus connections and relevant weblinks	Comprehensive test to review students' skills and knowledge	Interactive auto-correcting multiple-choice quiz to test student comprehension

4

Preservation, conservation and reconstruction of ancient sites

FOCUS QUESTIONS

1. What are the factors that preserve or threaten the integrity of ancient sites?

2. How effective or appropriate are methods used to preserve and conserve ancient sites?

3. What are the challenges presented by reconstruction of archaeological sites?

FOCUS CONCEPTS & SKILLS

Continuity and change
Continuity and change are evident in the way in which archaeological sites have been both preserved and changed over time by natural and human agency. While preservation has been a constant concern of those interested in cultural heritage, methods of conservation and reconstruction have changed over time. These have been influenced by changes in approaches and by the use of sophisticated technologies.

LEARNING OUTCOMES

1. Explain the factors that preserve or threaten the integrity of ancient sites.

2. Discuss and evaluate the methods used to preserve and conserve ancient sites.

3. Discuss the challenges presented by reconstruction of archaeological sites.

SOURCE 1 A Syrian policeman patrols the ancient city of Palmyra, which has been targeted by both Syrian and ISIS armies since 2015.

Remains of the past

We are surrounded by the remains of the past. Some of these are imposing monuments and structures, while others are more humble traces, such as the rubbish of our everyday lives. All have their value and their place in helping to reconstruct the human past. As well as studying the evidence provided by such traces, an important role of the archaeologist is to ensure their preservation for present and future generations.

Over time, both the natural environment and the actions of humans threaten the survival of traces of the past. On balance, it is likely that much more has been lost than has been preserved. This has important implications for the work of archaeologists and historians attempting to reconstruct the past. The challenge is to reconstruct that past as faithfully as possible, while recognising the limitations that are posed by gaps in the evidence.

Factors contributing to the preservation of the past

tells
artificial mounds formed by accumulated remains of ancient settlements

peat
partially decayed vegetation or organic matter found in peatlands or bogs

Some continuity can be seen in the preservation of material remains of the past, although the societies from which they come have disappeared. These physical remains have been preserved as a result of both natural and human agency. Natural agency includes the effects of climatic and other environmental factors. Preservation by human agency is usually the result of actions such as burial of the dead, or the hiding or hoarding of valued belongings.

The survival of physical remains depends on the material from which they are made and the environmental conditions they are subjected to. Organic materials such as human or animal remains, textiles, papyrus and paper will decay rapidly, and usually will not be preserved unless conditions are right. Artefacts made of stone, brick, flint, gold, bronze and clay will survive well. Source 2 lists some of the main factors contributing to the preservation of the past.

SOURCE 2 Agents of preservation

NATURAL AGENCY	EXAMPLE	HUMAN AGENCY	EXAMPLE
Hot and dry climate	Desert conditions prevent decay	Burial customs	Interment in tombs, graves, mummification
Cold climate	Extremely cold conditions (e.g. ice preserves organic material)	Continuous site occupation	Rebuilding, formation of **tells**
Lakes and rivers	Marshes, **peat** bogs (e.g. lack of oxygen or presence of acids)	Fire	Deliberate or accidental, baking clay tablets, carbonised grain
Natural burial	Volcanic ash and mud, silt, windborne sand	Hoarding	Hiding or burial of valuables

SOURCE 3 The hot, dry climate of the Atacama Desert in Chile preserved the human remains and grave goods in this burial.

Factors threatening the integrity of ancient sites

The natural processes of decay over centuries as well as climatic events have destroyed much evidence of the past. The actions of people have also been responsible for much destruction. In the ancient world, sites and artefacts were destroyed by invasion, warfare and settlement. Similarly, in our own times, warfare, terrorism, civil unrest and looting threaten the integrity and survival of ancient remains. Other significant threats today include the impact of tourism as well modern development, characterised by mining, construction works and pollutants from modern industry. Source 4 summarises the environmental and human factors threatening ancient sites. Two examples of destruction by human agency are examined next.

clandestine
secret and often illegal

black market
illegal trading of goods

SOURCE 4 Factors threatening ancient sites

ENVIRONMENTAL AGENCY	EXAMPLE	HUMAN AGENCY	EXAMPLE
Climatic events	Flood, fire, tornado, tsunami (when caused by a storm or glacier calving)	Warfare	Bombing, looting, deliberate destruction
Geological events	Earthquake, volcanic eruption, land subsidence, tsunami (when caused by an earthquake)	Illegal excavation and looting	**Clandestine** digging and removal of artefacts for **black market**
Vegetation	Weeds, jungle growth	Vandalism	Associated with war or other civil unrest, desecration for political or other purposes
Weathering and erosion	Effects of wind, water/rain, sand, heat and cold	Modern development	Building of roads, freeways, shopping malls, housing, mining, developments
Animals and insects	Burrowing, chewing, boring, droppings	Pollution	Effects of industry, car emissions, modern irrigation
		Tourism	Impact of large numbers, carelessness, souveniring, illicit photography

Warfare and conflict

Warfare and conflict are perhaps the most dramatic examples of human destruction of the remains of the past. This is often accompanied by looting of sites and artefacts. In the recent past, the world has witnessed the wanton destruction of the cultural heritages of countries such as Syria and Iraq in Middle Eastern conflicts. Source 6 describes the effects of the war in Syria on the ancient city of Palmyra. This city, dating to the 1st and 2nd centuries AD, was a desert oasis on the legendary **Silk Road**, a trade route that connected the Far East with the Roman Empire in the west. It featured some of the most advanced architecture of its time, including the Arch of Triumph and the Temple of Baal Shamin (Source 5).

SOURCE 5 The ancient Temple of Baal Shamin stood in Palmyra until ISIS blew it up in August 2015.

Silk Road
an ancient network of trade routes connecting the East and the West

ISIS
Islamic State of Iraq and Syria: a fundamentalist, jihadist terrorist group also known as IS, ISIL and Daesh.

As if the nearly six-year civil war in Syria couldn't get any worse, it appears that militants with the so-called Islamic State have inflicted further damage to the ancient Roman-era site of Palmyra.

The drone footage … shows the central section of Palmyra's famous amphitheater now lying in ruins. The city's majestic Tetrapylon – an arrangement of 16 columns at the city's main crossroads – also appears to have suffered extensive damage … In addition to holding strategic significance, Palmyra is … [one of] the world's most precious and important archaeological sites …

The ancient town first fell to ISIS in May of 2015. The militants held Palmyra for nearly a year, driving out local residents and deliberately destroying portions of the ruins, including many ancient temples. ISIS was eventually driven out by Syrian and Russian forces in March of 2016, but it has since returned … ISIS has damaged other archaeological sites in both Syria and Iraq, perceiving them as monuments to **idolatry**. The head of **UNESCO**, Irina Bokova, has characterised the latest demolitions as a 'war crime'.

George Dvorsky, 'Drone footage shows destruction at the Syrian world heritage site of Palmyra', *Gizmodo Australia*, 14 March 2017

The impact of tourism

Tourism is one of the world's largest industries. It has been estimated that modern tourism generates 12 per cent of the world total **gross national product (GNP)**. With studies predicting continued growth, tourism is an increasingly important factor in the planning and management of World Heritage sites.

SOURCE 7

Such is the **paradox** of modern tourism that sites have to be protected and promoted at the same time. 'Some of the world's most important architectural landscapes have become victims of their own success,' says Colin Amery of the World Monuments Fund (WMF), which produces a Watch List of the 100 Most Endangered Sites every two years. 'Publicity is often used to attract funds for conservation work, but it can be a double-edged sword. From the Great Wall of China to the temples of Angkor in Cambodia, drastic compromises are being made to accommodate swelling visitor numbers.' A few, he argues, shouldn't be visited at all.

Oliver Bennett, 'Are we loving our heritage to death?', *The Guardian*, 1 May 2005

4.1 Understanding and using the sources

Source 6

1 What impact has warfare had on the site of Palmyra?

2 What reason is suggested for the destruction carried out by ISIS?

3 Explain the different **perspectives** represented by 'monuments to idolatry' and 'war crime' to describe the destruction at Palmyra.

Source 7

4 In your own words, explain 'the paradox of modern tourism'.

5 Suggest some ancient sites that shouldn't be visited at all. Why?

idolatry
the worship of idols

UNESCO
United Nations Educational, Scientific and Cultural Organisation

gross national product (GNP)
an estimate of the total value of all goods and services produced within a given period

paradox
an apparently contradictory statement at first sight, but which may prove to be true when investigated

perspectives
the points of view held by individuals or groups about the past that are based on their contexts and motivations

4.1 Check your learning

1 What is the significance of Palmyra in terms of world cultural heritage? Visit the UNESCO World Heritage List website to identify the criteria for its inclusion on the list.

2 Find some pictures of the current state of the amphitheatre and the Tetrapylon at Palmyra.

3 The following sites have all been impacted by warfare in recent times. Research one or more of them and find out the current condition of the site:
   - Bamiyan Buddhas, 2001
   - Baghdad Museum, 2003
   - Libya, 2011
   - Nimrud, 2015.

4 Palmyra and Nimrud are two very important ancient sites. Either of these would make an excellent topic for your Historical Investigation. Find out about the historical and cultural significance of one of these sites. Consider also issues relating to the preservation and conservation of the chosen site.

5 Discuss the positive and negative aspects of tourism for archaeological sites.
   - Suggest the kinds of facilities necessary to accommodate large numbers of tourists at archaeological sites. What impact might these have on the sites?
   - What 'drastic compromises' might have to be made?

6 Visit the World Monuments Fund website and similar websites to find out how heritage sites are affected by tourism. Record the information you find in a table under the headings given below:

NAME OF SITE	DAMAGE TO DATE	ATTEMPTS TO ADDRESS PROBLEM/S	SIGNIFICANCE OF SITE

Where art collides with industry – Rock Art of the Burrup Peninsula

4.1 Profile

The Burrup Peninsula in the Pilbara region of Western Australia is a unique archaeological site. It is the largest open-air art gallery in the world, containing hundreds of thousands of petroglyphs – ancient Aboriginal rock carvings, some more than 30 000 years old. Engravings show humans and activities such as hunting and climbing, and animals such as fish, crab, turtles, sharks, lizards, goannas, snakes and kangaroos. Some images show animals that are now extinct, for example the thylacine (Tasmanian tiger). Some of the images are so detailed that even the species of animals can be identified. Some of this rock art may demonstrate the first use of this arid landscape by people arriving over 45 000 years ago.

SOURCE 8 One of the thylacine representations on the Burrup Peninsula

The Burrup Peninsula has been called Australia's most significant heritage site. For the local Aboriginal community, the Murujuga people, the art of this region is an integral part of their culture, comprising thousands of sacred images and ceremonial sites.

The Burrup Peninsula is also home to intensive mining, shipping and industrial interests. These include Woodside's Liquified Natural Gas processing plant and Rio Tinto's iron ore mining leases and railhead. In 2017, Yara Pilbara and Orica Australia plan to start production at its $700 million ammonium nitrate facility, less than a kilometre from the nearest rock art petroglyphs. One of the major concerns is the impact of industrial pollution from current and proposed heavy industry on the art.

The Dampier Archipelago, of which the Burrup Peninsula is a part, was included in the National Heritage List on 3 July 2007. Campaigners for the rock art are now seeking World Heritage listing for the site, saying it is essential to protect it from the impact of encroaching industry. In November 2016, the federal government established a Senate inquiry into the protection of Aboriginal rock art of the Burrup Peninsula.
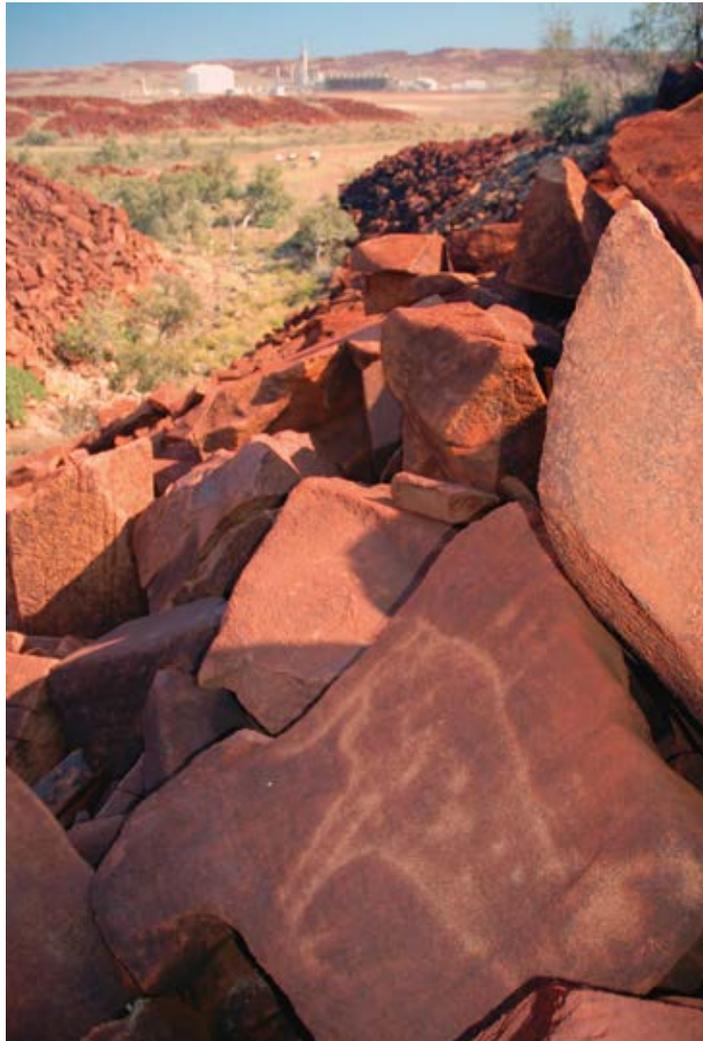
SOURCE 9 Heavy industry near the rock art of the Burrup Peninsula

4.1 Profile tasks

1 Investigate the heritage significance of the Burrup Peninsula. Search online for 'Burrup Peninsula for World Heritage listing'.

2 What are the most recent developments in the attempt to have the Burrup Peninsula included on the UNESCO World Heritage list? To what extent would World Heritage listing protect the site from current threats?

3 Why was a Senate inquiry into the Burrup Peninsula initiated? What are the results of the inquiry?

4 Discuss ways in which the interests of mining and industry in this region could be balanced against the need to protect the rock art of the region.

5 Draw up a class petition or letter to your local federal member of parliament, presenting your arguments for action to protect the rock art of the Burrup Peninsula.

Conservation of archaeological sites

Conservation is the deliberate attempt to arrest the process of change and decay, and to protect and preserve sites and artefacts from the damaging effects of both natural and human agency. A number of organisations and governments around the world have introduced charters and legislation for the protection, preservation and management of important archaeological sites and cultural heritage.

Protecting World Heritage sites

An important international charter that aims to protect World Heritage sites and cultural property from the effects of war is the UNESCO Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict. This convention, which came into effect in 1954, was developed in the aftermath of the widespread destruction of archaeological sites and artefacts during World War II. As of 2017, 128 states have signed up to the convention. Signatories commit to the adoption of measures to protect their own cultural property, and that of other states as appropriate, in the event of war. This includes drawing up inventories of monuments, artworks, scientific collections, books and other artefacts of historical or archaeological value. Under the convention, they are also required to make plans for the safe storage and supervision of cultural property in the event of war. The Blue Shield symbol has been adopted to identify cultural property protected by this convention (Source 10). Chapter four of the Convention contains a **sanctions** clause. To date, no state has been prosecuted for breaches of the convention.

International Committee of the Blue Shield (ICBS)

The Blue Shield is also the symbol of the International Committee of the Blue Shield (ICBS), which was founded to support the aims of the Hague Convention for the Protection of Cultural Property. Blue Shield members offer expert advice and support to countries in preparing plans to protect their cultural property and to respond to crisis situations, including natural disasters. Blue Shield is also active in the campaign to stamp out illegal trafficking of art and antiquities.

Individual states have developed legislation for the preservation and protection of their own heritage, for example the National Historic Preservation Act in the United States. In Australia, archaeological sites come under the general protection of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC). Indigenous heritage sites are protected by the EPBC Act and the *Aboriginal and Torres Strait Islander Heritage Protection Act 1984*.

The conservation plan

In the early days of archaeology, excavation was the prime concern of archaeologists, and little thought was given to the long-term preservation or conservation of the site. Today, any work of excavation and examination carried out on archaeological sites must also have in place a plan for the conservation of the site. Conservators use a range of sophisticated technologies to arrest the deterioration of ancient sites and finds to ensure their preservation. Conservation can also involve the restoration of neglected or damaged features and in some cases actual reconstruction.

sanction
a threatened penalty for disobeying a law or rule

SOURCE 10 The distinctive Blue Shield symbol, which identifies cultural property protected by the Hague Convention

fresco
painting on wet plaster on walls or ceilings

mosaic
picture or design made of small pieces of coloured tile, glass or other material

Archaeologists and site managers develop detailed plans for the conservation of archaeological sites. It is expensive and time-consuming, and may often cost more than the excavation of the site itself. Such planning needs to take into account the various factors relevant to the status of the site, including the resources available for its management and conservation, local and national laws, and the concerns of those who have an interest in the site such as local resident groups, tourists and national authorities. Decisions about the work of conservation will be guided by these factors and also by the guidelines in the Venice Charter.

Record and analyse the structures and artefacts of the site

Apply stabilising procedures to preserve the site in its existing state (principle of reversibility)

Determine the original context of the artefacts or structures and their uses

Assess potential risks arising from the use of different treatments

Determine the nature of the materials, and the cause and rate of their deterioration

SOURCE 11 Conservation plan for archaeological sites

SOURCE 12 The archaeological site of Akrotiri on Santorini showing the roof that has been constructed to protect the site. Wooden walkways have also been installed to protect the site from foot traffic.

The Venice Charter

The International Charter for the Conservation and Restoration of Monuments and Sites, more commonly known as the Venice Charter, has been the benchmark for principles governing the conservation and restoration of historic buildings since 1964. It was established by a group of professional conservationists meeting in Venice, Italy, hence its name. The charter sets down guidelines for all conservation, restoration and reconstruction work on historic buildings and the sites in which they are located. Each of the steps in the site conservation plan shown in Source 11 must adhere to the principles of the charter.

Preserving an exposed site could include closing areas such as houses and rooms to protect them from the effects of tourism. Scaffolding can be erected to strengthen crumbling structures; roofs and glass or plastic coverings can be used to protect structures and other features, such as **frescoes** and **mosaics**, from the effects of weather. For example, the entire 20-hectare archaeological site of Akrotiri on the island of Thera, modern Santorini, was covered by a roof to protect the various features of the site.

The principle of reversibility included in the Venice Charter requires that all interventions with the object or structure should be fully reversible so that it can be returned to the state it was in before the conservator's intervention.

Conservation technologies

Treatment of built structures and artefacts will depend on the nature of the materials from which they are made. Some procedures for conserving organic materials include impregnation with a chemical agent to strengthen and stabilise, or drying and hardening with chemical agents (e.g. freeze-drying). Inorganic articles that have corroded, rusted or otherwise deteriorated can be treated by chemical desalination or impregnation with **resins**, (e.g. acrylic, polyurethane and epoxy).

■ **resin**
a sticky, organic substance exuded by some trees and other plants; used as a glue in the mummification processl

Modern conservation techniques depend on increasingly sophisticated technologies. Survey, investigation and examination of the various structures and features of a site can involve the use of:

- satellite imagery, aerial photography and GIS mapping
- X-ray radiography
- computerised image analysis
- X-ray computer tomography
- neutron radiography
- infrared photography.

An example of the application of some of the latest digital technology in archaeological conservation can be seen in Source 13. Here, a terrestrial laser scanner (LiDAR) was used to create a precise record of restored mosaics in a 1st century AD **Byzantine** church at the ancient site of Petra in Jordan. Regular scans are used to detect any changes or movement in the structure so that necessary conservation work can be undertaken.

SOURCE 13 A screen shot of the LiDAR scanning of the interior of the Petra Church

■ **Byzantine**
relating to the ancient city of Byzantium (modern Istanbul) or the Byzantine Empire, the Eastern Roman Empire after the fall of the Western Empire in AD 476

4.2 Check your learning

1   How effective is the Hague Convention in protecting cultural heritage, considering the widespread destruction that has occurred as a result of the war in Syria in recent times?
2   A second protocol to the Hague Convention was adopted in 1999. Find out why a second protocol was required. What additional protection does it aim to provide?
3   Discuss the main challenges facing conservators at archaeological sites that you are familiar with.
4   Investigate the key principles of the Venice Charter that are relevant to each of the steps in the site conservation plan in Source 11.
5   Research some of the modern conservation technologies listed in the text. For each, provide a definition and give an example of how it has been used in the conservation of ancient sites.

Reconstruction of archaeological sites

Reconstruction involves rebuilding or restoring a site to its original state, or the state it was in at the period of its history chosen for that particular representation. Depending on the condition of the remains, this may require introducing new material into the structure, as shown in Sources 15 and 16, and so the integrity of the original structure may be compromised. Some reconstructions in attempting to be more visually appealing to the visitor may enhance features of the structure which are not faithful to the original. Even when accuracy is the main aim, the older a site is, the more difficult it is to be sure that the reconstruction is a reliable representation of the original. Today there is considerable debate among scholars and conservators about the reconstruction of archaeological sites. Source 14 presents the view of Paul Bidwell, Head of Archaeology at the Tyne and Wear Archives and Museums in the UK.

SOURCE 14

Archaeological reconstructions are the best means of conveying to visitors complex information about buildings and how they were used by those who lived in them. It is essential that the reconstructions should be based on the best possible evidence, and that they should be justified by a fully published assessment of that evidence which is **peer-reviewed**. Reconstructions *in situ* are only acceptable when the actual remains of the structure have been destroyed or are so badly damaged that they cannot be presented to visitors meaningfully. International guidelines on reconstructions are very restrictive, but their requirements have to be balanced against the clear benefits of reconstructions in bringing archaeological sites to life and engaging the public with their heritage.

Paul Bidwell, 'Discussion on archaeological reconstruction *in situ*', *Mixed Matters*, EXARC, 2012

peer review
the checking of a scholarly work by a group of experts in the same field to ensure it meets the required standards before being published

Knossos
the main Minoan site on Crete, often referred to as a palace

SOURCE 15 A partial reconstruction of the *porta principalis dextra*, the southern gate of the Roman army's fort at Apulum, modern Alba Iulia in Romania

SOURCE 16 A view of Evans' reconstruction of the northern entrance to the Palace of Knossos, showing the stonework, coloured columns, timber frames and bull fresco. The original parts of the palace can be seen in the foreground.

Case study: The reconstruction of Knossos

Knossos in Crete is a well-known archaeological site visited by thousands of tourists each year. It is one of several surviving palatial structures on the island of Crete in the Mediterranean Sea. In 1899, Sir Arthur Evans (Source 17) purchased the site and began excavating. He unearthed the foundations of a large structure that he named the Palace of Minos, after the legendary ruler from Greek mythology. From the name Minos, he coined the term 'Minoan' to describe the civilisation that had flourished on Crete in the middle to late Bronze Age.

Methods of reconstruction

Few of the modern visitors to Knossos are aware that most of what they see is actually a concrete reconstruction carried out by Evans who was keen to protect the remains of the structure from the extremes of the climate. In the first stage of his excavation, before World War I, his focus was on conservation of the fragile areas of the site. In the years after the war, he embarked on a more ambitious reconstruction of Knossos.

SOURCE 17 A bust of Sir Arthur Evans at the modern entrance to the Palace of Knossos

The structure

Wishing to present tourists with a view of the structure as it might have appeared in its original state, Evans restored and reconstructed parts of the walls and foundations using the newly invented reinforced concrete. Features that were originally made of timber were painted in a buff colour to differentiate them from the structures that would have originally been made of stone. Concrete was used to reconstruct the distinctive Minoan columns, basing their location on the column bases and their **capitals** found lying nearby. Their exact height and proportion were calculated using careful surveying and comparison with other architectural remains. Frescoes that depicted architectural structures were also used to make the reconstruction as authentic as possible.

■ **capital**
the decorated top part of a column

The frescoes

Evans and his team reconstructed many frescoes from the small fragments found during excavation (see Sources 19 and 20). The following description of the reconstruction of the frescoes in the throne room illustrates the methods used by Evans, and some of the difficulties that were encountered.

SOURCE 18

■ **griffin**
a mythical creature with the head and wings of an eagle and the body of a lion

A considerable area of fresco still adhered to this wall, although part had slipped down onto the bench and floor below. Parts of seated **griffins** … could be seen flanking the entrance. Evans noted the use of hatched lines to represent shading on the griffins' bellies. When he duly reported this to the press, *The Times* misunderstood and noted that a griffin hatching eggs was depicted. On the 13th February 1902, a griffin's paw was identified to the right of the throne on the north wall. Evans had previously interpreted this as part of an eel.

Ann Brown, *Arthur Evans and the Palace of Minos*, Oxford: Ashmolean Museum, 1983, p. 41

SOURCE 19 The Throne Room of the Palace of Knossos before reconstruction by Arthur Evans.
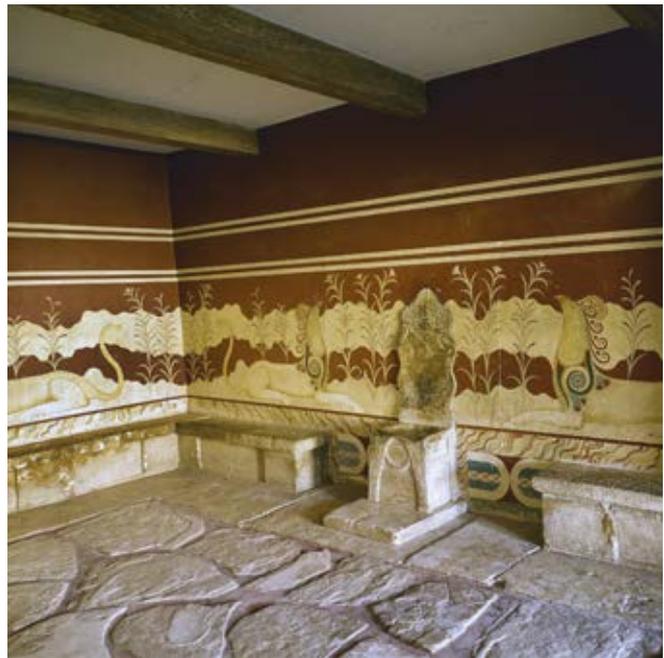
SOURCE 20 The Throne Room after it has been reconstructed. Note the reconstruction of the Griffin and the Lilies fresco that has been painted on the walls.

Evans' interpretation of Knossos

Evans made a significant contribution to **Bronze Age** archaeology in his excavation of Knossos. The entire work was funded from his personal fortune and it became his life's work. His conservation of parts of the site ensured its survival into the 21st century.

Parts of Evans' reconstruction of Knossos are based on firm archaeological evidence, but other parts are representations based entirely on guesswork and imagination. It also needs to be noted that, except for some undeciphered clay tablets, we have no written evidence for this period of the Bronze Age on Crete.

Identifying and naming parts of the structure

Evans gave excavated areas romantic names such as the 'Hall of the Double Axes', the 'Queen's Megaron' and 'Ariadne's Bath', based on the **legend** of Minos. King Minos and other characters from the Greek **myths** were real to Evans, and he assumed that they had actually inhabited Knossos. He also gave titles to the reconstructed frescoes, for example the 'Procession Fresco', part of which is shown in Source 22, which featured a young man wearing an elaborate plumed headdress whom he called the '**Priest-King**'.

An example of Evans' imagination can be seen in the following extract (Source 21) from *The Palace of Minos at Knossos*, Evans' own account of the excavation of Knossos. In this extract, he brings to life a moment in the eastern wing of the palace.

SOURCE 21

… the whole place seemed to awake awhile to life and movement. Such was the force of the illusion that the Priest-King with his plumed lily crown, great ladies, tightly girdled, flounced and corseted, long-stoled priests, and, after them, a retinue of elegant but sinewy youths – as if the Cup-bearer and his fellows had stepped down from the walls …

Arthur Evans cited in Ann Brown,
Arthur Evans and the Palace of Minos,
Oxford: Ashmolean Museum, 1983, p. 35

Evans' reconstruction revisited

It is now over 100 years since Evans began working at Knossos. Until quite recently, his methods of reconstruction of the palace went largely unchallenged. However, a new generation of archaeologists and scholars dispute aspects of Evans' interpretations of the site as well as his methods of reconstruction. Today it is accepted that it is virtually impossible to accurately represent the past as Evans tried to do.

SOURCE 22 The reconstructed fresco of the so-called 'Priest-King' (or the 'Prince of the Lilies') from Knossos. The surviving sections from the original can be clearly seen; the rest is largely conjecture. This representation is hotly contested by scholars today.

Bronze Age
a historical age characterised by the use of cast bronze to make tools and weapons

legend
an old story about famous people and events, but not necessarily true

myth
an ancient traditional story about gods, heroes and magic

priest-king
a monarch or ruler with an important religious role

Modern methods of reconstruction

Anastylosis is the term archaeologists and conservators use to describe the reconstruction of ruined ancient structures using – as far as possible – the original materials. The introduction of new materials is strictly limited. These principles of reconstruction are set down in the Venice Charter and are summarised as follows:

- The original state of the building must be determined by strict scientific evidence.
- The correct location for placing any recovered material must also be carefully established.
- Any new or substituted materials can be used only to maintain the integrity of the structure. They must be able to be clearly identified as substitute materials. No use of new materials for filling in gaps or to enhance the appearance of the building is allowed.

The Temple of Athena Nike (Victorious Athena) at the entrance to the Athenian **Acropolis** was built between 427 and 424 BC. It is a good example of reconstruction of a building by anastylosis. The building has undergone several attempts at anastylosis in the past, the latest one between 2000 and 2010. New material needed to stabilise the building is clearly visible in the lighter colour. No attempt has been made to fill in missing parts of the building, for example the pediment – this triangular section above the columns is not required for the building's stability.

SOURCE 23 The temple of Athena Nike on the Athenian Acropolis

Acropolis
an ancient citadel located on a rocky outcrop above the city of Athens

4.3 Understanding and using the sources

Sources 14 & 15

1 According to Paul Bidwell, what are the benefits of archaeological reconstructions?
2 When are archaeological reconstructions justified according to this writer?
3 What is the value of peer review in assessing proposed reconstructions?
4 Identify the advantages and disadvantages of the *in situ* reconstruction in Source 15.

Sources 21 & 22

5 Why do scholars challenge Evans' labelling of the fresco he called the 'Priest-King'? What other evidence would be needed to justify this label?

4.3 Check your learning

1 In Source 14, Bidwell refers to 'restrictive international guidelines'. What are the guidelines for reconstruction of archaeological sites in the Venice Charter? How restrictive are they in your **opinion**?
2 Investigate some arguments for and against archaeological reconstruction by a range of specialists. Search online for 'Discussion on archaeological reconstruction *in situ*'.
3 Evans carried out his work at Knossos long before the development of modern principles regarding archaeological reconstructions, so it is not fair to judge him by present standards. However, if he were excavating Knossos today, what aspects of his reconstructions would not meet with internationally accepted standards of reconstruction?

opinion
a person's belief, judgement or way of thinking about something that is not necessarily substantiated by facts

Rescue archaeology: Saving Abu Simbel

Abu Simbel in southern Egypt is an interesting and famous case of the preservation of an archaeological site, which involved the complete dismantling, removal and reconstruction of the site at a new location.

The two great temples of Abu Simbel, situated south of Aswan, near Egypt's border with Nubia, were carved by the builders of the pharaoh Ramesses II out of the limestone cliffs bordering the Nile over 3000 years ago. They are awe-inspiring monuments, their **façades** decorated with 20-metre-high colossal statues of the king and his chief wife, Nefertari.

In the 1960s, the Egyptian government began construction of the High Dam at Aswan to control the flow of the Nile. This meant that the Abu Simbel temples would have been submerged and lost forever under the waters of Lake Nasser. The threatened loss of these great monuments stirred the world community to action. The cost of this project was too much for Egypt to bear alone. UNESCO spearheaded the campaign to rescue the temples, the cost of which was subsequently met by donors from around the world in an unprecedented spirit of goodwill and cooperation. Archaeologists, scientists, engineers and other experts from many countries worked together to save the temples, shown in Sources 24 and 25.

façade
the front of a building
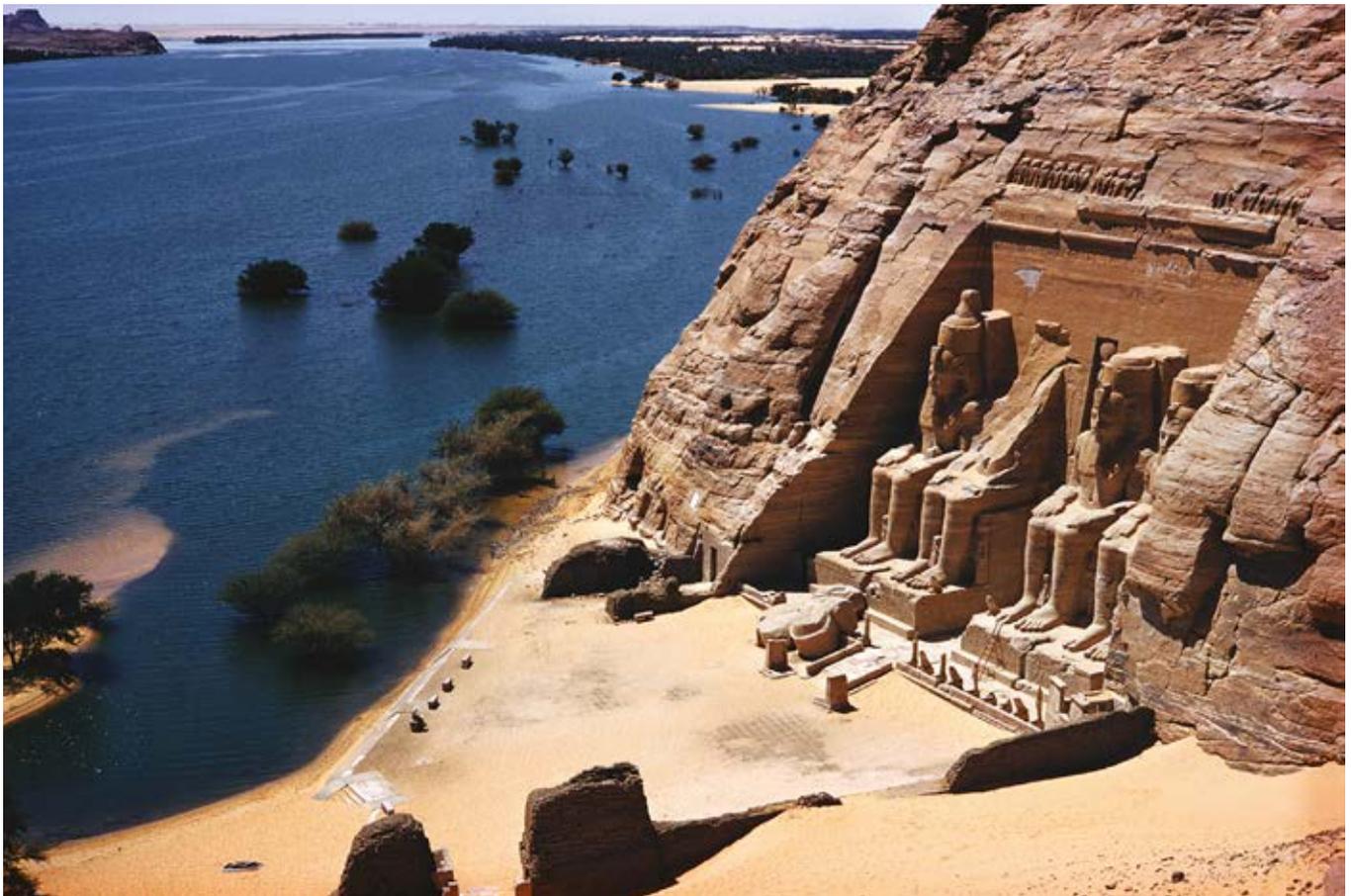
SOURCE 24 The great temple of Ramesses II at Abu Simbel showing its new position within the specially constructed dome above the waters of Lake Nasser

The Abu Simbel rescue operation took more than four years, cost $40 million and required a labour force of nearly 3000 people who had to be fed, housed and paid for the duration of the project. Thousands of tonnes of solid rock were removed from behind the temples, and the temples themselves were sawn into over 1000 blocks, each weighing up to 33 tonnes. The temples were then reassembled onto a cement foundation on high ground out of reach of the rising waters of Lake Nasser. A 30-metre-high dome with a span of 65 metres was constructed behind the temples to replicate the original limestone cliffs from which the temples were carved. The dome contains a modern lighting system and pumps to ventilate the temples. The rescue of the Abu Simbel temples is one of the greatest engineering accomplishments of the 20th century.

A further engineering triumph was the rescue of the **Ptolemaic** Temple of Isis on the nearby island of Philae (Source 27). It too would have disappeared beneath the waters of Lake Nasser when the Aswan Dam was built. It was dismantled block by block and reassembled on a higher island, thus preserving it for future generations.

Ptolemaic
relating to the period of time when Egypt was ruled by the dynasty founded by Ptolemy I in 305 BC

The significance of the Abu Simbel and Philae temples

Today, visitors still flock in their thousands to gaze at these magnificent monuments of Egypt's ancient past. In 1979, they were added to the World Heritage List. Source 26 records the contribution of these rescues to the development of the concept of world heritage.

SOURCE 26

This international perspective developed when the Egyptian temples of Abu Simbel and Philae were threatened by the building of the great dam in Aswan in 1960. Both Egypt and Sudan presented a request to UNESCO for assistance in their safeguarding, and this was the basis for the first international campaign of UNESCO. The response from public and private bodies was quite surprising. Even children from schools all around the world reacted by sending small contributions. The message was clear: these monuments do not belong only to Egypt. They represent a value to each and every one of us. It is no exaggeration to say that international campaigns for preservation undoubtedly constitute one of the key areas for the implementation of the concept of universal heritage.

This concept is the result of the development of the modern historical consciousness of the values of heritage that paved the way for the 1972 Convention, also called the World Heritage Convention. It was a significant innovation, as it linked sectors that had hitherto been considered very different – the protection of the cultural heritage and that of the natural heritage. The 20th century introduced the idea of world heritage, the significance of which transcends all political or geographical boundaries. The experts of all specialised organisations mentioned above have contributed to the development of this new concept and the doctrine applicable in this domain.

Mounir Bouchenaki, 'International Conservation Organizations', *e-Getty Newsletter*, issue 14.3, 1999
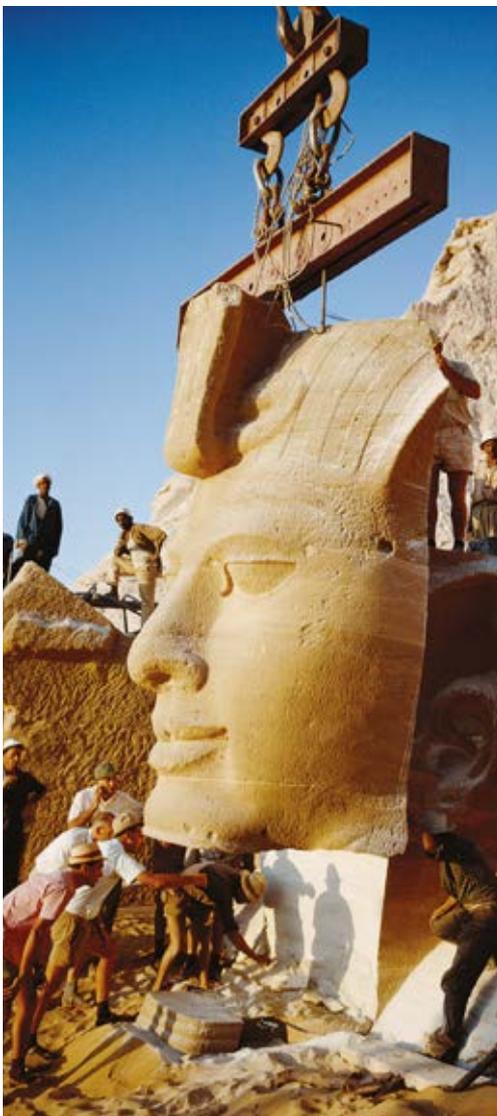
SOURCE 25 Workers carefully manoeuvre a 21-tonne head of Ramesses II into place during the relocation of the Abu Simbel temples.

4.4 Understanding and using the sources

1 Do you agree, as Source 26 argues, that the Abu Simbel temples 'do not belong only to Egypt'?
2 What role did the saving of Abu Simbel play in the development of the concept of world heritage?

4.4 Check your learning

1 Watch a film clip of the relocation and reconstruction of the great temple at Abu Simbel to appreciate the enormous challenge of this project. Search online for 'Moving Temple of Ramses II'.
2 What special features give the Abu Simbel temples World Heritage status? Look up UNESCO's World Heritage List cultural criteria.
3 There are many World Heritage sites in need of conservation. Working in pairs or small groups, choose one of the following ancient sites from the World Heritage List.

Olympia	Petra	Palmyra	Macchu Picchu
Troy	Nara	Damascus	Mycenae
Aleppo	Carthage	Angkor Wat	Stonehenge
Nimrud	Great Wall of China	Leptis Magna (Libya)	Egyptian Pyramids

Visit the UNESCO World Heritage page for your site by searching online for the name of your site plus 'UNESCO World Heritage site'.

Prepare a report on your site that includes the following:

- a map showing the location of your site and a brief introduction outlining its historical context
- selection criteria for World Heritage listing
- identification and description of the most outstanding features or structures of the site
- current state of the site, including state of conservation
- steps being taken to address conservation issues
- recommendations by the World Heritage Committee for protection and conservation of the site
- an argument for why your site should receive priority funding from UNESCO.

SOURCE 27 The Temple of Isis at Philae. The original temple was moved to its present site on Agilkia Island in Lake Nasser.

Digital reconstruction

Today the use of digital technologies by archaeologists and historians is opening up exciting new possibilities for preserving and representing the ancient past. These techniques include digital image processing, terrestrial laser scanning and 3D-model processing. Digital models of sites or buildings can be easily adapted for a wide range of purposes including research, teaching, publication and on-site or museum displays.

A simple but ingenious application of digital imaging can be seen in Source 28. It shows the remains of a 20-metre-high triumphal arch, part of a Roman legionary fortress in eastern Austria, dating to AD 50. At this site, a line diagram of the original arch has been etched onto a perspex sheet. Visitors stand a short distance away and view the arch with its digital reconstruction through the perspex panel.

SOURCE 28 The digitally reconstructed Roman arch viewed through a perspex panel

Palmyra rises from the ruins

jihadist
a person involved in a struggle or fight against the enemies of Islam; an Islamic militant

At the beginning of this chapter we looked at the impact of conflict and warfare on the ancient Syrian city of Palmyra (see Sources 5 and 6). In 2015, the **jihadist** group ISIS captured Palmyra and carried out widespread destruction of its many monuments, including the temples of Bel and Baalshamin, and the Arch of Triumph, locally known as the 'Gateway to Palmyra'. Tragically, Khaled al-Asaad, the Syrian archaeologist who had been chief of antiquities at Palmyra for 40 years, was publicly beheaded at the site by ISIS in August 2015.

Thanks to the creation of 3D digital records, damaged heritage sites such as Palmyra can be 'saved' for future generations. Following the damage inflicted by ISIS, websites were launched in the West, seeking photographs from people who had visited Palmyra in the years before its destruction. Many thousands of photos were supplied by former tourists anxious to help the digital recreation project. These images, taken from a variety of angles and locations, were uploaded into 3D-modelling software to create digital images of the damaged structures.

Many of the digital images are also being used to create 3D printing specifications for the production of replicas. An interesting example of the application of this technology is the re-creation of Palmyra's Arch of Triumph (Source 29). This ornamental archway was built in the 3rd century AD during the reign of the Emperor Septimius Severus. Originally almost 18 metres high and handcarved from limestone, it stood at the head of a grand colonnade, a thoroughfare at the centre of the city that connected with smaller side streets leading to the city's temples and public buildings.

Archaeologists at Oxford University's Institute for Digital Archaeology (IDA) recreated the arch using 3D printing technology and photographs of the original arch. The 11-tonne replica stands 6 metres tall and was made of Egyptian marble, sculpted in 30 days by robotic arms at a workshop in the marble quarries of Carrara in Italy. It was first displayed in Trafalgar Square in central London, then later in Florence, New York and Dubai. It has come to be regarded as an important symbol of the triumph of human ingenuity over senseless destruction.

SOURCE 29 The reconstructed Arch of Triumph in Trafalgar Square in London

4.5 Understanding and using the sources

1 Apart from creating a lasting record of a monument or site, what are the advantages of digital reconstructions such as the one shown in Source 28?
2 How effective are such reconstructions in representing the ancient past?
3 What is the significance of the display of the 3D-generated replica of the Arch of Palmyra (Source 29) in various cities around the world?

4.5 Check your learning

1 Look at some 3D-generated images of other ancient sites. What sources have been used to create the images? How accurate are these digital reconstructions?
2 Use the information you have gained in this chapter and your own research to write a response to one of the following questions:
   a 'How have approaches to the conservation and reconstruction of the ancient past changed over time?' (Explain: Relate cause and effect, make the relationships between things evident, provide why and/or how.)

      To help you plan your response:
      - identify some approaches to conservation and reconstruction
      - use these approaches to structure your response
      - say how and why these approaches have changed over time
      - use specific examples to support your answer.
   b 'Assess the effectiveness of efforts made by UNESCO and other organisations to preserve ancient World Heritage sites.' (Assess: Make a judgement of value, quality, outcomes, results or size.)

      To help you plan your response:
      - identify a range of efforts relevant to the question
      - use these to structure your response
      - explain the nature of each effort and make a judgement about its effectiveness.

This chapter has explored some of the ways in which the traces of the past, particularly archaeological sites, have been preserved, damaged or lost over time. This investigation of the past in the present reveals the important continuity between the past and the present, and the sustained interest in preserving the cultural heritage of the past for present and future generations. The work of international organisations such as UNESCO continues to play an important role in protecting that heritage, particularly in endangered sites. At the local level, methods of conservation and reconstruction designed to preserve the past have been examined, as well as the ways in which these have changed over time as new approaches and new technologies are adopted.

FOR THE TEACHER

Check your <u>o</u>book <u>a</u>ssess for the following additional resources for this chapter:

Answers	**Teacher notes**	**Class test**	**<u>a</u>ssess quiz**
Answers to each *Check your learning*, *Understanding and using the sources* and *Profile task* in this chapter	Useful notes and advice for teaching this chapter, including syllabus connections and relevant weblinks	Comprehensive test to review students' skills and knowledge	Interactive auto-correcting multiple-choice quiz to test student comprehension

5

Cultural heritage and the role of museums

FOCUS CONCEPTS & SKILLS

Perspective and interpretation

People have different views about cultural heritage and its importance. Some are interested in the past and its preservation, and value cultural heritage. Others either disregard it altogether, or see only its commercial value. There are often conflicting views about ownership of cultural heritage. Museums play an important custodianship role. They also interpret and construct the past for us through displays and exhibitions, which can reflect a range of perspectives.

LEARNING OUTCOMES

1   Explain the nature and significance of cultural heritage.

2   Discuss and evaluate the arguments for and against the return of cultural property to its country of origin.

3   Analyse the impact of looting and the illegal antiquities trade on cultural heritage.

4   Discuss the contributions museums make to our understanding of the ancient past.

SOURCE 1 The Parthenon in Athens, Greece, dating to the 5th century BC, represents one of the most iconic examples of a nation's cultural heritage.

What is cultural heritage?

Cultural heritage refers to all those things, both material and non-material, that are valued and passed down through the generations by individuals and cultural groups. These things are significant in providing a sense of identity and belonging. Material culture includes tangible things such as buildings, monuments, landscapes, books, works of art and artefacts, while non-material culture includes things such as traditions, language, music and knowledge. Cultural heritage includes:

- *family heritage* – stories, sayings, language, traditions, photographs, treasured possessions
- *community heritage* – historic buildings, monuments, documents and artefacts
- *national heritage* – important historical and cultural figures, natural and cultural sites
- *international heritage* – monuments, natural and cultural sites, and cultural events.

At a family level, valued possessions are owned and cared for by family members. In general, this is not disputed. However, at wider levels, ownership may be contested. For example, in this chapter, we will examine the ongoing debate about the ownership of the Parthenon Marbles. In addition to ownership, there is the important issue of **custodianship**; that is, the responsibility for the care and preservation of items and places of historical and cultural value.

Cultural heritage has become an important area of national and international concern in the contemporary world. The world's cultural heritage can be seen as a diminishing resource and is facing increasing challenges from factors such as conflict, population growth, climate change and the effects of **globalisation**. It is also a **construct** that can mean different things to different people. For example, an ancient statue can be an object of great cultural significance for some; for others it is a commodity to be sold to the highest bidder.

custodianship
custody or guardianship of property

globalisation
the worldwide trend towards integration of economy, finance, trade and communications

construct
an idea or theory usually considered to be subjective rather than based on fact or evidence

SOURCE 2 The Sydney Opera House is an instantly recognisable example of Australia's cultural heritage.

World heritage

The international concern for protecting the world's cultural heritage was reflected in the 1972 establishment of the **UNESCO** Convention Concerning the Protection of the World Cultural and Natural Heritage. A World Heritage List was created with a number of criteria for justifying the inclusion of sites on the list. Nominated sites must be of 'outstanding universal value' and meet at least one of the 10 cultural and/or natural criteria. For example, the first selection criterion requires a nominated site to be an outstanding example of human creativity. The Sydney Opera House was inscribed on the World Heritage List in 2007 because of its outstanding universal value.

■ **UNESCO**
United Nations Educational, Scientific and Cultural Organisation

5.1a Check your learning

1 Read the online UNESCO World Heritage List description for the Sydney Opera House. What features of the Sydney Opera House, in addition to its universal value, justify its inclusion?

2 At a national level, what important things should we as a nation preserve? Suggest examples of monuments, natural and cultural sites, and cultural events of international significance that should be preserved. Why?

3 Look up Australia's Natural Heritage List on the Australian Government Department of the Environment and Energy website. Choose a range of sites that interest you. What features of the sites qualify them for National Heritage listing?

4 What are the 10 selection criteria for inclusion on the UNESCO World Heritage List? Visit the 'World Heritage List criteria' web page.

Cultural property

Objects that are part of the cultural heritage of a group or society are considered to be its cultural property. They can include things such as archaeological sites, historic buildings, landscapes and works of art. The issue of ownership can be both legal and moral. For example, a family member might have legal ownership and custodianship of a precious family **heirloom** because it was left to them in a will. However, as an heirloom, the family can claim some moral ownership of the item as well. Taking this beyond the family, we could argue that although the Sydney Opera House belongs to the Government of New South Wales, it also belongs, in a wider sense, to the people of New South Wales. The people of Australia could also claim it as a symbol of national identity. Since the inclusion of the Opera House on the World Heritage List in 2007, it could also be argued that it belongs to all people as an **icon** of human achievement.

■ **heirloom**
a valuable object belonging to a family for several generations

■ **icon**
something regarded as a symbol or worthy of admiration

Ownership of cultural property has not been an important issue until recent times. Before laws existed to prevent ancient artefacts from being taken out of their countries of origin, archaeologists and treasure seekers treated these finds as their personal property. This explains why many famous museums, for example the British Museum in London, the Louvre Museum in Paris, the Metropolitan Museum of Art in New York and the State Hermitage Museum in Saint Petersburg, have enormous collections of antiquities from around the world.

Arguments for and against the return of cultural property

contentious
causing disagreement

Cultural ownership remains a **contentious** subject. Some countries that have lost valuable antiquities have made appeals for their return.

Egypt's Supreme Council of Antiquities has conducted a long campaign for the return of more than 5000 artefacts taken in the years before laws preventing their removal were introduced. Among these is the 3300-year-old bust of Nefertiti – arguably the best known of all works of Egyptian art. The bust was acquired in 1912 by a German excavation team working in Egypt. The usual arrangement regarding ownership of artefacts in 1912 was that finds were divided between Egypt and the foreign holder of the excavation licence. Under this arrangement, the bust of Nefertiti became part of the German share and currently has pride of place in Berlin's Neues Museum, where an entire room is set aside for its display. However, Egypt has since disputed whether the division of artefacts was conducted strictly according to the rules. Ongoing legal and other arguments continue to be mounted.

restitution
return of something lost or stolen to its original owner

A notable case of **restitution** of cultural property was the 3000-year-old mummy of Ramesses I, which was handed back to Egypt in 2003 from a museum in the United States. Closer to home, Aboriginal cultural material and human remains have been returned to their original owners from British and other museums. In many cases, however, the appeals are unsuccessful, as in the case of the Parthenon Marbles.

The case of the Parthenon Marbles

One of the most famous and long-standing disputes about the ownership, custodianship and restitution of cultural property is the case of the Parthenon Marbles. At the beginning of the 19th century, Thomas Bruce, Seventh Earl of Elgin, the British ambassador to Turkey, removed some of the marble sculptures from the Parthenon on the **Acropolis** in Athens. The Parthenon and its sculptures, built during the height of ancient Greek civilisation in the 5th century BC, represent one of the greatest architectural and artistic achievements of human history.

Acropolis
an ancient citadel located on a rocky outcrop above the city of Athens

With the permission of the Turkish government, which controlled Greece at that time, the marbles were shipped to Britain. Lord Elgin later sold the sculptures to the British Museum for £36 000. Despite repeated requests for their return to Greece, the marbles are still in the possession of the British Museum and form one of the most valuable displays in its collection.

SOURCE 3 Sculptures from the Parthenon in Athens remain in the collection of the British Museum.

The Parthenon Marbles debate

The debate about the return of the marbles began in earnest in the 1970s when the famous Greek actress Melina Mercouri became minister of culture in the Greek government. She launched a strident campaign for the restitution of the sculptures, arguing that they were the greatest symbol of Greek culture. In 2000, the Greek government appealed for the return of the marbles in time for the Athens 2004 Olympic Games. A new, state-of-the-art museum was constructed at the base of the Acropolis to house the returned marbles. The British Museum, backed by the British government, refused to return them.

In 2005, an international group representing several national restitution organisations was founded in Athens. Under the name International Association for the Reunification of the Parthenon Sculptures (IARPS), the group campaigns to return all surviving parts of the Parthenon Marbles to Athens. Australian businessman David Hill founded the association and was its first chairman. The issue gained prominence again in 2014, when a team of British lawyers including Amal Clooney and Geoffrey Robertson, renowned international human rights lawyer (Source 4), met with the then Greek prime minister, Antonis Samaras, and David Hill as part of the continuing legal process to secure the return of the Parthenon Marbles to Greece.

SOURCE 4 David Hill, Amal Clooney and Geoffrey Robertson in Greece in 2014

Arguments for and against the marbles' return

The following sources highlight the key arguments used by the **stakeholders** in the debate and important information about the issue. Source 5 is the Declaration on the Parthenon Marbles issued by the IARPS in 2006. Source 8 summarises the view of the British Museum, while Source 9 is an extract from the International Council of Museums (ICOM) Code of Ethics for Museums.

stakeholder
someone who has a particular interest in an issue, project or organisation

metope
decorative marble panel on the outside walls of the Parthenon

frieze
a wide, horizontal band of decoration, either of a painting or a sculpture, on a wall

Ottoman Empire
a vast Turkish dominion in south-west Asia, north-east Africa and south-east Europe, lasting from AD 1200 until the end of World War I

opinion
a person's belief, judgement or way of thinking about something that is not necessarily substantiated by facts

pediment
a triangular section of the face of a building below the roof

The sculptures currently in the British Museum were once an integral part of the Parthenon, the temple that stands at the summit of the Acropolis in Athens. Built at the high point of classical Greek achievement in the 5th century BC, the Parthenon remains an unparalleled achievement in the fusion of engineering, architecture and art. The temple's magnificent marble statues, **metopes** and **frieze**, which are not independent works of art but indivisible elements of the Parthenon, are widely regarded as among the world's finest surviving ancient art works. The Parthenon and the other monuments on the Acropolis are officially recognised as a World Heritage Site.

Over 100 pieces of the sculpture and some architectural elements, which are critical to the full appreciation of the beauty and design of the monument, were removed by the British Ambassador Lord Elgin in the early 19th century from the Acropolis when Greece was part of the **Ottoman Empire** and moved into the British Museum in 1816. They are exhibited in London … divorced from their architectural framework and proper context.

The continued insistence by the British Museum that the sculptures remain in London runs wholly counter to the fast growing atmosphere of international cooperation over the location of disputed museum objects. Reuniting them with the half of the sculptures that remain in Athens would restore to the art its fuller meaning and be of greater benefit to humanity, particularly since more people now visit the Acropolis in Athens than visit the Duveen Gallery of the British Museum. The retention of the sculptures in the British Museum is also at odds with British and world public **opinion**, which has overwhelmingly supported the reunification of the surviving Parthenon sculptures in Athens.

The Parthenon sculptures are of undeniable importance to the heritage of both Greece and the world at large. The potential now exists for Britain and Greece to reach agreement on the reunification of the sculptures beside the Acropolis – a development that would be of benefit for the people of both countries and indeed all nations not only for today but also for generations to come. The International Association for the Reunification of the Parthenon Sculptures calls on the British Government and the Greek Government to initiate government to government negotiations to achieve early reunification in the new Acropolis Museum of the Parthenon sculptures now in London and Athens.

International Association for the Reunification of the Parthenon Sculptures, 'Declaration on the Parthenon Sculptures', 25 March 2006

pediment

metopes

frieze
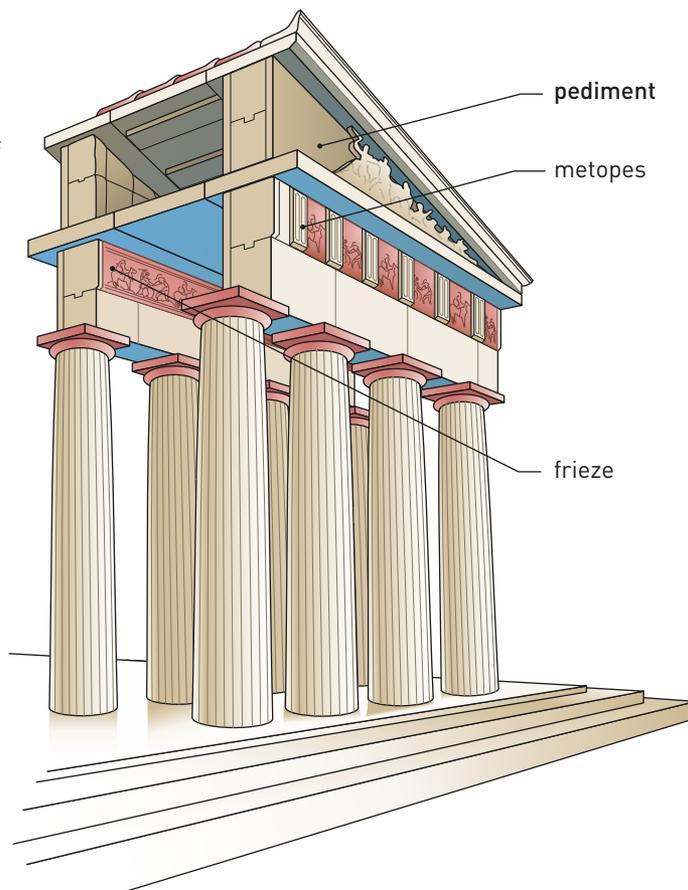
SOURCE 6 A sectional diagram of the Parthenon showing the location of the sculptures

SOURCE 7 Sculptures from the East Pediment of the Parthenon as displayed in the Duveen Gallery of the British Museum

SOURCE 8

The British Museum tells the story of cultural achievement throughout the world, from the dawn of human history over two million years ago until the present day. The Museum is a unique resource for the world: the breadth and depth of its collection allows the world's public to re-examine cultural identities and explore the connections between them.

Within the context of this unparalleled collection, the Parthenon sculptures are an important representation of the culture of ancient Athens. Millions of visitors admire the beauty of the sculptures each year – free of charge. They also gain insights into how ancient Greece influenced and was influenced by the other civilisations that it encountered.

The Acropolis Museum allows the Parthenon sculptures that are in Athens to be appreciated against the backdrop of ancient Greek and Athenian history. This display does not alter the Trustees' view that the sculptures are part of everyone's shared heritage and transcend cultural boundaries. The Trustees remain convinced that the current division allows different and complementary stories to be told about the surviving sculptures, highlighting their significance for world culture and affirming the universal legacy of ancient Greece.

Trustees of the British Museum, 'The Parthenon Sculptures: the position of the Trustees of the British Museum', London: The British Museum, 2017

SOURCE 9

6.2 Return of Cultural Property
Museums should be prepared to initiate dialogue for the return of cultural property to a country or people of origin. This should be undertaken in an impartial manner, based on scientific, professional and humanitarian principles as well as applicable local, national and international legislation, in preference to action at a governmental or political level.

6.3 Restitution of Cultural Property
When a country or people of origin seeks the restitution of an object or specimen that can be demonstrated to have been exported or otherwise transferred in violation of the principles of international and national conventions, and shown to be part of that country's or people's cultural or natural heritage, the museum concerned should, if legally free to do so, take prompt and responsible steps to co-operate in its return.

ICOM, 'ICOM Code of Ethics for Museums', < http://icom.museum/fileadmin/ user_upload/pdf/Codes/ICOM-code-En-web.pdf>

Sources 5, 8 & 9

1   What are the main arguments for the return of the marbles put forward by the International Association for the Reunification of the Parthenon Sculptures (IARPS)?

2   What arguments for retaining the marbles does the British Museum offer?

3   How is persuasive and emotive language used in these sources? Choose some examples for discussion.

4   Assess the relative merits of the arguments presented by the IARPS and the British Museum.

5   How could each side in the debate use the ICOM Code of Ethics for Museums to support its argument?

6   Based on the arguments given in these sources, what do *you* think should happen to the Parthenon Marbles?

Developments since 2014

In 2015, the British government and the British Museum rejected an offer from UNESCO to participate in mediation talks with their Greek counterparts for the return of the marbles.

In 2017, the Greek government renewed its efforts for the return of the marbles following the election of Professor Louis Godart as the new chairman of IARPS. Greece's renewed efforts are based on a proposal to offer regular, long-term loans of rare archaeological treasures from its museums in exchange for the return of the Parthenon sculptures. The Greek government will continue to play a leading role in the campaign for restitution of cultural property to their countries of origin through UNESCO, and other organisations.

The decision of Britain in 2016 to withdraw from the European Union, popularly referred to as 'Brexit', has opened up a new avenue for the possible return of the marbles to Greece. Geoffrey Robertson, major advocate for the marbles' return, published the following in the British *Guardian* newspaper in April 2017.

SOURCE 10

Britain has the perfect opportunity to return the artefacts to Greece. It's the right thing to do – and could earn concessions in fraught negotiations … it's worth remembering that the European Union treaty itself, in articles 3 and 167, places a duty on both sides in negotiations to take into account the need to 'ensure that Europe's cultural heritage is safeguarded and enhanced'. Here there is scope for a gesture that may allow talks to proceed more constructively … Putting the return of Lord Elgin's stolen marbles on the Brexit negotiating table would lead both to a boon for Britain and a triumph for European enhancement of its heritage. [The marbles] are now vested by the 1963 British Museum Act in the trustees of the institution. But parliament can unvest them, by a simple amendment or a line in the big Brexit bill, and send them back to Athens as part of our final deal with Europe … Now is the time to offer to return them, as part of the Brexit deal. … There is no more significant cultural heritage than the Parthenon marbles, so the negotiators on both sides are bound to take their reunification into account. They are, of course, priceless, and a UK offer to return them should be accepted in return for major concessions.

Geoffrey Robertson, 'Let's do a Brexit deal with the Parthenon marbles', *The Guardian*, 4 April 2017

5.1b Understanding and using the sources

1 What important provisions does the European Union treaty make regarding cultural heritage?
2 What gesture on the part of the British government is recommended by Geoffrey Robertson?
3 How could the gesture benefit both Britain and Europe?
4 How could an addition to the Brexit legislation help resolve the Parthenon Marbles **impasse**?

impasse
a situation in
which progress is
impossible because
no one agrees

5.1b Check your learning

1 Investigate the arguments for and against the repatriation of the bust of Nefertiti. Search online for 'Repatriating the Bust of Nefertiti: A Critical Perspective on Cultural Ownership' to help you get started.

2 Debate the topic: 'That the Parthenon Marbles should be returned to Greece'. Using the sources in this chapter and your own research, argue the case for and against. You might also consider the argument put by Janna Thompson from La Trobe University about the return of cultural property. Look up her paper, 'Cultural Property, Restitution and Value', online.

Here is some additional information that might help you prepare your case:

*   The trustees of the British Museum are forbidden by British law to dispose of objects in their charge.
*   The British Museum lends parts of its collection to other museums for temporary exhibition.
*   Casts and replicas of artefacts can be made for exhibition purposes.

3 Use the arguments you have prepared for the debate to write a response to the following: 'Discuss the conflicting arguments of the stakeholders in the Parthenon Marbles debate.' (Discuss: Identify issues and provide points for and/or against.)

To help you plan your response:

*   identify the key arguments presented by stakeholders for and against the return of the Parthenon Marbles
*   use these arguments to structure your response
*   use specific evidence to develop each argument in more detail
*   write a conclusion that sums up the case for and against the return.

SOURCE 11 A section of the Parthenon frieze depicting the Panathenaia, a festival celebrated in honour of the Goddess Athena. The British Museum displays 80 metres of the remains of the frieze in the Duveen Gallery, while the Acropolis Museum displays 50 metres.

Looting and illegal trade of antiquities

black market
illegal trading of goods

provenance
the origins and published ownership history of an archaeological artefact

unprovenanced
without provenance

ISIS
Islamic State of Iraq and Syria: a fundamentalist, jihadist terrorist group, also known as IS, ISIL and Daesh

The looting and illegal trade of antiquities are major problems for the world's cultural heritage. The lucrative **black market** for illegal antiquities – artefacts excavated illegally – has become a major incentive for the looting of sites. The illegal removal of artefacts from archaeological sites destroys not only the **provenance** of artefacts but also the sites they come from. Because no recording of location takes place, the artefacts lose their primary context and become mere treasures. Unscrupulous private collectors, and some museums who are often their willing accomplices, provide funding for this looting and stimulate it through the purchase of illicit and **unprovenanced** antiquities. Governments are not above this type of illegal trade in antiquities. This was demonstrated after the pillaging of the Afghan National Museum in Kabul after the fall of the city to the Taliban during the war in Afghanistan. High-ranking members of the government of Pakistan were involved in the sale and purchase of looted treasures from the museum.

The recent spread of warfare in Middle Eastern countries that are rich in antiquities has led to a new crisis in looting. The pillaging of the sites of ancient Mesopotamia and Syria by criminal gangs and terrorist organisations such as **ISIS** has caused concern that the trade in illicit antiquities is helping to fund terrorism. Many acts of looting are committed by local people made destitute by war and political turmoil. For them, the sale of a handful of ancient coins or a statuette dug up in a field might help to feed themselves and their families.

SOURCE 12 These satellite images of the ancient Mesopotamian city of Mari in modern Syria reveal the huge increase of looting pits on the site between 2011 and 2014. The image on the right clearly shows the hundreds of holes dug by looters.

The involvement of museums and auction houses

In 2005, the Italian government brought criminal charges against the curator of the J. Paul Getty Museum in Los Angeles in relation to the purchase of illegally excavated antiquities. While no verdict was reached in the subsequent trial, the Getty Museum did agree to return many looted antiquities to Italy. The curator was fired as a result.

In 2006, another example of museum complicity in acquiring illicit antiquities was revealed, this time involving the Metropolitan Museum of Art in New York. The Italian government pressured the museum to return the famous 2500-year-old Euphronios *krater*. It had been looted from an **Etruscan** tomb near Rome in 1971 by a gang of tomb robbers. When returned, it was one of 21 treasures that was restored by the museum.

Etruscan
people belonging to the civilisation of ancient Etruria, a region in central Italy c. 500 BC, who influenced the Romans

SOURCE 13 A ceremony for the return of the Euphronios *krater* to Rome

Modern auction houses have often contributed to the illicit trade in antiquities. Famous houses such as Christie's and Sotheby's are not always meticulous in checking the provenance of artefacts that they purchase. In their auction catalogues, provenance is either not supplied or takes the form of vague descriptions, for example 'property of a European gentleman' or 'bought on the London market'. In this way, auction houses provide a ready market for illegal trade either unwittingly or even deliberately in some cases.

Attempts to limit illegal acquisition of antiquities

Today, the illegal acquisition of antiquities is limited by international agreements such as the 1970 UNESCO Convention on the Means of Prohibiting the Illicit Import, Export and Transfer of Ownership of Cultural Property (see Source 14) and the International Council of Museums (ICOM) Code of Ethics for Museums (see Source 9). However, such conventions and codes are not legally enforceable, and rely on the ethical behaviour of countries and museums that have adopted them.

The General Conference of the United Nations Educational, Scientific and Cultural Organization, meeting in Paris from 12 October to 14 November 1970, at its sixteenth session …

CONSIDERING that the interchange of cultural property among nations for scientific, cultural and educational purposes increases the knowledge of the civilisation of Man, enriches the cultural life of all peoples and inspires mutual respect and appreciation among nations,

CONSIDERING that cultural property constitutes one of the basic elements of civilisation and national culture, and that its true value can be appreciated only in relation to the fullest possible information regarding its origin, history and traditional setting,

CONSIDERING that it is incumbent upon every State to protect the cultural property existing within its territory against the dangers of theft, **clandestine** excavation, and illicit export,

…

CONSIDERING that, as cultural institutions, museums, libraries and archives should ensure that their collections are built up in accordance with universally recognised moral principles

…

CONSIDERING that the protection of cultural heritage can be effective only if organised both nationally and internationally among States working in close co-operation …

UNESCO, 'Convention on the means of prohibiting and preventing the illicit import, export and transfer of ownership of cultural property 1970', 14 November 1970

clandestine
secret and often illegal

5.2 Understanding and using the sources

Source 14

1 Explain the purpose of this Convention.
2 According to the Convention, what are the benefits of the interchange of cultural property between nations?
3 What is meant by the terms 'clandestine excavation' and 'illicit export'?
4 What is the obligation of each **signatory** to the Convention regarding cultural property?
5 What rules do you think museums should follow in establishing and developing their collections?
6 Considering that the black market in illegal antiquities continues to thrive today, how effective is such a convention?

signatory
a person or organisation that has signed an official agreement

5.2 Check your learning

1 Research some famous cases involving the return of cultural property (e.g. Benin Bronzes, Priam's Treasure, Koh-i-Noor Diamond). Some items have been returned, others remain subject to dispute. Visit the website 'Chasing Aphrodite: The Hunt for Looted Antiquities in the World's Museums'.
2 Write a profile on one case you have researched. Use the Dancing Shiva Profile on the opposite page as a model. Include information about the artefact/s and cultural significance, details about acquisition and return if relevant, and an appropriate image.
3 Visit the websites of these museums: Vatican Museum, Rijksmuseum, Altes Museum, Pergamon Museum, Istanbul Archaeology Museum. Browse their online collections of artefacts to familiarise yourself with the range of ancient cultures that are represented in their collections. You could use the Google Cultural Institute website.

The Dancing Shiva: Australia's own antiquities scandal

In 2014, the National Gallery of Australia (NGA) in Canberra was involved in a scandal related to an allegedly looted Indian antiquity. The artefact at the centre of the scandal was a 900-year-old bronze statue of the Shiva Nataraja, or Dancing Shiva. The Nataraja depicts the Hindu god Shiva performing an **ecstatic** dance. The sculpture represents Shiva as the 'Lord of the Dance' and dramatic arts. It is a well-known sculpture in India and an important symbol of Indian culture.

The NGA bought the statue for $5 million in 2008 from a New York art dealer, Subhash Kapoor, who subsequently went on trial in India for smuggling antiquities. It was one of 22 items purchased by the NGA from Mr Kapoor's gallery between 2002 and 2011. The Canberra-based Indian High Commission in Canberra requested the return of the Shiva, arguing that it had been looted from a temple in Tamil Nadu. The NGA complied with the request and the statue was formally returned.

ecstatic
feeling total elation and happiness

SOURCE 15 The Dancing Shiva statue represents the dancing form of the Hindu god, Lord Shiva.

A postscript

In April 2017, the Indian High Commission informed the NGA that four sculptures in its collection had been listed as stolen and were the subjects of a police investigation in India. Two of these were purchased from Subhash Kapoor, the same dealer involved in the Dancing Shiva scandal. He is now in prison in India. The NGA responded that it was discussing the issue with the Indian High Commission.

5.2 Profile tasks

Research the following:

1 What role does Shiva play in Hindu religion and culture?

2 Explain the symbolic significance of the various features of the Dancing Shiva statue.

3 Locate Tamil Nadu on a map of India and find information about its temples and the significance of the Shiva statues for this region.

4 Research the full story of the Dancing Shiva scandal using the following:
   - television program *Four Corners* on ABC, 24 March 2014
   - website 'Chasing Aphrodite: The Hunt for Looted Antiquities in the World's Museums'.

Role and contribution of museums

Museums have a very long history, dating back to the 3rd century BC, when the first known museum, called the *Mouseion*, was opened in Alexandria in Egypt. Today, the concept of the museum has become a global one and there are few countries that do not have one. The traditional role of museums is to collect artefacts and materials of cultural and historical importance. They are responsible for the cost of their upkeep and preservation. Museums hold the cultural wealth of the nation in trust for present and future generations. As such, they are the keepers or custodians of our past.

Museums tell the story of how humanity has changed and developed throughout time. In doing this they select items from their collections for display, arrange the way in which they are displayed and give the items a context through accompanying description and/or narrative. Such displays offer a particular interpretation of the past for the general public.

Conflicting perspectives: whose past?

A museum's interpretation of the past can often be controversial. Whose version of the past will be presented? The packaging and presentation of the past has both political and economic dimensions. A display can be used to promote a political policy or perspective. Sponsorship by big business can influence the nature of exhibitions. The presentation of gender and ethnic issues can be highly controversial as well. An example of such a controversy occurred with the opening of the National Museum of Australia (NMA) in 2001. Under its inaugural director, Dawn Casey, the NMA presented an interpretation of Australian history that the government of the day argued was weighted more towards the impact of colonisation on Aboriginal people than the achievements of European settlement.

This debate arose from the 'History Wars' or 'Culture Wars' that have been a feature of national **discourse** in the last two decades. The conflict in these 'History Wars' is between two very different interpretations of Australia's history. One view, the so-called 'triumphalist' or 'three cheers' view, sees Australian history as a catalogue of stirring achievements of European settlement since 1788. The opposing, 'black armband' view argues, as the name suggests, that not all of Australian history has been positive, that there are darker moments largely to do with European treatment of Aboriginal peoples. This argument is not confined to historians, but has a clear political dimension because it reflects the **ideological** divisions between the major political parties in Australia.

Such controversies underline the fact that historians in museums take risks in presenting their interpretations to the public. The NMA example is not the only case of public controversy. Julia Clark, curator of the Tasmanian Museum and Art Gallery in the 1980s, was on the receiving end of criticism during her tenure at the museum. She was the first to present Aboriginal history in any Australian museum. She was also the first to use the term 'invasion' to describe European colonisation in an exhibition, and to use the term 'war' to refer to frontier conflict between Indigenous Australians and European settlers.

discourse
the interchange of ideas

ideological
relating to a system of ideas and ideals, particularly concerning economic or political theory and policy

NMA 'Defining Moments' project

In 2014, the NMA launched a project called Defining Moments in Australian History. The main purpose of the project was to stimulate public discussion and debate about the events of history considered to have most significance for Australians. The museum consulted with staff and leading historians to compile a list of 100 defining moments as a starting point for a wider national debate.

The project was officially launched by the then prime minister, Tony Abbott, in August 2014. Mr Abbott unveiled a plaque commemorating the first European settlement at Sydney Cove established by Captain Arthur Phillip. The curator of the project discusses the aims of the project in Source 16.

SOURCE 16

We hope to take the discussion into classrooms and universities, into local historical societies and even the local pub. The success of the program will be gauged by the level of public involvement, so we invite you to join this national debate about our nation's past, and to suggest a defining moment of your own.

In the process, we hope to develop a language for frank discussions about our past, from moments of success and celebration to those that are much more challenging. The project will comprise live public events, an online conversation and physical and virtual content at the National Museum.

National Museum Australia, 'Defining moments in Australian history: about the project',
<www.nma.gov.au/online_features/defining_moments/about>

The NMA continues to collect nominations from interested people on its website. For example, 2017 nominations include the launch of the national Australian Rules Football Women's League.

5.3 Understanding and using the sources

1 In what ways is this NMA project different from more traditional museum representations of Australian history that you are familiar with?
2 Why might Mr Abbott's unveiling of a plaque commemorating the first white settlement of Australia be contested?

5.3a Check your learning

1 Read more about the 'History Wars' and the NMA. Explain the issues as you understand them. Identify the stakeholders and their views.
2 Visit the NMA website and have a look at the initial list of 'Defining Moments'.
3 Discuss the NMA's list of defining moments in your class. Suggest some defining moments of your own and post them on the NMA's website.

The contribution of museums to our understanding of the past

Two of Sydney's universities are well known for their museums that hold extensive collections of antiquities. As well as being resources for their students, they play an important role in the wider community promoting ancient history and archaeology.

Macquarie University Museum of Ancient Cultures

The Museum of Ancient Cultures was founded in 1974 as the Ancient History Teaching Collection. The collection focuses on everyday life in the ancient world. It has more than 7000 artefacts from the ancient Mediterranean world including Egyptian, Greek, Roman and **Near Eastern** cultures. The museum is a foundation member of the International Council of Museums (ICOM), demonstrating its support of the international world of museums and its ethical standards.

The Museum also runs a program in which thousands of school students visit the Museum to learn about ancient cultures and participate in activities using the Museum's artefact teaching collection.

Two Macquarie University experts, Dr Jaye McKenzie-Clark, archaeologist and **ceramicist**, and Professor John Magnussen of the Australian School of Advanced Medicine have combined their expertise in ancient ceramics and modern medical imaging to achieve a breakthrough in the analysis of some of the 3500-year-old **cuneiform** tablets held in the museum's collection.

Using Professor Magnussen's powerful CT scanner, he and Dr McKenzie-Clark have digitally unwrapped tablets that previously could only be read by breaking open the clay envelope in which they were sealed, a highly destructive process. Thousands of previously unread cuneiform tablets held in collections all over the world may now be able to reveal their secrets and provide a huge amount of new information for researchers.

In another use of some of the latest technology, Dr McKenzie-Clark and Professor Magnussen have combined CT scanning and 3D printing to create replicas of some of the museum's artefacts (see Source 18).

Near Eastern
a region of south-west Asia including Asia Minor, the Levant and Mesopotamia

ceramicist
a pottery expert

cuneiform
a system of wedge-shaped writing on clay tablets first developed by the ancient cultures of Mesopotamia and Persia

SOURCE 17 Dr Jaye McKenzie-Clark and Professor John Magnussen

SOURCE 18 Two 3D-printed replicas of the Museum of Ancient Cultures' cuneiform tablet (MU 2092). The tablet on the left has been enlarged to one and half times full size. The detail can be clearly seen in the enlarged replica.

Virtual Egyptology project

3D technology has the potential to revolutionise museums as learning places both for students and the wider public. The Museum of Ancient Cultures' collection of Egyptian artefacts has been scanned using 3D technology. The scanned objects have been uploaded to a web server that enables students of Egyptology to view the models of the artefacts without the need for complex software packages. The project is being expanded into a platform that will allow people all over the world to access the 3D images.

The Museum of Ancient Cultures is applying 3D technology to produce replicas of many of its artefacts. This means that students and other museum visitors will be able to view not only the collections in the display cabinets, but also handle replicas of artefacts. 'Don't touch!' signs will no doubt soon be replaced by 'Hands-on!'

University of Sydney's Nicholson Museum

The Nicholson Museum, Australia's oldest university museum, was founded in 1860 following the donation by Sir Charles Nicholson of his personal collection of antiquities. It houses the largest collection of antiquities in the southern hemisphere, with more than 30 000 artefacts from Egypt, Greece, Italy, Cyprus and the Near East.

Dr Craig Barker, Manager of Education and Public Programs, is keen to attract younger students to the Nicholson Museum and get them thinking about the past. For this purpose, an innovation has been the partnership with Lego professional Ryan McNaught to create Lego models of

SOURCE 19 Ryan McNaught (aka the 'Brick Man') with his Lego model of Pompeii

famous ancient sites. In 2015, the Nicholson commissioned a model of Pompeii for display. It contained 190 000 blocks and was constructed over a period of 500 hours.
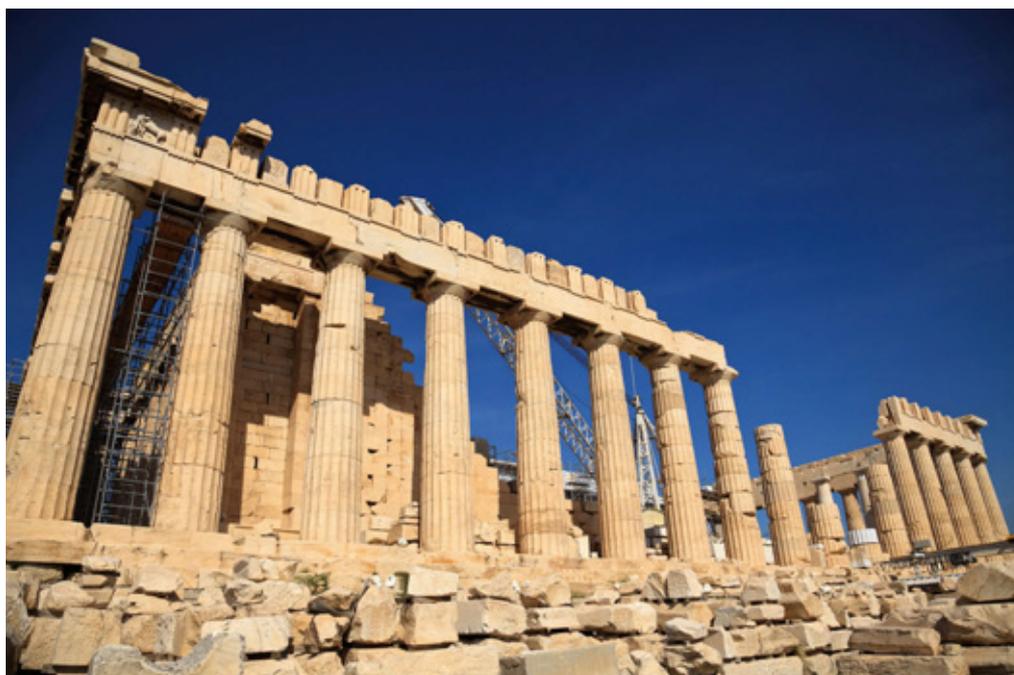

5.3b Check your learning

1 Watch a short video of the digital unwrapping of the Museum of Ancient Cultures' cuneiform tablets. Search online for 'ABC TV *Catalyst* – Ancient Writing'.
2 Watch the film about Macquarie University's Virtual Egyptology project called 'Accessing History' by searching online for 'Touching history: Bringing the past into the future'.
3 Have a look at the other Lego models that were displayed at the Nicholson Museum. Search for 'Lego Pompeii Nicholson' in Google Images.
4 Discuss a recent or memorable visit you made to a museum or museum exhibition. Consider the following for discussion:
   • What were the most memorable, worthwhile aspects of your visit?
   • What did you learn about the past from your visit?
   • If you were the curator of the museum you visited, how might you have changed or improved the experience or exhibition to make it more appealing to visitors?

In this chapter we have investigated the concepts of cultural heritage and cultural property. We have explored issues regarding the ownership of significant examples of cultural property, such as the Parthenon Marbles and the Dancing Shiva statue. The looting and illegal trade in antiquities pose serious threats to the world's cultural heritage. What has become clear is that there is often great debate about the meaning of cultural heritage and the value of cultural property. The views of different individuals and groups represent a wide spectrum of perspectives. Museums have a special role to play in preserving and presenting the past. Big international museums, such as the British Museum and the Metropolitan Museum, as well as smaller university museums, such as those of Macquarie and Sydney universities, all contribute to our understanding of ancient ways of life. However, the displays and exhibitions through which museums present the past can often give rise to controversy (e.g. the NMA's 2001 interpretation of Australian history).

FOR THE TEACHER

Check your obook assess for the following additional resources for this chapter:

Answers
Answers to each *Check your learning*, *Understanding and using the sources* and *Profile task* in this chapter

Teacher notes
Useful notes and advice for teaching this chapter, including syllabus connections and relevant weblinks

Class test
Comprehensive test to review students' skills and knowledge

assess quiz
Interactive auto-correcting multiple-choice quiz to test student comprehension

6

The treatment and display of human remains

FOCUS QUESTIONS

1 How have the human remains in this chapter been discovered, removed from where they were found, and preserved?

2 What scientific methods have been used to investigate and preserve the remains?

3 What is the significance of the human remains and associated sources for an understanding of the life and times in which these people lived?

4 What ethical issues are relevant to the treatment, display and ownership of the remains?

FOCUS CONCEPTS & SKILLS

Significance

We place particular importance on events, people and places of the past, and their impact. Our understanding of the past is influenced by the significance of the human remains studied as well as how the scientific analysis and preservation of those remains is conducted. Using this, judgements can be made about the relative importance of evidence in helping to reconstruct these people's lives and their context. It is also important to consider the ethical issues relating to the treatment, display and ownership of ancient human remains.

LEARNING OUTCOMES

1 Explain how the human remains in this chapter have been discovered, removed from where they were found, and preserved.

2 Analyse what scientific and written evidence reveals about the lives and deaths of ancient people, their societies, health and environment.

3 Discuss the ethical issues involved in the treatment, display and ownership of the remains.

4 Assess the significance of the study of human remains for an understanding of the past.

SOURCE 1 The well-preserved head of Tollund Man

Human remains from the past

Many discoveries of ancient human remains have been made over time. A quick survey of newspapers, archaeological magazines and television documentaries reveals exciting reports of 'bog bodies' in Ireland, 'ice maidens' in Siberia and Peru, the Iceman in the Austrian Ötztal Alps, mummified Eskimo babies, ancient Chinese mummies of the Tarim Basin and, of course, Egyptian mummies. These ancient human remains have survived for a variety of reasons and historians rely heavily on the work of scientists to unlock their secrets. This chapter focuses on the preservation, analysis, significance and display of human remains. It will investigate bog bodies, particularly Lindow Man and the Iceman, Ötzi.

Bog bodies

From time to time, people have come across preserved bodies in the bogs of northern Europe. The state of preservation of many of these bodies is so good that the discoverers have naturally assumed that they were recent murder victims and the local police have been called to investigate. For example, in England in 1983 a man confessed to the murder of his wife when the partial remains of a human skull were found in a **peat** extraction site at the rear of his house. It was only after scientific investigation was conducted to determine the age of the remains that it became clear that the owner of the skull had died almost 2000 years ago.

The first recorded discovery of a bog body was in the Netherlands in the late 18th century, but people had no doubt found bodies before this as they cut peat from the bogs to use as fuel for their fires. Many were reburied in local cemeteries, as once out of the peat and without artificial preservation, these bodies would have decomposed quickly.

Bog bodies have been dated from the Stone Age to modern times, but the best preserved examples date from the **Iron Age** and Roman periods, when the dominant culture of these regions was **Celtic** (see Chapter 11 The Celts). The reasons why they came to be in the bogs are diverse: accidental death, burial, murder and ritual sacrifice have all been suggested.

Where are bog bodies found?

Bog bodies have been found and recorded in the United Kingdom, Ireland, the Netherlands, Denmark and Germany, especially since the 1950s (Source 2). These are all countries where low-lying boglands are common. Bog bodies are named after the geographical areas where they were found. Tollund Man and Grauballe Man from Denmark were perhaps the best known of all bog bodies until the discovery of Lindow Man in England in the 1980s. Other well-preserved bodies have since been found in Ireland, including Cashel Man, the oldest fleshed remains found anywhere. It was discovered in a bog near Cashel in County Laois in 2011.

peat
partially decayed vegetation or organic matter found in peatlands or bogs

Iron Age
an archaeological era following the Stone Age and Bronze Age, and characterised by the use of iron for toolmaking

Celtic
relating to the Celts, pre-Roman inhabitants of Britain and Gaul

Source: Oxford University Press

SOURCE 2 Places where bog bodies have been found

How are bog bodies preserved?

You would expect that bodies deposited in water would decompose rapidly. However, in a typical peat bog there is little or no oxygen in the water for chemical processes of decay to take place (Sources 3 and 4). Bogs consist of two layers: a thin, watery top layer, and a thick layer of peat. The peat layer remains constant, undisturbed by any outside changes in the environment. Therefore, any archaeological material can remain there undisturbed for hundreds of years. The chemical content of bogs is also vital to the preservation of human and other organic remains. Scientists believe that muscle, tissue and wooden artefacts survive in the bogs because of **sphagnan**, a polysaccharide (carbohydrate) found in the cell walls of the sphagnum moss that prevents destructive bacteria operating. As the sphagnum moss decays, an acid forms, which contributes to the tanning of the bodies, converting the skin into leather. This is why bog bodies are usually very dark brown in colour.

There is great variety in the outcomes of such preservation. Some bog bodies are merely skeletons with no soft tissue, while others have no bones but have soft tissue and tanned skin. Often the hair, nails and major organs are preserved, as well as the contents of the stomach. Clothing and objects made from wool, skin, leather and metal may also have been preserved.

sphagnan
a polysaccharide (carbohydrate) in sphagnum moss that contributes to the tanning process
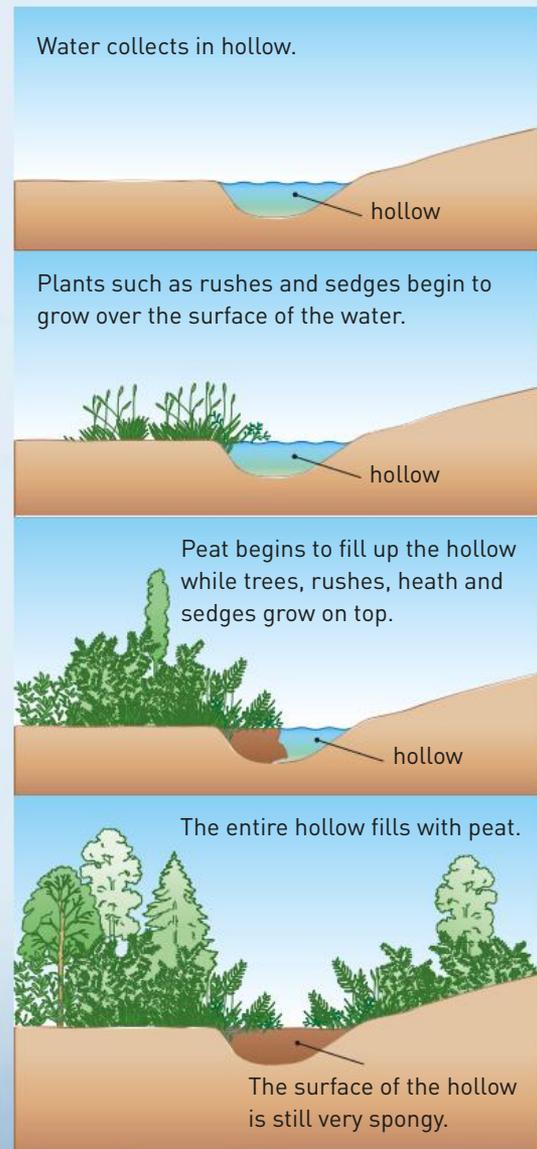
Significance of bogs

Why bodies were put into bogs remains a contested issue among scholars. Even sources contemporary with Iron Age times do not give a clear answer. Tacitus, the Roman historian, talks about criminals being cast into bogs as punishment, but also suggests that religious ritual may have been involved.

Modern scholarship since the 1950s has explored the cultural practices associated with bog burials. Since **Neolithic** times in northern Europe, bogs have been a source of peat for fuel. However, they appear to have had a supernatural significance as well. Danish villagers, for example, placed not only everyday items such as clothing, weapons and slaughtered animals in bogs, but also more valuable items such as **torcs** or neck rings, bracelets and ankle rings, possibly as religious offerings. At times they also deposited bodies, or parts of bodies, most of which had suffered violent deaths. In Ireland, scholars have suggested that bog burials were associated with kingship rituals and the marking of borders between territories. Other scholars have suggested that bogs were **liminal** zones, areas between heaven and earth or between the realm of the living and the dead, and as such were places to deposit offerings as well as things that were no longer wanted in the visible world.

■
Neolithic
relating to the New Stone Age, which began about 10000 years ago

■
torc
a collar or neck ring of twisted metal, worn especially by the ancient Celtic tribes of Gaul and Britain

■
liminal
relating to an intermediate stage between two states or conditions

Water collects in hollow.

hollow

Plants such as rushes and sedges begin to grow over the surface of the water.

hollow

Peat begins to fill up the hollow while trees, rushes, heath and sedges grow on top.

hollow

The entire hollow fills with peat.

The surface of the hollow is still very spongy.

SOURCE 3 The formation of a peat bog

SOURCE 4 Blanket peat bog moorland in the Peak District National Park, England

Scientific analysis of bog bodies

Today, more is known about bog bodies than when they were first studied in the 1950s. This is largely due to the advances in medical and forensic techniques. The cause of death of some bodies is now known with more certainty, as well as the age at death and when the body was put into the bog. Some bodies have even had to be reclassified when **DNA** testing revealed new information. For example, the body originally known as Windeby Girl is now known to be that of a 16-year-old boy.

SOURCE 5 (a) The Osterby skull, showing the distinctive hair knot worn by this bog body. (b) The head of Windeby I, showing its blindfold and shaved head. (c) The face of Grauballe Man. (d) The remains of Tollund Man on display in the Silkeborg Museum, Denmark. The cap and the noose around the neck can be seen clearly. Only the head was preserved; the rest is a reconstructed model.

More recently, developments in **strontium isotope tracing technology** have made it possible to detect strontium isotopes in human hair and skin, indicating where some of the bog people had lived in the last few years of their lives. Contrary to the traditional view that the bog bodies were local to the bogs in which they were found, this evidence reveals that some of these people had travelled abroad and that some may have been of high social status. Textile analysis conducted by Ulla Mannering, an expert in ancient textiles at the National Museum of Denmark, indicates that the woollen clothing worn by Huldremose Woman (see Source 6) had been dyed, a clear indication of her wealth. Mannering's colleague Karin Margarita Frei has carried out research suggesting that trade and travel were much more widespread than previously thought. Another Iron Age expert, Lotte Hedeager from the University of Oslo in Norway, argues that the results of this research call for a reinterpretation of the communication and trade networks among these early Iron Age Europeans.

Famous bog bodies

To date, more than 500 bog bodies and skeletons have been discovered in Denmark, with many others in Germany, the Netherlands, the United Kingdom and Ireland. Source 6 records some of the bog bodies that have been found, their main features, and some information that scientific examination has revealed about them.

SOURCE 6 Selected bog bodies

NAME, DISCOVERY DATE AND PLACE	RADIOCARBON DATE	POSSIBLE CAUSE OF DEATH	FEATURES
Huldremose Woman, 1879, Jutland, Denmark	160 BC – 340 AD	Insufficient evidence	Lacerations to the feet; right arm nearly severed from the rest of the body before it was deposited in the peat; rope around the neck; last meal – rye bread; body clothed in a cape, scarf and skirt
Yde Girl, 1897, Drenthe Province, the Netherlands	54 BC – 128 AD	Strangulation with a braided woollen band still around the throat	A wound near the left shoulder blade probably inflicted with a knife; remains of a large, worn, woollen cloak; **CT scan** revealed **scoliosis**; age at death, 16 years
Elling Woman, 1938, Bjeldskovdal bog, Silkeborg, Denmark	350 – 150 BC	Hanging or strangling with a leather thong	Wrapped in a sheepskin cape and with a leather cloak tied around the legs; a woven belt around the waist; elaborately knotted plait of hair
Borremose Man, 1946, Himmerland, Denmark	c. 700 BC	Hemp rope around neck; blow to back of skull	In sitting position; black leathery skin; body naked with two sheepskin coats and a woven cap nearby; hands showed no hard labour; stomach contained remnants of vegetable soup
Borremose II female, 1947, Himmerland, Denmark	475 BC	Insufficient evidence	Upper body naked, shawl and cloak covering lower body; remains of an infant nearby; leg fractured below knee; amber beads and bronze disk around neck; body covered by three birch poles
Tollund Man, 1950, Bjeldskovdal bog, Silkeborg, Denmark	c. 375 – 210 BC	Hanged by noose around neck	Wearing a sewn skin cap; clean-shaven; 30 to 40 years of age at death; 1.6 m tall; internal organs intact; last meal – soup of barley and seeds (wild and cultivated); died late winter or spring
Windeby I, 1952, Schleswig-Holstein, Germany	41 BC – 118 AD	Possible drowning	16 years old; hair missing from left side of head due to early exposure to oxygen; woollen band across eyes possibly hair band rather than blindfold; body covered by birch branches and rocks; suffered several stoppages of growth during life
Grauballe Man, 1952, Jutland, Denmark	c. 290 BC	Throat cut from ear to ear	About 30 years old at death; naked; last meal – porridge of corn, weed seeds and grasses, with traces of the poisonous fungus **ergot**, eaten immediately before death; died in winter or early spring; hands show no manual labour
Lindow Man (Lindow II), 1984, Lindow Moss, Cheshire, UK	2 BC – 119 AD	Blows to head; garrotted; throat cut; stab wound to chest	About 25 years old at death; naked to waist; moustache trimmed with shears; short beard; fox fur armband; last meal – bread with bran
Old Croghan Man, 2003, County Offaly, Ireland	c. 300 BC	Torture and beheading	Tallest bog body found (1.91 m); plaited leather band on left arm; last meal – buttermilk and cereals; meat-based diet in months before death; polished manicured nails; nipples cut
Clonycavan Man, 2003, County Meath, Ireland	c. 300 BC	Severe head wound and disembowelling	High, sweeping hairdo; use of hair gel made from **resin**; summer death; vegetable diet before death; moustache and goatee beard
Cashel Man, 2011, County Laois, Ireland	c. 2000 BC	Undetermined (back injuries now considered caused **post mortem**)	About 20 to 25 years old at time of death; broken arm; two hazel rods either side of body marked the location or kept the body in place

6.1 Understanding and using the sources

Look at the table in Source 6.

1   What were the main causes of death?
2   What is interesting about the nature of the stomach contents? What questions arise from this?
3   What items of clothing or adornment have been found? What is their significance?
4   List the features that the bodies have in common. How might these help us to explain the possible circumstances of their deaths?
5   The majority of these bodies have been dated to Iron Age times. What evidence in the table indicates that the practices described began much earlier than this period?

6.1 Check your learning

1   Find out more about these bog bodies and others that you find interesting. Some useful online resources include:
    •   the Silkeborg Museum (Tollund Man)
    •   the National Museum of Ireland (Kingship and Sacrifice exhibition)
    •   Wikipedia, which has some very useful information and a list of all known bog bodies.
2   Compile a picture file of your favourite bog bodies using Google Images.
3   Conduct some further research on what strontium isotope tracing technology has revealed about bog bodies. What impact has this research had on theories about social status, trade and the movement of people? Read the online *National Geographic* article 'Who were the ancient bog mummies?'
4   Bog bodies have also been found in peat bogs in the United States. These human remains are considerably older than those found in Europe. Find out more about them by reading the online article 'America's Bog People' by Peter Tyson on NOVA Online.

CT scan
computed tomography scan; an imaging method using digital geometry processing to produce a 3D image of the inside of an object or body

scoliosis
a medical condition in which a person's spine has a sideways curve

ergot
a plant disease caused by a fungus

resin
a sticky, organic substance exuded by some trees and other plants; used as a glue in the mummification process

post mortem
literally, after death

SOURCE 7 Endoscopic examination of Tollund Man's head at the National Museum of Denmark

The case of Lindow Man

Lindow Man (or Lindow II, to use the official name) was discovered in 1984 in a peat bog called Lindow Moss in Cheshire, England. Two workmen cutting peat found a foot in a piece of machinery. The torso of the body was revealed in the remaining peat. The police were called, as well as an archaeologist, Rick Turner, who soon established that it was part of an ancient bog body. In 1988, more parts of what are now considered to be Lindow Man's body were discovered: the skin of the buttocks, part of the left leg, and both the right thigh and femur.

A visual examination by the investigators revealed that Lindow Man had been 25 to 30 years old, muscular and at the peak of physical condition. He was about 1.65 metres tall and would have weighed approximately 60 to 65 kilograms. Even though the head was distorted as a result of the weight of the peat, they observed that it had brown to ginger hair, and a moustache and beard of similar colour. Both were neatly trimmed, the ginger colour probably caused by the peat. The hands were manicured and well cared for, which suggests that he did little physical work. The neck and torso of the body bore the marks of stab wounds and the body was naked, except for a fox fur armband.

Modern preservation of the remains

After the scientific examination of Lindow Man's remains had taken place and samples had been taken, the next step was their preservation. Scientists decided to freeze-dry the body, as success had been achieved with this method on other ancient materials. The technique involved an initial soaking of the body in **polyethylene glycol** to prevent distortion, then freezing it and vaporising the ice. Lindow Man's body suffered only minimal shrinkage as a result of the process. Following this, it was placed in a purpose-built display case with a controlled environment.

polyethylene glycol
the main chemical component of antifreeze

SOURCE 8 Lindow Man on display in the British Museum

Methods and results of scientific analysis of Lindow Man

Paleopathology is the investigation of ancient human remains to reveal disease and illness. The scientific or paleopathological examination of Lindow man has used a variety of techniques which have revealed his last meal and manner of death among other things. Some of these are summarised in Source 9.

SOURCE 9 Scientific analysis of Lindow Man

SCIENTIFIC TECHNIQUE	INFORMATION REVEALED	SIGNIFICANCE
Scanning electron microscopy – uses an electron microscope that produces high-resolution, three-dimensional images	Beard and moustache hairs had 'stepped' ends.	This indicated that they had been trimmed with fine shears or scissors rather than with a single knife or razor blade.
	The stomach contained sphagnum moss spores, crushed wheat, bran, barley grains and mistletoe pollen.	Mistletoe pollen in the stomach suggests an association with Druidic practice because it was commonly used in their rituals.
	Eggs of roundworms and whipworms were present in his stomach.	Body was infested with parasitic worms but not severely enough to affect health.
Electron spin resonance (ESR) spectroscopy – examines changes in molecular structure to determine exposure to heat	Bran and charcoal fragments were found.	This suggests burnt griddlecake had been eaten before death. Further speculation exists as to whether the burnt material was deliberately ingested or eaten by accident.
Atomic absorption spectrometry – determines the composition of elements in a sample	His torso skin had a higher copper content than skin samples from other parts of his body.	This suggests that copper pigments might have been applied as body paint.
Radiocarbon dating (see Chapter 1)	The body is now thought to be in a date range of 2 BC to AD 119.	Lindow Man is generally believed to be from the Iron Age. Speculation exists as to whether he lived during the Roman occupation of Britain.
Xeroradiography – a form of X-ray in which a picture of the body is recorded on paper instead of on film	The body had received a blow to the head causing a V-shaped cut on the surface and a fracture to the skull. Bone fragments were driven into the brain. Swelling was observed along the edges of the wound.	The wound was caused by a blunt instrument, possibly an axe. The swelling indicated that Lindow Man had survived the blow, possibly for several hours, but probably in an unconscious state.
Computed tomography or CT scan – uses X-rays and digital computer technology to create detailed images of the inside of the body	The brain showed evidence of swelling and bruising.	As with the xeroradiographs, this suggests that he was alive for some hours after sustaining the fatal injury.
	Schmorl's nodes were observed.	He appears to have had mild osteoarthritis.

paleopathology
a branch of pathology concerned with ancient diseases, e.g. in fossils or human remains

Druidic
relating to the ancient Druids, a pre-Christian religious order among the ancient Celts of Gaul, Britain and Ireland

griddlecake
a thin cake made from a batter cooked on a hot griddle or frying pan

pigment
a natural substance that gives colour to animals and plants

radiocarbon dating
a method of determining the age of organic material by analysing the amount of carbon-14 remaining in a sample

Schmorl's nodes
protrusions of the cartilage of the spinal discs

osteoarthritis
a joint disease resulting from a breakdown of joint cartilage and underlying bone

How did Lindow Man die?

Forensic analysis has revealed the particularly horrific manner of Lindow Man's death. His death resulted from:

- two or three blows, possibly from a blunt instrument such as an axe, that fractured the skull
- a blow to the back, which broke a rib
- strangulation or garrotting with a thong made of animal sinew
- a cut throat, perhaps not to cause death but to drain the body of blood
- a possible stab wound to the upper chest.

Using written sources to explain Lindow Man's death

Written sources may be of use to unravel the mystery of Lindow Man's death. The following extracts are from writers who lived around the time of Lindow Man:

- Tacitus, a Roman writer from the 1st century AD who observed and described the customs of ancient Celtic tribes in his work *Germania* (Source 10)
- Strabo, a Greek historian, geographer and philosopher from the 1st century AD who wrote *Geographica* (Source 11), an encyclopedia of geographical knowledge
- **Julius Caesar**, a Roman politician and general (101–44 BC) who recorded his observations of Celtic tribes in the records of his Gallic campaigns, *Commentarii de Bello Gallico* (Source 12)
- Diodorus Siculus, a Greek historian from the 1st century BC whose *Bibliotheca historia* (a universal history) covers a period from mythology to the death of Alexander the Great (Source 13).

Julius Caesar
a significant Roman general and statesman of the late Roman Republic

SOURCE 10

The nature of the death penalty differs according to the offence: traitors and deserters are hung from trees; cowards and poor fighters and sexual perverts are plunged in the mud of marshes with a hurdle [covering of sticks] on their heads.

....

At fixed seasons all tribes of the same name and blood gather through their delegations at a certain forest … And after publicly offering up a human life, they celebrate the grim 'initiation' of their barbarous worship. There is a further tribute which they pay to the grove: no one enters it until he has been bound with a cord …

....

These tribes are protected by forests and rivers, nor is there anything noteworthy about them individually, except that they worship … Mother Earth … In an island of the ocean is a holy grove, and in it a consecrated chariot, covered with a robe: a single priest is permitted to touch it: he feels the presence of the goddess in her shrine, and follows with deep reverence as she rides away drawn by cows: then come days of rejoicing … as many as she thinks worthy to receive and entertain her. They make no war, take no arms … until the same priest returns the goddess to her sacred precinct, when she has had her fill of the society of mortals. After this the chariot and the robe, and … the deity in person, are washed in a sequestered lake: slaves are the ministrants and are straightway swallowed by the same lake.

Tacitus, *Germania*, 12, 39, 40

The Romans put a stop … to … sacrifice and divination, as they were in conflict with our own ways: for example, they would strike a man who had been consecrated for sacrifice in the back with a sword, and make prophecies based on his death-spasms; and they would not sacrifice without the presence of the **Druids**. Other kinds of human sacrifices have been reported as well: some men they would shoot dead with arrows and **impale** in the temples; or they would construct a huge figure of straw and wood, and having thrown cattle and all manner of wild animals and humans into it, they would make a burnt offering of the whole thing.

Strabo, *Geographica*, 4.1.13

Druid
a priest of the ancient Celtic religion

impale
to pierce or transfix with a sharp instrument

Gaul
the Latin name for France in Roman and Celtic times

SOURCE 12

All the people of **Gaul** are completely devoted to religion, and for this reason those who are greatly affected by diseases and in the dangers of battle either sacrifice human victims or vow to do so using the Druids as administrators to these sacrifices, since it is judged that unless for a man's life a man's life is given back, the will of the immortal gods cannot be placated. In public affairs they have instituted the same kind of sacrifice. Others have effigies of great size interwoven with twigs, the limbs of which are filled up with living people which are set on fire from below, and the people are deprived of life surrounded by flames. It is judged that the punishment of those who participated in theft or brigandage or other crimes are more pleasing to the immortal gods; but when the supplies of this kind fail, they even go so low as to inflict punishment on the innocent.

Julius Caesar, *Commentarii de Bello Gallico*, 6.16

SOURCE 13

They [the Gauls] also observe a custom which is especially astonishing and incredible, in case they are taking thought with respect to matters of great concern; for in such cases they devote to death a human being and plunge a dagger into him in the region above the diaphragm, and when the stricken victim has fallen they read the future from the manner of his fall and from the twitching of his limbs, as well as from the gushing of the blood, having learned to place confidence in an ancient and long-continued practice of observing such matters.

Diodorus Siculus, *Bibliotheca Historica*, 5.31.3

Contested modern interpretations

Scholars and scientific experts have reached different conclusions about Lindow Man and his death. Dr Anne Ross and Rick Turner, for example, argue that Lindow Man was a ritual sacrifice. Robert Connolly takes a different view, as revealed in Source 15.

Archaeologists have noted the connection between the manner of Lindow Man's death and the festival of Beltane as described in the ancient sources. This was a festival held by the Celtic tribes, usually on the 1st of May (spring in the northern hemisphere). It was held in times of great danger, such as the failure of crops or attack by the Romans. The tribes sought help from the sun god Belenos by offering him a human sacrifice.

Celtic scholars have established that at this festival, a special bread was prepared, one portion of which was deliberately burnt. The bread was given out, and whoever received the burnt portion was 'the devoted one'; that is, given to the gods in human sacrifice. As we have seen earlier, forensic examination of the contents of Lindow Man's stomach revealed that his last meal consisted of burnt griddlecake. This has led Dr Ross, a Celtic archaeologist, to conclude that it had ritual significance.

The scientists also examined the botanical evidence of the peat bog. Considering the evidence, together with the grains of cereal found in the stomach, they concluded that Lindow Man must have died in winter or early spring. Others interested in Celtic customs note Lindow Man's death by three methods: strangulation, bludgeoning and throat-cutting. They see this as part of a religious symbol called 'triplism', the superstitious concept that events occur in groups of three. Other links to Celtic religion include the presence of mistletoe pollen in the stomach and the possibility that he wore body paint. Mistletoe was considered sacred by the Celts for its healing powers, while body painting was associated with warfare.

The **opinion** of Rick Turner, the first archaeologist to examine Lindow Man's remains, about Lindow Man and the other remains found at Lindow Moss between 1983 and 1988 can be read in Source 14.

opinion
a person's belief, judgement or way of thinking about something that is not necessarily substantiated by facts

SOURCE 14

… the most likely explanation for these two bodies is that they represent ritual sacrifices, probably for religious reasons, just before or during the first half of the Roman occupation of Britain. As such, they belong to a phenomenon well established across northern Europe and now well documented in Britain and Ireland.

R. C. Turner, 'The Lindow Man phenomenon: ancient and modern', in R. C. Turner & R. G. Scaife (eds), *Bog Bodies: New Discoveries and New Perspectives*, London: British Museum Press, 1995, p. 189

SOURCE 15

Is there then enough evidence to write 'ritual sacrifice' into the anthropology of Iron Age Cheshire? My belief is we are more likely witnesses after the crime of an Iron Age mugging or death from combat. Whether he was fighting naked or his clothes have degraded without trace is open to question. If, as is suggested by his hair, nails and bodily **habitus**, he was more than a simple peasant, then perhaps his clothes were worth taking either by his assailant or some other person or persons unknown; but absence of preserved clothes does not confirm ritual.

R. C. Connolly, 'Lindow Man: Britain's prehistoric bog body', *Anthropology Today*, vol. 1, issue 5, 1985, p. 17

habitus
a person's physical characteristics, especially appearance and constitution

6.2 Understanding and using the sources

1 Use Sources 10 to 15 to answer the following questions:
   • Briefly explain what each source says about Celtic customs (see Chapter 11).
   • What comment would you make about Tacitus' description of these practices as 'barbarous worship'?
   • List the references in the sources that could apply to the manner of Lindow Man's death.
   • How reliable do you think these sources are? Why? (Consider who the authors are, the time of writing, their audiences and purposes.)
   • How useful do you think these sources are for an understanding of Lindow Man's life and death?

2 Using Sources 14 and 15, compare the arguments of Turner and Connolly. Which is more persuasive and why?

What did Lindow Man look like?

Forensic science has been able to reconstruct Lindow Man's appearance. Source 8 shows Lindow Man's face, squashed and contorted from the weight of the peat. However, medical illustrator Richard Neave was able to reconstruct the face of Lindow Man. He used templates made from X-rays of the skull from which the distortions had been removed. He then sculpted a skull from clay over these templates. Even though this was a significant new technique at the time of Lindow Man's discovery, it has now been superseded by the use of CT scans and **computer-generated imaging (CGI)**.

■ **computer-generated imaging (CGI)** the application of computer graphics to create or contribute to images in a variety of media

■ **reliability** the accuracy of a source judged on its context, purpose, origin and intended audience

6.2 Check your learning

1 Compare Lindow Man's injuries with those listed in Source 6. In what ways is the manner of his death similar to those of other bog bodies? Why is this significant?

2 Find out more online about Lindow Man's manner of death.

3 Research the techniques used by Richard Neave to reconstruct the face of Lindow Man. Compare these with the computer-generated images made of Tutankhamun's head following the 2005 scientific examination (see Chapter 3). What conclusions can you draw about the relative reliability of these different techniques?

4 Find out more about the research carried out on Lindow Man's remains. For example, you could investigate the problems associated with dating Lindow Man's remains, or the techniques used to preserve them. Two excellent resources are:
   • 'Peat stratigraphy and the age of the Lindow bodies', in R. C. Turner and R. G. Scaife (eds), *Bog Bodies: New Discoveries and New Perspectives* by P.C. Buckland
   • *Lindow Man* by J. Joy.

SOURCE 16 A model of Lindow Man's head made in the 1970s by Richard Neave of Manchester University, using X-rays of the skull

5 Use the information in this chapter and your own research to write a response to the following: 'Explain what scientific analysis and written sources reveal about the life and death of Lindow Man.' (Explain: Make relationships clearly evident, give cause and effect, provide why and/or how.)

To help you plan your response:

- identify relevant aspects of Lindow Man's life and death, e.g. diet, occupation etc.
- use these aspects to structure your answer (Note: avoid a purely narrative structure)
- identify the scientific techniques used to examine Lindow Man's remains and draw conclusions about what they reveal about his life and death
- identify the written sources and draw conclusions about what they reveal about his life and death
- use specific evidence to support your explanation.

Hint: A good strategy would be to consider the extent to which the scientific analysis **corroborates** the written evidence.

corroborate
support or confirm

Irish bog bodies

In 2003, two more bog bodies were discovered in Ireland during peat-cutting activities. Both bodies are male, are more than 2000 years old and appear to have been the victims of a ritual sacrifice, indicated by signs of torture before their deaths. The bodies have been named Clonycavan Man and Old Croghan Man after their places of discovery, just 40 kilometres apart. In 2011, a further discovery was made by a milling machine operator at Cashel bog, in County Laois. This body, also male, is over 4000 years old and, like the others, appears to have been the victim of ritual sacrifice. The bodies have undergone extensive forensic examination at the National Museum of Ireland.

SOURCE 17 Clonycavan man

Clonycavan Man

Unfortunately, the peat-cutting machine had cut off the forearms, hands and lower abdomen of Clonycavan Man. Despite this, it was possible to determine that it was a young man of short stature, no more than 1.6 metres. The most striking feature of this body was its hairstyle. Clonycavan Man had used a substance made of vegetable plant oil mixed with a resin to sweep his hair up on top of his head. The resin came from pine trees found in Spain and south-west France, providing evidence of Iron Age trade across Western Europe.

Beneath the hairdo was evidence of the cause of death – a huge wound made by a heavy, sharp implement that had sliced open the skull. There was a slash across the cheekbone, as well as evidence of a blow to the chest and disembowelment. Analysis of the hair showed that Clonycavan Man had eaten mainly vegetables before death, which suggests that it occurred in the summer.

Old Croghan Man

Old Croghan Man was a young man in his early to mid 20s. Although the body was missing its head and lower limbs, it was possible to calculate its height from the length of the arms. When alive he would have been about 2 metres tall, making him the tallest bog body found in Europe. The body was found naked except for a band of plaited leather around the left arm.

Old Croghan Man's remains revealed evidence of savage torture before death. His nipples had been cut and he had been stabbed in the ribs. A cut on his arm was probably a defence wound, made as he tried to fend off his killer. Holes were cut in his upper arms through which a rope made of hazel was threaded, possibly to restrain him. Final mutilation included beheading and cutting the body in half across the torso.

Stomach remains indicate that milk and cereals had been consumed as a last meal. However, chemical analysis of polished and manicured nails showed that his diet was rich in meat, unlike that of Clonycavan Man. It is likely that he died in the winter when vegetables were not readily available.

SOURCE 18
Old Croghan Man

Cashel Man

The body of Cashel Man was missing the head and left arm when found. The young man of 20–25 years had been placed in the peat in a crouching position with his arms holding his legs. Unfortunately only the legs were well preserved, the rest of the body having decomposed within the skin. When the head was later recovered it was found to have closely cropped hair. In what seems to have been a violent struggle to survive, Cashel Man sustained a defence wound to his arm before having one arm broken by a blow from a sharp object, possibly the sword that could have been used to cut him across the back.

Who were these bog bodies?

Many Irish bog bodies have been found buried on important political or royal boundaries. **Votive objects** such as feasting equipment, weapons, royal clothing and objects relating to processions with horses have also been found in boundary locations. This has led to a theory that the bodies and the offerings were related to kingship rituals. Eamonn Kelly, former Keeper of Irish Antiquities at the National Museum of Ireland, thinks that the three bog bodies discussed here were kings. He points out that a king's role was to ensure the safety of the people and their cattle from disease. If he failed in this duty he would be sacrificed. Source 19 gives his view of the connection between these bodies and the rejected rulers.

■ **votive objects** objects offered to gods as an appeal for divine favour

SOURCE 19

We're looking at the bodies of kings who have been decommissioned [removed from office], who have been sacrificed. As part of that decommissioning, their nipples are mutilated. In the Irish tradition they could no longer serve as king if their bodies were mutilated in this way. This is a decommissioning of the king in this life and the next.

Matt McGrath, 'World's oldest bog body hints at violent past', *BBC News*, 24 September 2013

6.2 Profile tasks

1 Read Eamonn Kelly's detailed online account of Cashel Man, 'The bog body from Cashel Bog, Co. Laois'.

2 Visit the National Museum of Ireland's 'Kingship and Sacrifice' webpage.

3 Suggestion for a historical investigation: Research the cultural and religious practices of Irish and other northern European Celtic societies. Compare and contrast them.

Ötzi the Iceman

The Iceman, or Ötzi as he is often referred to, has been arguably the most significant discovery of ancient human remains in the recent past (Source 20). The examination of the artefacts found with the body has extended our knowledge of the lifestyles of Neolithic people. Perhaps more significantly, the scientific analyses of the body have revealed previously unknown information about human genetics and disease.

Like many great archaeological discoveries, the Iceman was a chance find. On 19 September 1991, Erika and Helmut Simon were hiking in the Ötztal Alps between Austria and Italy. Returning from an expedition to the **Similaun** peak, they left the marked track and found the remains of a body sticking out of the ice. Fortunately, they took a photograph, the only one that exists of the Iceman as it first appeared to modern eyes.

When the police were notified, they presumed the body to be that of a normal **glacier corpse**. However, after its enthusiastic but careless recovery from the ice, the remains were deemed to be ancient. They were taken to the forensic medical unit in Innsbruck, Austria, where Professor Konrad Spindler of the Institute of Pre- and Protohistory at the University of Innsbruck was called in to take charge of what was to become a long-term investigation involving hundreds of scientists from a wide variety of fields.

SOURCE 20 The body of Ötzi the Iceman

Scientific analysis of the Iceman

The initial scientific examination of the Iceman focused on determining the age of the body and the cause and manner of death. Specialists were keen to determine where the Iceman came from, why he was on the mountain and how he had been so well preserved. They also wanted to know exactly how old the remains were. In addition, they were interested in studying the more than 70 personal possessions that were found with the body, including clothing, tools and weapons, and participating in their identification and conservation.

In more recent times, there has been a greater focus on the body itself. Technological advances such as the harvesting of ancient DNA and **genome mapping** have revealed more information than was probably ever imagined possible in the years immediately after the discovery.

Who was the Iceman?

In 1994, Konrad Spindler concluded that the Iceman was a shepherd who probably came from a Neolithic settlement in the Val Venosta, an alpine valley in northern Italy, approximately 20 kilometres from where he was found. His theory was based on the Iceman's age, strong physique, equipment, clothing and place of death (a route by which herds would cross the main ridge of the Alps). Since then, the **isotopic** composition of his tooth enamel and bones has been examined. The results indicate that the Iceman was born in the South Tyrol near the village of Feldthurns. His childhood was probably spent in the Eisack or Puster valleys, but he seems to have spent his last 10 years in the Vinschgau (Val Venosta in Italian).

KEY LOCATIONS OF THE ICEMAN

Source: Oxford University Press

SOURCE 21 This map shows where the Iceman was born, where he lived and where he was found.

How old is the Iceman?

Konrad Spindler initially estimated that the Iceman lived in the early **Bronze Age**, about 2000 BC (roughly 4000 years ago). He drew this conclusion based on his observation of the axe found with the corpse. Spindler assumed that it was made of bronze because the design of its blade was characteristic of Bronze Age axes. Chemical analysis, however, proved that the axe was made of copper. The Iceman therefore belonged to an earlier time, the **Chalcolithic**, or Copper Age, which lasted in Europe from c. 4000 to 2200 BC.

Radiocarbon dating of the body was carried out, using minute samples from the bone and tissue of the hip. Other radiocarbon tests were done on grass samples found with the body. The average result of these tests showed that the Iceman lived approximately 5300 years ago.

isotopic
in this context, relating to the isotopes of dental tissue, which can be analysed to reconstruct diet and geographical origin of ancient human remains

Bronze Age
a historical age characterised by the use of cast bronze to make tools and weapons

Chalcolithic
the Copper Age

The Iceman's equipment

The Iceman was found with many pieces of equipment, shown in Source 22. These included a **bow stave**, an axe, parts of a back **pannier**, two birch-bark containers, a dagger with **scabbard**, a **retoucheur**, a net, and a quiver with the makings for several arrows.

SOURCE 22 A catalogue of the Iceman's equipment

ARTEFACT	BRIEF DESCRIPTION
Bow stave	Unfinished, made of yew wood, 182 cm long
Axe	Handle of yew wood, blade of copper, held together with bindings of leather
Back pannier	Frame of hazel wood, sack of fur
Birch-bark container (1)	Flattened tube of bark with remains of charcoal and green leaves inside, 20 cm x 10 cm
Birch-bark container (2)	Empty, cylindrical box, oval bottom, 18 cm x 20 cm
Quiver and arrows	Rectangular deer hide sack, stiffened with rod of wood with a closing flap; two arrows found completed, 12 unfinished arrows
Net	Cords of grass 1.8 mm thick with holes 5 cm wide
Dagger with scabbard	Two cutting blades with flint blade and ash wood handle; scabbard intricately plaited from **bast**, 12.8 cm
Retoucheur	Stub of lime-wood branch with a piece of stag antler driven through the centre; used for sharpening flint blades
Belt pouch	Small calfskin bag like a 'bum bag', containing implements for sharpening flint and bone tools

bow stave
a wooden rod, trimmed for using as a bow

pannier
a large container carried over the shoulder

scabbard
a sheath for the blade of a sword or dagger

retoucheur
a tool use to sharpen a flint blade

bast
the fibrous inner bark of a tree, used as fibre in matting or cord

The Iceman's clothing

Interpretations of how the items of the Iceman's clothing were worn and used have changed since the early days of examination. Following is a description of the garments:

- The *leggings* are made of goat and sheep hide and taper downwards, ending in sewn-on, oblong tongues. These were pushed into the shoes and tied on. Sewn on at the top are double supporting straps to knot the leggings to the belt. The hide was worn fur side out. They show signs of heavy wear and repair.

- The *loincloth* was worn over the belt and the leggings. Slipped under the belt, it hung freely to the knees. It is made of narrow strips of sheep hide scraped thin and stitched together. Its overall length was approximately 1.8 metres.

- The *upper garment* is the least well preserved: only one third of it survives. It is made of tanned goat and sheep hide. Alternating brown and black pieces of fur were neatly sewn together with animal sinew creating a vertical pattern of stripes. The sleeve design is unknown because no sleeves were preserved. The garment has seen a lot of wear and bears evidence of mending by an unskilled hand.

- The *three large sections of plaited grass* were originally thought to have been a cape that he wore over his clothing. Problems with fit and practicality became apparent; imagine trying to wear a backpack over a rain cape. The latest theory is that he wore the matting over his head fastened with string to protect him from rain. Modern herders still use grass matting in this way.

- The *bearskin cap*, shaped like a blunt cone, is made of strips of hide sewn together. It has two leather chinstraps for keeping it in place, but both were torn before the Iceman's death.

- The *shoes* consist of two upper parts: an outer shell made of deerskin and an inner lining of grass netting into which grass could be stuffed to act like socks. Both uppers were attached to a bearskin sole with leather straps and the ankles were bound with grass. A recent theory suggests that they were the upper parts of snow shoes, the fragmentary pieces of the back pannier forming the base.

SOURCE 23 The Iceman's shoes

sloe berry
the small, sour, purple fruit of the blackthorn shrub

periodontitis
inflammation of the gums

atherosclerosis
a disease of the arteries in which fatty material builds up inside the arterial walls

histological
referring to the study of the form of structures that can be seen under the microscope

biochemical
to do with the chemical processes that occur in living organisms

multispectral imaging
a type of digital imaging using information from electromagnetic radiation and other waves passing through or bouncing off objects to create images

endoscopy
a medical procedure in which an instrument is introduced into the body to allow an inside view

subclavian artery
one of two arteries located below the clavicle (collarbone) that supply our arms with blood

6.3 Understanding and using the sources

1 Copy the table in Source 22, adding two columns headed 'Possible uses' and 'Information revealed about the Iceman'. Fill in these columns with your own conclusions drawn from the evidence.

2 Answer the following questions using the text and Sources 22 and 23.

- How well equipped was the Iceman to defend himself, gather food and keep warm?
- What do the Iceman's equipment and clothing suggest about his lifestyle?
- How suitably clothed was the Iceman for the region in which he lived and the lifestyle he seems to have led?
- Make a list of a modern hiker's equipment and clothing (e.g. a backpack, a weatherproof jacket). What similar equipment did the Iceman have?
- What does this comparison suggest about the Iceman's preparedness for his environment and lifestyle?

6.3a Check your learning

1 Archaeologists have been puzzled by the finding of a **sloe berry**, a stone bead with tassles and two pieces of birch fungi. Investigate how archaeologists explain why they were in the Iceman's possession and what they might have been used for.

2 Find out about the types of wood that were used for making the Iceman's tools: yew, hazel, ash, lime. What does their use tell us about the knowledge and skill of the craftsmen who made them?

3 Find out more details about the Iceman's clothing, equipment and lifestyle, including the latest information, on the South Tyrol Museum of Archaeology's website.

4 The Iceman's copper axe has played a significant role in dating his remains as well as the information this artefact can yield about his occupation and social status. Find out more about the axe and its Italian origins on the South Tyrol Museum of Archaeology website. Also read the article 'Ötzi – a treacherous murder – with links to Central Italy' on the same website (under 'News & Events').

5 Use the information in this chapter and your own research to write a response to the following: 'To what extent was the Iceman clothed and equipped appropriately to live and work in his environment?' (Assess: Make a judgement of value, quality, outcomes or results.)

    To help you plan your response:

- identify the key features of the Iceman's clothing and equipment (e.g. provided warmth, enabled hunting)
- use these features to structure your answer (Note: Avoid a purely narrative structure.)
- make judgements about how well he was clothed and equipped
- use specific evidence to support your assessment.

Forensic analysis of the Iceman

In the two and a half decades since the Iceman's remains were discovered, the body and the equipment found with it have undergone thorough forensic analysis. A wide range of specialists has analysed and interpreted hundreds of samples. All have contributed to the ongoing story of who the Iceman was and why he was on the mountain where he was found. Source 24 shows the results of these analyses over time.

a 2013: CT scans revealed the Iceman's teeth had several cavities, extensive wear of the tooth enamel and advanced **periodontitis** in the area of the rear molars.

b 2014: CT scans revealed a build-up of calcium in the Iceman's arteries consistent with **atherosclerosis**. Studies of the DNA revealed that he had a genetic predisposition for cardiovascular disease.

c 2011: The discovery of the Iceman's stomach enabled an analysis of its contents. He had eaten a sizable meal of uncleaned ibex meat (ash and animal hair were present), forest berries and einkorn grains (an ancient variety of wheat) less than two hours before death.

d 2016: The bacterium *Helicobacter pylori* was detected in the Iceman's stomach contents. This bacterium, found in about half the world's population, can cause gastritis and stomach ulcers. Scientists discovered that the Iceman had an unexpected strain of the bacterium, causing them to change their ideas about the history of settlements in Europe.

e 2003: **Histological** and **biochemical** evidence suggested that the Iceman received a cut to the base of his right thumb that reached down to the bone, consistent with a defensive wound that had not healed before death.

f 2015: New **multispectral imaging**, using ultraviolet, visible and infrared wavelengths, revealed previously unseen tattoos, many deep in the skin layers on his lower right ribcage. The Iceman has 61 tattoos, found on the lower back and legs, and arranged mostly in parallel lines, which are thought to be associated with medical treatment.

g 2007: CT scans revealed that the Iceman suffered a blow to the back of the head shortly before death. Scientists studying minute samples of brain tissue found traces of clotted brain cells, indicating bruising to the brain.

h 2012: An **endoscopy** found traces of a clotting protein called fibrin, which is only present in human blood for a very short time after a wound. Its presence indicates that the Iceman survived for a minimal time after sustaining a head wound.

i 2001: X-rays revealed a flint arrowhead near the shoulder, indicating the Iceman had been shot in the back with an arrow, which was subsequently pulled out.

j 2007: CT scans revealed that the arrowhead discovered in 2001 had penetrated the left **subclavian artery**, causing the Iceman to bleed to death within a short time.

k 1998: Examination of the Iceman's intestines revealed the presence of pollen from the hop hornbeam plant, which flowers between March and June, indicating that he died in spring.

l 2003: DNA analysis of the contents of both the ileum and colon (parts of the intestines) revealed that the Iceman had a breakfast of cereals, other plant food and ibex meat up to 30 hours before death.
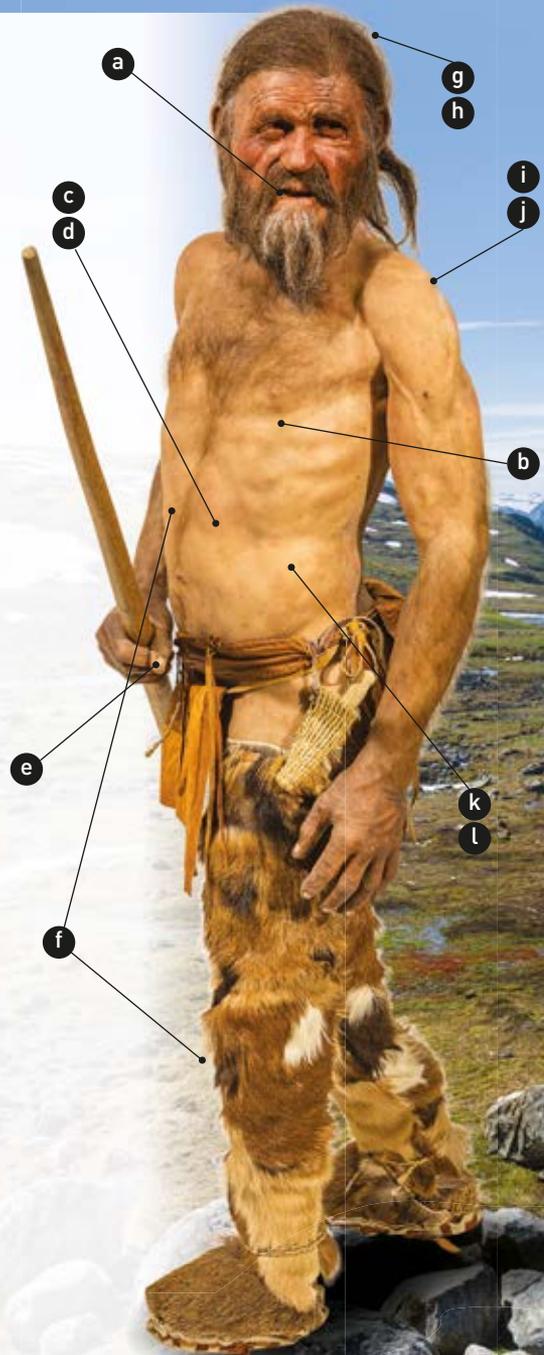
SOURCE 24 The latest reconstruction of the Iceman showing the results of the scientific analyses of his remains

DNA analysis of the Iceman's remains

Perhaps the most exciting investigation of the Iceman to take place so far was the analysis of the DNA in 2012. A team of experts and scientists led by Albert Zink, from the EURAC Institute for Mummies and the Iceman in Bolzano, Italy, retrieved a minute sample of pelvic bone during a nine-hour autopsy of the remains. From a study of the nuclear DNA they were able to sequence the Iceman's entire **genome**. Of particular significance is the establishment of a genetic link between the Iceman and modern humans. The following are some of the findings that have been reported so far, which indicate that the Iceman:

- had brown hair and brown eyes
- was lactose intolerant – possibly most people were still unable to digest milk in his time when farming livestock was still a relatively recent development
- had blood group O and belonged to the **y-chromosomal haplogroup** G2a2b, which is rare in modern Europe – it shows that his ancestors probably migrated from the Middle East with the spread of agriculture
- has 19 living relatives from a region in Austria near where he was discovered, who share his rare mutation known as G-L9
- was more closely related to people living today in southern Europe than to those living in North Africa and the Middle East – he was closely related to modern people living in the geographically isolated islands of Sardinia and Corsica
- carried genetic mutations that gave him a high risk of coronary heart disease and atherosclerosis, or build-up of fat in his arteries
- had Lyme disease – evidence of a bacterium that causes the tick-borne disease was found in the DNA.

A study of the Iceman's **mitochondrial DNA** in 2006 by Dr Franco Rollo from the University of Camerino, Italy, found evidence suggesting that he was infertile. Since then speculation has occurred about the possible social impact of this condition. It has been suggested that his inability to father offspring might have caused him to be rejected by his peers.

Further research on the Iceman's mitochondrial DNA in 2016 resulted in the conclusion that his maternal genetic line, originating in the Alps, is now extinct due to migration of populations.

How did the Iceman die?

Despite having the latest information from the forensic analysis of the Iceman's remains, we can still only know the immediate cause of death. The circumstances leading to death remain a matter of speculation. Immediately following the discovery, Konrad Spindler theorised that he may have been overcome by a storm while crossing the Alps. Then, when X-rays and CT scans of the body revealed several broken ribs, Spindler suggested that a violent conflict had taken place shortly before the Iceman's death. He suggested that the Iceman's village had been attacked and that he had escaped. With his inadequate equipment (the incomplete arrows and partially made bow stave) and insufficient food, he had lain down to rest in a sheltered gully, died of hypothermia and was buried in the ice.

However, CT scans taken in 2007 revealed two important pieces of information that challenged this interpretation. First, an arrowhead detected in 2001 was found to have penetrated the left subclavian artery, causing huge blood loss as evidenced by the **haematoma**

genome
an organism's complete set of DNA, including all of its genes

y-chromosomal haplogroup
a genetic population group of people who share a common ancestor along the patrilineal (male) line

mitochondrial DNA
the small amount of genetic material or DNA found in mitochondria that is inherited through the maternal line

haematoma
an abnormal collection of blood outside the blood vessels that has leaked into surrounding tissue, caused by injury or disease

in the surrounding tissue. Second, the scans showed that the Iceman had suffered a brain trauma shortly before death. Whether this happened when he fell with the impact of the arrow or was the result of a blow from his assailant is unknown. Therefore, the Iceman bled to death after suffering an arrow wound and serious head injury.

So, the evidence indicates that the Iceman was murdered, presumably by one or more attackers who had pursued him up the mountain. The exact circumstances of his death might be revealed by further examination of his remains, but we may never know exactly what happened on that mountainside 5300 years ago or why it happened.

Further research on the Iceman

Research on the Iceman's remains is ongoing. The significant advances made in the last two decades will doubtless be added to in the future as the numerous teams studying samples taken from his body and equipment continue their work. The South Tyrol Museum of Archaeology, and EURAC's Institute for Mummies and the Iceman, both located in Bolzano, Italy, will play significant roles in this research. In Source 26, the South Tyrol Museum of Archaeology gives its view of the importance of the Iceman research.

SOURCE 25 *Ötzi the Iceman* is a three-floor permanent exhibition at the South Tyrol Museum of Archaeology. The museum features everything from his discovery and the international media response to research about his life in the Copper Age. You can even view Ötzi's mummy in his refrigerated cell.
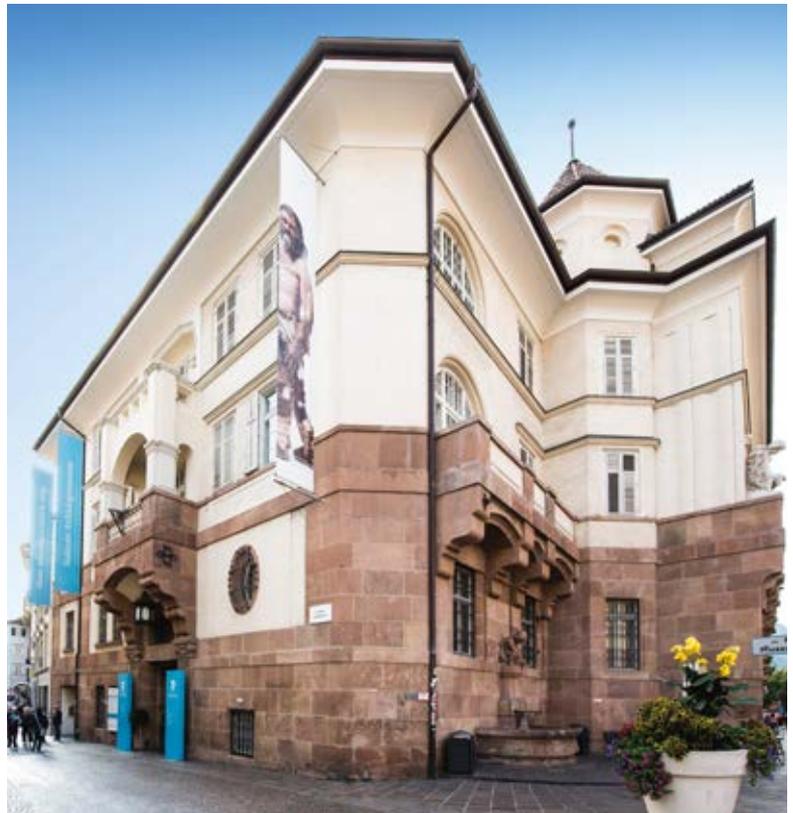
SOURCE 26

Since his discovery in 1991, the Iceman has provided new data from prehistoric times for countless research disciplines around the globe, both in the natural sciences and in the humanities.

For example, using the Iceman as a starting point, it has been possible to conduct research into how specific organic artefacts and present-day diseases originated, to develop new diagnostic techniques and to gain information on climatic developments. The Iceman, or 'Ötzi', as he is nicknamed locally, has helped researchers in countless fields gain insights that would otherwise have been impossible to come by. In addition, the media, as well as a large section of the general public, are particularly interested in the man's fate, his personal history, how he lived and how he died. On this last point research, above all medical, paleopathological and forensic research, has contributed additional details and continues to do so. This has made the Iceman a unique example of how interdisciplinary research achieves positive results.

South Tyrol Museum of Archaeology, 'A look at the research work', <www.iceman.it/en/the-research/>

6.3b Check your learning

1 Compare Konrad Spindler's theory with the information revealed by later scientific examination. What evidence was not available to Spindler at the time he drew his conclusions?

2 Consider the evidence already presented in this chapter as well as the information given below to develop your own theory to explain the Iceman's death.

- Stone Age hunters aimed their arrows and spears at the left shoulder blade, knowing that this location offered the best chance of a kill. Was Iceman the victim of rivalry between hunters?

SOURCE 27
A close-up of one of the Iceman's tattoos on his right foot

3 Considering the Iceman's relatively young age at death, he had very bad dental health. Research the possible reasons for this.

4 Find out more about the Iceman's tattoos at the EURAC Research website. One is shown in Source 27.

5 Conduct more research on how the strain of the *Helicobacter pylori* bacterium present in the Iceman can change what we know about human settlement in Europe.

6 Find out more about the possible implications of the Iceman's infertility.

7 'It has been suggested that his inability to father offspring might have caused him to be rejected by his peers.' What questions need to be asked about such a suggestion? What kind of evidence would be needed to substantiate such an interpretation?

8 In 2014, the South Tyrol Museum of Archaeology engaged a criminologist to investigate the Iceman's murder. Read the results by searching online for 'Ötzi – a treacherous murder – with links to Central Italy'. Scroll down to 'Investigations of a "profiler"'.

9 Visit the EURAC Research Iceman Photoscan project website to view some wonderful images of the Iceman.

10 Use the information in this chapter and your own research to write a response to the following: 'Evaluate the significance of the scientific techniques used in the analysis of the Iceman for an understanding of his life and death.' (Evaluate: Make a judgement based on criteria; determine the value of.)

To help you plan your response:

- identify some of the key scientific techniques used in the investigation of the Iceman
- use these techniques to structure your answer
- make judgements about the significance of what these techniques reveal about the Iceman
- use specific evidence to support your evaluation.

Ethical issues and ancient human remains

Our consideration of the ethical issues related to the ownership, scientific analysis and display of human remains has been relatively recent. There is disagreement about the treatment and the ultimate fates of the bog people and the Iceman studied in this chapter. In some ways, these human remains are also seen as examples of cultural property, similar to the way in which excavated artefacts are seen as the cultural property of the regions or the countries in which they were found. For example, before Lindow Man's remains were transferred to the British Museum, there was an unsuccessful campaign to keep him in Manchester, closer to the location of Lindow Moss where he was found. However, Lindow Man has subsequently been on display in Manchester on three occasions, the most recent was in 2008–09 for a special exhibition called *Lindow Man: A Bog Body Mystery*.

The ownership of the Iceman's remains was also subject to dispute. After his recovery, he was taken to the University of Innsbruck for conservation and scientific examination in the belief that he had been found on the Austrian side of the border with Italy. A subsequent survey of the site found that he had actually been found a mere 92 metres from the border in South Tyrol, a province of Italy. In a victory for common sense, although the South Tyrolean authorities claimed property rights over the Iceman's remains, they agreed to leave him in Innsbruck until the scientific investigation was complete. The Iceman and his equipment were transported to Bolzano in Italy in 1998 to be housed in the newly built South Tyrol Museum of Archaeology.

Scientific analysis and display of ancient human remains

contentious
causing
disagreement

While ownership issues can often be solved amicably in the short term, issues relating to scientific analysis and display of ancient human remains have become more **contentious**. They can often continue for some time and ultimately remain unresolved.

Following are some of the contested issues:

rite
a traditional or
religious ceremony

- *preservation and display* – what sort of display?
- *reburial* – reburied where? With or without **rites**? If with rites, what sort?
- *research* – does the knowledge gained from human remains outweigh the value of preserving them undisturbed?
- *religion* – what are the views of Christians, Druids and other religious groups?
- *education* – how important is it to educate the public, particularly children, about the past?

stakeholder
someone who has a
particular interest in
an issue, project or
organisation

- *tourism* – what are the benefits for tourism in the display of ancient human remains in regional and national museums?

Source 28 is the view of one **stakeholder**, Melanie Giles of Manchester University.

... I believe it is important to study ancient human remains because this analysis and interpretation is transformative: it not only has the potential to challenge modern preconceptions but reveal very different understandings of what it meant to be human in the past.

… Ultimately, our goal is a greater understanding of the past or rather, human history, which we need to share and disseminate. What then, are our options? First, as I have argued, these remains cannot be easily re-interred, since the original context of their burial has usually been destroyed. I would be cautious about selecting an alternative place of burial and of imposing a rite or ritual upon them, which was not of their own choosing. But should they be displayed in a museum case? I believe this *can* be achieved with sufficient respect, perhaps by screening the body from any immediate visual access, and offering visitors a choice as to whether they actually view the remains. This is a deliberate policy adopted in the Archaeological Museum of the South Tyrol, with regard to the remains of the Ice Man. At this stage, the debate over display and reburial issues could be highlighted, through the views of different interest groups.

<div align="right">Melanie Giles, 'Bog bodies: representing the dead', paper delivered at the conference 'Respect for Ancient British Human Remains: Philosophy and Practice', Manchester Museum, 17 November 2006</div>

6.4 Understanding and using the sources

1 What does Melanie Giles think is the value of studying ancient human remains?
2 From your study of this chapter, identify ways in which the original contexts of bog body burials have been destroyed.
3 Why would Giles be 'cautious' about reburying ancient human remains? Do you think her caution is justified?
4 Who do you think are the different interest groups or stakeholders in the debate over display and reburial?
5 How could a museum give visitors a sense of the 'historical, social and landscape context' of any ancient human remains it had to display?
6 What is your opinion of Giles' suggestion of how ancient human remains could be displayed in a museum?

Replicas and reproductions

One way of getting around the problem of displaying actual human remains is the use of replicas and reproductions. For example, a company in the UK prepares replicas of the royal Egyptian mummies for display. These are constructed by a special process using real bones and artificial organic flesh to produce perfect **facsimiles**. The manufacturers claim that exhibiting these replicas enables the public to view the mummies while preserving the originals. It also enables the display of human remains in cultures that do not choose to display real bodies.

A recent technological innovation has enabled the production of replicas using 3D printing. A 3D-printed replica of Tutankhamun's mummy was displayed in a New York exhibition in 2014. In 2016, the South Tyrol Museum of Archaeology presented a life-size replica of the Iceman's body. The 3D sculptures were both made by American **paleoartist** Gary Staab. Three replicas of the Iceman's mummy have been made to be used for a travelling exhibition in the United States and Canada, and for teaching purposes.

facsimile
exact copy

paleoartist
an artist specialising in artworks relating to paleolithic times

1 Research the ways in which some of the bog bodies in this chapter have been preserved and displayed. Do you approve of the decisions made by the researchers and museums? (Hint: Compare pictures of Grauballe Man immediately after its discovery and the picture of it on display seen in Source 5.)

2 Consider what has been discovered about the Iceman's remains in the last two decades. In what ways has the research carried out been of benefit to us?

3 Research the views of Christians, Druids and other religious groups about what should be done with ancient human remains.

4 Read all of Melanie Giles' paper, *Bog Bodies: Representing the Dead*, online.

5 Find out what the ICOM Code of Ethics for Museums has to say about the acquisition and display of human remains. Search online for 'ICOM Code of Ethics', open the PDF document and scroll down to '2.5 Culturally Sensitive Material'.

6 For a discussion of the different **perspectives** associated with the ethics of mummy research, search online for 'Ethics of mummy research – Decoding the Heavens'.

7 View exciting YouTube clips of the process used to create the replicas of Tutankhamun and the Iceman by searching online for '3D replica Tutankhamun' and 'Presentation of an Ötzi mummy replica by paleoartist Gary Staab'.

SOURCE 29 A 3D replica of the Iceman's mummy

perspectives
the points of view held by individuals or groups about the past that are based on their contexts and motivations

Australian Aboriginal peoples and ethical issues

In post-colonial times, largely since World War II, many new nations that were formerly colonies have been demanding the return of their cultural property, including the remains of their ancestors. Such demands have met with mixed success. An Australian example concerns the treatment of Australian Aboriginal skeletal remains. During the 19th and most of the 20th centuries, excavation of Aboriginal sites and research into Aboriginal culture was conducted mostly by European Australians. Little consideration was given to Aboriginal attitudes to such excavation, or to the analysis and display of skeletal material in museums. Sacred sites were dug up, burial sites looted and anything of interest was taken away to be examined or displayed in museums.

The head of Pemulwuy, a warrior of the Sydney Eora tribe, was cut off, pickled, bottled and sent to England for display. A great number of other Aboriginal remains suffered the same fate. Truganini, a traditional Tasmanian Aboriginal, feared what would happen to her remains, and her fears were realised. Two years after her death, the government gave permission to the

Tasmanian Royal Society to exhume her bones on the condition that her remains be properly stored and accessible for scientific purposes. However, her body was later put on public display for almost 50 years before being removed from display in 1951.

In more recent times, Aboriginal claims to museums, such as the British Museum in London and the Ashmolean Museum in Oxford, have resulted in the return of both cultural artefacts and skeletal material to their original owners, as shown in Source 32. This was made possible by the British Government's *Human Tissue Act 2004*, which allows museums to return remains that 'are reasonably believed to be under 1000 years in age'.

In Australia, Section 21 of the *Aboriginal and Torres Strait Islander Heritage Protection Act 1984* provides for the return of Aboriginal human remains 'to an Aboriginal or Aboriginals entitled to, and willing to accept possession, custody or control of the remains in accordance with Aboriginal tradition'.

Today, although there are no Aboriginal skeletons on display in Australian museums, it is estimated that 10 000 Indigenous remains are still held in Australian museums. Many collections of such material held by both Australian and international universities and museums are being returned to Aboriginal communities for reburial. Source 30 records some of the earliest examples of **repatriation** of Aboriginal remains. In 2007 the *United Nations Declaration on the Rights of Indigenous Peoples* formally included specific recognition of the right to repatriation of their human remains (see Source 31).

■ **repatriation**
the return of
someone to their
own country

SOURCE 30 Extract from 'Remains Repatriation Timeline'

1976	The Tasmanian Museum and Art Gallery, Hobart, Tasmania, becomes the first museum in Australia to return Aboriginal remains, with the return of the remains of Truganini to the Tasmanian Aboriginal community. The Royal Society of Tasmania had exhumed her body two years after her death in 1876 and put her skeleton on public display for 40 years.
1985	May: Tasmanian Museum and Art Gallery, Hobart, Tasmania, returns the Tasmanian Aboriginal human remains commonly known as the Crowther Collection (33 skulls and three skeletons) for cremation at Oyster Cove. The 'largest gathering of Tasmanian Aboriginal people in a decade' attends the cremation.
1990	February: Royal College of Surgeons, Dublin, Ireland, gives back the head of the great-great grandfather of Tasmanian lawyer Michael Mansell after he went to Dublin petitioning for the return of Aboriginal remains including the one of his family.
2000	The Royal College of Surgeons of Edinburgh, UK, returns 500 remains.
2003	The Edinburgh Museum, Scotland, returns remains that were dug up from burial grounds in South Australia. April: Royal College of Surgeons, Dublin, hands over 60 Aboriginal human remains to Aboriginal representatives, who had travelled to Ireland to collect the remains and return them to Australia. 10 September: The Museum of Victoria returns the remains of an Aboriginal baby girl nicknamed 'Jaara Baby' to her modern-day relatives, the Dja Dja Wurrung people of north-west Victoria, 99 years to the day after they were found in a tree by a woodcutter.

http://www.creativespirits.info/aboriginalculture/people/aboriginal-remains-repatriation

1 Indigenous peoples have the right to manifest, practice, develop and teach their spiritual and religious traditions, customs and ceremonies; the right to maintain, protect, and have access in privacy to their religious and cultural sites; the right to the use and control of their ceremonial objects; and the right to the repatriation of their human remains.

2 States shall seek to enable the access and/or repatriation of ceremonial objects and human remains in their possession through fair, transparent and effective mechanisms developed in conjunction with indigenous peoples concerned.

United Nations, 'Article 12', *United Nations Declaration on the Rights of Indigenous Peoples*, Australia: Australian Human Rights Commission

SOURCE 32 The remains of two Bundjalung people from northern NSW are buried following their return from Leiden University in the Netherlands in 2010.

6.4b Check your learning

1 In what way does the issue of the return of skeletal remains to Aboriginal communities reflect political and racial views?

2 What are the arguments for and against the return of Aboriginal human remains?

3 What rights are acknowledged in the other Articles of the United Nations Declaration?

4 Hold a class debate on the topic: 'The potential value of research on ancient human remains to science and medicine is more important than the consideration of ethical concerns.'
   Your arguments could be informed by the research and discussion you have carried out.

5 Use the knowledge you have gained in this chapter to write a response to the following: 'Explain the ethical issues involved in the ownership, treatment and display of human remains.' (Explain: Relate cause and effect, make the relationships between things evident, provide why and/or how.)
   To help you plan your response:

   • identify some ethical issues involved in the ownership, treatment and display of human remains

   • use these issues to structure your response

   • use specific evidence to develop your explanation of issues

   • write a conclusion that sums up the key ethical issues.

In this chapter we have examined some fascinating examples of ancient human remains, in particular bog bodies and the Iceman. By looking at the scientific examinations of the remains of these ancient humans we have seen how they died and have tried to work out why they died as they did. We have seen how, to some extent, it is possible to reconstruct their life and times by drawing conclusions from their remains and the possessions found with them. In the 25 years since the Iceman's discovery, there has been an explosion of information discovered by the application of recent developments in technology and genomic identification. Further scientific developments will no doubt reveal even more about both bog bodies and the Iceman.

It is clear, however, that despite all the scientific advances, we cannot escape considering the ethics involved in the study, ownership and display of ancient human remains. At the point of discovery, whether it is in a bog, a glacier or any of the other places ancient human remains are found, we have to decide what is the right and proper thing to do with the discovery. At no time can we forget that the remains were once human beings. In some cases, for example in dealing with the remains of Aboriginal people, we must be sensitive to the cultural links between contemporary peoples and the remains of their ancestors.

FOR THE TEACHER

Check your <u>o</u>book <u>a</u>ssess for the following additional resources for this chapter:

Answers

Answers to each *Check your learning*, *Understanding and using the sources* and *Profile task* in this chapter

Teacher notes

Useful notes and advice for teaching this chapter, including syllabus connections and relevant weblinks

Class test

Comprehensive test to review students' skills and knowledge

<u>a</u>ssess quiz

Interactive auto-correcting multiple-choice quiz to test student comprehension

7

Historical investigation

FOCUS CONCEPTS & SKILLS

Evidence

Evidence is information gained from sources that can be used for a particular inquiry. It can be used to formulate a research question, develop and support a thesis or contest an interpretation.

Interpretation

Interpretation is an explanation of the past. There can be more than one interpretation of the past because researchers may have asked different questions, used different sources and reached different conclusions.

LEARNING OUTCOMES

1   Plan and conduct a historical investigation.

2   Formulate a historical focus question and hypothesis relevant to the investigation.

3   Locate, analyse and use sources to develop a historical interpretation.

4   Synthesise information from a range of sources to develop a historical account or argument about a historical issue.

5   Apply knowledge of the appropriate protocols for acknowledging sources of information.

6   Present and communicate the findings of a historical investigation using appropriate and well-structured texts.

SOURCE 1 Historical investigation involves interrogating the past.

Historical inquiry

One of the most important skills that you need to learn in your study of history is how to conduct a research investigation. Remember that history by its definition involves 'learning by inquiry'. 'Inquiry' means asking questions and the business of historians is to interrogate the past. So, any sound historical inquiry will be based on formulating questions to initiate the research process. To simply ask 'what happened?' is not enough. Reconstructing the past requires an understanding of 'why' and 'how' and 'what was the result?' as well. This is referred to as cause and effect.

All historians rely on sources, which are the basic tools of research. These may include a range of **primary** and **secondary sources**, both archaeological and written. A good researcher must use their **historiographical** skills especially, testing all sources for their trustworthiness and making judgements about their value. (See Chapter 1 Investigation of Sites and Sources) Today we tend to rely heavily on the internet as a source of information on almost any topic. Like any other source, it too must be subject to the same rigorous scrutiny.

Once the research has been completed the answers to the questions are used to construct a **thesis** which is a **synthesis** of argument and source analysis in which different **perspectives** may be presented. The thesis will depend on the nature of the questions asked, the range of sources consulted and the interpretation of the researcher. The final product of all historical investigation will be presented in a logically structured oral, written or digital format. **Ethical scholarship** requires acknowledgement of all sources of information using an appropriate referencing system. You must also avoid **plagiarism** by presenting your findings in your own words without using 'cutting' and 'pasting' techniques.

The historical investigation in the NSW Ancient History Syllabus

If you are studying Stage 6 Ancient History in New South Wales you are required to complete a historical investigation to give you the opportunity to develop investigative, research and presentation skills relevant to historical inquiry. You will undertake individual or group research, and both your topic and choice of presentation style will draw on your own interests.

Planning and conducting historical investigations using historical concepts

To be successful, your historical investigation needs careful planning. If you follow the established procedures used by historical researchers you will find that conducting your historical investigation will run smoothly. The first step is to choose your topic. Source 2 lists topics suggested in the syllabus.

Possible historical investigations include:

- aspects of an ancient society as revealed through sources
- the causes and impacts of an historical event
- the significance of an historical development
- tracing the development of an aspect of the ancient past over time through a thematic approach
- the analysis of an historical debate
- the contribution of an historical site to our understanding of the past
- constructions of the ancient past
- an interpretation or representation of an individual, group or event.

'Ancient History Stage 6 Syllabus', *NSW Syllabus for the Australian Curriculum*, p. 55

Remember that your investigation must not overlap with or duplicate significantly any topic that you will attempt in the Year 12 Ancient History or History Extension courses.

These suggestions can seem a little daunting on first reading. What do they mean? The table in Source 3 offers possible approaches to some of them.

SOURCE 3 Some suggested approaches to the syllabus topics

TOPIC	POSSIBLE APPROACHES
Aspects of an ancient society as revealed through sources	Through sources, we know certain aspects about most ancient societies; for example: • religion • the social structure • the political structure • power and authority • the economy – industries, occupations • everyday life – housing, leisure activities, food and dining, clothing, health. Research some of these aspects and the sources that reveal them.
Causes and impacts of a historical event	Think of some ancient historical events, but avoid the really big ones, such as the Persian Wars, because they are too comprehensive for the size of your investigation. Choose something more manageable, for example the first recorded strike in history (Egypt, 1128 BC).
Tracing the development of an aspect of the ancient past over time through a thematic approach	For this topic you could consider an aspect such as writing. You could look at writing in two or three cultures, for example Sumerian **cuneiform**, Egyptian hieroglyphics and Minoan Crete **Linear A**.
Analysis of a historical debate	There are many debated aspects of ancient history. For example: 'How powerful was Nefertiti in Akhenaten's reign?' or 'What was the nature and purpose of Persepolis?' Identify the **stakeholders** in the debate and account for their positions.
The contribution of a historical site to our understanding of the past	Use the online UNESCO World Heritage List to help you choose an ancient site.
An interpretation or representation of an individual, group or event	Use the internet to identify individuals, groups or events that you could investigate. Try using search terms such as 'ancient people you should know' or 'major events in ancient history'. Once you have chosen your topic, you can research how your chosen topic has been interpreted or represented.

ethical scholarship
conducting research and exchanging ideas in an honest way, particularly by acknowledging sources

plagiarism
taking someone else's work or ideas and passing them off as your own (e.g. not acknowledging your sources); it is cheating

cuneiform
a system of wedge-shaped writing on clay tablets first developed by the ancient cultures of Mesopotamia and Persia

Linear A
the main script used by the Minoans

stakeholder
someone who has a particular interest in an issue, project or organisation

Formulating a good historical research question

Once you have chosen a topic area that you wish to investigate, your next step is to formulate a research question that will guide your investigation. Developing a good research question is a vital step of any research project. You should avoid questions that require you to only describe or narrate. Instead, your research or focus question should involve higher-order thinking. That means you should formulate your questions so that you will have to:

- *analyse* – analyse, explain, compare, select, infer
- *evaluate* – assess, decide, rank, grade, test, measure, recommend, convince, select, judge, explain, discriminate, support, conclude, compare, summarise
- *synthesise* – combine, integrate, modify, rearrange, substitute, plan, create, design, invent, what if?, compose, formulate, prepare, generalise, rewrite.

A sample historical investigation

At this stage it is helpful to work with an example. Let us assume that the topic you are interested in is 'an interpretation or representation of an individual, group or event'. You could formulate the following focus question: 'In what ways has Alexander the Great been interpreted over time?' Some starters for your focus question are suggested in Source 4.
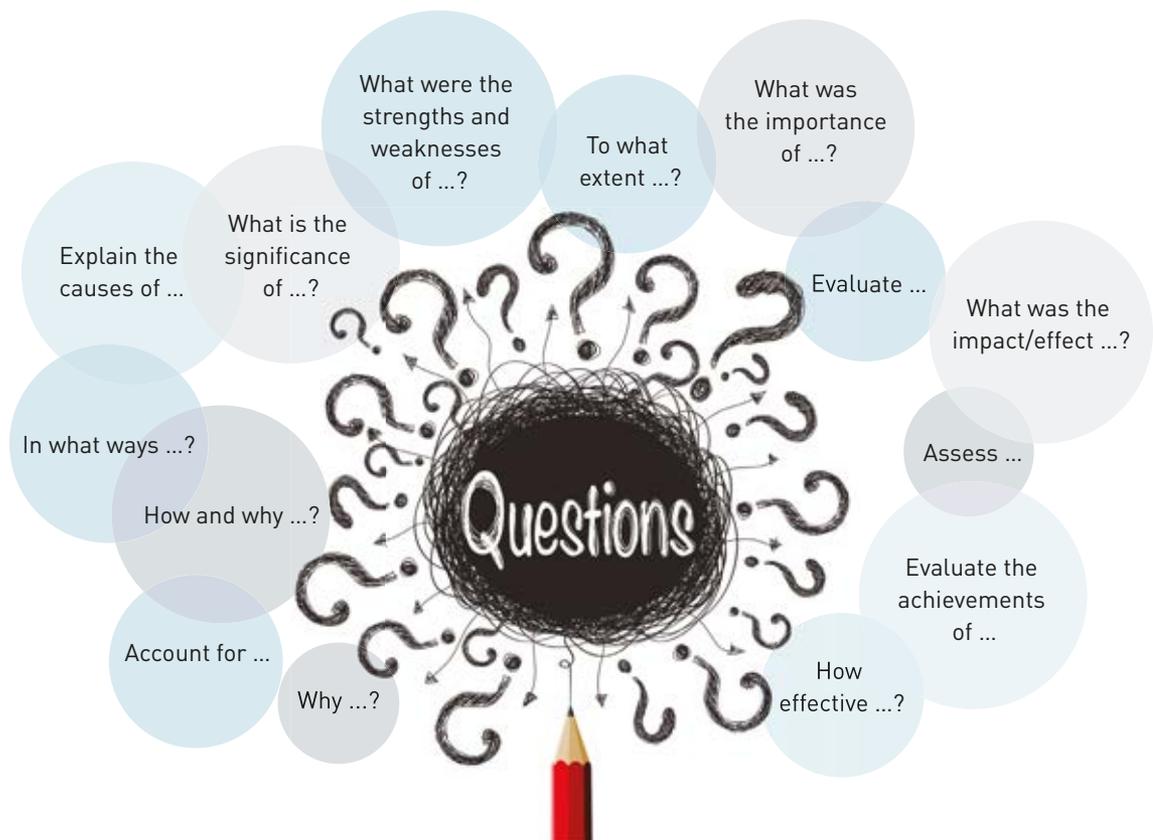
SOURCE 4 Focus question starters

Notice that the first part of this question requires assessment, a higher-order skill. To answer it effectively you need to investigate both ancient and modern interpretations of Alexander the Great. Such a question is very challenging because you would have to look at the authors of the interpretations and consider reasons for their interpretations. You would also have the opportunity to synthesise the information you discover and evaluate it, rather than simply describe and narrate.

Developing your topic

Having formulated your focus question, the next stage is to develop your topic. To do this, you identify the main concepts or keywords in your question. Reading widely about your topic can help you here as it provides a historical context. If your topic area is from the syllabus, as in our example, this is a good place to start your reading. You might need to read quite widely to get an understanding of what your topic entails, so use the library and the internet. Once you feel you know what your topic is about, create a mind map of the keywords.

These keywords and concepts form the basis of your research. You could make a list of the things you need to research in order of importance and make a preliminary schedule for completing the task. Source 5 gives some of the keywords and concepts involved in researching Alexander the Great.

SOURCE 5 Mind map of keywords and concepts

Developing supporting questions

Your list of things to find out will enable you to formulate the supporting questions, which will help to guide your research. Some supporting questions for our sample investigation of Alexander the Great could be:

- Who was Alexander the Great and what was his family background?
- What do Alexander's military campaigns reveal of his generalship?
- How have Alexander's relationships with Macedonians, Greeks and non-Greeks been interpreted?
- How has Alexander the Great been presented in ancient and modern sources?
- What problems of evidence are involved?

Answers to these questions are necessary to enable an in-depth response to the focus question.

Selecting and organising information

Selecting the information that you will use in your investigation is an important process. You should always think critically, evaluating what you discover for its relevance and **usefulness** to the topic you are investigating. The questions in Source 6 will help you to do this.

SOURCE 6 Questions to ask when selecting information

Usefulness	Is the information relevant to my topic? Will I be able to use this information? Will it help me to answer a question or solve a problem?
Possible uses	Does it lead to more information about the topic? Does it provide background information? Is it useful for detail?
Specific uses	Will the information form part of the central argument? Can it be used to support the central argument? Can it be used as a good example? Does the information help to make sense of conflicting information?
Currency	Is the information up to date? If out of date, is it still useful?
Reliability	Does the information come from a reputable, unbiased source? If it is biased, is it still useful?

How to organise information

The next step is to consider organisation. You have already done considerable reading to help you to formulate and research your focus question and supporting questions. Before you do any more, you need to decide on a system for recording and organising what you have read. As a responsible researcher, you must be able to acknowledge the sources from which you have gathered information. The best way to do this is to collect the bibliographical information as you read the sources: author's name, title, publisher, place and date of publication, and page numbers for quotations. If you leave this task until you have finished your research, you might no longer be able to access the sources you need or you could forget important sources you have used. This will make it impossible to construct an accurate bibliography.

You will also need a system for taking notes. Handwritten or word-processed notes are better than just highlighting relevant information in photocopies because they help you to understand the information and to put it in your own words. In this way you can avoid plagiarism. You only need to make exact copies of statements that might be suitable for use as quotations. Your notes can be on a card system that you organise according to your supporting questions, or you could use a note-taking template like the one suggested in Source 7. You can also use mind maps to help you make sense of the information that you are locating and to identify lines of thought. Handwritten notes of all kinds, for example sticky notes, can be kept in a research journal, along with your thoughts about your progress in the task and the direction your research is taking.

SOURCE 7 A note-taking template like this one will enable you to record the bibliographical details of your sources and encourage you to make notes in your own words to help you avoid plagiarism.

NOTE-TAKING TEMPLATE	
SOURCE DETAILS (author's name, title, publisher, place and date of publication, and page numbers)	
FOCUS QUESTION	
SUMMARY OF SOURCE	CONNECTIONS TO THE FOCUS QUESTION • What key points are related to my focus question? • What is my **opinion** about the ideas in the source?
THESIS OF THE SOURCE	• How does it relate to my focus question?
KEY POINTS OF THE SOURCE	• How do the main points relate to my focus question? (mind map or table)
EVALUATION (What questions does the source raise? How useful is it in developing my own thesis? How can I use it?)	

opinion
a person's belief, judgement or way of thinking about something that is not necessarily substantiated by facts

Using the internet

You can also use the internet for your research and note-taking, and there are apps available to help you. Some of these are summarised in Source 9. You can try them for yourselves and see which ones best fit your needs.

SOURCE 8
There are many apps available to help you to organise your research material using the internet.

SOURCE 9 A selection of useful apps

NAME OF TOOL	WHAT IT DOES	DEVICE
Note-taking software, for example: • Evernote • Microsoft OneNote • Inkflow • PaperPort Notes	 • Captures notes, images, links and web pages in a free-form database. • Gathers notes (handwritten or typed), drawings, screen clippings and audio commentaries. Notes can be shared with other users. • Takes notes with finger or stylus; drags ideas around to rearrange and order. • Makes typed or freehand notes, annotated notes, search and bookmarking tools.	 • Mac, PC, Windows Mobile, iPhone, Android, iOS, Windows Phone • Microsoft Office and Windows 10, app for Windows, OS X, Windows RT, Windows Phone, iOS and Android • iPad, iPod Touch, iPhone • iPad, PC
Mind-mapping software, for example: • MindManager • Popplet • MindMeister	 • Allows you to enter ideas, save and follow bookmarks, annotate ideas, make flow charts • Creates mind maps, brainstorms ideas • Allows collaborative mind mapping and cloud storage	 • Microsoft Windows, Mac OS X, Android, iOS • iPad, iPhone • iPhone, iPad, Android
Delicious	Stores, tags, searches for and shares bookmarks	https://del.icio.us
Bibliography makers, for example: • Cite This For Me • BibMe • Citelighter	 • Creates reference list automatically • Automatic bibliography maker • Stores, organises and shares research	 • http://www.citethisforme.com • http://www.bibme.org • http://www.citelighter.com

7.4 Locating the information

The reading you have done so far has enabled you to get the big picture and to formulate your research or focus question. Now you need to do some research that is related specifically to your focus question and supporting questions. Many sources you need can be found in your school library and also in local, state or nearby university libraries. The reference sections contain different types of dictionaries, encyclopaedias and thesauruses, which can provide information to help you identify more keywords.

Encyclopaedias

reliability
the accuracy of a source judged on its context, purpose, origin and intended audience

Encyclopaedias can be very useful sources for locating information on a research topic and are a good place to start your research. You will be familiar with *World Book* and *Encyclopaedia Britannica*, which cover a wide range of knowledge and are valuable for gathering background information on your topic. You will also find more keywords that you can add to your mind map for further research. As you use the encyclopaedia, remember to look at the reference lists at the ends of articles. These can provide more useful resources for you to find.

There are also online encyclopaedias such as Credo Reference, Encyclopedia.com and Encyclopaedia Britannica, which is also available as an app. You may also be familiar with Wikipedia. This is not considered a credible source because it can be edited by anyone at any time. However, it is a broad source of information that is a good starting point for your research. As with all sources, you need to make sure that you check this information for **reliability**.

Other resources

The traditional sources of information, of course, are books. When you locate them, remember to use the table of contents, glossary and index to locate specific information related to your keywords and concepts. You need to be aware of different spellings of your keywords. Articles in magazines and journals can also be useful. You will often come across references to these in the bibliographies of books you read. If your library does not have a resource you want in its collection, the librarian might be able to organise an interlibrary loan for you.

SOURCE 10 Libraries, such as the State Library of NSW in Sydney, hold many resources to assist in the historical investigation research process.

REFERENCE BOOK CHECKLIST

Dust jacket

- What information does it give about the author? Is the author an expert on the subject?
- Are there any reviews of the book?
- Is there an indication of the intended audience – adults, children, academics, students?

Title and subtitle

- Do these reflect the information you are looking for? Be alert for misleading titles.

Contents

- Does the book contain the information you need?

Preface

- Is there any indication that the book has material useful for your topic?

Authority

- Does the writer have authority in the subject?

Index

- Look for the keywords of your topic. Follow up any cross-references.

Date of the book

- Is the information up to date? Is the information still valid for your topic?
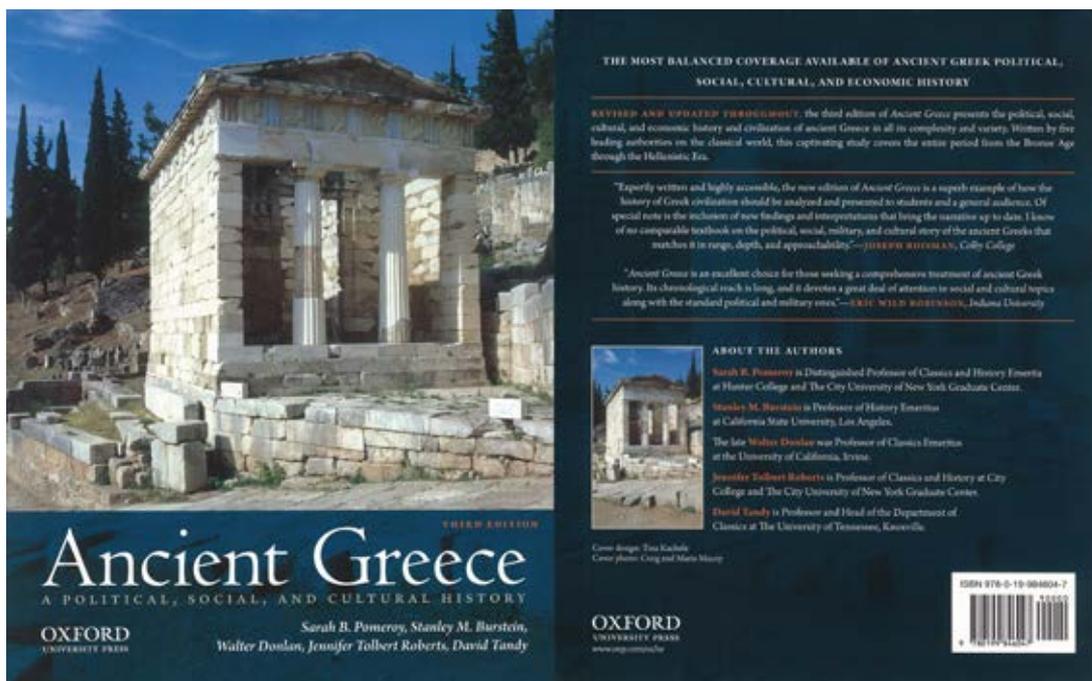
SOURCE 12 Looking carefully at the dust jacket of a book can provide useful information.

Researching on the internet

You will notice that this chapter talks about using traditional print resources first. This is to discourage you from going straight to the internet to research your topic. While valuable, the internet is an overwhelmingly vast source of information and a search can bring up hundreds of thousands of results – most of them are irrelevant and not all are credible.

You will be familiar with conducting an online search using keywords and a search engine, such as Google. However, you might not know how to conduct a search effectively. Start with one or two simple keywords, and then add more to refine the results. Source 13 lists some other ways of searching with Google that might be helpful in your research.

SOURCE 13 Google search tips

USE	INSTRUCTION	EXAMPLE
To get a definition of a word or a synonym	Type 'define:' before the word.	define:antiquity
To search for a quotation or an exact phrase	Place double quotation marks around the phrase.	"Zeus and Hera"
To search for something but you want to exclude a word	Insert a hyphen before the word.	-statue
To search the pages within a specific website	Type 'site:' after the keyword.	Yde girl site:britannica.com
To search for a document type (e.g. pdf, doc, ppt)	Type 'filetype:[file abbreviation]' after the keyword.	The Illiad filetype:pdf
To make sure the word you want is on the page you find	Type 'intext:' before the word.	intext:Tutankhamun
If you want information about a page	Type 'info:[site URL]'	info:oup.com.au
If you want a list of similar pages	Type 'related:[site URL]'	related:history.com
If you want to search for scholarly literature	Go to http://scholar.google.com.au/	
If you can't recall a specific term but you can remember a synonym or definition	Go to http://reversedictionary.org/	

Historians as sources

Historians engage in scholarly debate about their areas of interest. As well as publishing books and articles in specialist journals, they often have an online presence via social media. Historians maintain websites, write blogs and keep Twitter accounts. You can access this online presence to find out more information about your topic. You can even contact some relevant historians to ask for clarification about aspects of their views you are interested in.

A good example of a historian who maintains a high profile online, as well as a media presence, is the British classicist Mary Beard. As well as being Professor of Classics at the University of Cambridge, Beard is the classics editor of *The Times Literary Supplement* and writes a blog called 'A Don's Life'. She has a Twitter account where she comments on matters of public as well as historical interest. Her Twitter handle is @wmarybeard.

The information search process

Carol Kuhlthau, Professor of Library and Information Science at Rutgers University in the United States, has investigated how students react when carrying out research. She found that despite initial enthusiasm and success, they often became confused about how to continue. She observed confusion and disorientation, with students often expressing anger at the assignment and even the library staff. Some students gave up because they felt they did not have the necessary skills to go on. Professor Kuhlthau considered the beginning to be a very difficult stage of the research process.

Professor Kuhlthau developed a model that she called the 'information search process'. The model identified six stages of research: Initiation, Selection, Exploration, Formulation, Collection and Presentation. She then identified common feelings at each stage based on interviews with students carrying out research. Source 14 summarises the features of each stage.

Professor Kuhlthau's model will help you to locate the stage you are in and help you to understand what you are feeling at each stage. It can be very helpful to understand that the uncertainty and anxiety you feel is normal. These feelings can recur during the research process as you move on to a new part of your research. Once you recognise what is happening, you can see what stage you are at in the process and realise that you will gain confidence and even enjoy your research!

You can find out more by searching for 'Kuhlthau information research process' online.

Initiation
The researcher is aware of a lack of knowledge and understanding about how to carry out the task. Common feelings at this stage include uncertainty and apprehension.

Selection
At this stage the researcher identifies the general area or topic to be investigated. There is often a brief appearance of optimism and a readiness to begin.

Exploration
Often a difficult stage when a researcher feels uncertainty as they seek to extend their understanding of the topic. They might feel unable to communicate exactly the sort of information they need. This is a time to read for information, linking it to existing knowledge.

Formulation
Confidence increases as the researcher is more certain about the process and is establishing a perspective on the topic.

Collection
At this stage the researcher confidently gathers relevant information. Uncertainty has declined as the researcher's interest and involvement have increased.

Presentation
Here the researcher feels relief that the project has reached completion. The new understanding achieved enables the researcher to explain their learning to others or put it to use.

SOURCE 14 A summary of the information search process model

Identifying perspectives and interpretations

When doing your research for the historical investigation, it is important to remember that primary sources as well as secondary sources all present alternative voices, interpretations and perspectives on the past. You need to remember that written history is a dialogue between historians about what happened, and why and how it happened. As a prospective writer of history you need to follow and evaluate arguments, and draw conclusions based on the available evidence.

When assessing sources you intend to use for your investigation, ask yourself:

• What perspective does the source present?
• What evidence in the source indicates the perspective?
• Why would the writer have this perspective?
• What does it reveal of the writer's historical context?

The answers to these questions will help you to decide whether the source will help you in developing your thesis. (See 7.6 Using sources to develop a view about a historical issue.)

Evaluating sources

As you find your information, you will have to assess its quality. For example, you will find quite a difference between a children's book, such as Mary Renault's *The Nature of Alexander* published in 1975, and a scholarly text, such as Norman Cantor's *Alexander the Great: Journey to the End of the Earth* published in 2005. It is essential to evaluate any information you find for its relevance, **currency** and reliability. Source 15 suggests some questions you can use to evaluate your sources.

currency
the quality of information being up to date or current in the scholarship

Relevance
• Does it cover the main topic in sufficient detail?
• Is it at the appropriate level (i.e. not too basic or too specialised)?
• Is it about the right country and time period?
• Is it an appropriate source (e.g. is it primary or secondary)?

Currency
• Is the information up to date?
• Does it take recent scholarship into account?
• Is the scholarship on your topic rapidly changing or does the information stay valid for some time?

Note: To decide about the currency of a resource you have found, look at the publication date and the dates of the references listed in the bibliography. For a web page, check when it was last updated.

Reliability
• Who is the author?
• Are there details of the author's identity and qualifications? Are the sources of the **facts** given?
• Is it fact (indicated by objective language) or opinion (indicated by emotive language)?
• Is there any bias?
• What is the purpose? What is the perspective of the author? Who is the audience?

fact
a thing that is known or generally agreed to be true

SOURCE 15 Source evaluation questions

7.6 Using sources to develop a view about a historical issue

Having located and selected your sources, tested them for relevance, currency and reliability, you now need to use them to develop a view about the historical issue that you are investigating. This is called 'synthesising evidence'. For example, using our sample investigation topic, Alexander the Great, some research on this historical figure will reveal that two ancient sources, Arrian and Plutarch, had very high opinions of him. Others, such as Diodorus and Curtius, were very critical of him. Your job as the researcher would be to go through the events of Alexander's life as revealed in the sources. Then, by putting these together with the writers' views, come to an understanding of the varying interpretations and perhaps explain the reasons for them.

When it comes to presentation, you will have to do more than just tell a story. You will have to make a point. You will do this by developing an argument based on your own view of the person, event or aspect you are researching. This is your thesis. At the beginning of your presentation you will write or present a sentence that will be your thesis statement, which clearly states your argument about the topic. You will then develop the argument in the body of your essay or presentation, using evidence from the sources you have researched, to support it. A good thesis statement will:

- address your focus question, for example: 'In what ways has Alexander the Great been interpreted over time?'
- explain what you think is the historical significance of your topic, for example: 'Alexander the Great has been interpreted in many ways because …'
- connect your focus question to the topic you have chosen, for example: an interpretation or representation of an individual, group or event.

Presenting your findings

There are numerous ways in which you can present the findings of your historical investigation once your research is complete. You might be given the freedom to select a format of your own choice. This could be a speech, a film, a PowerPoint presentation or even a series of web pages. However, the task you are given might require you to write a more traditional essay. There are some important differences between oral, written, multimedia and digital presentations. For each of these you have to consider your audience, purpose and time constraints.

Remember that whatever format you choose for your presentation, your task is to present a thesis or argument that answers your focus question. Beware of just describing or narrating information. You should also remember to use appropriate historical concepts and terms. After doing so much work on your research and thesis development, you do not want to let yourself down by using language that is not fitting for the historical investigation you have undertaken.

Oral presentation

A good oral presentation is usually accompanied by relevant visual material. Your focus should be on engaging the audience's attention, so you might like to use presentation software such as PowerPoint, Prezi or Keynote. Remember that the main objective of your presentation is to communicate the results of your research to the audience. Source 17 provides a checklist that you might find helpful. The presentation software you choose will not do that for you if you do not have your material clear in your own head.
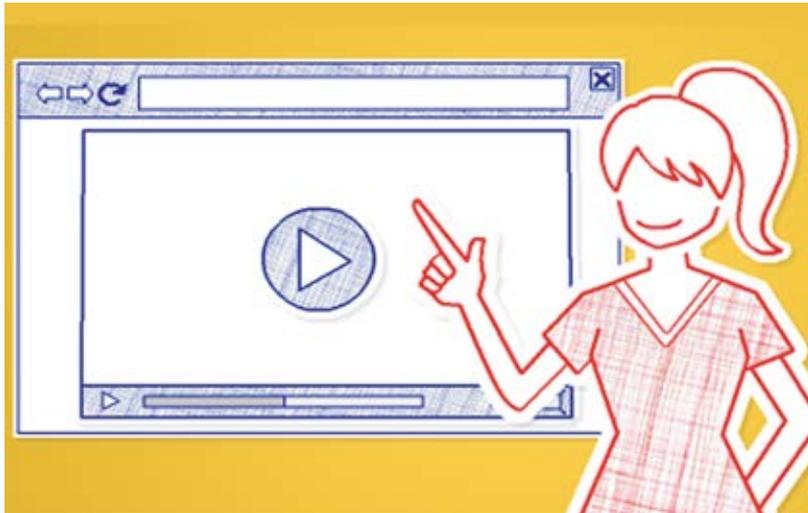
SOURCE 16
Presentation software is useful to support your oral presentation.

PREPARATION	• Does your presentation address the focus question explicitly? • Have you provided some context for your audience in the introduction? • Have you clearly previewed your argument and the aspects of your topic that you will talk about? • Have you rehearsed your presentation?
STRUCTURE	• Have you organised your aspects in a logical way? • Does each aspect of your presentation begin with a clear topic statement? • Will you provide evidence from sources to support your arguments? • Are you going to use some linking words or phrases to indicate when you are going on to a new aspect? • Will you show how these aspects contribute to your argument? • Do you have a conclusion that pulls together the main points of your argument and sums it up?
DELIVERY	• Have you prepared the timing accurately? • Will you deliver it in an appropriate style for an oral rather than a written presentation? That is, will your presentation have sustained eye contact, vocal variety (including pitch, volume and voice modulation) and appropriate pace? • Will you remember to talk to your audience? Don't read to them!

SOURCE 17 Oral presentation checklist

- -

7.6 Check your learning

Use the internet to research some of the following examples of presentation software. You might find an alternative to the more common or predictable ones.

- emaze
- GoAnimate
- SlideRocket
- SlideSnack
- SlideDog
- Google Slides

- -

Structuring and evaluating an essay

If you present your information in the form of a traditional written essay, it is essential to structure it correctly to enable you to develop a coherent thesis in response to your focus question.

Your essay should consist of three sections:

1   the introduction
2   the body
3   the conclusion.

Once you have completed your essay, you need to proofread what you have written, reference all of your sources and evaluate your work. The final step is to reflect on your work once it has been submitted.

1   The introduction

The purpose of the introduction is to provide the orientation and the context for your piece of writing. You will outline the thesis or argument you intend to develop in your essay and preview the aspects of your argument in the order in which they will appear in the rest of the essay. An introduction to an essay on Alexander the Great might read as follows:

> Alexander the Great has been interpreted in many ways over time. Some ancient sources, such as Arrian and Plutarch, thought very highly of him. Other ancient writers, such as Curtius and Diodorus, while expressing negative opinions of his **tyranny** and drunkenness, still managed to give much praise to his amazing deeds and greatness. Explanations for these varying interpretations can be found in the contexts of these writers as well as in the sources that they relied on. Secondary sources of the late 20th and early 21st centuries give interpretations that range from the 'glorious Alexander' of film and text to the negative interpretations of the 1970s historians who brought psychological motives into play, and the later **revisionists** who considered his achievements as more due to luck than skill. Like their ancient colleagues, the views of modern historians are also largely dependent on context and the available sources.

tyranny
an absolute form of rule in which one individual exercises power without any legal restraint

revisionists
those who reinterpret the past and challenge the traditional interpretation

topic sentence
the first sentence of a paragraph that identifies its main idea

2   The body

The body of your essay will consist of a series of paragraphs that will contain your developing argument. Follow the plan that you previewed in your introduction. Each paragraph should begin with a **topic sentence** that introduces an aspect and links it to the question. The link is essential because this is how you will develop your argument. The remainder of each paragraph explains the relevant details of this part of your argument and supports it with the evidence you collected during your research.

Evidence shows your audience that your arguments do not just rely on personal opinion, that you have read a variety of sources, evaluated the ideas and information, and developed a critical view and conclusion as a result.

Make sure that you explain any historical issues that arise from the sources. For example, as indicated in the sample introduction, Curtius and Diodorus used sources that might have given negative views of Alexander. When using these sources you would quote from the accounts and show where and how they were using these sources.

3   The conclusion

The conclusion is a brief summary of the main points of your argument. Do not introduce any new material here. Make sure that you pull together the main threads of your argument and end on a strong note.

7.7a Check your learning

Read the sample Alexander the Great introduction again carefully. Identify where it:

- provides the orientation and the context
- outlines the thesis or argument of the essay
- previews the aspects of the argument.

Proofreading

Once you have finished writing your essay, you will have your first draft. It is likely to include faults such as structural errors, long-winded sentences or missing topic sentences. Furthermore, spelling and grammatical errors will detract from the quality of your final product. Make sure that you give yourself time to read over your first draft and make changes where you see they are needed. A good idea is to ask someone to give feedback as an **objective** audience. Ask them to read through your essay and comment on what they think it is about, what they learnt from it, and what they did not understand or what could be clearer.

Using this constructive feedback, edit your draft and rewrite it, ensuring that your arguments are clear and your writing is concise and cohesive. If you do not have anyone to provide feedback, a good alternative is to at least read your essay out aloud. Pay attention to areas that cause you to stumble as it may indicate a poorly worded sentence. You might need to repeat these processes more than once before your essay is ready for submission.

Referencing

The NSW Education Standards Authority has a program called HSC: All My Own Work, which is designed to enable students 'to follow the principles and practices of good scholarship'. It consists of five modules:

- Scholarship principles and practices
- Acknowledging sources
- Plagiarism
- **Copyright**
- Working with others

Completion of these modules is an excellent way to teach yourself how to **reference** sources in your essay. HSC: All My Own Work also defines and explains plagiarism and gives valuable advice on how you can avoid it in your work. To find this program, search online for 'HSC: All My Own Work'.

objective
an impartial view that is not influenced by personal feelings or opinions when considering facts

copyright
an exclusive legal right that the creator of a work has for its use and distribution

referencing
acknowledging the sources of information used to research assignments

Bibliography

A bibliography is a consistently formatted alphabetical list of all resources used to complete an investigation. As mentioned before, it is useful to keep a progressive bibliography by recording the details of the resources you use as your research proceeds. By doing this you can save yourself the unnecessary stress of re-locating resources at a later stage. You can do this in your research journal or by using an app (see Source 9). This draft bibliography should contain a list of each resource you use, recording:

- the author's surname and initial
- the year of the edition you are using, which can be found at the front of most books. If several dates are given choose the copyright date, which is shown by the sign ©
- the title
- the publisher
- the place of publication
- the page number you have been working from.

When your project is complete, you should compile your final bibliography. There are two main referencing systems: **Harvard** and **APA** (American Psychological Association). The Harvard system is an author–date **citation** system. The system is the editorial style used by many of the social and behavioural sciences. The differences between the two systems are minimal. Your school may require you to use one or other of these two styles. Check with your teacher.

An annotated bibliography

Your teacher might require you to submit an **annotated bibliography**. For each source used, or for some of them, you could be asked to explain the strengths and weaknesses, and their usefulness and reliability. You could also be asked how you used the sources and how they helped you to understand the topic. This will be easy to do if you have kept records of all the sources you have used, as suggested in the note-taking template in Source 7.

Evaluation

Before submitting your written project it is valuable to assess your final product. Here are some questions you can ask:

- Are all parts of the task completed?
- Has the argument or key idea presented in your introduction been consistently addressed and developed throughout the task?
- Did you revisit your introduction to ensure that your conclusion reflects the argument or key idea raised there?
- Does the final product meet all the criteria stated in the assessment task?

It is useful to re-read your assessment task carefully, a few days after completing it if possible, and make sure that you have satisfactorily completed everything you are required to do.

Harvard system
an author–date citation system of referencing similar to APA but with minor differences in formatting the reference list

APA system
an author–date referencing system using in-text citation of sources (not footnotes)

citation
a reference or quotation from a historical source

annotated bibliography
a list of references containing brief descriptions and evaluations of their contents

Reflection

Now that you have finished your historical investigation and presented the product of your research, the final step is to reflect on the process.

- What have you learnt?
- What specific skills have you developed?
- Have you fulfilled your purpose?
- How would you do it differently next time to improve the process and the final product?

Even though the focus of this chapter has been your historical investigation, remember that the skills you have learnt can be applied to all the subjects you study that have a research component. Enjoy your researching!

7.7b Check your learning

1 Look up more information on both the Harvard and APA referencing systems.
- **a** Search online for 'Harvard reference guide' to access some of the online guides published by Australian universities that use the Harvard system.
- **b** Search online for 'APA reference guide' to access the online guides published by universities that prefer the APA system.

  Note that some universities will give you both systems.

2 Check how to reference the following examples in both systems:
- books (print and online)
- journal and newspaper articles
- web documents and sites
- other electronic media
- audiovisual and other media
- legislation and legal authorities
- unpublished works
- proceedings and technical reports.

3 Find out how to reference the following: Twitter, Facebook, YouTube, LinkedIn, Wordpress, Instagram, Pinterest, Google Plus.

SOURCE 18 Always review your historical investigation before submission.

In this chapter you have had an opportunity to learn about the process involved in conducting an effective historical investigation from first idea to final product. You can now apply this knowledge and the associated historiographical skills to a real historical investigation. The skills you have learnt will not only see you through the HSC, but will also equip you for a range of research tasks you may undertake in your post-school life.
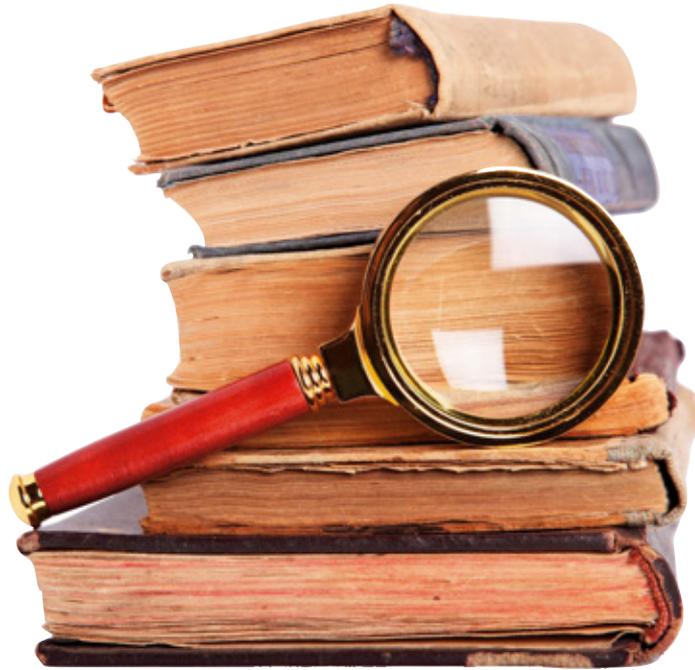
FOR THE TEACHER
Check your obook assess for the following additional resources for this chapter:

Answers	**Teacher notes**	**Class test**	**assess quiz**
Answers to each *Check your learning*, *Understanding and using the sources* and *Profile task* in this chapter	Useful notes and advice for teaching this chapter, including syllabus connections and relevant weblinks	Comprehensive test to review students' skills and knowledge	Interactive auto-correcting multiple-choice quiz to test student comprehension

Statue of Athena in the city of Athens. Daughter of
Zeus, Athena is the goddess of wisdom, craft and war.

PART

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B

Investigating ancient history – case studies

8

Tutankhamun's tomb

FOCUS QUESTIONS

1   Who was Tutankhamun and what was his place in New Kingdom Egyptian history?

2   How was Tutankhamun's tomb discovered and what contribution did its excavation make to early archaeology?

3   What does the tomb reveal about burial customs and life in New Kingdom Egypt?

4   What does modern scientific examination of Tutankhamun's remains reveal and what ethical issues are involved?

5   What is the significance of Tutankhamun's tomb in its own time and in the present?

FOCUS CONCEPTS & SKILLS

Significance

Whether something or someone is significant depends on the perspective and purpose of the observer. A historical figure such as Tutankhamun can acquire significance if he can be linked to larger narratives that have meaning for us today. In studying Tutankhamun's tomb, you will need to draw some conclusions about its importance in revealing the culture and society of New Kingdom Egypt. You will also have to consider its role in the 21st century. Why do Tutankhamun and his tomb continue to excite the imaginations of people all around the world?

LEARNING OUTCOMES

1   Describe Tutankhamun's family and dynastic background.

2   Explain how Tutankhamun's tomb was discovered and the contribution its excavation made to early archaeology.

3   Explain what the tomb reveals about Egyptian life and death at the time of Tutankhamun.

4   Analyse the modern scientific examination of Tutankhamun's remains and the ethical issues involved.

5   Evaluate the significance of Tutankhamun's tomb in its own time and in the present.

SOURCE 1 The famous solid gold funerary mask of Tutankhamun. It was found in the burial chamber, where it had been placed over the head and shoulders of the young king's mummy.

Who was Tutankhamun?

New Kingdom
a period of Egyptian history extending from the 16th century BC to the 11th century BC, covering the 18th, 19th and 20th dynasties

KV62
Kings Valley 62, the tomb of Tutankhamun

rite
a traditional or religious ceremony

18th Dynasty
the first dynasty of the New Kingdom in Egypt

Hyksos
the foreigners who ruled Egypt in the last years of the Second Intermediate Period before being expelled by the kings of the 18th Dynasty

state religion
the principal religion of a people or nation

orthodox
of the traditional type

DNA (deoxyribonucleic acid)
a self-replicating genetic or hereditary material present in nearly all living organisms

KV35
Kings Valley 35, the tomb of Amenhotep II

Tutankhamun is undoubtedly the world's best-known Egyptian pharaoh. He is the only one to have been given a nickname: 'King Tut'. His image is immediately recognisable to people all over the world. Yet many of those who can identify his face and call him by his nickname know very little about who he was, other than a young pharaoh of Egypt.

Tutankhamun was born in ancient Egypt in approximately 1341 BC in a period we call the **New Kingdom** (see Source 2). About 1333 BC, Tutankhamun came to the throne. Although these times were significant for Egypt, the pharaoh was only a 9-year-old boy, so undoubtedly other hands shaped government policy.

When Tutankhamun died suddenly at about 18 years of age, he was buried with all the pomp and ceremony befitting a pharaoh – except that the tomb in which he was laid to rest, **KV62**, was one borrowed from someone else, his own being far from ready. Who would have expected him to die so soon? When all the **rites** were completed and the tomb sealed, its location and all knowledge of the pharaoh himself disappeared. Tutankhamun most likely would have remained a little-known pharaoh of the **18th Dynasty** if it were not for the discovery of his almost untouched tomb in 1922.

OLD KINGDOM
2700–2200 BC
Time of the pyramids

FIRST INTERMEDIATE PERIOD

MIDDLE KINGDOM
2050–1750 BC

SECOND INTERMEDIATE PERIOD

NEW KINGDOM
1550–1050 BC
Time of Tutankhamun

- The pharaohs of the emerging New Kingdom expelled the foreign **Hyksos** kings and began a program of military expansion and domestic consolidation of power.
- Thutmose I, Thutmose III and Amenhotep II established Egyptian military power north of the Euphrates river and south into Nubia.
- Amenhotep III's building program provided Egypt with many beautiful palaces and temples.
- Amenhotep IV changed the **state religion** from worship of the god Amun 'the hidden one' to worship of the Aten, the disc of the Sun. He changed his name to Akhenaten.
- Tutankhamun's reign saw a return to the **orthodox** worship of Amun, after the death of Akhenaten.

SOURCE 2 A chronology of the periods of Egyptian history and brief overview of the New Kingdom

Tutankhamun's parentage contested

Despite much scientific investigation and debate among scholars, Tutankhamun's parentage remains a contested issue. In 2009, much-anticipated **DNA** testing was carried out on his remains and also on the remains of 11 other royal mummies. The results confirmed that Tutankhamun's father was Akhenaten. The tests further revealed that Tutankhamun's mother was a previously unidentified mummy, the so-called 'Younger Lady' from **KV35**. Her DNA indicated that she was the daughter of the pharaoh Amenhotep III and his wife Tiye, who were also Akhenaten's parents. This meant that Tutankhamun's parents were full brother and sister. Tutankhamun then, was the child of a brother–sister relationship, a situation that was not uncommon in the Egyptian royal family of the New Kingdom period.

In 2013, French Egyptologist Marc Gabolde claimed that the DNA results of the 2009 tests had been misinterpreted. He argued that Tutankhamun was actually the son of Akhenaten and his Great Royal Wife, Nefertiti. In his **opinion**, the DNA results do not necessarily indicate a brother–sister relationship for Tutankhamun's parents. He considers that a relationship between first cousins, in a family in which first cousins had been intermarrying for more than three generations would better explain the DNA findings. According to Gabolde, Nefertiti and Akhenaten were first cousins. If this is indeed the case, the 'Younger Lady' mummy in KV35 would be Nefertiti herself. Needless to say, this is another area of much dispute because Nefertiti's mummy has never before been absolutely identified.

opinion
a person's belief, judgement or way of thinking about something that is not necessarily substantiated by facts

8.1 Check your learning

1 Research the family members identified in Source 3. Find out what you can about the evidence scholars use to support the claims about Tutankhamun's parents outlined earlier. Be warned that we do not have all the evidence we would like to have about the period of time in which Tutankhamun lived and as a result there is much debate. Scholarly opinions also change over time, so recently published works are more likely to give you up-to-date opinions based on more recent evidence. Resources you can use include:

  • *Amarna Sunset: Nefertiti, Tutankhamun, Ay, Horemheb and the Egyptian Counter-Reformation*, by Aidan Dodson
  • *Tutankhamun and the Golden Age of the Pharaohs*, by Zahi Hawass
  • 'Ancestry and Pathology in King Tutankhamun's Family', *Journal of the American Medical Association*, by Zahi Hawass et al
  • *The Complete Tutankhamun,* by Nicholas Reeves
  • 'Tut's family tree' on the *National Geographic* website
  • For Marc Gabolde's view, search online for 'King Tut's parents were cousins, not siblings: researcher'.

2 Use a table to record what you discover of the theories held about Tutankhamun's parents. You might include the scholars listed above and any others you find during your research.

WHOSE THEORY	FEATURES OF THE THEORY	EVIDENCE

3 Consider the problems of evidence you have discovered in your research, the things you would like to know that are still uncertain, and whose theory about Tutankhamun's parents you think is the strongest, and why.

Discovery and excavation of the tomb

The discovery in 1922 of Tutankhamun's tomb by Howard Carter and his sponsor, Lord Carnarvon, is a well-known story. This significant archaeological discovery came after two decades of what was initially a random, then more systematic, investigation and clearing of the tombs of the pharaohs in the Valley of the Kings. This valley is the royal cemetery on the west bank of the Nile at Thebes in southern Egypt. Tutankhamun's tomb was the first intact royal tomb to be discovered there.

Lord Carnarvon, an amateur archaeologist, had the **concession** to dig in the Valley of the Kings and employed Carter to supervise the excavations. From 1917 to 1921, the two worked in the eastern valley with little success. Lord Carnarvon was so disappointed that he threatened to withdraw his sponsorship. However, Carter managed to persuade him to continue for one more season, apparently even offering to pay for the last attempt himself. One triangle of unexplored ground remained in the Valley of the Kings, and Carter was determined to find Tutankhamun's tomb. Carter's optimism was rewarded when the top of a staircase was uncovered on 4 November 1922. Following the clearing of 12 steps and the discovery of a blocking wall plastered and stamped with **necropolis seals**, Carter refilled the whole area and summoned Lord Carnarvon.

concession
permission granted to archaeologists to dig at a specific location in Egypt

necropolis seal
seal used by cemetery officials in ancient Egypt

VALLEY OF THE KINGS, SOUTHERN EGYPT
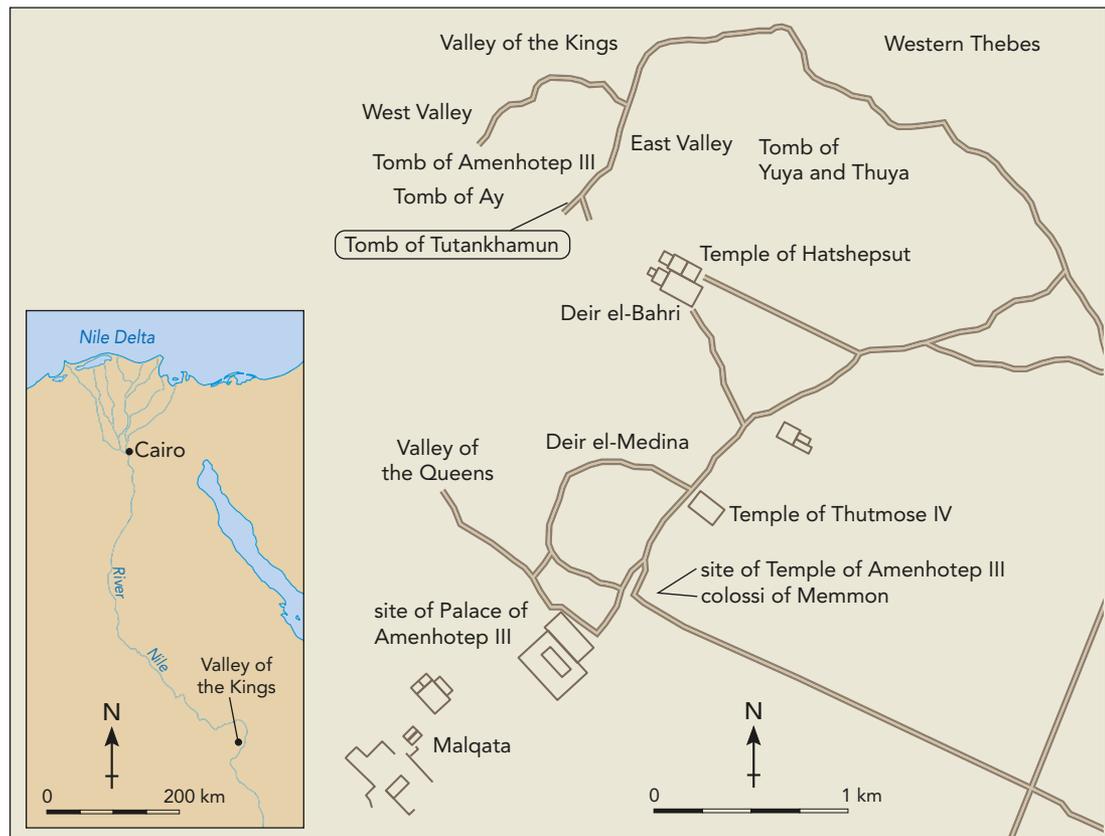
Source: Oxford University Press

SOURCE 4 The location of Tutankhamun's tomb in the Valley of the Kings

Howard Carter

Howard Carter developed a fascination with Egypt at an early age. In his teens, he started work in Egypt as a **tracer** for the Egypt Exploration Fund, copying drawings and inscriptions on paper for later study. At this time, he received valuable training in excavation techniques from the British archaeologist William Flinders Petrie. He worked with Petrie at el-Amarna, ancient Akhetaten (the capital city built by Akhenaten) where he made some significant finds.

From 1894 to 1899, Carter worked as the main artist for the Egyptian Exploration Fund's excavations at the temple of Hatshepsut at Deir el-Bahri, where he recorded the extensive wall **reliefs**. He made such an impression that he was appointed the first Inspector of Antiquities in 1899 at the age of 25. This position gave him responsibility for supervising and controlling all excavations within the Upper Nile Valley. On his transfer to the Inspectorate of **Lower Egypt** in 1904, Carter initiated improvements to the existing excavation sites. He was keen to enhance access to these sites as well as the means of protecting them. Carter received funding for his own excavations at this time, and he discovered the tombs of 18th-Dynasty pharaohs Thutmose I and Thutmose II.

Carter's famous association with Lord Carnarvon began in 1909, after his resignation as Inspector. During this partnership, he discovered six tombs in the Valley of the Kings on the West Bank at Luxor. However, it was the eventual discovery of the tomb of Tutankhamun that would make him a world-famous figure.

In the years following the excavation of the tomb, which lasted until 1932, Carter spent some time as a part-time agent for collectors and museums, as well as lecturing in the United States. He eventually retired and went into the antiquities business in Egypt. He returned to England where he died in 1939 at the age of 64.

■ **tracer**
a person who traces the reliefs made on tomb walls

■ **reliefs**
wall sculptures, sometimes painted, where the sculpted or carved elements are left attached to a solid background, giving the impression that the relief has been raised above it

■ **Lower Egypt**
the political and geographic division of ancient Egypt in the north

SOURCE 5
Howard Carter working on Tutankhamun's coffins

8.2 Profile tasks

1   How did Howard Carter's early career prepare him for the excavation of Tutankhamun's tomb?

2   Find out more about Carter's partnership with Lord Carnarvon by conducting online research.

The opening of the tomb

Following the arrival in Luxor of Lord Carnarvon and his daughter, Lady Evelyn Herbert, the staircase of the newly discovered tomb was fully cleared, revealing a plastered door bearing **seal impressions** of Tutankhamun's names. It was apparent that the tomb had been robbed in antiquity, as there was evidence of possibly three separate entries in the corridor's fill. Carter's records reveal the excitement that must have accompanied the first view of the Antechamber on 26 November 1922.

seal impressions
the imprints of seal devices made when pressed into clay

SOURCE 6

At first I could see nothing, the hot air escaping from the chamber causing the candle to flicker, but presently, as my eyes grew accustomed to the light, details of the room within emerged slowly from the mist, strange animals, statues and gold – everywhere the glint of gold. For the moment – an eternity it must have seemed to the others standing by – I was struck dumb with amazement, and when Lord Carnarvon, unable to stand the suspense any longer, inquired anxiously, 'Can you see anything?' it was all I could do to get out the words, 'Yes, wonderful things.'

Howard Carter, *The Tomb of Tutankhamen*, London: Sphere Books Ltd, 1972, p. 35

cartouches
oval-shaped enclosures bearing the names of the pharaoh in hieroglyphs

Sometime before the formal opening the following day, Carter, Lord Carnarvon and Lady Herbert unofficially explored the entire tomb. This visit included entry to the Burial Chamber, Treasury and Annexe, as well as the Antechamber. The presence of the intact shrine in the Burial Chamber confirmed that, despite the entry by ancient tomb robbers, it was likely that Tutankhamun was still in his tomb.
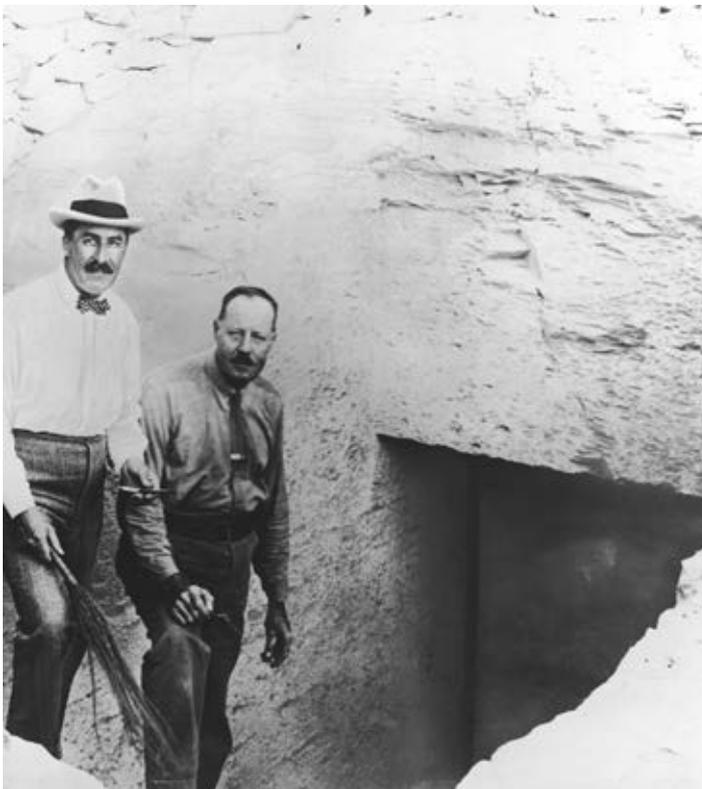
SOURCE 7 Howard Carter and Lord Carnarvon at the entrance to Tutankhamun's tomb
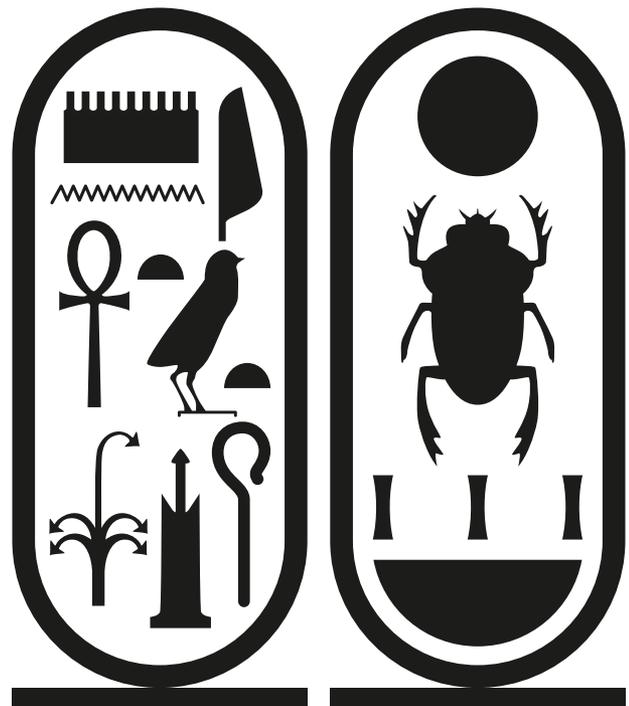
SOURCE 8 The **cartouches** of Tutankhamun

Excavating the tomb using new techniques

Howard Carter's excavation of the tomb of Tutankhamun marked a clear development in the history of archaeology. Unlike many earlier archaeologists, he was not satisfied with a rapid clearance of the tomb that would produce an array of treasures ready for immediate display in a museum. Carter saw the need for a systematic investigation of the tomb's contents. His method involved meticulous recording, preservation and conservation of all the artefacts within the tomb, from the floral wreaths that adorned the pharaoh's mummy, to the gold coffins and shrines. Due to this care for detail, it took nearly 10 years to complete the clearing and the cataloguing of the tomb. Without the conservation techniques he pioneered, only a small percentage of the tomb's artefacts would have survived.

Carter's method

Howard Carter established a new procedure for the recording of all artefacts cleared from the tomb. This consisted of the following steps:

1   Each artefact was given a reference number.
2   It was photographed *in situ*, both with and without the reference number.
3   A numbered record card was made, including a brief sketch and description of the artefact.
4   The artefact's position was recorded on a ground plan of the tomb.
5   The artefact was removed to the laboratory tomb (the tomb of Seti II was used for this purpose) where it was photographed against a neutral background and preserved and/or conserved.
6   When this process was completed, the artefacts were carefully crated and transported to Cairo.

SOURCE 9 This photograph, taken by Harry Burton, shows the Antechamber with artefacts *in situ* bearing their reference numbers.

A team of experts

Howard Carter realised that the investigation of Tutankhamun's tomb was a much bigger job than he could handle alone. He turned to his friends at the Metropolitan Museum of Art in New York for assistance and also received offers of help from British and American colleagues. Before long, an impressive team of experts, listed in Source 10, had assembled at the tomb.

SOURCE 10 The who's who of experts who worked on Tutankhamun's tomb

Arthur Mace	Assistant Curator of Egyptian Art at the Metropolitan Museum in New York and a close friend of Carter, Mace had excavated in Egypt and provided general expertise and advice.
Alfred Lucas	As a chemist, Lucas was responsible for conservation and analysis of the burial goods. He is credited with ensuring that only 0.25 per cent of the artefacts were lost.
Harry Burton	A photographer who worked for the Metropolitan Museum's Egyptian expedition, Burton took hundreds of still photographs and moving footage of the tomb and its excavation.
Arthur Callender	An architect, engineer and friend of Carter; his particular assistance was the dismantling and removal of the gilded shrines from the Burial Chamber.
Percy Newberry	Professor of Egyptology at the University of Liverpool, Newberry analysed the botanical specimens found in the tomb. His wife mended several textile artefacts.
James Henry Breasted	Founder of the Oriental Institute of the University of Chicago, Breasted was in charge of the historical work of the excavation. In particular he worked on the seal impressions found on the various door blockings within the tomb.
Walter Hauser and Lindsley Foote Hall	As trained architects and draughtsmen, they produced the scale drawings of the Antechamber.
Sir Alan Gardiner	A friend of Lord Carnarvon, Gardiner was a prominent **philologist** who worked on the many inscribed artefacts found in the tomb.

philologist
a person who studies language in historical literary texts or written records, determining their authenticity, their original form and their meaning

8.2 Check your learning

1 Prepare Howard Carter's Facebook page announcing the discovery of Tutankhamun's tomb. Remember that to 'Like' your page, friends will want to know what was discovered, who was involved, where the event took place, as well as its significance.

2 Consider the following:
   a Why is it important to give reference numbers to the artefacts from the tomb?
   b Why were artefacts photographed both with and without their reference numbers?
   c Why were artefacts photographed against a neutral background as well as *in situ*?
   d What information could be gained from an analysis of the plants and flowers found in the tomb?
   e Why would inscribed artefacts have been particularly useful?

3 Find out more about the members of the team that assisted Howard Carter in the initial clearance and conservation of Tutankhamun's tomb. See Source 10.

4 Access the Griffith Institute's 'Tutankhamun: Anatomy of an Excavation' site to research:
   a the conservation methods used by Alfred Lucas
   b Howard Carter's object cards and diaries
   c maps and plans of the tomb
   d Arthur Mace and Sir Alan Gardiner's accounts of the opening of the burial chamber
   e Harry Burton's photos.

5 Prepare a report for your class on an aspect of the excavation of Tutankhamun's tomb that interests you. This could be short and informal, or you could use a PowerPoint or Prezi presentation to illustrate your chosen aspect.

8.3 The features and contents of Tutankhamun's tomb

It was usual for a pharaoh to spend a considerable part of his reign preparing his tomb. Because Tutankhamun died at such a young age, there was no time to prepare on the lavish scale seen in other royal tombs of this period.

The size and structure of the tomb

gypsum
a soft, white mineral used to make plaster

Tutankhamun's tomb is a rock-cut tomb excavated deep into the limestone cliffs of the Valley of the Kings. Compared to the tombs of other pharaohs of the 18th Dynasty, his tomb was small and lacked some of their more elaborate features. Source 11 indicates the layout of the tomb and the dimensions of its rooms.

e Burial chamber
- 6.37 m by 4.02m
- 3.63 m high
- oriented east–west
- floor 0.94 m below Antechamber
- four niches cut into each wall
- doorway in east wall gives access to the Treasury
- the only chamber with wall paintings

d Annexe
- 4.35 m by 2.6 m
- 2.55 m high
- oriented north–south
- floor 0.9 m below that of Antechamber

c Antechamber
- 7.85 m by 3.55 m
- 2.68 m high
- oriented north–south
- doorway in west wall, closed with masonry blocking gave access to the Annexe
- partition wall at northern end made of limestone chips and plaster and doorway leading to the Burial Chamber

f Treasury
- 4.75 m by 3.8 m
- 2.33 m high

b Corridor
- 8.08 m by 1.68 m
- 2 m high
- rock-cut doorway at end
- blocking similar to entrance doorway

a Entrance
- 16 steps
- 1.68 m wide
- entrance doorway had dry limestone blocking plastered with **gypsum**

SOURCE 11 Tomb plan

Burial furniture and possessions

The dazzling array of burial goods preserved from Tutankhamun's tomb is no doubt responsible in large part for his fame. No other pharaoh has been discovered still in his tomb, surrounded by the full complement of burial furniture and possessions. Among these burial goods were the ritual artefacts designed to protect the pharaoh and ensure his safe arrival in the afterlife. But there were also the everyday items that he would need: clothing and jewels to wear, royal **regalia**, chairs to sit on, beds to sleep in, games to play, chariots and weapons to hunt with, lamps, and food to eat and drink.
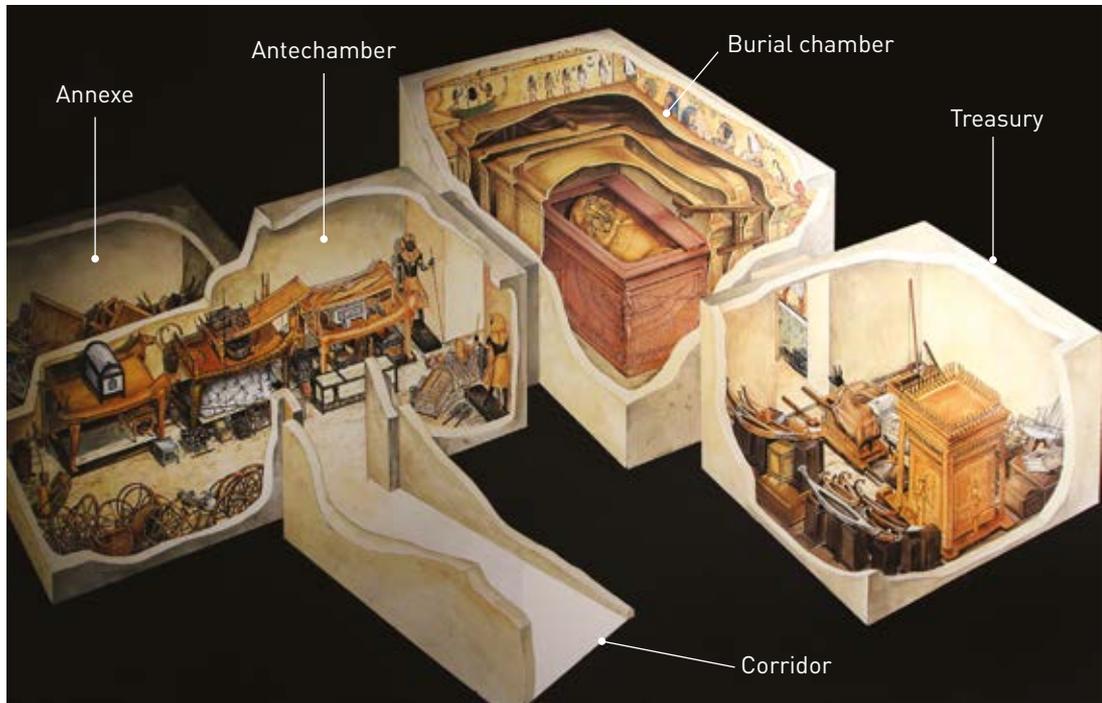
SOURCE 12 A section diagram of Tutankhamun's tomb

SOURCE 13
The Painted Wooden Chest from the Antechamber of Tutankhamun's tomb

Wall paintings and decorations

Unlike other royal tombs where painted scenes adorned all of the wall surfaces, Tutankhamun's tomb scenes were restricted to the Burial Chamber. The scenes depict the funeral procession, the **'Opening of the Mouth' ceremony**, and the pharaoh being welcomed into the afterlife by a range of deities. All of these scenes were oriented towards the west wall (see Sources 14, 15 and 21), which contained a detail from the royal funerary text called the *Amduat*, the Book of That Which Is in the Underworld.

SOURCE 14 Tutankhamun's Burial Chamber showing the west and north walls. The north wall depicts from right to left: Ay performing the 'Opening of the Mouth' on Tutankhamun's mummy, Tutankhamun being greeted by the goddess Nut, and Tutankhamun followed by his *ka* or spiritual double being received into the underworld by Osiris, king of the dead. The west wall shows an extract from the *Amduat*.

SOURCE 15 The south wall of Tutankhamun's burial chamber as shown in the replica tomb that has been built at Luxor. See Source 21 for the east wall decoration.

8.3 Check your learning

1   Work in groups to compile fact files of the burial goods found in each of the four chambers of the tomb: the Antechamber, Annexe, Burial Chamber and Treasury. Your fact file should contain information about a range of artefacts located in each chamber. Choose at least three categories from the following:

- jewellery
- clothing
- food and drink
- burial furniture
- furniture for everyday use
- statues
- toys and games
- vases and lamps
- cosmetics
- royal regalia.

For each artefact, provide a picture and a bullet-point description that includes the following information: nature of the artefact, **findspot**, purpose, materials it was made from. See Source 16 for an example.

2   Using your fact files, write an explanation of what the artefacts in your chamber reveal about Egypt in the time of Tutankhamun. You might consider categories such as role of the pharaoh, leisure, daily life, burial customs, warfare, personal relationships (e.g. with his family or with the members of his court) and afterlife beliefs.

Present your fact files in any of the following formats: illustrated catalogue; PowerPoint, Prezi or Keynote presentation; poster; loose-leaf artefact file; website.

You could use the template on the opposite page for this task.

3   Construct a mind map using the following categories: trade, pharaoh's role, daily life, burial customs, afterlife beliefs, art/craft. (You could search online for 'mind map template' to help with this activity.)

Now, organise your information under the categories listed above, remembering that some artefacts can appear in more than one category.

4   Use the mind map you have completed to plan an answer to the following question: 'Explain what the artefacts from Tutankhamun's tomb reveal about Egypt during his time.' (Explain: Make relationships clearly evident, give cause and effect, provide why and/or how.)

To help you plan your response:

- identify aspects of Egyptian life that are relevant to artefacts from the tomb
- use these aspects to structure your answer
- draw conclusions about what the artefacts reveal of Egypt at the time of Tutankhamun
- use specific evidence to support your explanation.

5   In your original groups, draw a plan of Tutankhamun's tomb outside on your school grounds using the dimensions given in Source 11. You can draw it accurately using a measure, or use a scale of one large step equals one metre. Each group can be responsible for the different chambers. Draw or place sketches of the main burial goods in their approximately correct locations. You will need a lot of chalk. You can have a lot of fun re-enacting the opening of the tomb! Don't forget to invite Year 7 students to visit the tomb of the dead boy-king.

findspot
the place where an artefact is found in a dig

Fact file: Painted Wooden Chest

Nature of the artefact: Wooden chest Number 21

Findspot: On the floor in the Antechamber near the *ka* statues (see Source 12)

Purpose: Used to store a range of children's clothing (some still present when it was discovered)

Materials it was made from: Wood covered with **gesso** and painted

Inscriptions/text:

- Tutankhamun is referred to as 'The good god, the Son of Amon, the Valiant one, without his equal, A Possessor of strength who tramples hundreds of thousands, who makes them into a pile of corpses'.
- Tutankhamun's throne name, Nebkheperure, and his personal name, Tutankhamun, accompanied by the 'good god, Son of Re', are written in front of him.

Decoration: Both sides of the chest depict battle scenes

- One side shows the pharaoh accompanied by the Egyptian army defeating a chaotic mass of Nubian soldiers.
- The other side shows the same scene except that here the defeated enemies are Syrian.

- The curved lid is divided into two sections, both of which depict Tutankhamun hunting wild animals.
- The smaller sides each depict Tutankhamun as a **sphinx** treading upon his enemies.

Explanation:

The Painted Wooden Chest reveals much about Egypt in the time of Tutankhamun. Its main contribution is to our knowledge of the role of the pharaoh. The scenes of Tutankhamun, accompanied by his neat ranks of soldiers, defeating the confused mass of Nubian and Syrian enemies reflects the pharaoh's role as upholder of *ma'at*. It is the pharaoh's duty to defeat the forces of chaos and to establish and maintain order throughout Egypt. Tutankhamun's depiction as a sphinx trampling his enemies adds to the idea of the preservation of *ma'at*, as do the scenes of the king hunting wild animals.

The main scenes give information about Egyptian chariotry and weapons, as well as revealing information about Egypt's enemies, the Nubians and Syrians. The depiction of Tutankhamun wearing the *Khepresh*, or blue war crown, driving a chariot pulled by rearing horses and shooting arrows at the enemy, clearly shows the **'warrior pharaoh' iconography** of a typical New Kingdom pharaoh.

■ *ka* **statues**
statues placed in a tomb for the *ka* (spirit) of the deceased to reside in

■ **gesso**
a combination of chalk, gypsum and a binder to form a paint mixture used to prepare surfaces like wood panels

■ **sphinx**
a mythical creature with the head of a human and the body of a lion

■ *ma'at*
the ancient Egyptian concept of truth, order, harmony and justice

■ **'warrior pharaoh' iconography**
images of a pharaoh showing him dressed as a soldier and killing enemies or driving a chariot, for example

Burial customs in the time of Tutankhamun

Sources are plentiful for information about burial customs at the time of Tutankhamun. By the time his tomb was discovered, many tombs, both royal and non-royal, had been discovered. These revealed the customs that were involved in the preparation of both body and tomb, the rituals associated with burial, and the beliefs about the deceased person's afterlife.

Preparation for the afterlife was an important focus of a pharaoh's reign. First, a pharaoh selected an appropriate site in the Valley of the Kings for his tomb. This was followed by excavation of the tomb from the limestone cliffs of the western desert by teams of workers skilled in tomb construction. Once hewn from the rock, the interior surfaces were plastered before being decorated with scenes of the king greeting the gods and making the journey to the afterlife.

Mummification

Not only Tutankhamun's mummy, but several other existing mummies from royal and non-royal burials give us a good understanding of the nature of mummification. Our main written source of information about the process of mummification comes from the account of the ancient Greek writer and traveller Herodotus, of the 5th century BC.

SOURCE 17

Mummification is a distinct profession … The most perfect process is as follows: as much as possible of the brain is extracted through the nostrils with an iron hook, and what the hook cannot reach is rinsed out with drugs; next the flank is laid open with a flint knife and the whole contents of the abdomen removed; the cavity is then thoroughly cleansed and washed out, first with palm wine and again with an infusion of pounded spices. After that it is filled with pure bruised myrrh, cassia, and every other aromatic substance with the exception of frankincense, and sewn up again, after which the body is placed in **natrum**, covered entirely over, for seventy days – never longer. When this period, which must not be exceeded, is over, the body is washed and then wrapped from head to foot in linen cut into strips and smeared on the underside with gum, which is commonly used by the Egyptians instead of glue. In this condition the body is given back to the family, who have a wooden case made, shaped like the human figure, into which it is put.

Herodotus, *The Histories*

■ **natrum (or natron)** a mixture of mineral salts used in the mummification process

The discovery of Tutankhamun's mummy still *in situ* provided an example of the mummification of a pharaoh of the 18th Dynasty. Source 18 is an account of the autopsy carried out in 1925 by Douglas E. Derry, Professor of Anatomy at the Egyptian University in Cairo, from which we can determine how closely the young pharaoh's mummification followed the method described by Herodotus.

Dr Carter suggested that the upper layers of bandages might be strengthened with melted paraffin wax in order that they might be incised and turned back with less disturbance to the original arrangement. This was done and, when the wax had set, an incision was carried down the middle line of the mummy wrappings from the lower edge of the mask to the feet. This penetrated only a few millimetres and the two flaps so produced were turned outwards … Throughout the course of this part of the work, which was necessarily slow, the increasing state of the disintegration of the wrappings was noticeable. These in many places were reduced to dust. Thus it was impossible to follow the system of bandaging …

All of the limbs were separately wrapped before being enclosed by the bandages which enveloped the body as a whole. The upper limbs were placed so that the king lay with his forearms across his body … All the fingers and toes were bandaged individually and gold sheaths were adjusted over each before the bandage covering of the whole hand or foot was applied. … The head appears to be clean-shaved and the skin of the scalp is covered by a whitish substance probably of the nature of fatty acid. Two abrasions on the skin … had probably been caused by the pressure of the **diadem** which was enclosed by the tightly wound head bandages. The plugs filling the nostrils and the material laid over the eyes were found … to consist of some woven fabric, impregnated with **resin** … some whitish spots on the skin over the upper part of the back and shoulders … proved to be composed of 'common salt with a small admixture of sodium sulphate' in all probability derived from the natron used in the embalming process … The **cartilaginous** portion of the nose had become partially flattened by the pressure of the bandages …

The skin of the face is of a greyish colour and is very cracked and brittle. On the left cheek, just in front of the lobe of the ear, is a rounded depression, the skin filling it, resembling a scab … The skull cavity was empty except for some resinous material which had been introduced through the nose in the manner employed by the embalmers of the period, after they had extracted the brain by the same route …

The cracked and brittle state of the skin of the head and face … was even more marked in the body and limbs. The abdominal wall exhibited a marked bulging on the right side. This was found to be due to the forcing of the packing material across the abdominal cavity from the left side where the embalming incision is situated. This opening, which had a ragged appearance, is roughly 86 mm in length and is placed parallel to a line drawn from the umbilicus [navel] to the **anterior superior iliac spine** … The incision is situated somewhat differently … There was no pubic hair visible, nor was it possible to say whether circumcision had been performed, but the phallus [penis] had been drawn forward, wrapped independently, and then retained in the **ithyphallic** position by the **perineal** bandages.

The skin of the legs, like that of the rest of the body, was of a greyish-white colour, very brittle and exhibiting numerous cracks.

Douglas E. Derry, 'Report upon the examination of Tutankhamen's Mummy', in Howard Carter, *The Tomb of Tutankhamen*, London: Sphere Books Ltd, 1972, pp. 224–9

■ **diadem**
a crown

■ **resin**
a sticky, organic substance exuded by trees or other plants, used as a glue in the mummification process

■ **cartilaginous**
made of cartilage, a firm, flexible connective tissue found in various parts of the body

■ **anterior superior iliac spine**
a bony projection of the uppermost and largest part of the hip bone

■ **ithyphallic**
a term used to describe an erect penis, especially in reference to a statue or image of a god

■ **perineal**
to do with the part of the body in the pelvis containing the genitalia and the rectum

8.4 Understanding and using the sources

1 Construct a sequence chart of eight frames that outlines the main steps in the mummification process as described by Herodotus in Source 17. You can find several templates for a sequence chart by searching online for 'sequence chart template'.

2 Use a table like the one below to record what Derry's account in Source 18 reveals of Tutankhamun's mummification. The first entry has been done to help you.

PROCESS	CARRIED OUT ON TUTANKHAMUN'S MUMMY YES/NO	EVIDENCE
Brain removal	Yes	• Skull empty • Small amount of resinous material present, introduced through the nose
Evisceration (i.e. removal of the lungs, liver, stomach and intestines)		
Desiccation (i.e. drying the body in natron)		
Wrapping		

topic sentences
the first sentence of a paragraph that identifies its main idea

3 How does the method used to mummify Tutankhamun compare to the process described by Herodotus? Identify any discrepancies between the two accounts. What other information would you need to explain the discrepancies?

SOURCE 19 Tutankhamun's face, as it was revealed during the 2005 investigation

8.4a Check your learning

1 Research the mummification procedure used by Egyptian embalmers in the 18th Dynasty. Search online for '18th Dynasty Egyptian mummification'. 'How the Egyptians made mummies' from NOVA Online is a good starting point.

2 Research the mummification of some of the other 18th-Dynasty royal mummies. For example, you could look for Yuya, Thuya, Amenhotep III, Hatshepsut and Thutmose I.

3 Using the information you have gathered, write a response to the following question: 'Describe the process used to mummify Tutankhamun's body.'
(Describe: Provide characteristics and features.)
   To help you plan your response:
• identify the steps apparent in the mummification of Tutankhamun's body
• identify the evidence you will use to support your description of the steps
• use these steps to structure your response
• write **topic sentences** to introduce each step.

The funeral procession

A New Kingdom funeral covered the time between the body of the deceased being collected from the embalmers and its burial within the tomb. This consisted of four main elements (see Source 20).

The tomb paintings in Tutankhamun's burial chamber are some of the few sources of information about what happened at his funeral. The painting on the east wall depicts his funeral procession (see Source 21). In this scene, Tutankhamun's mummy is shown lying on a decorated **bier**, which has been placed in the middle of the funerary boat. The tiny figures of Isis and Nephthys can be seen on the sides of the bier, protecting it with their outstretched arms. The boat, sitting on a sled, is pulled across the sand by 12 men who are dressed in white and wear white bands on their foreheads. The text identifies them as court officials, the 'nine friends of the king'. The two shown with shaved heads are the **viziers** of **Lower** and **Upper Egypt**.

CROSSING THE NILE
The body was ferried across the Nile on a decorated boat accompanied by family and mourners. Mourners representing the goddesses Isis and Nephthys, the female relatives of the god Osiris, accompanied the deceased, positioned at the front and rear of the boat.

PROCESSION TO THE TOMB
The mummy lying on a boat-shaped bier, placed on a sled drawn by oxen, was transported across the desert to the tomb. The procession was led by a priest who sprinkled milk and burnt **incense**. Servants carried burial goods for the use of the deceased in the afterlife. The family was accompanied by mourners, including some professional mourners led by the two representing Isis and Nephthys, who wailed and threw dirt on their heads.

BURIAL
The mummy was placed in its nest of coffins within the **sarcophagus**. The burial goods, including the **canopic chest** containing the **viscera** of the deceased, furniture and other personal belongings, were then placed in the various rooms of the tomb. The burial chamber was sealed and the deceased was left to lie undisturbed for eternity.

RITUALS AT THE TOMB
A ceremony called the 'Opening of the Mouth' was performed on the mummy. This was carried out by the 'sem' priest, the son or the heir of the deceased. It restored all senses and physical functions for use in the afterlife.

SOURCE 20
A sequence chart of a New Kingdom funeral

bier
a movable structure on which a coffin can be transported to the grave or tomb

vizier
a chief minister and king's deputy in ancient Egypt

Lower Egypt
the political and geographic division of ancient Egypt in the north

Upper Egypt
the political and geographic division of ancient Egypt in the south

incense
an aromatic substance used in religious rituals, e.g. frankincense

sarcophagus
a stone coffin

canopic chest
a ritual container for the mummified internal organs of the deceased, stored in the tomb

viscera
the internal organs (lungs, liver, stomach and intestines)

SOURCE 21
A scene from the east wall of the Burial Chamber, showing Tutankhamun's funeral procession

Burial and the role of the gods

The paintings in Tutankhamun's burial chamber are important sources for the role played by the gods in a pharaoh's burial. The painting on the north wall depicts the ceremony called the 'Opening of the Mouth', which was performed on the pharaoh's mummy. Ay, Tutankhamun's successor, takes on the role of the *sem* priest who touches the dead pharaoh's eyes, ears, nose and mouth with the ceremonial **adze**, magically restoring his senses for the afterlife (see Source 14).

Once the rituals were complete, the pharaoh would be welcomed into the realm of the gods. The paintings in Tutankhamun's burial chamber depict him and his *ka* being greeted by the goddesses Nut, Hathor and Isis, as well as by Osiris, King of the underworld. So, the role of the gods was to ensure that Tutankhamun arrived safely in the underworld and their presence affirms his new status as a companion of the gods. His physical remains were placed in the sarcophagus in the burial chamber of his tomb, surrounded by the possessions that would equip him for the afterlife.

adze
a woodworking tool similar to an axe

barque
a type of small sailing boat

8.4b Check your learning

1 Why was mummification a significant practice in Egyptian preparation for the afterlife?

2 The following gods and goddesses played important roles in the pharaoh's afterlife: Osiris, Nut, Hathor, Anubis, Isis and Nepthys. Investigate these deities and explain their significance in the afterlife.

3 Investigate the meaning of the following terms and concepts in the pharaoh's afterlife: *ka*, solar **barque**, the *Amduat*, the *ankh*, the 'Opening of the Mouth' ceremony.

4 Imagine you were at Tutankhamun's funeral. Send out a tweet sharing your impression of the event.

5 View coloured images of the wall paintings in Tutankhamun's tomb via Google Images.
   a Identify the gods, goddesses and rituals you have researched. You could print some for your personal file or display them in your classroom.
   b Write a paragraph on each wall scene, explaining what is happening and its significance to burial, deities, afterlife, funerary beliefs and practices.

6 Construct a mind map that summarises aspects of 18th-Dynasty Egyptian funerary beliefs and practices that are revealed by the wall paintings in Tutankhamun's tomb. Use it to plan an answer to the following question: 'Explain what the wall paintings from Tutankhamun's tomb reveal about 18th-Dynasty Egyptian funerary beliefs and practices.' (Explain: Make relationships clearly evident, give cause and effect, provide why and/or how.)

   To help you plan your response:
   • identify aspects of Egyptian funerary beliefs and practices that are relevant to the tomb paintings, e.g. role of the gods, rituals
   • use these aspects to structure your answer
   • draw conclusions about what the tomb paintings reveal of Egyptian funerary beliefs and practices at the time of Tutankhamun
   • use specific evidence to support your explanation.

8.5 Tutankhamun's remains

Unlike all other pharaohs of Egyptian history, Tutankhamun is remarkable for being the only one to have been found still in his tomb. The mummy, however, was not in good condition. Because of the copious quantities of resin that the embalmers poured over Tutankhamun's mummy wrappings, the mummy was stuck to the base of the inner solid gold coffin. As a result, the examination of the mummy had to be done *in situ*.

Douglas Derry's account of his examination of the human remains from the tomb (see Source 18) records the removal of the mummy's bandages, most of which had been reduced to soot as a result of some kind of spontaneous combustion. At this time, the objects that had been included in the wrappings were also removed and recorded. Derry and his team drew conclusions about the young pharaoh's physique, age at death and resemblance to other royal remains found in Tomb 55 in the Valley of the Kings.

Finally, the mummy was removed from the inner coffin. To do this, Howard Carter and his team cut the mummy into several pieces. The torso was cut in half and the limbs and head were severed from the body. It was necessary to use hot knives to separate the head from the golden funerary mask. Carter later rearranged the pieces on a sand tray so that Harry Burton could photograph the mummy in its entirety. After being rewrapped, the mummy, still on the sand tray (see Source 22), was placed inside the outer most coffin within the sarcophagus, which had never been removed from the tomb. It remained there undisturbed from 1926 until 1968.

SOURCE 22 A photograph of the mummy of Tutankhamun taken after Howard Carter reassembled it and laid the pieces on a sand tray. He had been forced to disassemble the mummy to remove it from the inner coffin.

Scientific investigation of Tutankhamun's remains

Tutankhamun's mummy has been scientifically investigated several times since its discovery in the Valley of the Kings. The first occasion was the autopsy carried out by Douglas E. Derry, Professor of Anatomy at the Egyptian University in Cairo in 1925 (see Source 18).

In 1968, a team from the University of Liverpool, led by R. G. Harrison, X-rayed the body. The X-ray of the skull revealed the deposits of resin introduced into the skull after the brain was removed during the mummification process. Thickened areas observed at the base of the skull, as well as the presence of a small bone fragment, caused some scholars to speculate on a cause of death – murder by a blow to the back of the head, perpetrator unknown. The X-rays also revealed that Tutankhamun's sternum, or breastbone, and some of his ribs were missing. This caused speculation that he might have died in a chariot accident or even that he might have suffered from a birth defect.

In 1978, the body was disturbed again by James E. Harris, a professor of orthodontics, who X-rayed the skull and carried out a blood analysis. The results of this analysis, together with analyses of the blood of other family members whose mummies were available, indicated that he was closely related to Amenhotep III, Akhenaten (based on his grandparents' blood types), Sitamun (a sister of Akhenaten) and Tiye.

In 2005, the most advanced scientific analysis so far was carried out on Tutankhamun's remains. Led by Dr Zahi Hawass, a team performed a **CT scan**, resulting in 1700 images of the pharaoh's body. The results of the scan confirmed the conclusions reached by earlier investigations regarding the king's approximate age at death, 18 to 19 years, as well as his height and general health. The team ruled out death from a blow to the base of the skull and decided that the missing sternum and ribs must have been removed by Carter's team, rather than as a result of a massive injury. The CT scan enabled a more detailed analysis of a fracture to the king's lower left femur (thigh bone), which had been noted as early as Derry's autopsy. As there is no evidence of healing, the fracture is thought to have occurred, at most, a few days before Tutankhamun's death. By itself the fracture is unlikely to have caused his death, but scientists theorised that a life-threatening infection might well have set in.

Between September 2007 and October 2009, the Tutankhamun Family Project was carried out by Dr Zahi Hawass and a large, multidisciplinary team. In this study, several royal mummies underwent detailed anthropological, radiological and genetic examination. Contrary to some long-held beliefs, it was revealed that there was nothing **pathological** about the shape of Tutankhamun's skull or of the skulls of any members of his family. However, the team found

CT scan
computed tomography scan; an imaging method using digital geometry processing to produce a 3D image of the inside of an object or body

pathological
caused by disease

SOURCE 23 DNA samples being taken from Tutankhamun's mummy

that Tutankhamun's family members exhibited a range of malformations. The young pharaoh himself had a **cleft palate**, **scoliosis**, a **club foot** and **Köhler disease II** (a rare bone disorder). Along with four other members of his family, Tutankhamun was found to have suffered from malaria. The identification of the DNA of ***Plasmodium falciparum*** in his mummy is possibly the oldest genetic proof for malaria in dated mummies.

The investigators had the following to say about Tutankhamun's cause of death:

> Tutankhamun had multiple disorders, and some of them might have reached the cumulative character of an inflammatory, immune-suppressive – and thus weakening – syndrome. He might be envisioned as a young but frail king who needed canes to walk … A sudden leg fracture possibly introduced by a fall might have resulted in a life-threatening condition when a malaria infection occurred. Seeds, fruits, and leaves found in the tomb, and possibly used as medical treatment, support this diagnosis.
>
> Zahi Hawass et al., 'Ancestry and Pathology in King Tutankhamun's Family', *Journal of the American Medical Association*, vol. 303, issue 7, 2010, p. 646

The results of the DNA analysis carried out at this time determined that Tutankhamun was the child of the pharaoh Akhenaten and a woman who was his father's full sister. The identity of this woman, however, remains disputed (see '8.1 Who was Tutankhamun?').

8.5 Understanding and using the sources

1 Re-read Douglas Derry's account of his examination of Tutankhamun's remains in Source 18.
2 Draw a table like the one below and use it to record information about the condition of the human remains. The first row has been done for you.

FEATURE OF THE HUMAN REMAINS	CONDITION
Head	• Clean-shaved • The skin of the scalp is covered by a whitish substance – fatty acid? • Two abrasions on the skin, caused by the pressure of the diadem and tightly wound bandages
Nose	
Face	
Skull cavity	
Body and limbs	
Abdominal wall	
Phallus	

8.5 Check your learning

1 Find out more about the most recent scientific examination of Tutankhamun's mummy.
    • Access the *JAMA* article 'Ancestry and Pathology in King Tutankhamun's Family', by Zahi Hawass et al.
    • Look at the online *National Geographic* article 'King Tut's Family Secrets'.
2 The recent investigations of Tutankhamun's mummy have resulted in reconstructions of his head and facial features using images from the CT scans. You can view these online. (See also, Chapter 3, '3.3 Representations of Tutankhamun'.)
3 You will find a video of the examination of Tutankhamun's mummy by Zahi Hawass online. Search for 'King Tut Unwrapped'.

cleft palate
a condition in which there is an opening into the nose from the roof of the mouth

scoliosis
a medical condition in which a person's spine has a sideways curve

club foot
a birth defect causing the foot to point inwards

Köhler disease II
a rare bone disorder of the foot

Plasmodium falciparum
a parasite that causes malaria

8.6 Tutankhamun's tomb and 21st-century archaeology

Technologies developed in the 21st century have enabled developments in various aspects related to Tutankhamun himself and his tomb. You can read about these below.

SOURCE 24 An overview of the developments to Tutankhamun and his tomb

DNA ANALYSIS	CONSTRUCTION OF A REPLICA TOMB
The analysis of Tutankhamun's DNA between 2007 and 2009 answered some questions about the young pharaoh, his health, possible cause of death and family relationships (see 'Scientific investigation of Tutankhamun's remains' earlier in this chapter). It also raised many new ones.	In 2014 an exact, full-sized replica of Tutankhamun's tomb was opened in Luxor. It was created using high-resolution colour photography and **3D laser scanning** systems, and recreates the tomb as it was in 2009 when the scans were done. This technology has huge implications for the preservation of heritage sites from the damage caused by threats such as tourism, climate and warfare.
VIRTUAL AUTOPSY	CONSERVATION OF THE TOMB
Technologies such as CT scans have made possible the virtual unwrapping of mummies and virtual autopsies. While the virtual autopsy carried out on Tutankhamun's remains in 2005 revealed much important information, this has not remained uncontested.	In 2009–14, Tutankhamun's tomb was the subject of a collaboration between the Getty Conservation Institute and Egypt's Supreme Council of Antiquities to conserve and manage the tomb. The project focused on the tomb infrastructure, for example walkways, protective barriers, ventilation, lighting, signage and the conservation of the wall paintings.
THE 'HIDDEN CHAMBERS'	TUTANKHAMUN'S BEARD
A highly contested outcome of 21st-century technology occurred in 2015–16. Following 3D laser scanning of the tomb, Nicholas Reeves, director of the Amarna Royal Tombs Project, claimed that hidden chambers within Tutankhamun's tomb might contain the tomb of Nefertiti. Subsequent scans using advanced ground-penetrating radar, however, appear to have thrown the existence of the chambers into considerable doubt.	Recently, Tutankhamun's beard was accidentally snapped from the golden mask (see Source 25), and attempts were made to fix it with epoxy glue. Restoration required a full 3D scan with a light pattern projection scanner to establish the condition of the mask as well as the chemical-free removal of the epoxy. Restorers discovered that the beard is connected to the face of the mask by an internal tube.

3D laser scanning capturing a physical object's size and shape to produce a digital 3D representation of that object

8.6a Check your learning

1 Consider some of the implications of the technology enabling exact replicas of ancient sites to be made. For example, what if authorities decided to close original sites and only offer **facsimiles** to tourists? Would people be satisfied with visiting replicas? What if these replicas were constructed in locations other than near the original?

2 Read online accounts of the building of the replica of Tutankhamun's tomb: 'King Tut's Tomb Undergoes Digital Preservation and Reproduction' and 'Tut's Tomb: A Replica Fit for a King'.

3 View a virtual autopsy of Tutankhamun's remains in the BBC program entitled 'Tutankhamun: the Truth Uncovered'. Consider that the 'truth' referred to is what the program's writers consider to be the truth. For a different view, read the article 'Virtual autopsy of Tutankhamun triggers anger of Egyptian Egyptologists'.

facsimiles exact copy

4 Find out about the work done by the Getty Foundation, such as scientific analysis of the wall paintings, sarcophagus and outermost coffin, as well as microbiological investigation. Search online for 'Conservation and Management of the Tomb of Tutankhamen – The Getty'.

5 Find out more about the controversy over the possible hidden chambers in Tutankhamun's tomb and the likelihood of locating Nefertiti's tomb.

6 Read about the high-tech and low-tech methods used to restore Tutankhamun's golden mask in the online *National Geographic* article 'King Tut's Beard Is Back, With Help From a Little Beeswax'.

Ethical issues

According to ancient Egyptian burial beliefs, once the mummy was interred in its sealed tomb it was to remain undisturbed for eternity. The ancient Egyptians believed that disturbance of the dead threatened the deceased's survival in the afterlife. In our times, scientific investigation of the dead is strictly regulated by ethical considerations. So what gives scientists the right to conduct autopsies and other medical interventions on the ancient dead? How old do human remains have to be before respect is no longer necessary?

The treatment of Tutankhamun's mummy is a case in point. You read earlier about the violent methods used by Howard Carter and his team to remove the mummy from its coffin. Such treatment of a mummy was not considered shocking at the time. Today, this would be out of the question. Egyptian law forbids the unwrapping of any mummy without special permission. The examination and preservation of mummies must now be conducted by X-rays and other scientific methods without disturbing the wrappings. You have read about such examinations that were carried out on the body of Tutankhamun in an attempt to determine his cause of death and family relationships. It is up to you to decide where you stand on the ethical issues in the preservation and examination of Tutankhamun's remains.
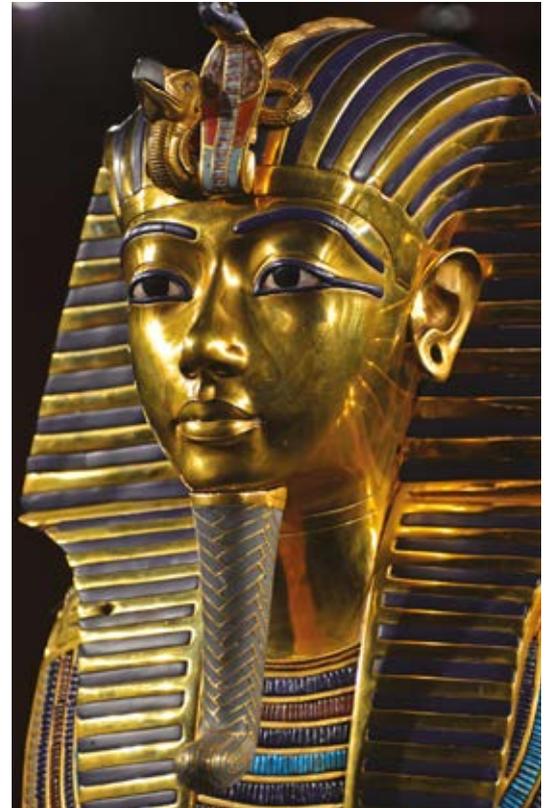
SOURCE 25 Tutankhamun's magnificent golden death mask

8.6b Check your learning

1 Hold a class debate on the topic 'That we have no right to invade Tutankhamun's privacy'.
   To help you prepare for the debate, read the following online articles:
   • 'Do we have the right to violate King Tut's medical privacy?'
   • 'Tutankhamun does not deserve this 21st-century desecration'.

2 What are your answers to the ethical questions raised in this section?
   • What gives scientists the right to conduct autopsies and other medical interventions on the ancient dead?
   • How old do human remains have to be before respect is no longer necessary?

Representations of Tutankhamun

Tutankhamun's name and image have appeared in a range of media, for example in songs, historical novels and movies. Tutankhamun's story has all the elements to qualify him as an **icon** of popular culture. He died young, never realising his full potential. His tomb was packed with artefacts of priceless splendour and beauty. It was discovered by two colourful characters, one an archaeologist, the other a member of the British aristocracy, who died tragically only months after the discovery, giving rise to claims that the pharaoh had put a curse on those who disturbed his rest. Take all of these ingredients, mix with liberal lashings of media promotion and speculation, and you have enough to fire the imaginations of a public newly emerging from the dark years of World War I. 'Tutmania' was born.

Tutmania

Tutmania was expressed in various media during the 1920s and even later. Egyptian **motifs** appeared everywhere in architecture, art, jewellery and fashion in the then popular **art deco** style. An example of this is shown in Source 26. The interiors and exteriors of buildings featured papyrus columns and lotus **friezes**, while women wore brooches and necklaces decorated with **scarab** beetles, winged goddesses and sphinxes.

There were novels and plays based on Egyptian themes, featuring archaeologists, tombs and especially mummies. More spectacular were the films that were released at this time. In 1932, Karl Freund directed a horror film called *The Mummy*. It starred a famous horror film actor, Boris Karloff, in the role of the accidentally revived mummy of an Egyptian prince, Imhotep. He causes havoc and destruction in his quest for the reincarnation of his ancient lover, Ankhesenamun (the same name as Tutankhamun's wife!). The **franchise** was rebooted in 2017 with the release of *The Mummy*, a film starring Tom Cruise.

Source 28 is an online news report of the 2014 opening of the *Discovering Tutankhamun* exhibition at the Ashmolean Museum in Oxford, United Kingdom.

icon
something regarded as a symbol or worthy of admiration

motif
dominant or recurring idea or image in an artistic work that forms a pattern

art deco
the main decorative art style of the 1920s and 1930s, featuring geometric shapes and strong colours

frieze
a wide, horizontal band of decoration, either of a painting or a sculpture, on a wall

scarab
a dung beetle, a symbol of the sun god in his form of Khepri, the rising sun

franchise
a collection of related media, e.g films, in which several have been produced from an original creative work

SOURCE 26
Egyptian themes were very popular in art deco jewellery and design, as seen in the architecture of Greater London House (originally the Carreras Cigarette Factory).

SOURCE 27 This poster for the 2017 film *The Mummy* shows the longevity of the mummy as monster motif, originating with the discovery of Tutankhamun's tomb.

TUTANKHAMUN: HOW 'TUT-MANIA' GRIPPED THE WORLD

It may not boast glittering treasures from ancient Egypt, but a new Tutankhamun exhibition shows how the discovery of the boy king's tomb in 1922 had a huge impact on popular culture across the globe.

The Ashmolean show focuses on the story of Carter's discovery and how it sparked a wave of 'Tut-mania' across the globe.

In one of the first examples of a newspaper paying for a scoop, *The Times* was given exclusive access to the excavation when Lord Carnarvon sold the rights for £5000 … Rival newspapers weren't happy and there was fierce competition among reporters to report the story and its many mysteries, such as the famous Pharaoh's Curse …

The exhibition features giant blow-ups of Harry Burton's photographs for *The Times*, as well as Carter's original records, drawings and photographs. Also on show are many items that illustrate how the craze for all things Tutankhamun had an impact on arts and culture in the 1920s. Egyptian motifs appeared on clothes, jewellery, hairstyles, fabrics, furniture and in architecture …

'Tutankhamun, Lord Carnarvon and Howard Carter became almost movie stars,' says Dr Collins [Co-curator of the Ashmolean exhibition]. 'There was an extraordinary outpouring of games and ceramics and costumes and posters. Everybody wanted a little bit of Tut.'

The tomb's discovery, at the start of the Roaring Twenties, followed the global upheavals of World War One. Mass media was able to bring news of objects being carried out of the tomb to a wider audience, faster than ever before. America, in particular, became obsessed by 'King Tut' – as he became known. Even US President Herbert Hoover used the name for his pet dog …

Meanwhile, songwriter Harry Von Tilzer had a 1923 hit with *Old King Tut*. The lyrics went: 'They opened up his tomb the other day and jumped with glee / They learned a lot about ancient history / His tomb instead of tears / Was full of souvenirs.' The sheet music and an old **Bakelite** recording of the song appear in the exhibition …

'*Old King Tut* was one of the great hits of the time, just as the **Charleston** was becoming the most popular dance,' says Dr Collins. 'It was a great combination.'

Even today Tutankhamun remains an icon. 'In the recent revolution, in Tahrir Square in Cairo there was graffiti showing Tutankhamun's mask as a symbol of Egyptian identity.' Speaking at the Ashmolean Museum this week, Lord Carnarvon's relative, George Herbert, the 8th Earl of Carnarvon, said: 'My great grandfather would be delighted that the fascination with his and Howard Carter's discovery still continues after all these years.'

Tim Masters, 'Tutankhamun: how "Tut-mania" gripped the world', *BBC News*, 24 July 2014

Bakelite
an early form of brittle plastic, dark brown in colour

Charleston
a popular dance during the 1920s

Tutankhamun tours the world

In the latter half of the 20th century, the artefacts from Tutankhamun's tomb, which had been located in the Egyptian Museum in Cairo since their removal from the tomb, began to be exhibited around the world. The first exhibition to leave Egypt toured from 1961 to 1966 and featured only a small number of artefacts. A new wave of Tutmania arose, however, when *The Treasures of Tutankhamun*, a 'blockbuster' exhibition, toured the world between 1972 and 1981. The exhibition visited the United Kingdom, the former Soviet Union, the United States, Canada and former West Germany at a time of shifting political relations between the major powers and the Middle East.

Subsequent exhibitions have taken place until as recently as 2013, despite attempts by the Egyptian government to keep the famous golden mask and the mummy of the pharaoh permanently in Egypt due to their fragile nature.

In 2011, *Tutankhamun and the Golden Age of the Pharaohs* visited Melbourne and became the most successful exhibition in Australian history.

SOURCE 29 Press day at the Treasures of Tutankhamun exhibition in 1972 at the British museum

Tutankhamun's curse

As well as being the inspiration for the outbreak of Tutmania around the world, the opening of Tutankhamun's tomb also gave birth to the phenomenon of the 'mummy's curse'. A series of improbable coincidences appeared to point to supernatural interest in the event.

- A cobra, the symbol of the pharaoh's power, attacked and swallowed Howard Carter's pet canary on the day that Carter discovered the tomb.
- In the April following the tomb's discovery, Lord Carnarvon died from pneumonia. While shaving, he had nicked a mosquito bite on his cheek, which led to infection and fever.
- The lights of Cairo apparently went out at the time of Carnarvon's death.
- Carnarvon's dog, Susie, dropped dead at the same time.

Such 'evidence' was sufficient to send the world's media into a frenzy of speculation about the existence of a curse. A written version was even claimed to exist above the entrance of the tomb, promising death 'on swift wings' to anyone disturbing the pharaoh's rest. Needless to say, no such inscription existed. As the years passed, a range of people who had been closely or even vaguely associated with the tomb's opening died, fuelling further speculation. Their manners of death ranged from suicide to accidental falls and murder by a jealous wife.

The **facts** seem to contradict those who believe in the mummy's curse. Howard Carter, the man most associated with the discovery and excavation of the tomb, lived until the age of 64, dying in 1939. Others closely involved lived much longer lives, dying in their eighties.

fact
a thing that is known or generally agreed to be true

The significance of Tutankhamun's tomb

Your study of Tutankhamun's tomb in this chapter will have prepared you to consider the reasons why it is a significant site from the ancient world. The mind map in Source 30 provides you with some areas to think about. Discuss these in your class and see if you can identify the nature of Tutankhamun's tomb's significance. Do not be limited by the suggestions given here, but explore some ideas of your own.

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                    ┌──────────────────────────────────────────┐
                    │ WHY IS TUTANKHAMUN'S TOMB SIGNIFICANT?    │
                    └──────────────────────────────────────────┘
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ARCHAEOLOGICAL METHODS	SOURCES OF INFORMATION ON NEW KINGDOM EGYPT	CONTRIBUTION TO EGYPTOLOGY AND SCIENCE	DISCOVERY AND WORLDWIDE IMPACT
Carter's impact on development of recording techniques and conservation	features of life and culture, especially burial customs	stimulated by the need to understand Tutankhamun's position in his family	Tutmania

SOURCE 30 The significance of Tutankhamun's tomb

8.7 Check your learning

1 Visit the *BBC News* site 'Tutankhamun: 'How "Tut-mania" gripped the world'. Look at the selection of artefacts from the *Discovering Tutankhamun* exhibition at the Ashmolean Museum in Oxford. How was the discovery of Tutankhamun's tomb in 1922 expressed in the popular culture of the time? What is your favourite artefact from the exhibition?

2 Design your own example of Tutmania. You could create a Facebook page featuring art deco items such as clothing, furniture, cosmetic containers, labels, leadlight windows, fabrics and furniture. Try using Google Images for some inspiration.

3 Mark Nelson, from Monash University in Victoria, has made a study of the 'mummy's curse' by looking at the lives of all people present at the opening of the tomb. You can access his findings at *The BMJ*, 'The mummy's curse: historical cohort study'.

4 Watch the YouTube trailer for the four-part TV series *Tutankhamun*. When you have completed your study of this chapter, you will be able to assess the historical accuracy of the series. The trailer will give you a hint.

5 Having studied Tutankhamun and his tomb, why do you think they continue to excite the imagination of people all over the world?

6 Use your work on this chapter to answer the following question: 'Evaluate the significance of Tutankhamun's tomb in its own time and in the present.' (Evaluate: Make a judgement based on criteria; determine the value of.)

    To help you plan your response:
    • identify some of key criteria for judging the significance of Tutankhamun's tomb
    • use these criteria to structure your answer
    • make judgements about the significance of what Tutankhamun's tomb reveals about these criteria
    • use specific evidence to support your evaluation.

This chapter has examined the identity of Tutankhamun and the significance of the discovery and excavation of his tomb. The stunning collection of artefacts from the tomb has shed light on not only the life of the young pharaoh, but also on life in Egypt in his time. A study of the tomb and its contents also suggests something of the remarkable achievements of the age. Considering that this is the only intact royal tomb so far discovered, it can only be imagined what the tombs of longer-lived pharaohs such as Amenhotep III or Ramesses II might have contained. Tutankhamun's tomb has also enabled a better understanding of New Kingdom burial customs and afterlife beliefs. Just as remarkable, perhaps, is the enduring legacy of Tutankhamun's tomb and the fascination it has continued to excite in the popular imagination. Indeed, for many people Tutankhamun *is* ancient Egypt.

FOR THE TEACHER

Check your <u>o</u>book <u>a</u>ssess for the following additional resources for this chapter:

Answers	Teacher notes	Class test	<u>a</u>ssess quiz
Answers to each *Check your learning*, *Understanding and using the sources* and *Profile task* in this chapter	Useful notes and advice for teaching this chapter, including syllabus connections and relevant weblinks	Comprehensive test to review students' skills and knowledge	Interactive auto-correcting multiple-choice quiz to test student comprehension

9

Thera

FOCUS CONCEPTS & SKILLS

Significance

To determinine the significance of Thera in its archaeological and historical context, we need to consider the important information it reveals about its time: what is known of the people who lived there, how they lived and how they spent their time. To do this we must ask questions of the limited archaeological remains available. Thera is also significant in a wider context, through its involvement in the Minoan and Greek worlds. And the ongoing debate about the dating of the Theran eruption ensures Thera's significance, and its contribution to archaeology and other disciplines, for some time to come.

LEARNING OUTCOMES

1   Describe the location, discovery and excavation of Thera.

2   Examine the representations of Thera in ancient and modern times.

3   Analyse and interpret written and archaeological sources for evidence about life on Thera.

4   Explain the relationship between Thera and Minoan Crete.

5   Discuss and evaluate differing theories about the dating of the Theran eruption, its role in ending the Minoan civilisation and its impact on the Aegean world.

6   Evaluate the significance of Thera as an archaeological site.

SOURCE 1 Modern Santorini overlooking the caldera of the ancient volcano

Representations of Thera

Popular tourist websites list the attractions of Santorini, the modern name for the ancient island of Thera. You can visit the 'popular black volcanic beaches', particularly Red Beach, which is near Akrotiri, the 'place to go for archaeology buffs'. There are 'stunning views from sky-high towns, eclectic cuisine, lovely galleries, thriving nightlife and excellent wines' to tempt prospective visitors. The tiny Aegean island of Santorini is a familiar image from tourist brochures and websites: churches with blue domes and whitewashed buildings, trimmed with blue shutters, clinging to the sides of steep cliffs, set against the azure of the Aegean Sea. The modern representations of Santorini are clearly linked to its main sources of wealth: agriculture and tourism. If you want to see Greece's most beautiful island, you must go to Santorini.

Ancient and modern representations of Thera/Santorini are often blended in written articles and in documentary films. Eager to promote the attractions of the island, as well as their own careers, journalists and historians like to link the ancient eruption of the volcano that destroyed Thera/Santorini to the legendary story of the lost city of Atlantis.

Plato and Atlantis

The Athenian philosopher Plato (427–347 BC) wrote down the story of Atlantis in two of his famous **dialogues**, *Timaeus* and *Critias*, c. 360 BC. He claimed that the story had originally been told by Solon, an Athenian statesman of the 6th century BC, who was famous for his wisdom and his honesty. Plato's *Critias* begins with an introduction to a war that supposedly took place between Athens and Atlantis 9000 years before Plato's time (see Source 2). Plato's *Timaeus* gives a more detailed account of the fate of Atlantis (see Source 3).

SOURCE 2

Let me begin by observing first of all, that nine thousand was the sum of years which had elapsed since the war which was said to have taken place between those who dwelt outside the **pillars of Heracles** and all who dwelt within them … Of the combatants on the one side, the city of Athens was reported to have been the leader and to have fought out the war; the combatants on the other side were commanded by the kings of Atlantis, which … was an island greater in extent than Libya and Asia, and when afterwards sunk by an earthquake, became an impassable barrier of mud to voyagers sailing from hence to any part of the ocean.

[Plato goes on to describe the island of Atlantis and the building of its palace and city.]

First of all they bridged over the zones of sea which surrounded the ancient metropolis, making a road to and from the royal palace … The island in which the palace was situated had a diameter of five **stadia** … All this … they surrounded by a stone wall on every side, placing towers and gates on the bridges where the sea passed in.

The palaces in the interior of the citadel were constructed on this wise: – In the centre was a holy temple dedicated to **Cleito** and **Poseidon** … In the next place, they had fountains, one of cold and another of hot water, in gracious plenty flowing … They constructed buildings about them and planted suitable trees; also they made cisterns, some open to the heaven, others roofed over, to be used in winter as warm baths; there were the kings' baths, and the baths of private persons, which were kept apart; and there were separate baths for women, and for horses and cattle, and to each of them they gave as much adornment as was suitable.

Plato, *Critias*

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dialogues
the form taken by Plato's writings in which several characters argue a topic by asking questions of each other

Pillars of Heracles (or Hercules)
an ancient name for the rocky promontories at the entrance to the Strait of Gibraltar

stade (pl. *stadia*)
a Greek unit of measurement equal to 180 metres

Cleito
according to Plato, she was the daughter of Evenor and Leucippe, two of the original inhabitants of Atlantis; Poseidon fathered her five pairs of twin sons, the eldest of whom, Atlas, became the first king of Atlantis

Poseidon
the Greek god of the sea, and the Earth shaker, whose domain was Atlantis

But afterwards there occurred violent earthquakes and floods; and in a single day and night of misfortune all your warlike men in a body sank into the earth, and the island of Atlantis in like manner disappeared in the depths of the sea. For which reason the sea in those parts is impassable and impenetrable, because there is a shoal of mud in the way; and this was caused by the subsidence of the island.

Plato, *Timaeus*

SOURCE 4 An artist's representation of ancient Atlantis

9.1a Understanding and using the sources

Sources 2 & 3

1 What does Plato relate about the war between Athens and Atlantis?
2 What information is given about the location of Atlantis?
3 What do we find out about:
   a   the geography of Atlantis
   b   the buildings
   c   the facilities for the citizens
   d   the religious beliefs of the inhabitants?
4 How was Atlantis destroyed? What were the consequences of the destruction?
5 What is your assessment of the **reliability** of Plato's account of Atlantis and its fate?

reliability
the accuracy of a source judged on its context, purpose, origin and intended audience

The link between Atlantis and Thera

Since Plato's time, a modern Atlantis mythology has developed, with many theories about the location of Atlantis. One early, popular theory proposed that Atlantis was located in the Atlantic Ocean as suggested by its name. Today there is no evidence anywhere in this vast ocean of the magnitude of volcanic activity needed to destroy a continent. Further, no continental remains have been found so far on the Atlantic seabed.

Other Atlantis seekers have suggested that Atlantis was the Mediterranean island of Thera, based on the evidence of volcanic activity consistent with that described by Plato.

The location of Thera

The island of Thera is part of the Cyclades, a group of Aegean islands located between Greece and Turkey. It was strategically placed for making trading contacts with Crete to the south and mainland Greece to the west. This is evident in the archaeological record of Akrotiri, the **Bronze Age** site excavated from the late 1960s. It is apparent that Thera also maintained close links with other Aegean islands, demonstrated by the discovery at Akrotiri of natural resources from these places. Other finds suggest that Thera also had contact with Syria, Palestine and Egypt.

Bronze Age
a historical age characterised by the use of bronze to make tools and weapons

THERA

Source: Oxford University Press

SOURCE 5 Thera and her Aegean neighbours, with an inset map showing Thera and Akrotiri

9.1b Understanding and using the sources

1   Study the map in Source 5 carefully and locate the following:

- Thera
- the Cyclades
- Crete
- the Peloponnese (mainland Greece)
- Melos
- Egypt
- Syria
- Palestine.

2   What do you observe about the location of Thera? Which areas are most likely to have had contact with Thera?

9.1 Check your learning

1   Read the full versions of Plato's dialogues *Critias* and *Timaeus* on the Internet Classics Archive website.

2   You will find a range of sites online that are dedicated to the proposition that Thera was Atlantis. Some are academic in nature and some are not. Research these sites and decide for yourself which theories are best supported by evidence.

3   Research the trade routes that were used in the eastern Mediterranean in the Bronze Age. What advantages were available to Thera because of its location? Search online for 'Bronze Age trade'.

4   Research the countries that would have traded with Thera. What goods would have been exchanged?

SOURCE 6 A view of the island of Thera showing the caldera of the volcano in the centre

The discovery of Akrotiri

millennium
a period of 1000 years

Cycladic
related to the Early Bronze Age culture of the Cycladic islands in the Aegean Sea

crucible
a metal container in which metals or other substances may be melted

caldera
a volcanic crater formed by the collapse of a volcano into itself

In the third **millennium** BC, the Theran settlement of Akrotiri was a small community dependent on fishing and farming for survival. Its people seem to have thrived, their culture reflecting not only the **Cycladic** islands of which they were a part, but also the Minoan culture of the nearby island of Crete. Rock-cut burial chambers, as well as pottery and stone vases are proof of this. Trade with the Cycladic islands of Paros and Naxos probably provided the raw material, marble, in exchange for wood and food items.

Akrotiri increased in significance after 2000 BC, playing a greater role in Aegean trade. Being located on the copper trade route between Cyprus and Crete, it became a metal-working centre, which can be seen by the presence of **crucibles** and moulds in archaeological finds. The town became more urbanised with paved streets and drainage. Its pottery was being produced on a large scale.

The progress and prosperity of the island of Thera came to a sudden halt after a massive volcanic explosion that took place at least three millennia ago. The date of this explosion is a highly contested issue for Aegean Bronze Age specialists. The centre of the island disappeared into the sea, in what would become the **caldera** of the volcano. What was left of the island was covered in volcanic ash, 70 metres deep in some parts.

The town of Akrotiri was rediscovered and excavated by a Greek archaeologist, Spyridon Marinatos (1901–74), who began working on the site in 1967. It had houses still standing up to two storeys high, with the artefacts made by its inhabitants in exactly the places where they had left them. Here was a unique opportunity to recreate a Bronze Age town.

Excavation on Thera

Suez Canal
a sea-level canal linking the Mediterranean Sea with the Red Sea

quarry
a person or object being pursued

Evidence of early excavation at Thera is difficult to identify because few records were kept at the time. Modern ploughing has also removed all traces of digging. Early excavations were carried out in the late 19th century associated with quarrying for the **Suez Canal**. Traces of prehistoric stone walls were found at a **quarry** on Therasia (see Source 5 inset map). In 1870, the French Archaeological School excavated at near Akrotiri. From 1894 to 1903, Baron Friedrich Hiller von Gaertringen found ruins of a settlement dating to the 9th century BC. Finally, in 1960, the Greek Archaeological Society began excavations at Akrotiri.

SOURCE 7 Spyridon Marinatos photographing a vessel at Akrotiri in 1970

SOURCE 8 Christos Doumas inspecting a wall at Akrotiri

SOURCE 9 Part of the archaeological site of Akrotiri beneath its protective roof

Excavations of Spyridon Marinatos and Christos Doumas

In the 1930s, the Greek archaeologist Spyridon Marinatos developed a theory that the sudden destruction of the Minoan civilisation on Crete was linked to the eruption of the Theran volcano. He first published this theory in 1939. Marinatos began excavating the site of Akrotiri on the southern tip of Thera in 1967, following information from locals who remembered or were associated with the 19th century excavations and the discovery of surface finds, such as **potsherds**. Almost immediately, impressive remains came to light, vindicating Marinatos' choice of site. Tragically, Marinatos died in 1974 as the result of a fall while excavating and is buried at the site.

In 1968, another Greek archaeologist, Christos Doumas, joined the small excavation team and became the director of the project in 1975 after Marinatos' death. Today, no further excavations are being carried out. The uncovered parts of the site are not disturbed unless they need to be consolidated or preserved. Source 9 shows part of the site as it appears today.

potsherd
a pottery fragment that has archaeological significance

9.2 Check your learning

1 What is the evidence of Akrotiri's significance after 2000 BC?
2 What was Spyridon Marinatos' motive for excavating at Akrotiri?
3 Suggest reasons why no further excavation of the site of Akrotiri is being carried out today.

The site of Akrotiri

The site of Akrotiri itself is a major source for interpreting ancient Thera. Excavations have revealed the remains of a long and narrow section of the original town, running on a north–south axis.

Many buildings have been uncovered, some of which are freestanding and others parts of housing blocks. These building blocks have been named after letters of the Greek alphabet (for example, sectors Alpha, Beta and Gamma). Others have been given descriptive names based on the decorations found within. For example, the 'House of the Ladies' was named after the wall paintings showing women in Minoan-style dress discovered in one of the rooms. Buildings labelled *xeste* were so called because of their style of construction, which included the use of carefully cut and dressed stone blocks. This type of masonry is called **ashlar** and *xeste* is the Greek term for this. The West House was so called because, when it was discovered, it was the most westerly building on the site.

Most of the buildings have yielded wall paintings of great beauty that tell us something of life on Thera. A number have provided other sorts of information, such as the construction methods used by the ancient builders, pottery styles and types, the different sorts of food eaten and methods of storing food. The town has revealed the following features:

- narrow paved streets, with occasional small town squares
- houses of several storeys built of stone blocks and mortar, reinforced with wooden beams
- a drainage system beneath the streets made of narrow slab-covered ditches
- plumbing in the form of clay pipes that drained waste from domestic toilets into the town system
- stone or wooden staircases
- windows that allowed light and ventilation
- several mills
- workshops, many containing hammers and anvils
- *polythyra* or large rooms divided by **pier-and-door partitions** used for large gatherings.

9.3 Understanding and using the sources

Source 10

1 Make a photocopy of the plan of Akrotiri. Using a highlighter, mark in the features listed above as you identify them.
2 Identify sectors Alpha, Beta, Gamma and Delta, and colour each one differently.
3 Identify the buildings that are labelled *xeste* and colour-code them.
4 From your study of the plan, what observations can you make about the town of Akrotiri?

9.3 Check your learning

1 Read an interesting reflection on ancient Thera by Christos Doumas by searching online for 'Christos Doumas at Akrotiri'.

---

xeste
a name given to houses in Akrotiri based on their construction using ashlar masonry

ashlar
a type of masonry in which rectangular, smoothly dressed blocks of stone are laid in regular courses

polythyron (pl. polythyra)
large rooms that can be divided into smaller spaces by use of partitions

pier-and-door partition
a Minoan architectural feature dividing a large room into two smaller ones by means of partitions set between upright slabs or piers

EXCAVATIONS AT AKROTIRI, THERA

SECTOR ALPHA (A)
A3
A2
A1

Tunnels

PORTER'S LODGE

7 2
3
6 4

HOUSE OF
THE LADIES

WEST
HOUSE
6
3
2
1

Triangle
Square

△5
△4
TERRACE 3
Course of modern ravine

△3

△1
△17a
XESTE 5

△1a
△17
SECTOR
DELTA (△)

PYLON
△9c
△9d
△9
△18
TERRACE 1

HOUSE OF
THE ANCHOR
△9e
△9b
△19
TERRACE 2

△16
△9.1
△20

△11
△10
XESTE 2

△15
△13

△12

△14

B5a

Γ9
B8

Γ10
Γ5

SECTOR
GAMMA (Γ)
Γ7
B1b

Γ8
B4
B7

Γ4a
Γ4
B2
B3
SECTOR
BETA (B)

Γ4b

Γ2a
B3

Γ2

Γ1

XESTE 3
12
8
13
10 7
14
11 6 5
5

2
3
1 4
8
9
5
7
XESTE 4
10 11

ENTRANCE

SOUTH
BUILDING

N

10 0 10 20m

SOURCE 10 A plan of the excavated buildings at the ancient town of Akrotiri

The architecture of Akrotiri

Three different types of buildings can be identified at Akrotiri: mansions, large freestanding buildings and building blocks or joined housing.

Mansions

The buildings named *Xeste* 2, 3 and 4 have specific features that Nanno Marinatos, daughter of Spyridon Marinatos, thinks are similar to the palace sites on Crete. These include **façades** of ashlar masonry, **lustral basins** (or *adyta*) and *polythyra*.

　　Xeste 3 had all of the above. The *polythyron* in the eastern part of the building, which could be used by large numbers of people, suggests that the house had a public purpose. Its lustral basin (or *adyton*) points to a religious function, as do the **frescoes** that appear to depict a religious ceremony. The rooms containing storage jars and plain pottery could have been service areas for the preparation and storage of food. Whether people lived in the building is uncertain.

Freestanding buildings

The freestanding buildings have service areas on the ground floor and ceremonial and residential rooms on the upper floors. Nanno Marinatos considers these types of houses to rank lower than the mansions as their special rooms are not open to the public, except maybe through the large windows on the first floors.

Building blocks

These are a little like modern terrace houses except that individual houses are impossible to identify. Because each block appears to have only one kitchen, it could be that cooking was done on a communal basis. Sector Gamma appears to have been industrial in nature as stone mortars, grinders and hammers were found there.

façade
the front of a building

lustral basin (or adyton, pl. adyta)
a sunken room accessed by a short flight of steps, possibly for ritual use

fresco
painting on wet plaster on walls or ceilings
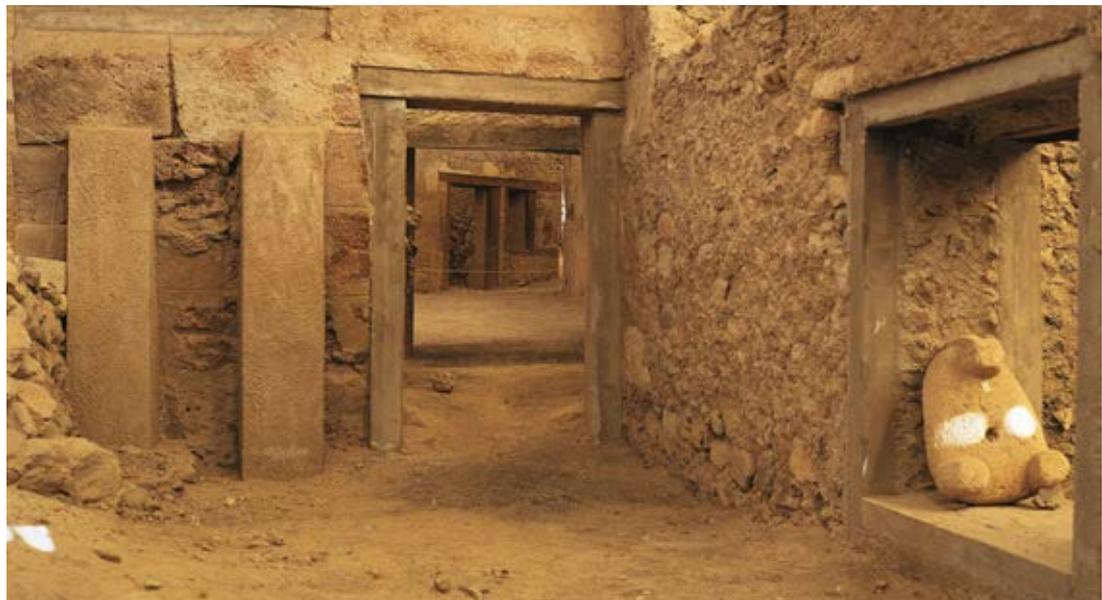
SOURCE 11
A section of building block Delta

Building techniques and materials

Despite the variety in house plans and room configuration, some elements were common to all buildings. Windows were almost always placed next to doorways of buildings. Basements had small windows, while windows on upper storeys tended to be large.

The most common building materials were unworked stone and clay. Walls were supported by timber frames to help protect them from earthquake damage. Ashlar masonry used in *Xeste* 2, 3 and 4 made these buildings much stronger. Internal walls were made of thin mud bricks or straw-filled clay reinforced with timber.

Doors and windows were wooden, while stairs were usually of stone but sometimes of wood in upper storeys. Floors were usually of beaten earth except for a few that were paved with stone or covered with crushed seashells. Flat roofs were the norm, made of branches, reeds or rubble laid on wooden beams and covered with a layer of earth. Rainwater was directed through long clay pipes onto the street.

9.4 Check your learning

1 What features suggest that the mansions served a public purpose?
2 What do the different types of housing suggest about social class on Thera?
3 Besides the kitchens, is there anything else about the building blocks that suggests communal living?
4 What would be the advantage of placing windows next to doorways?
5 Suggest reasons for the small size of basement windows.
6 Why would ashlar masonry be restricted to the mansions?

SOURCE 12 A ruined staircase leading to the second floor of a house at Akrotiri
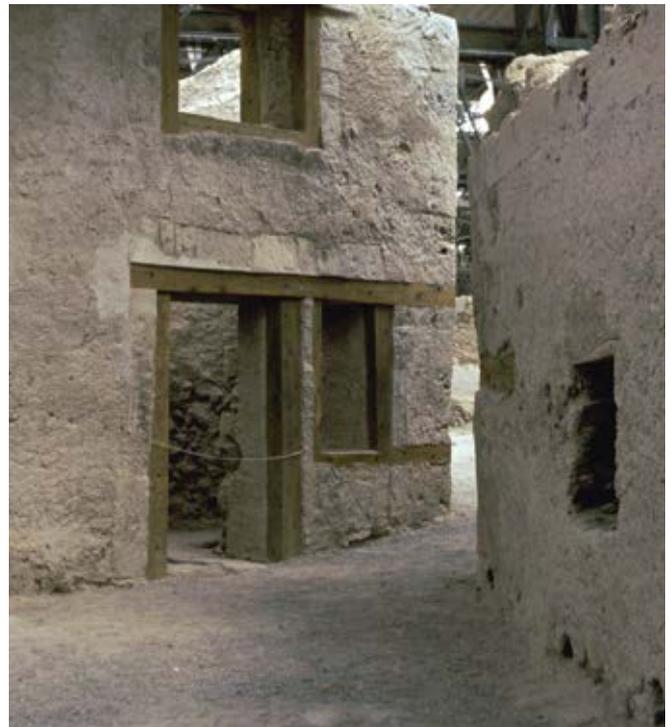
SOURCE 13 Triangle Square showing the West house and Delta 1

The wall paintings of Akrotiri

The wall paintings or frescoes of Akrotiri are valued greatly, not only for their artistic merit but because they are important sources of information about Thera and the Aegean Bronze Age. Unlike the frescoes of Minoan Crete, many of the Theran frescoes survived intact, largely due to their burial beneath layers of volcanic ash. The diversity of subject matter in the frescoes provides evidence for a range of aspects of daily life, from dress and personal adornment to architecture, shipbuilding, flora and fauna.

The Aegean Bronze Age scholar Professor Peter Warren assesses the value of the Theran frescoes in Source 14.

SOURCE 14

Yet another contribution made by the works of Akrotiri is their contextual association … The abundant preservation of artefacts, often more or less *in situ*, in rooms decorated by paintings with known wall positions provides contextual information at a level not reached even in the Roman Neapolitan towns and villas. Thus at Akrotiri much more plausible assessments can now be made not only of the functions of individual rooms or areas, but also of buildings as a whole, through study of the internal connexions between rooms or units with such rich contextual evidence.

Peter Warren, foreword to C. Doumas, *The Wall Paintings of Thera*, Athens: The Thera Foundation, 1999, p. 13

Today it is thought that the art of wall painting in the Aegean could well have originated in the Cyclades, maybe even on Thera itself. Considering the role of Cycladic sailors in the eastern Aegean, it is likely that they made contact with people from further east (such as Mesopotamia) and adopted their art as well as their mythical creatures. For example, the **griffin** that appears in frescoes from the West House and *Xeste* 3, originated in the east.

griffin
a mythical creature with the head and wings of an eagle and the body of a lion

provenance
the origins and published ownership history of an archaeological artefact

9.5a Understanding and using the sources

Source 14

1   What do you understand by the term 'contextual association'?
2   Explain why it is useful to have both artefacts and wall paintings preserved *in situ*.
3   How does this contribute to your understanding of the importance of the **provenance** of finds?

SOURCE 15 The river scene from the east wall of Room 5 in the West House

The elements of Theran wall painting

An analysis of the wall paintings of Thera requires us to look at four elements: techniques and materials, the **iconographic program** or pictorial plan, subjects and style. See Source 16 for a summary.

SOURCE 16 The elements of Theran wall painting

TECHNIQUES AND MATERIALS	ICONOGRAPHIC PROGRAM

Surface preparation:
• walls covered with a mixture of mud and straw
• 1.5 cm layer of lime plaster applied followed by one or more coats of fine plaster
• final layer sometimes polished by rubbing with sea pebbles while plaster still fresh.
Guidelines:
• made in wet plaster with a taut string or a sharp stone flake
• outlines sketched in a pale colour.
Painting:
buon fresco (true fresco)
• paint usually applied to wet plaster
• this method ensures better preservation as plaster absorbs paint
fresco secco (dry fresco)
• paint applied to drying plaster
• this method usually results in flaking paint and poor preservation.
Colours:
• mineral **pigments** (e.g. **ochres** and ground minerals)
• use of organic glue to bind the paint
• limited colours: white (the untreated plaster), red, brown, yellow, blue and black.
	Private houses:
	• all painted rooms were on upper storeys.
	Public buildings:
	• paintings mostly on upper storeys
	• some on ground floor
	• paintings covered whole walls including doorways, windows, window sills and door jambs.
	Walls:
	• divided into three registers:
	  - bottom: the base of main subject
	  - middle: the main subject
	  - top: **friezes** of stripes or decorative **motifs**.
	Arrangement:
	• episodes of a narrative painting can appear on each wall of a room or even continue into adjacent rooms.

SUBJECTS	**STYLE**

The following can be identified:
• *geometric motifs* (e.g. **running spirals**)
• *buildings or structures* (e.g. the boat cabins from the West House)
• *abstract patterns* (e.g. the marbling dado in the West House)
• *plants* (e.g. palm trees, crocuses and lilies)
• *domestic animals* (e.g. sheep, goats and cattle) depicted as components of large frescoes
• *wild animals* (e.g. antelopes, swallows, ducks, dolphins and deer)
• *humans:*
  - women feature prominently; depicted with white skin and dressed elaborately
  - boys and men always depicted with brown skin, frequently naked or wearing loincloths.
	The following elements have been noted:
	• *naturalism* (realistic representation)
	  - nature: animals and plants
	  - readily recognisable materials: stone, gold, wood, textiles
	  - human figures: artists demonstrate difficulty with hands and feet (figures often shown with two left hands or two left feet)
	• *narrative composition*: some paintings convey a sequence of activities (e.g. the Saffron Gatherers, the Naval Campaign); narrative scenes are read from left to right
	• *two-dimensional depiction*: depth suggested by layering (covering part of a figure with another), e.g. one swallow painted partially over another suggests that one is closer to the viewer.

iconographic program
the symbols used in a work of art

buon fresco
a technique where walls are painted in pigment mixed with water on wet, fresh lime mortar or plaster

frieze
a wide, horizontal band of decoration, either of a painting or a sculpture, on a wall

motif
dominant or recurring idea or image in an artistic work that forms a pattern

fresco secco
a technique of painting in watercolours on dry plaster

pigment
a natural substance that gives colour to animals and plants

ochre
consolidated earth made up of clay and iron oxide, used to make red or yellow pigment

running spiral
a decorative motif consisting of a continuous spiral

A study of two frescoes

Having studied the main elements of Theran wall painting, we will now have a closer look at two well-preserved frescoes from Akrotiri: the 'Spring Fresco' and 'Young Boxers Fresco' (Sources 17 and 18).

'Spring Fresco'

This wall painting was found in Room 2 of the Delta sector of Akrotiri. This room is the only decorated room of the Delta sector and the only room where the frescoes were found *in situ* and in a ground floor room. Three walls of the room display a mountainous landscape with rocks depicted in black, red, blue and yellow. From the rocks grow clusters of red lilies, in various stages of blossom, bud to fully blown. These are mostly in groups of three. Swallows fly among the lilies, in pairs or individually.

Spyridon Marinatos thought that the scenes in this room were religious in nature and 'expressed the advanced spring season when the swallows, who have come back, are restless from mating fever and are feverishly preparing their nests'.

The artefacts found within the room included a small bed, domestic vases, bronze tools and vessels.

SOURCE 17 The 'Spring Fresco' from Room Delta 2

The 'Young Boxers Fresco'

This wall painting from Room 1 of the Beta sector is part of an iconographic program that includes the 'Antelopes Fresco'. The Young Boxers appear on a wall in a small space between two doors. They have been painted straight onto the white plaster beneath a block of red colour known as a 'silent wave' because of the lower wavy edge. A frieze of large blue ivy leaves on red stems runs around all four walls of the room, unifying the paintings. The ivy leaves are bordered by red and blue lines.

The boys' heads are painted blue, probably to indicate that they have been shaved, and they have two long locks of hair each and two small locks over their foreheads. Each boy wears jewellery – earrings, necklaces, bracelets, anklets and a waist girdle – and each wears a boxing glove on the right hand. The positions of the boys' arms suggest that they are engaged in a boxing bout or perhaps carrying out the movements of some type of dance. Whether these boys were ordinary children playing a game or 'princely brothers', as Spyridon Marinatos thought, is unknown.
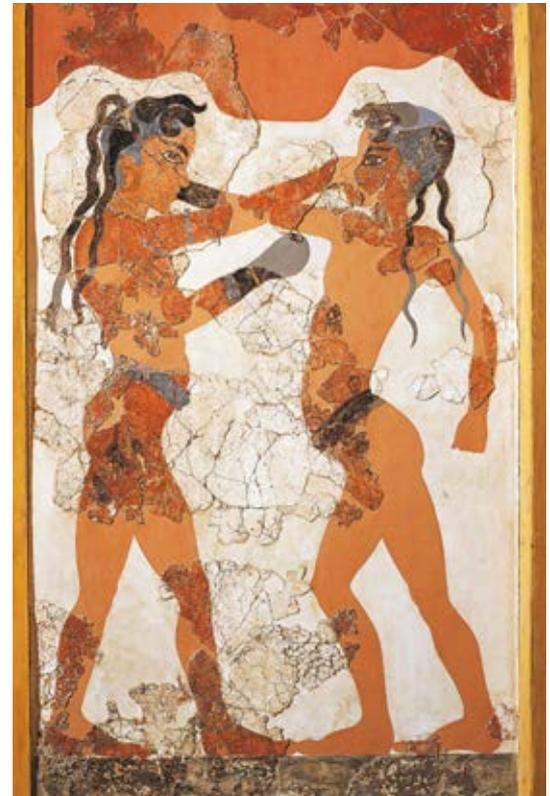
SOURCE 18 The 'Young Boxers Fresco' from Room Beta 1

9.5b Understanding and using the sources

1 Why might Marinatos have suggested a religious function for the room with the 'Spring Fresco'?
2 Is there any evidence to support this interpretation?
3 Why might Marinatos have thought that the boys in the 'Young Boxers Fresco' were 'princely brothers'?
4 What do you think is the most likely interpretation? Why?

9.5 Check your learning

1 Research as many of the other frescoes from Akrotiri as you can. You can find excellent illustrations and information in the following sources:
   • *The Wall Paintings of Thera*, The Thera Foundation, by Christos Doumas
   • *Art and Religion in Thera: Reconstructing a Bronze Age Society* by Nanno Marinatos
   Use Google Images to find a range of the paintings.
2 Use the following table to record the information you find. An entry has been completed on the 'Spring Fresco' to help you.

NAME OF FRESCO	LOCATION	SUBJECT	TECHNIQUES USED (COLOURS, MOTIFS, ETC.)	INFORMATION REVEALED ABOUT THERA AND THERAN LIFE
'Spring Fresco'	Room Delta 2	Clumps of lilies growing from rocky outcrops; swallows flying in and out	• Colours: black, red, yellow, blue • Plants grow in clusters of three • Swallows shown in profile, in pairs and singly	• Rocky landscape • Flora and fauna (lilies and swallows) • Theran artists' appreciation of nature • Influence of Cycladic art in use of whole space rather than zones

3 Use the table you have completed as well as information in other parts of this chapter to write a response to the following question: 'Explain what sources reveal about fresco painting on Thera'. (Explain: Relate cause and effect, make the relationships between things evident, provide why and/or how.)
   To help you plan your response:
   • identify aspects of Theran fresco painting (e.g. subjects, techniques, information revealed)
   • use these aspects to structure your answer (Note: avoid a purely narrative structure.)
   • draw conclusions about what the frescoes themselves reveal about fresco painting
   • use specific evidence from the sources to support your explanation.

Artefacts from Akrotiri

The artefacts found during excavation provide valuable evidence of everyday life at Akrotiri. It seems likely that the inhabitants had warning of the impending volcanic eruption, enabling them to escape before it happened. No human remains have been found. As anyone would, the fleeing people took their valuables with them. As a result, archaeologists have found limited numbers and types of artefacts. Most artefacts found have been pottery and stone vessels. Metal artefacts are much less common, and furniture is all but non-existent. However, plaster casts have been made from the impressions left by wooden items in the solidified volcanic ash, providing an idea of the furniture used by the inhabitants. All of these artefacts reveal the range of Bronze Age technology at Akrotiri.

SOURCE 19 A breasted ewer decorated with eyes, necklace and nipples
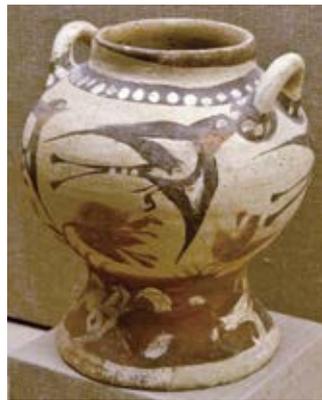
SOURCE 20 A ceramic pitcher with swallows

SOURCE 21 A clay tripod oven

SOURCE 22 A clay 'barbecue'. These supports are known as firedogs.

Pottery

All the buildings excavated at Akrotiri have produced items of pottery, some miraculously intact, others in pieces. Pottery was used for a huge variety of purposes and, as one would expect, the shapes, sizes and decoration of pots reflect their purpose. Some uses include:

- storage – food, clothing, liquids
- food preparation, cooking and display
- eating and drinking
- bathing and washing
- lighting
- ritual activity
- transportation of goods
- bee keeping
- plant growing and floral decoration.

The vast majority of pots were made locally by potters catering to the needs of the population. Local pots were made from coarse, buff-coloured clay and painted in black, brown and red. Potters seem to have been primarily influenced by Cycladic tradition, painting the entire surface of their vases with floral and faunal motifs arranged at will. They were also influenced by the tradition of Minoan potters, dividing the surface into zones separated by horizontal bands, in which they painted geometric motifs. The running spiral was very common. Some pots were decorated with small clay knobs painted as eyes, necklaces and even nipples. Nippled or breasted **ewers** could have been used for storing milk. Pots were also imported from other Cycladic islands and from Crete. Sources 19–22 show various examples of pottery found at Akrotiri.

ewer
a large jug used for carrying liquids

Christos Doumas made the following assessment of Theran pottery:

Pottery vessels quite clearly fulfilled a vast range of requirements at Akrotiri, hence the enormous number of vases of local manufacture. Taking into account the standardization of types and the association of certain decorative motifs with particular forms, this would suggest production on an industrial scale. One gains the impression that there was somewhere a major centre where vases were manufactured to cover all the requirements of the city. Perhaps the potters themselves were organised into some kind of corporate body, such as a guild.

Christos Doumas, *Thera: Pompeii of the Ancient Aegean*, Thames & Hudson, London, 1983, p. 112

Stone artefacts

A number of stone artefacts have been excavated at Akrotiri. They include tools, vases, pestles and mortars, hammers, anvils, millstones and anchors.

As with pottery, there were locally produced items as well as those imported from nearby islands. Locally produced stone artefacts were made from Theran volcanic materials and also from imported fine stones, such as alabaster, limestone and marble.

SOURCE 24 A stone pestle and mortar

Metal artefacts

Most metal artefacts found at Akrotiri were made of bronze. These included fish hooks, knives, sickles and chisels. Lead balance weights and bronze scale pans have also been found, as well as **incense** burners, cooking pots, bowls and ewers.

incense
an aromatic substance used in religious rituals, e.g. frankincense

SOURCE 25 (a) Bronze incense holder (b) Lead balance weights (c) Bronze scale pans

SOURCE 26 A gold ibex figurine found at Akrotiri in 1999

For some time silver seemed to be the only precious metal known at Akrotiri. However, in 1999 a small gold figurine in the shape of an ibex was found when foundations were being excavated for the pillars of a new shelter. The figurine had been kept in a clay chest within a wooden box. An imprint of the box in the clay was all that remained. The box was found alongside a pile of goats' horns. The figurine was hollow and its body had been made using the **'lost wax' technique**. The legs, neck and tail had been soldered on after the initial core had been removed from the body. Tool marks indicate that the figure had been hammered in the finishing process. Christos Doumas, director of excavations at Akrotiri, has suggested that the figurine was a gift, possibly from someone coming from the East. He also thought that it could have been a sacrificial artefact associated with religious ritual.

'lost wax' technique
a metal-casting method in which the figure is first moulded in wax and then covered in plaster; when the plaster is set, the wax is melted out and replaced by metal

Furniture

The volcanic ash from the eruption surrounded items of wooden furniture and set hard, preserving their 'negatives' after the wood had decomposed. Liquid plaster of Paris was poured into the spaces to produce casts of pieces of furniture such as tables, chairs and stools (see Source 27). The cast of a small bed was recovered in this manner from Room Delta 2. The bed had a wooden frame with a base made of animal skins laced tightly to it, so that it resembled a modern camp stretcher.

SOURCE 27 A plaster cast of a three-legged table from Akrotiri

9.6 Understanding and using the sources

1   What evidence supports Doumas' conclusion that the manufacture of pottery was centralised somewhere on Thera?
2   Why would metal artefacts have been valuable items?
3   Why might the gold ibex figurine have been left behind when the inhabitants left?
4   Professor Doumas thinks that the gold ibex was either a gift from the East or a religious object. Which do you think is most likely? Suggest another origin or use for the object.

The West House

This profile of the West House at Akrotiri will give you an opportunity to interpret an entire house using what you have learnt about architecture, frescoes and artefacts.

The West House has been thoroughly excavated and examined. It consists of a ground floor, first floor and a second storey in the east wing. The entrance is situated at the eastern end of the main street in the most northerly section of Triangle Square (see Source 10).

The main staircase at the entrance gave access to each storey. Various finds, such as pottery and stone vessels on the ground floor, indicate that this level was reserved for food preparation, storage and workshops. The spacious Room 3 in the centre of the first floor had a very large window (3.2 metres wide) overlooking the square. A large number of loom weights (see Source 30) found in this room suggests that weaving took place here.
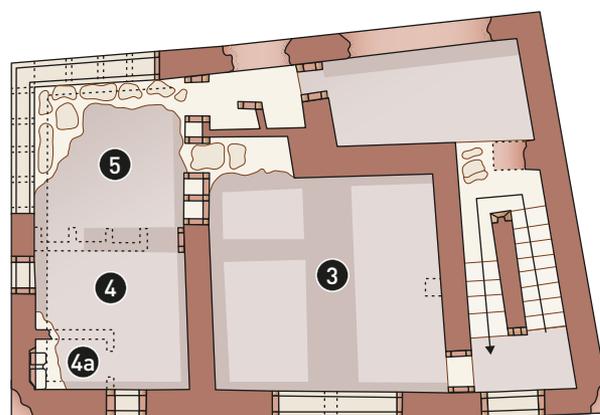
Ground floor level
Walls of ground floor
Upper storey
Walls of upper storey

N

0   5 m

SOURCE 29 A ground plan of the West House
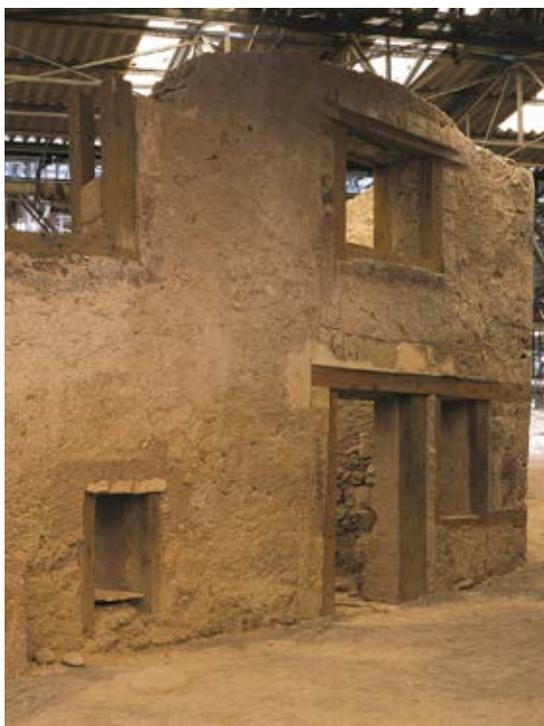
SOURCE 28 The front of the West House, facing Triangle Square
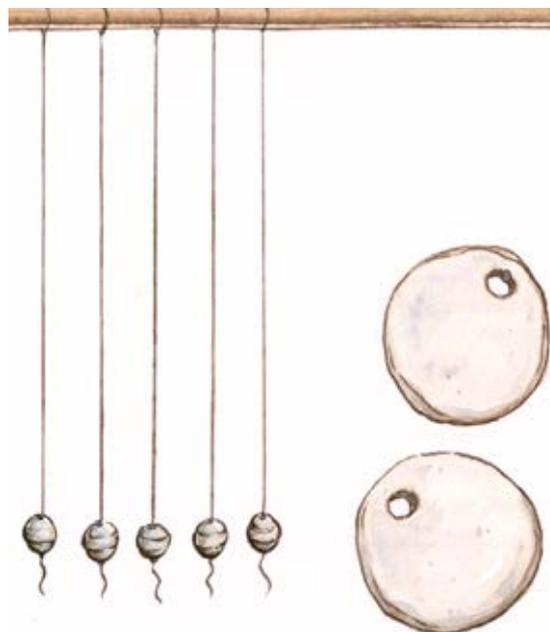
SOURCE 30 Loom weights, which were made of pottery or stone, were attached to the ends of the threads to keep them taut. This enabled the weaver to use the shuttle more easily.

The frescoes: some problems of interpretation

The most spectacular discoveries in the West House were the magnificent wall paintings in the west wing of the upper storey, which was divided into rooms 5, 4 and 4a (see Source 29). Room 4a in the upper storey contained a bathroom and possible toilet installation. Many of the frescoes, however, are in a damaged state and there is much debate about what the scenes depict, their significance and the purpose of the rooms.

The 'Young Priestess Fresco'

Located on the door jamb (side post) between Rooms 4 and 5 was a narrow fresco, over 1 metre high, of a female wearing a long, heavy garment and holding a metal vessel. Spyridon Marinatos identified her as 'a young priestess' because of her elaborate garment and because she holds what he interpreted as a gold and silver vase containing a 'kind of cake' or 'fig pudding'. However, the subsequent discovery of a number of bronze and clay artefacts similar to the one held by the woman indicates that the vessel is more likely to have been a brazier (a metal container for holding hot coals used for cooking or heating) or an incense burner (see Source 32).

SOURCE 31 The 'Young Priestess Fresco' from Room 4 of the West House

SOURCE 32 A clay brazier or incense burner

Christos Doumas, in his book *Thera, Pompeii of the Ancient Aegean*, has suggested that the young lady in this fresco, whether a priestess or a girl of the household, 'seems to be moving from Room 4 to Room 5 or vice versa, censing the house with some aromatic substance. Whether this was done for any religious purpose or merely to purify the air – there is a lavatory [toilet] installation adjacent – is difficult to decide.'

The 'Fisherman Fresco'

Room 5 of the West House contained two panels decorated with paintings of naked youths holding bunches of fish. The 'Fisherman Fresco' from the wall in the north-east corner is the better preserved of the two. It had become detached from the wall but was otherwise intact. It shows a young, nude male figure holding a bunch of fish in each hand, seven in the right and five in the left.
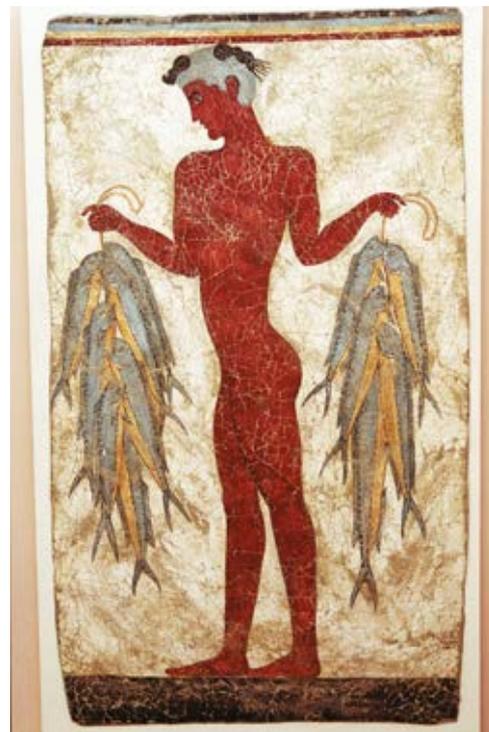
SOURCE 33 The 'Fisherman Fresco' from Room 5

SOURCE 34 An artist's **speculative** reconstruction of Room 5

Nanno Marinatos has argued that the majority of Theran frescoes are essentially religious in nature. She suggests that when viewed as a whole, together with the artefacts found in the rooms, the frescoes form a pictorial program (that is, the combination of decorative elements and artefacts in a structure that need to be interpreted together), which she interprets as religious. According to Marinatos, the figures in Room 5 are not simply fishermen, but are youthful adorants, or worshippers, making an offering of their catch to a god or goddess. She suggests that their nudity and their shaven heads indicate that they belong to a special religious group. The location of the Fishermen frescoes is also important, as she explains in Source 35.

SOURCE 35

The other important thing about the young adorants is their position in the room. They were placed in the SW and NE corners respectively and they are in a walking position. If they could walk, they would meet in the NW corner. Could it be that some offering table was placed there to receive offerings such as fish? Indeed, an offering table was found in that corner, resting on the window sill. It was decorated with dolphins and marine motifs. Thus, the adorants depict an offering that took place in that room, thereby perpetuating it forever.

Nanno Marinatos, *Art and Religion in
Thera: Reconstructing a Bronze Age Society*,
D. & I. Mathioulakis, Athens, 1984, pp. 35–6

SOURCE 36 A pottery tripod table decorated with marine motifs, which was found in Room 5

The 'Naval Campaign Fresco' or 'Miniature Frieze'

Room 5 of the West House also contained a fresco that Doumas calls the 'Miniature Frieze'. It was a small-scale painting that formed a frieze above the doors and windows around each wall of the room. This fresco is also referred to as the 'Flotilla Fresco' or the 'Admiral's Fresco'. These different names indicate the problems of interpreting this fresco. Many of the sections are damaged and fragmentary, and accurate reconstruction has proved extremely difficult. However, from the sections that have been restored it seems that the painter was narrating the events of an overseas voyage. This seems to have included visits to several harbours and cities – five in all.

Room 4a of the West House

The upper storey of the west wing of the West House was divided by a thin mud brick partition into three rooms: 4, 4a, and 5. Room 4a is the smallest of the three rooms and is situated in the south-west corner of the building. It contains two small narrow benches divided by a narrow channel. This channel was connected to a cylindrical clay drain pipe that ran down the exterior wall into a drainage system below the house. A bath tub may have originally stood nearby, together with a bronze three-legged vessel for pouring water into the bath.

Doumas has identified this installation as a toilet and bathroom and says that the only rooms in the houses at Akrotiri that can be identified with any certainty are the toilets, of which this one is the best preserved example. However, Nanno Marinatos disagrees with this interpretation and suggests that it may have had a purely religious function as a room for preparing the offerings that were made in the adjacent Room 5.
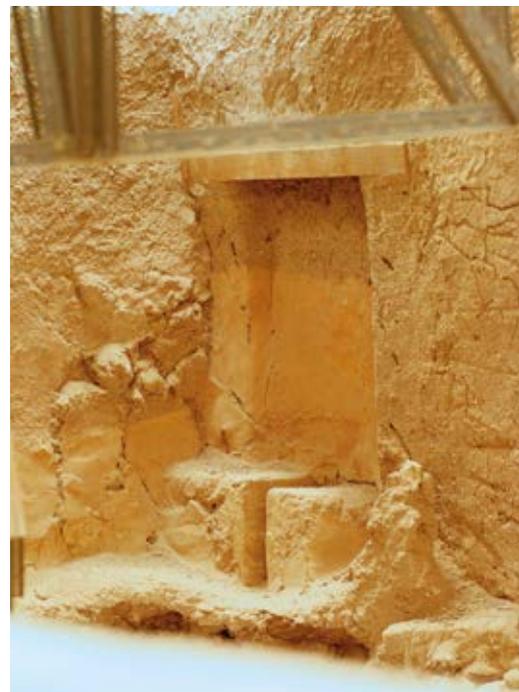
SOURCE 38 Installation in Room 4a of the West House, containing two narrow benches divided by a narrow channel that was connected to a drain pipe

I have argued that Room 5 was the main shrine but what about 4? The architecture and the finds suggest that it was a preparatory room. There was a bath-tub and a bronze **cauldron** in the corner 4a which must have been used in connection with water. A bench with a slit in the middle was connected to a drain pipe that ran vertically down the outside wall. This indicates that water or liquids were poured down there. A table of offerings and a lion's head **rhyton** [a vessel used for making liquid offerings], as well as cups, were among the finds which suggest offerings. Finally, there was a broken bowl containing red pigment which I think was used on the 'priestess' as body paint … the latter had not only vivid red lips but a red ear as well.

In view of the above, it is arguable that Room 4 was used for preparation involving offerings and purification with water and painting of parts of the face. It will be remembered that the painting of the 'priestess' was found exactly on the door jamb leading from 4 to 5 as though she is passing from one room to another.

Nanno Marinatos, *Art and Religion in Thera: Reconstructing a Bronze Age Society*, Athens: D. & I. Mathioulakis, 1984, pp. 48–9

cauldron
a large metal pot with a lid and handle, used for cooking over an open fire

rhyton
an ancient drinking or pouring vessel

9.6 Profile tasks

1 How plausible is Marinatos' theory that the fishermen depicted in Room 5 are involved in a religious ritual? What other interpretations are possible?

2 Which do you think is the more likely explanation for the function of Room 4a?

3 From the information given on the West house, what conclusions would you draw about the occupants of the house, their social status and lifestyle? And about the activities conducted in the house?

4 Which do you think is the more plausible explanation for the woman in the fresco in Source 31? Explain your choice.

5 What other evidence would it be useful to have in order to help you decide the identity and function of the young woman?

6 Look up 'Naval Campaign Fresco' online and research differing interpretations of this fresco from the West House. Which interpretation do you find most convincing?

7 View an interesting 3D reconstruction of the West House by searching online for 'Kaspersky Lab 2015–2016 Citizenship Report Akrotiri'. Compare this reconstruction with the one in Source 34. What similarities and/or differences can you observe?

8 Working in groups, choose another house from the plan in Source 10. Research this house and find information on architectural features, artefacts, frescoes and the interpretation of the house's significance and function. Present a report in which you interpret the finds. You could present this like the profile on the West House, or use PowerPoint, Prezi or another format of your choice. These following resources can help you:
   • *The Wall Paintings of Thera*, The Thera Foundation, by Christos Doumas
   • *Art and Religion in Thera: Reconstructing a Bronze Age Society*, by Nanno Marinatos, Athens, 1984
   • Search online for 'houses of ancient Akrotiri'.

Features of everyday life at Thera

We do not have enough evidence to construct a clear picture of the everyday lives of the people of Akrotiri. Significantly, there are no written texts to help. We must rely on an interpretation of the material remains. For example, Christos Doumas speculates that the production of pottery at Akrotiri must have been on an industrial scale judging from the enormous number, variety and standardisation of types of pots found (see Source 23).

We would like to know more about the social structure of Theran society. We can make some inferences from the nature of the housing. There are some freestanding houses and some blocks of housing which might suggest differing social status. However, are we applying our own modern understanding of housing and social status to an ancient society?

The mind map in Source 40 summarises some ideas about everyday life on Thera based on the sources.

FRESCOES
their contribution to Aegean and later art

RELIGION
involvement of women, youths, rituals and ritual equipment

SHIPBUILDING
its contribution to Bronze Age Aegean trade and economy

WHAT DO SOURCES REVEAL ABOUT LIFE ON THERA?

PLUMBING
introduction of drainage and toilets

ARTEFACTS
pottery, metalwork, stone tools and furniture

ARCHITECTURE
knowledge of construction of multi-storeyed buildings

SOURCE 40 A mind map summary of everyday life through the sources

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9.6 Check your learning

1. Find out more about what the frescoes of Akrotiri reveal about everyday life at Thera. The following sources will be useful:
   - *Thera: Pompeii of the Ancient Aegean,* by Christos Doumas
   - *The Wall Paintings of Thera,* by Christos Doumas
   - *Art and religion in Thera: Reconstructing a Bronze Age Society,* by Nanno Marinatos.

2. Discuss what the sources reveal of everyday life on Thera with your class. Add anything to the mind map in Source 40 that you think should be there.

3. Use what you have learnt in this section of the chapter to write a response to the following: 'What do the various sources from Akrotiri reveal about everyday life on Thera?' (Explain: Relate cause and effect, make the relationships between things evident, provide why and/or how.)

   To help you plan your response:
   - identify the key features of everyday life on Thera
   - use these features to structure your answer
   - analyse and interpret the evidence you have selected to explain what it reveals about each feature of everyday life
   - use specific evidence to support your explanation.

Thera and the Minoan civilisation

Late Bronze Age
the final stage
of an ancient
historical period
(c. 1600–1100 BC)
characterised by the
use of bronze tools
and weapons

Linear A
the main script used
by the Minoans

**horns of
consecration**
an architectural
feature named by Sir
Arthur Evans because
of its resemblance to
bulls' horns

At the same time as the Cycladic culture was developing on Thera, the nearby island of Crete, 110 kilometres to the south, was beginning to emerge as an important cultural and trade centre. The culture that developed on Crete during the Bronze Age is called 'Minoan'. Some scholars think that the Minoans established a colony on Thera and may even have controlled Thera in the **Late Bronze Age**. Others scholars reject this theory on the basis of lack of evidence. They suggest that the Therans and Minoans were trading partners only and that Thera was an independent and flourishing settlement in its own right. This remains a contested issue.

It is clear from the archaeological evidence that there was considerable contact between Thera and Crete. The exact nature of this contact, however, is difficult to determine. The Minoan script, **Linear A**, which might shed some light on the situation has not been deciphered yet. Doumas comments on the 'high degree of cultural influence exercised by the Minoans over the population of the Cycladic islands'. For example, see Source 41. He points out, however, that this was only an influence, and that the indigenous Cycladic culture remained dominant. This can be seen clearly in the material remains from Thera.

The mind map in Source 40 summarises the areas where Minoan influence can be observed in the archaeological record.
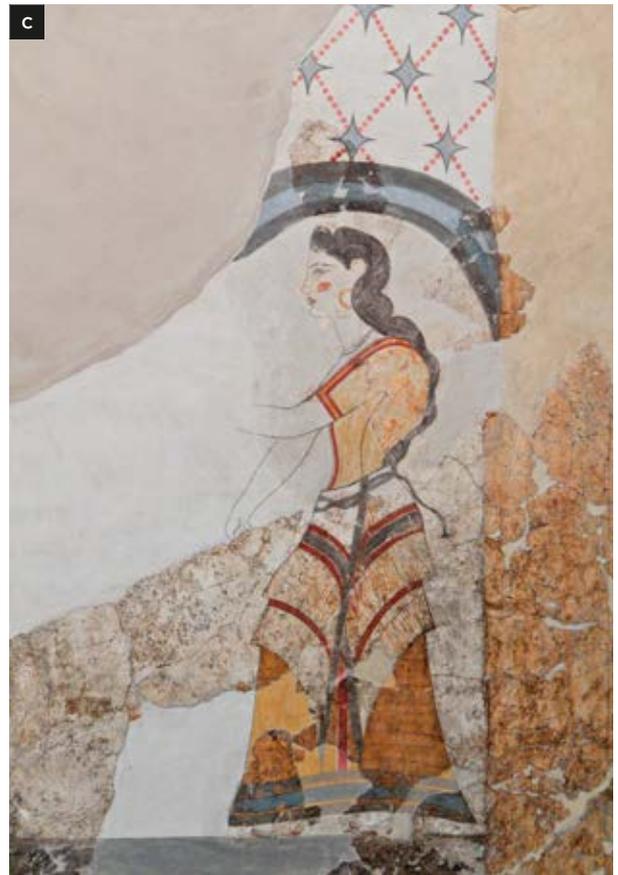
SOURCE 41 (a) Bull rhytons found at Akrotiri suggest links with Minoan religion and its bull motifs (b) The '**horns of consecration**' found outside the Delta sector seems to indicate Minoan influence (c) A young woman dressed in an outfit resembling those worn by Minoan priestesses

Frescoes
- use of Minoan techniques (e.g. lime plaster)
- naturalistic style more Cycladic than Minoan

Pottery
- Minoan influence seen in use of geometric or linear patterns
- Cycladic pictorial motifs more popular

■ **Kamares style**
a type of fine pottery produced in Minoan Crete, named for the cave in which many examples were found

■ **seal stones**
small engraved stones used as seals

■ **Knot of Isis**
a religious symbol originating in Egypt and given this name because it resembles a knot or sash that held together the garments worn by the gods

Architecture
- no palaces, no evidence of a ruler or king
- a 'lustral basin' or *adyton*, a Minoan sacred structure found in *Xeste* 3

Writing
- pottery fragments found bearing Linear A signs
- a large ewer found in Room Delta 4 had a Linear A inscription on the shoulder

RELATIONSHIP BETWEEN THERA AND THE MINOANS

Trade
- small **Kamares style** cups imported from c. 1700 BC
- much Minoan pottery from later times found at Akrotiri, used either as containers for other goods (e.g. textiles, foodstuff) or traded in their own right
- a small number of Minoan **seal stones** have been found
- fine stone vases imported from Crete
- Minoan metric system used – large numbers of disc-shaped lead weights found in various sizes
- large jars found containing white snail shells suggest import of this delicacy from Crete, where they were common
- large numbers of tripod mortars exported to Crete
- islanders perhaps used as trading middle men by the Minoans

Shipbuilding
Uncertain, but:
- ships shown in the 'Naval Campaign Fresco' could have been Minoan
- alternatively, the Therans could have influenced Minoan shipbuilding

Religion
- 'priestesses' wore Minoan-style dress (i.e. flounced skirts; tight-fitting, breast-revealing bodices)
- **Knot of Isis** worn by a priestess similar to that of Minoan priestesses
- 'horns of consecration', a Minoan religious symbol, found outside sector Delta (see Source 41)
- a 'lustral basin' or *adyton*, a Minoan sacred structure found in *Xeste* 3

SOURCE 42 A mind map summarising the relationship between Thera and the Minoans

9.7 Understanding and using the sources

1 What does the discovery of large numbers of lead weights using the Minoan metric system suggest about the nature of the relationship between Crete and Akrotiri?

2 What conclusions can be drawn about Minoan influence on Theran religion?

3 What does the evidence suggest about trading relationships between Thera and Crete?

4 How great was Minoan influence on Theran art?

5 What conclusions can be drawn about the presence of Linear A script on Thera?

9.8

vulcanology
the scientific study of volcanoes

geological
relating to the science of geology, which is the study of the earth, the rocks of which it is composed and the changes it has undergone

pyroclastic flows
dense masses of very hot ash, rock and gases that explode from a volcano and flow down its sides at immense speed

Knossos
the main Minoan site on Crete, often referred to as a palace

Mycenaean
relating to a Bronze Age civilisation in Greece

The Theran eruption

As mentioned earlier in the chapter, the prosperity and peace of Akrotiri ceased abruptly with the massive eruption of the island's volcano. Modern research into **vulcanology**, geology and oceanography has established that in ancient times the island was rocked by a mighty volcanic eruption and part of it collapsed into the sea. The results of **geological** studies indicate that the eruption consisted of about four phases and occurred over several days. The first phases included an eruption that carried a column of ash about 35 kilometres into the atmosphere, and the subsequent rain of pumice from this cloud covered the island. The next phases of the eruption became violent when magma from the eruption came into contact with sea water, and hot, dry avalanches of ash and pumice, called **pyroclastic flows**, raced down the sides of the volcano. Eventually the centre of the island collapsed, forming 300-metre cliffs around a central lagoon or caldera. Today all that remains is a group of islands – Therasia, Aspronisi, Palea Kameni, Nea Kameni and Thera proper (see Source 5 inset map).

Thera is not an extinct volcano: the latest eruption occurred in 1950. What remains of the island around the perimeter of Thera is buried beneath a thick layer of ash and pumice, up to 70 metres deep in some places.

The impact of the eruption

One of the great unsolved mysteries of Aegean Late Bronze Age history concerns the cause of the widespread destruction of the palaces on Crete c. 1450 BC that ended the Minoan civilisation. After this time, all the palaces except **Knossos** were abandoned. The palace of Knossos was subsequently rebuilt and shows clear evidence of **Mycenaean** occupation. In the Late Bronze Age, the Mycenaeans were a growing power with their centre at Mycenae on the Greek mainland to the north of Crete. After the destruction of 1450 BC, they used Knossos as a centre for their Aegean trade. Various theories have been suggested to explain the causes of the destruction on Crete.

SOURCE 43 Explanations of the destruction on Crete

Earthquake	The significant damage to the palaces c.1450 BC is agreed to have been caused by earthquakes that are common to this region. The earthquakes were followed by fires probably fuelled by the large quantities of olive oil stored in the palace magazines.
Earthquake and civil war	Sir Arthur Evans, discoverer and excavator of the Palace of Knossos, suggested that severe earthquakes caused major damage both to the palace and the economy of Crete. A period of social upheaval and perhaps even civil war could have followed.
Earthquake and invasion	Earthquakes alone may not have caused the end of the Minoan civilisation. A Mycenaean invasion soon followed taking advantage of Minoan weakness. Some of the fire and other damage may be the result of arson and looting carried out by an invading force.

Spyridon Marinatos' theory

In the 1930s, when he began his investigations, Marinatos proposed a theory that the volcanic eruption that destroyed Thera was linked directly to the destruction of Minoan civilisation, usually dated at around 1450 BC. He dated the eruption at 1500 BC on the basis of pottery sequences. Marinatos' two central arguments were:

- The volcanic eruption on Thera caused huge tsunamis that hit the northern and eastern coasts of Crete 110 kilometres to the south, destroying the palaces, harbours and, most importantly, the Minoan fleet, the basis of Minoan power. This catastrophe subsequently affected Minoan trade, an important part of the Minoan economy.
- The volcanic ash or **tephra** from the eruption settled over a wide area of Crete, destroying crops and contaminating the soil, seriously affecting Minoan agriculture.

Current archaeological research

Marinatos' theory had a number of supporters. However, more recent research appears to contradict his central arguments.

- Archaeological evidence does not support the tsunami destruction theory. Except for one site, the coastal destruction on Crete was caused by raging fires.
- A better understanding of tsunamis suggests that the Minoan fleet would have been destroyed only if all the ships had been in harbours at the time. Tsunamis are barely detectable at sea but cause immense damage in shallow harbours, where they reach great heights. It is likely that if the Minoan fleet was mainly a commercial one, the ships would have been in a variety of locations.
- The ash-fall theory has also been questioned. The south-east direction of the fallout left the west unaffected. The estimates of tephra have been reduced from 10 centimetres to 1.5 centimetres, and most scholars discount its role in the destruction of sites.

The dating of the Theran eruption: a contested issue

The date of the Theran eruption is a vigorously contested issue among Aegean scholars, who use widely varying scientific and archaeological dates to support their theories about the eruption and other events in the period. For example, the destruction of Minoan palaces and the Mycenaean invasion of Crete have been the subject of great debate ever since Spyridon Marinatos linked them to the Theran eruption.

There are two theories about when the eruption occurred with reference to a calendar date. They are: c. 1540–1500 BC, known as the 'low chronology' and c. 1660–1600 BC, known as the 'high chronology'.

The debate centres on which date range is more probable. Of major importance is the difference between archaeological and scientific dating (see Chapter 1). The archaeological dating of the eruption, which tends to support the 'low' range, is based on the pottery finds from Akrotiri, Crete and other Aegean sites. The scientific dating, which tends to support the 'high' range, relies on **radiocarbon dating** of organic matter from the Akrotiri excavations, data derived from Greenland **ice cores** and growth rings in trees in California and Ireland.

Source 45 sums up the evidence considered by the two sides of the debate. Note that it gives a very simplistic view of what is really a very complex issue.

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tephra
pieces or rock and other particles ejected from a volcano

radiocarbon dating
a method of determining the age of organic material by analysing the amount of carbon-14 remaining in a sample

ice core
a sample of ice drilled from polar ice, used to reveal sequences of past climatic change
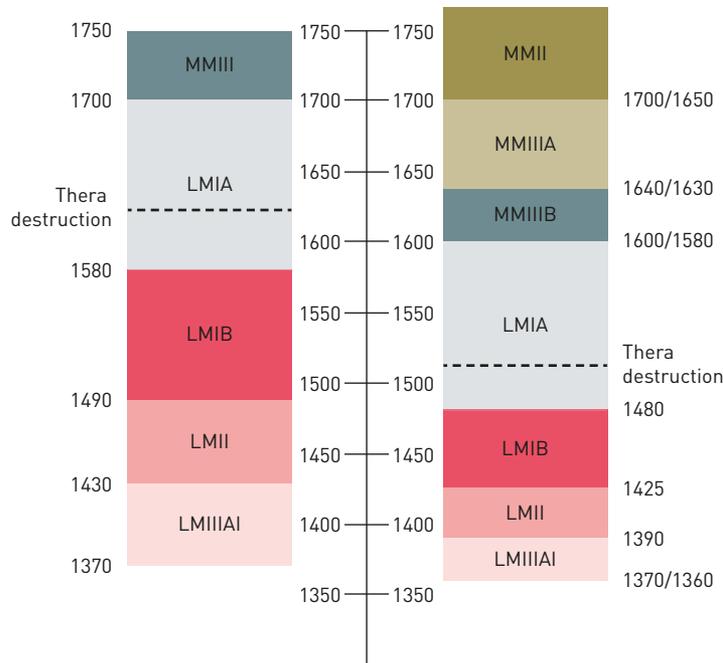
SOURCE 44 A timeline showing the relationship between the two different chronologies for the Theran eruption. The abbreviations MM and LM refer to **Middle Minoan** and **Late Minoan**. These periods are further divided based on established pottery sequences.

SOURCE 45 A simple overview of the Theran eruption debate

SCIENTIFIC DATING	ARCHAEOLOGICAL DATING
Dendrochronology: Oak trees from Irish bogs have been shown to have narrow growth rings for the decade following 1628 BC, attributed to dust from the Theran eruption. This date is supported by growth-ring evidence from the California bristlecone pine, an extremely long-lived species of pine found in Utah, Nevada and eastern California. Note: the link between the narrow growth-rings and the eruption is not proved.	*Pottery styles:* The most recent Minoan pottery style found at Akrotiri was **Late Minoan 1A (LM1A)**, which archaeological (relative) dating places at c. 1500 BC. Later pottery styles from Crete have not been found at Akrotiri. The chronology for the Minoan Bronze Age established by Sir Arthur Evans and based on pottery styles is still regarded as highly reliable.
Ice-core evidence: The acidity levels of an ice core from Greenland give a date c. 1645 BC. Note: A fragment of tephra from the ice core was shown not to be associated with the Theran eruption.	Late Minoan 1A pottery has been found in Egypt in stratigraphic layers that Egyptian records date to a time later than the early 17th century BC. (This supports the latest possible archaeological date for Late Minoan 1A to be after the high date suggested by scientific dating. So, the eruption would have to have occurred after 1600 BC.)
Radiocarbon dating: • 127 samples of wood, bone and seed from Akrotiri and other Aegean sites give dates between 1660 and 1613 BC. • An olive branch buried by the eruption was dated c. 1627–1600 BC. Note: Both examples gave dates with 95% confidence levels.	An example of **Cypriot** pottery found at pre-eruption Akrotiri does not appear in Egypt until the 1500s BC.

■ **Middle Minoan**
a Bronze Age period of Minoan culture ranging from 2200 BC to 1550 BC

■ **Late Minoan**
a late Bronze Age period of Minoan culture ranging from 1500 BC to 1000 BC

■ **Late Minoan 1A (LM1A)**
a period of Late Minoan culture, also known as the New Palace Period Phase II, which can be dated anywhere between 1700 BC and 1500 BC

■ **Cypriot**
originating in Cyprus

The significance of a precise date

In the last few decades, the pendulum of scholarly **opinion** in the Theran eruption debate, has swung between the 'high' and the 'low' dating schemes. The value of a resolution would be enormous. If a precise date for the eruption could be agreed on, it would enable the histories of all the cultures of the Aegean region to be **synchronised**. Further, it would provide a method of revising the historical chronology of ancient Egypt and the chronologies of other Aegean and East Mediterranean cultures that are based on it.

9.8 Understanding and using the sources

Sources 44 & 45

1   In the timeline, which is the high chronology and which is the low chronology?
2   According to the timeline what is the gap between the high and low dates for the eruption?
3   Which of the two chronologies (high or low) is supported by the archaeological evidence?
4   Which chronology does the scientific dating support?
5   Using Source 45, explain the problems associated with the scientific evidence.
6   Which of the scientific tests appears to be most reliable? Why?
7   Summarise in your own words the opposing arguments in this difficult dating debate.

9.8a Check your learning

1   Consider each of the theories about the destruction of Minoan civilisation that have been presented. Which seems to be the most plausible explanation?
2   Is it possible to reach a conclusion on this question?
3   What does recent thinking and scientific evidence add to the existing understanding of the eruption of the Thera volcano and its impact?
4   Do some research of your own on this complex topic. Some sources you could use include:
   •   *A Test of Time: The volcano of Thera and the chronology and history of the Aegean and east Mediterranean in the mid-second millennium BC*, by S. W. Manning. (You can access parts of this text and a post-2000 update online.)
   •   S. W. Manning & D. A. Sewell, 'Volcanoes and history: a significant relationship? The case of Santorini', in *Natural Disasters and Cultural Change*, R. Torrence & J. Grattan (eds), by S. W. Manning and D. A. Sewell.
   •   'The chronology of the Aegean late bronze age with special reference to the "Minoan" eruption of Thera', by S. Dunn. (This is a very long and detailed thesis. Its conclusion suggests a way forward in solving the Theran eruption dating issue.)
5   Find out more online about the Minoan chronology devised by Sir Arthur Evans.
6   Watch a film about Thera and the eruption of the volcano. Search online for 'Minoan eruption'. Use what you have learnt in this chapter to assess the reliability of the representations in the film.

Significance of Thera

Your study of Thera in this chapter will have suggested the reasons why it is a significant site from the ancient world. In the first place, there is the link between Thera and the **legend** of Atlantis. This continues to be a subject of great interest for Atlantis enthusiasts. In addition, the cataclysmic eruption that destroyed the island has been compared to the eruption of Mount Vesuvius that buried Pompeii and Herculaneum more than 1000 years later.

Because Akrotiri was buried under layers of ash, many of its buildings, including frescoes and some artefacts, were preserved. These have provided valuable information about the culture and daily life of the people who inhabited this Bronze Age site. Thera is also significant in its relationship to the Minoan civilisation. The influence of Minoan culture is clearly evident in all aspects of Theran life. The other important connection with Crete is both the short- and the long-term impact of the Theran eruption on the Minoan civilisation. This aspect, together with the date of the eruption, continues to be hotly debated by Aegean Bronze Age archaeologists and vulcanologists.

The mind map in Source 47 summarises some of these key factors of significance.

HOW DOES IT LINK TO A WIDER CONTEXT?
• link to Minoan culture
• impact of eruption on Minoan civilisation

WHAT IMPORTANT INFORMATION DOES IT REVEAL?
• daily life and Bronze Age culture

SIGNIFICANCE OF THERA

IS IT WORTH REMEMBERING?
• link to the legend of Atlantis

WHAT IS ITS CONTRIBUTION TO ARCHAEOLOGY AND OTHER DISCIPLINES?
• debates about impact and date of eruption
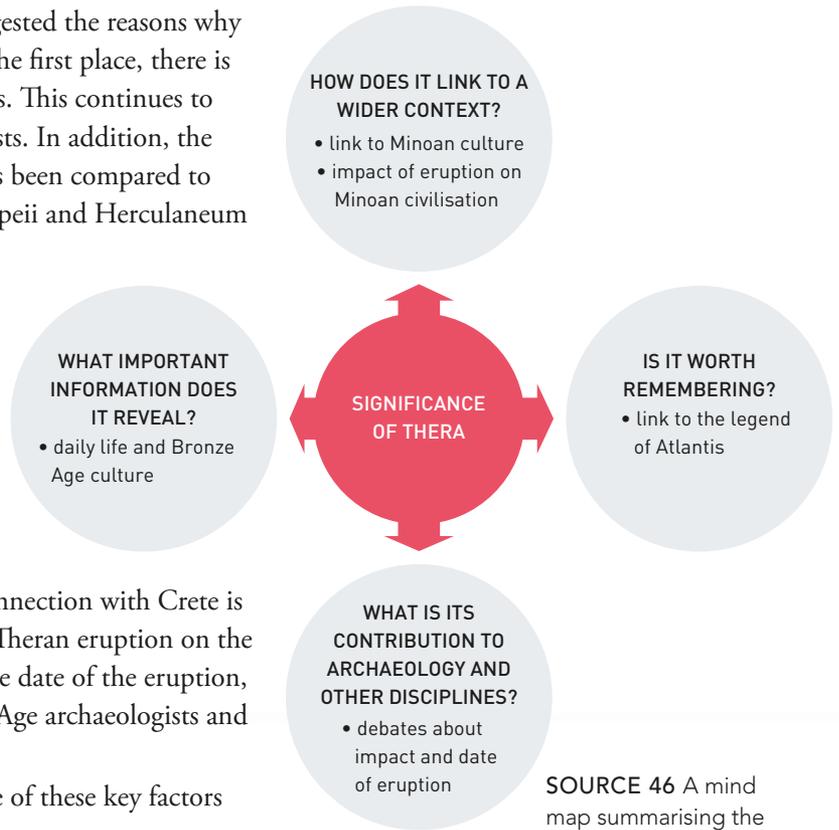
SOURCE 46 A mind map summarising the significance of Thera

9.8b Check your learning

1 Use what you have learnt from your study of this chapter to construct a response to the following question: 'Evaluate the significance of Thera as a Bronze Age site'. (Evaluate: Make a judgement based on criteria, determine the value of.)

   To help you plan your response to:
   • identify the criteria for judging Thera's significance
   • use these criteria to structure your answer
   • make judgements about the value of Thera as a Bronze Age site. Think in terms of 'Thera is a significant site because …'
   • use specific evidence to support your evaluation.

legend
an old story about famous people and events, but not necessarily true

A study of the Bronze age site of Akrotiri on Thera has enabled us to explore a wide range of archaeological evidence, from the remains of buildings, their architectural features and decorations to the artefacts of everyday life. It has been possible to attempt a reasonably reliable reconstruction of aspects of the lives of the inhabitants. We know something of the Theran inhabitants' technology, artistic skills and interests, and if we accept the interpretations of some scholars, their religious practices. We can see the strong influence of Minoan Crete in both Theran technology and art, but cannot draw definite conclusions about the relationship between their cultures. Of particular interest to modern scholars of the Aegean Bronze Age is the question of the date of the Theran eruption. This remains one of the most contested issues in current archaeological and scientific debate. A resolution of the issue will solve a number a dating problems not only for Minoan/Theran research, but also significantly for the wider Aegean area.

FOR THE TEACHER

Check your <u>o</u>book <u>assess</u> for the following additional resources for this chapter:

Answers
Answers to each *Check your learning*, *Understanding and using the sources* and *Profile task* in this chapter

Teacher notes
Useful notes and advice for teaching this chapter, including syllabus connections and relevant weblinks

Class test
Comprehensive test to review students' skills and knowledge

<u>a</u>ssess quiz
Interactive auto-correcting multiple-choice quiz to test student comprehension

10

Troy

FOCUS CONCEPTS & SKILLS

Contestability

Particular representations of the past are challenged or contested for many reasons. Historians and others often draw different conclusions from the same evidence. On the other hand, lack of evidence can lead to constructed versions of the past that are open to debate. In this chapter we look at the site of Troy and the Trojan War. We have very little evidence for the war itself. For this reason, its very existence is debated. Regardless of its historicity, its causes, course and outcomes are all subjects of scholarly and popular debate.

LEARNING OUTCOMES

1. Analyse and interpret archaeological and written sources for evidence to support a historical account or argument about Troy and the Trojan War.

2. Analyse and evaluate the role of Schliemann and other archaeologists in the discovery, excavation and interpretation of Troy.

3. Explain the role and status of women as revealed in Homer's *Iliad.*

4. Discuss and evaluate differing interpretations and representations of Troy.

5. Account for the continued popularity of Troy and the Trojan War in modern times.

SOURCE 1 A poster advertising the 2004 film *Troy*, with Brad Pitt as Achilles and Eric Bana as Hector

The legend of Troy

epic
a long poem, usually derived from ancient oral tradition, narrating the deeds and adventures of heroic or legendary figures or the past history of a nation

legend
an old story about famous people and events, but not necessarily true

black-figure
relating to a type of Greek pottery with one or more bands of figures silhouetted against a tan or red background surface

amphora (*pl. amphorae*)
an ancient two-handled pottery storage jar with a narrow neck; one of the principal vessel shapes in Greek pottery

For centuries the mythological stories of the Trojan War have fascinated people the world over. The main written source of these traditional stories is Homer's famous **epic**, the *Iliad*. The name *Iliad* comes from Ilion, another name for Troy. The word 'epic' comes from the Greek word *epos* meaning 'the spoken word'.

There are many stories that make up the cycle of stories called the Trojan War. The cycle begins with the birth of Paris, son of Priam and Hecuba, king and queen of Troy. A prophecy foretells that Paris will bring death and destruction to his father's kingdom. Paris is banished from the kingdom and secretly raised by a shepherd and his wife. Years later when he has grown to maturity, the three goddesses Hera, Aphrodite and Athena involve him in a contest. He has to choose the most beautiful among them. Each offers a different prize and Paris chooses Aphrodite, who offers him the most beautiful woman in the world as his wife.

Paris is soon reunited with his parents and travels as an ambassador of Troy to the Greek kingdom of Sparta where he meets King Menelaus and his beautiful wife, Helen, as the prophecy had foretold. Helen and Paris fall in love, escape together and return to Troy. This sets in motion a tragic sequence of events. In another version of the **legend**, Paris abducts Helen and takes her back to Troy.

Menelaus, enraged by the treachery of Helen and Paris, calls on his fellow Greek chieftains to join him in a war to regain Helen and punish the Trojans. The fleet is assembled and eventually sets sail for Troy. What follows is a 10-year siege of this fortified city. The characters of the story, both Greek and Trojan, and the battles, triumphs and tragedies of this long war as recounted in Homer's *Iliad* have been told and retold through the centuries. It is a fascinating story. The *Iliad* is, in fact, the earliest known literature in the western world and the key elements of this epic – its heroes, villains and conflict – have inspired thousands of other stories of human struggle right down to our own times.

The destruction of Troy

One of the most intriguing parts of the Trojan story concerns the means by which the Greeks were finally able to overcome the Trojans and carry out the destruction of Troy. Troy was a strongly fortified site and, for 10 long years, the Greeks could find no way into the city. All of the battles were fought on the plain outside the city walls. In the end it was not a battle between heroes that decided the outcome, but a cunning trick of the Greeks that enabled them to enter the city. This famous wooden horse was devised by the Greek hero Odysseus. According to the legend, the Greeks pretended to give up the war and sailed off in their ships, leaving behind a large wooden horse. Inside the horse, Greek warriors were hiding in preparation for an attack. The Trojans, thinking the Greeks were gone for good, began rejoicing and opened their city gates and pulled the horse inside. During the night that followed, the Greeks crept out from their hiding place, gave entry to the rest of their men and carried out the destruction of the city. The wooden horse is one of the most recognisable representations of Troy in modern times.

SOURCE 2 A Trojan War battle scene on a Greek **black-figure amphora**, 550–540 BC, on display in the National Gallery of Victoria in Melbourne

SOURCE 3 A modern representation of the Trojans bringing the wooden horse into the city, a scene from the 2004 film *Troy*

The major part of Homer's *Iliad* describes the final stage of the war and features epic battles between the great warrior heroes of Greece and Troy, including Achilles and Hector. After the Greek victory, Troy is **sacked**, **razed** to the ground and its men are put to the sword. The women of Troy are given as spoils of war to the conquering Greek generals. Helen returns to Sparta to live out her days with Menelaus. The Greek hero Odysseus, the inventor of the wooden horse **stratagem**, is fated to wander for 10 years before returning to his native Ithaca. The tale of Odysseus' adventures is told in Homer's sequel to the *Iliad*, the *Odyssey*. One Trojan prince, Aeneas, manages to escape the destruction of his city with his father and son. After many adventures, he arrives on the plain of Latium in Italy to lay the foundations for the future city of Rome. His tale is told in Virgil's famous *Aeneid*.

■
sacked
destroyed, plundered

■
razed
destroyed, demolished, levelled to the ground

■
stratagem
a plan, scheme or trick for surprising or deceiving an enemy

10.1 Check your learning

1 Suggest examples in modern popular culture of stories of heroes and battles that reflect the ancient epic tradition of the Trojan War story.
2 Share your own experiences of the Trojan War story with your peers. When did you first hear the story? What impression did it make on you?
3 Discuss the features of the Trojan War story that you are familiar with and which help to explain why it continues to fascinate modern audiences.

Bronze Age
a historical age characterised by the use of cast bronze to make tools and weapons

The **Bronze Age**, the period in which the Trojan War is thought to have occurred, spans approximately 2300 years between about 3500 and 1200 BC. During this period, people learnt how to mine and smelt copper and tin to make bronze weapons and tools. These activities required an organised labour force and skilled craftsmen. Before the Bronze Age, tools were made of stone or copper and people hunted for and gathered their food. However, in the Bronze Age agriculture and animal husbandry were developed. This meant that a surplus of food could be produced to feed other workers – such as bronze-smiths, weavers, potters and builders – and to feed the ruling class who organised and led society. These developments led in time to the growth of towns and cities, and the beginning of writing and sophisticated systems of administration to organise and govern them.

social hierarchies
the ranking of groups of people in society based on status, wealth or power

The technological and cultural advances of the period accelerated the development of complex social structures based on access to and control of resources. Distinctive **social hierarchies** emerged. These were characterised by the centralisation of power, culminating in the figure of a powerful ruler or a ruling **elite** below whom was the mass of the population including craftsmen and agricultural workers.

elite
the group of people considered to be superior to others because of their social standing, wealth and gender

LATE BRONZE AGE CIVILISATIONS IN THE MEDITERRANEAN AND THE NEAR EAST

Late Bronze Age
the final stage of an ancient historical period (c. 1600–1100 BC) characterised by the use of bronze tools and weapons
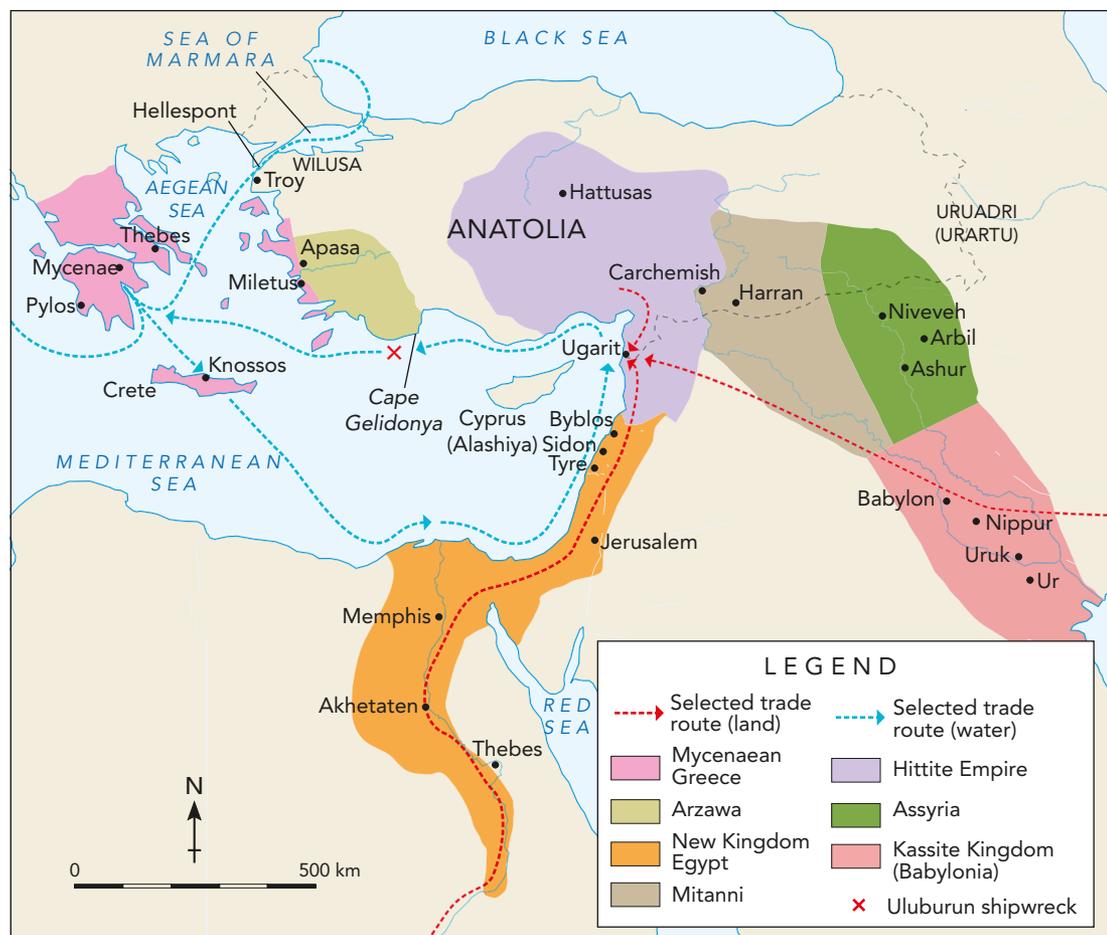
Source: Oxford University Press

SOURCE 4 The Mediterranean and the Near East, showing the major civilisations and trade routes of the Late Bronze Age

Features of Bronze Age civilisations

The Bronze Age civilisations of the eastern Mediterranean and Near East are shown on the map in Source 4. Some of the earliest developments occurred in areas that are now modern-day Turkey, Iran and Iraq. The Sumerians (modern-day Iraq) are credited with being the first to make bronze. They also developed **cuneiform**, the earliest form of writing, and introduced a system of political administration and state-sponsored religion. Early Bronze Age Egypt was a golden age in art and architecture. Part of this period, known as the Old Kingdom, witnessed, among other things, the building of the pyramids, the emergence of a highly efficient bureaucracy and the distinctive hieroglyphic script. The Babylonians are famous for their contributions to architecture and the sciences. The Babylonian king Sargon of Akkad built the first empire of the world and another king, Hammurabi, was the first to introduce a written code of laws. Babylon fell to the conquering Hittites who established an empire in the Late Bronze Age period.

In the Greek world, the Minoan civilisation on the island of Crete, centred on the site of **Knossos**, had also become a major focus of development and trade during the Middle Bronze Age, between about 2000 and 1500 BC. However, around 1450 BC, the Minoans were eclipsed by the rising power of the **Mycenaeans**, a warrior society named after Mycenae, an important Bronze Age centre on the Greek mainland. Mycenaean civilisation flourished for 500 years between 1600 and 1100 BC. The Mycenaeans were the forerunners of Greek civilisation of the **Classical period**.

Elsewhere in the Bronze Age world, there was the Indus Valley civilisation of India, whose large cities are noted for their urban planning, baked-brick houses, and elaborate systems of drainage and water supply. The Vedas, important religious texts, were written in the Bronze Age and form the basis of cultural life in India even today. In China, the earliest of the dynasties, the Shang, flourished in the Late Bronze Age. In Japan, the Yayoi Period was a time of rapid development in agriculture.

cuneiform
a system of wedge-shaped writing on clay tablets first developed by the ancient cultures of Mesopotamia and Persia

Knossos
the main Minoan site on Crete, often referred to as a palace

Mycenaeans
relating to a Bronze Age civilisation in Greece

Classical period
the period of Greek history from c. 500 to 323 BC

Near Eastern
a region of south-west Asia including Asia Minor, the Levant and Mesopotamia

SOURCE 5 A summary of developments across Bronze Age civilisations

PERIOD	NEAR EAST	EGYPT	GREECE	INDIA	CHINA
Early Bronze Age c. 3500–2000 BC	• Sumerians discover how to make bronze; develop cuneiform script • Sumerian city-states, e.g. Ur	• Old Kingdom: Age of pyramids • Development of bureaucratic administration • Hieroglyphs	• Early Minoan period on Crete • Pre-palatial period: development of crafts and industries	• Indus Valley civilisation • Cities of Harappa and Mohenjo-daro	• The Longshan people
Middle Bronze Age c. 2000–1600 BC	• Akkadian Empire • Sargon of Akkad • Hammurabi of Babylon	• Middle Kingdom: Golden age in art and architecture • Second Intermediate Period	• Height of Minoan civilisation • Widespread trading contacts	• Decline of Harappan culture • Indo-Aryan migrations into India	• Shang Dynasty • Oracle bones: development of writing
Late Bronze Age c. 1600–1200 BC	• Rise of Hittites as a major power; conflict with other **Near Eastern** powers	• New Kingdom: Imperial expansion • Reign of Tutankhamun	• Rise of Mycenaean civilisation • Trojan War may have occurred in this period	• Vedic period: Major time of development • Oldest Hindu scriptures date to this time	• Shang Dynasty

Troy in the Late Bronze Age

The Late Bronze Age is the focus of this chapter. It is regarded by most scholars as the period in which the events described in Homer's *Iliad* may have occurred. Ancient Troy was situated at a strategic point at the southern entrance to the Hellespont (now called the Dardanelles), a narrow passage of water linking the Black Sea with the Aegean Sea via the Sea of Marmara. It was a bridge between Europe and Asia and a major trade route. This was a time of extensive trade and cultural exchange between the Bronze Age civilisations of the Near East and the eastern Mediterranean. Source 4 shows some of the trade routes of this period, including the location of the famous Uluburun and Cape Gelidonya shipwrecks, the oldest shipwrecks so far discovered. They provide important evidence of Bronze Age culture and trade.

SOURCE 6 Some of the cargo including weapons and pottery, from the Uluburn shipwreck, now in the Bodrum Underwater Archaeology Museum, Turkey

The city of Troy also commanded a land route that ran north along the west Anatolian coast and crossed the narrowest point of the Hellespont to the European shore. It is possible that this position of strategic advantage might have enabled the Trojans to impose a duty on ships travelling through the Hellespont. However, evidence for this is very limited. Excavations at Troy suggest that the city flourished in the Late Bronze Age at the height of the Mycenaean period and had contacts with its Aegean neighbours as well as with the Hittite civilisation, an important Bronze Age power.

During this time, warriors from the cities on the Greek mainland conducted raids into settlements around the Aegean Sea and carried off loot of all kinds, including men and women who became slaves. These Greeks have been identified with the **Achaeans** of Homer's *Iliad*.

Achaean
the name that identifies the Mycenaean Greeks in Homer's *Iliad*

10.2 Check your learning

1   For discussion: The Bronze Age was a time of remarkable development. What innovations or developments do you consider the most significant? Explain your choices.

2   Conduct some research on one or more of the periods of Bronze Age civilisations featured in Source 5. Compile a short summary supported by relevant visual sources.

3   Prepare a short Prezi or PowerPoint report (5–10 frames) including evidence from the ships' cargoes to answer this question: 'What do the Uluburun and/or Cape Gelidonya shipwrecks reveal about Bronze Age culture and trade?' These resources will be useful:

   a   View a 5-minute YouTube film clip about the Uluburun shipwreck.

   b   Read the Institute of Nautical Archaeology's online 'Cape Gelidonya Late Bronze Age Shipwreck Excavation Site Report'.

The people and gods of the Trojan legends

Some of the characters, both gods and mortals, who feature in the *Iliad* are shown in the family trees of the two royal houses of Troy and Greece in Sources 7 and 8. For the ancient Greeks, the gods were real and played important – often decisive – roles in their lives. Although the gods were powerful and immortal, they also experienced the same moods, whims and passions as humans.

SOURCE 7 The royal house of Troy
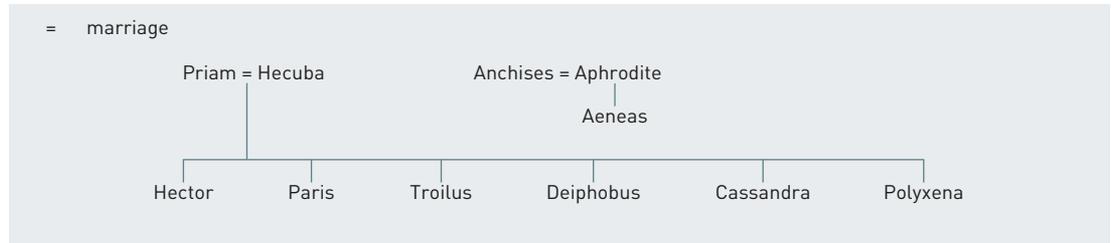
SOURCE 8 The Greek royal house of Atreus
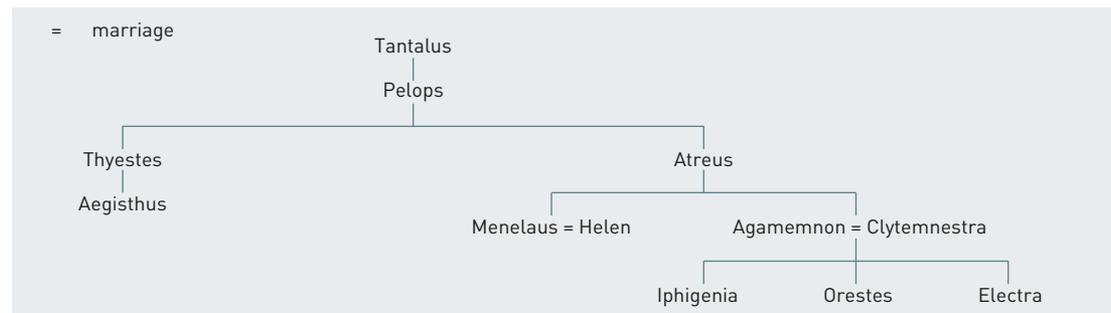
The people of Homer's story

The *Iliad* opens with a quarrel between the Greek hero Achilles and Agamemnon the commander-in-chief of the Greek forces, over a female slave, Briseis, whom the Greek soldiers had awarded to Achilles as a prize in recognition of his heroic exploits. Agamemnon, however, seizes the woman. Achilles, in a fit of rage, withdraws from the fighting and remains so for much of the action. In the meantime, the Trojans, led by Hector (son of the Trojan king, Priam), almost burn the beached Greek ships and drive the invaders into the sea.

Hector kills Achilles' close friend, Patroclus, prompting Achilles to resume fighting. The Greeks drive the Trojans back to their citadel. Achilles kills Hector in one of the climactic scenes of the war. He abuses the corpse but is eventually persuaded by the god Zeus to return it to Priam for funeral honours. Achilles dies as the result of an arrow shot into his heel. At the end, the Greeks enter Troy by hiding in a wooden horse and destroy the citadel. Other Greek warriors who take part in the war include Menelaus, brother of Agamemnon and husband of Helen; Ajax, son of Telamon; Diomedes, the youngest of the Greek kings in Agamemnon's force; and Odysseus, a bold and clever warrior, inventor of the wooden horse stratagem. On the Trojan side, Paris, son of Priam and abductor of Helen, plays a secondary role in the war. Although an able warrior, he is inferior to his brother Hector and to the Greek leaders whom he faces.

After the destruction of Troy, the Trojan women, including Hecuba, Andromache, Cassandra and Polyxena, are handed over to the victorious Greeks as war trophies.

The Gods of Homer

The actions of the gods in the *Iliad* reflect the social structure and values of the **Homeric Age** in which it was composed. It was a society dominated by elite families and their warrior heroes. Ancient Greek society accepted war as a necessary and even important part of life. The gods of Homer's time hold the same values and behave in the same way as the noble heroes of the day.

In the Trojan War, many gods took sides in the conflict, helping their favourite mortals both directly and indirectly (see Source 9). Mortals fight gods, and gods often fight each other.

SOURCE 9 Gods of the Trojan War

GODS SUPPORTING TROJANS	EXAMPLE	GODS SUPPORTING GREEKS	EXAMPLE
Aphrodite	Promised Paris the most beautiful woman in the world as his wife before the war; protector of Paris in the war	Athena	A chief urger of battle against the Trojans; intervenes in many disguises to injure Trojans or protect Greeks
Apollo	Infected the Greek camp with a plague and helped Paris to kill Achilles	Hera	Schemes with other gods to defeat Troy; never forgave Paris for choosing Aphrodite as the most beautiful goddess
Ares	Led Trojans into battle against the Greeks; fought for Hector until wounded by a Greek spear guided by his sister, Athena	Thetis	Mother and fierce protector of Achilles; asked the god Hephaestus to make a suit of armour for Achilles
Zeus	Vowed to remain neutral in the war, but in his heart favoured the Trojans	Poseidon	Enters the war at a crucial stage and moves through the ranks of soldiers, giving them courage for the fight

10.3 Check your learning

1   Compile a short profile on the members of the royal houses shown in Sources 7 and 8. Research them online by searching for 'House of Atreus' and 'House of Troy – Timeless Myths'.

2   Find out more about the gods listed in Source 9 and others who took sides in the Trojan War. Start your research by searching for the name of the god + 'role in the Trojan War'.

3   Choose one or more of the following famous events of the Trojan War and find out how the gods in each case influenced the course of events.

  Book 1: Apollo and the plague

  Book 2: Zeus sends Agamemnon a dream

  Book 3: Aphrodite rescues Paris from duel with Menelaus

  Book 4: Athena persuades Pandaros to break the truce

  Book 7: Athena and Apollo agree to fight in single combat (leads to contest between Hector and Ajax)

  Book 8: Zeus weighs the fates of the Greeks and the Trojans in a scale

  Book 13: **Poseidon** secretly helps the Greeks

  Book 15: Zeus sends Apollo to Hector to help the Trojans

  Book 21: The gods in hand-to-hand combat – Ares v. Athena, Athena v. Aphrodite, Poseidon v. Apollo, Hera v. Artemis, Hermes v. Leto

Homer and the *Epic Cycle*

Very little is known about Homer. Tradition has it that he was born in Asia Minor in the 8th century BC and that he was blind. The issues concerning the identity of Homer and the composition of his epics are the subject of ongoing debate among scholars, a debate that has come to be called the 'Homeric Question'. There are actually several questions: Who was Homer? Was there a person called Homer? When did he live? Is there one author of the *Iliad* and *Odyssey* or a number of authors?

One scholar argues that Homer 'was not the name of a historical poet, but a fictitious or constructed name'. (M. L. West, 'The Invention of Homer', 1999) Another scholar suggests that we moderns have an 'author obsession – we want to know biography all the time. But Homer has no biography', he argues. 'The *Iliad* and the *Odyssey* are like Viking longships. Nobody knows who made them, no name is attached to them, there's no written design or drawings. They're simply the evolved beauty of long and careful tradition.' (A. Nicholson, *Why Homer Matters*, 2014)

The ancient epic of the Trojan War attributed to Homer is based on an oral tradition in which a number of stories are woven together to form a long narrative – the *Epic Cycle*. The stories are derived from historical and legendary materials that originated in the oral traditions of the poet's country during times of conflict and expansion. The original epics were not written down, but were composed and sung or chanted to musical accompaniment.

The epics are structured in a loosely knit form. This means that different episodes can be recited and enjoyed as separate poems or stories. The heroic ideal in the ancient oral epic is expressed through heroes who strive primarily for personal fulfilment, while national or patriotic sentiments are usually less important.

The language of the epic is **formulaic**. It uses repetitive stock phrases and descriptions of places, people and events as an aid to memory and oral recitation. These are known as **epithets** and scholars estimate that approximately 25 000 of these are contained in the *Iliad*. The following are some famous examples:

- the goddess Athena is usually called 'Athena of the flashing eyes'
- Odysseus is referred to repeatedly as 'Odysseus of the nimble wits'
- the city of Tiryns becomes 'Tiryns of the Great Walls'
- a new day beginning is described as 'Dawn lit the east with rosy fingers'.

The Trojan War, if it happened, is generally regarded as having occurred somewhere between 1270 and 1200 BC. Homer is believed to have lived between 800 and 700 BC, so his tales were even then of long ago – a golden age, an age of heroes. Sources 9 and 10 are examples of epic poetry taken from the *Iliad*.

formulaic
produced in accordance with a mechanically followed rule or style

epithet
an adjective or phrase describing a quality or attribute of a person

SOURCE 10

The Wrath of Achilles is my theme, that fatal wrath [anger] which, in fulfilment of the will of Zeus, brought the Achaeans so much suffering and sent the gallant souls of many noblemen to Hades, leaving their bodies as carrion [decaying flesh] for the dogs and passing birds. Let us begin, goddess of song, with the angry parting that took place between Agamemnon King of Men and the great Achilles son of Peleus. Which of the gods was it made them quarrel?

Homer, *Iliad*, Book 1.1

Hades
the name of both the ancient Greek god of the underworld and the home of the dead

SOURCE 11

While Hector stood engrossed in this inward debate, Achilles drew near him, looking like the god of war in his flashing helmet, girt for battle. Over his right shoulder he brandished the formidable ashen spear of Pelion, and the bronze on his body glowed like a blazing fire or the rising sun. Hector looked up, saw him, and began to tremble. He no longer had the heart to stand his ground: he left the gate, and ran away in terror. But the son of Peleus, counting on his speed, was after him in a flash. Light as a mountain hawk, the fastest thing on wings, when he swoops in chase of a timid dove, and shrieking close behind his **quarry,** darts at her time and again in his eagerness to make his kill, Achilles started off in hot pursuit; and like the dove flying before her enemy, Hector fled before him under the walls of Troy, fast as his feet would go … Keeping some way from the wall, they sped along the cart track, and so came to two lovely springs … Here the chase went by, Hector in front and Achilles after him – a good man, but with one far better at his heels. And the pace was furious. This was no ordinary race, with a sacrificial beast or a leather shield as prize. They were competing for the life of horse-taming Hector; and the pair of them circled thrice round Priam's town with flying feet, like powerful race horses sweeping round the turning post, all out for the splendid prize of a **tripod** or a woman offered at a warrior's funeral games.

Homer, *Iliad*, Book 22

SOURCE 12 Achilles with Hector's corpse, a scene from an **Attic red-figure** cup, c. 490–480 BC

10.4 Understanding and using the sources

Sources 10 & 11

1   What was the cause of Achilles' wrath? How were the gods involved?
2   Briefly retell in your own words what happens in Source 11. How does Homer depict each warrior?
3   What is the meaning of 'ashen spear' and 'a good man, but with one far better at his heels'?
4   Which stock phrase does Homer use to describe Hector?
5   Why is this 'no ordinary race'? What were the usual prizes for such a race?
6   How does Homer arouse the reader's interest in the events he describes? Choose examples from the text to support your answer.

10.4 Check your learning

1   Find out more about the quarrel between Agamemnon and Achilles. Why is it such an important part of the story?
2   You can read the full account of the Trojan War in Homer's *Iliad* in a Penguin Classics print edition or online (e.g. on the Internet Classics Archive website).
3   If Homer did not live at the time of the events he describes, what value does his work have for the historian investigating the Trojan War?

10.5 Did the Trojan War really happen?

historicity
historical quality or character, especially in relation to establishing the authenticity of people and events

myth
an ancient traditional story about gods, heroes and magic

predatory forays
raids or attacks carried out to gain plunder

Scholars have been debating for a long time whether the Trojan War ever happened. We refer to this issue as the **historicity** of the Trojan War. This term refers to the actuality or authenticity of persons and events. In other words, is there sufficient evidence to prove that persons existed or particular events occurred and that they are not merely the stuff of **myth**, legend or fiction? Sources 13 and 14 deal with some of the issues involved in this controversy.

SOURCE 13

Kings like Agamemnon, then, needed to reward and equip their war host with loot – treasure, raw materials, precious metals, cattle and women … In Homer … the greatest praise is to be called a 'sacker of cities' … Soon after 1300 the Mediterranean had started to witness the widespread raiding and instability which would later engulf it. There may have been economic problems, overpopulation, crop failures, drought and famine … it may be that Greek interests were squeezed out of south-western Anatolia, forcing them to look further northwards for their slaves and raw materials – toward Troy … we have to assume that Agamemnon and his fellow kings and cities did what they could to remedy the situation … and frequent **predatory forays** must have been the way they sustained themselves … Seen in this light, an attack on Troy, among other places, seems so obvious that if we had no tale of Troy we would have had to postulate it … There is an immense amount of circumstantial evidence that suggests that a kernel of the tale of Troy goes back to a real event in the Bronze Age; how much we cannot yet be sure …

Michael Wood, *In Search of the Trojan War*, London: BBC Books, 1987, pp. 246–9

SOURCE 14

According to the archaeological and historical findings of the past decade especially, it is now more likely than not that there were several armed conflicts in and around Troy at the end of the Late Bronze Age. At present we do not know whether all or some of these conflicts were distilled in later memory into the 'Trojan War' or whether among them there was an especially memorable, single 'Trojan War'. However, everything currently suggests that Homer should be taken seriously, that his story of a military conflict between Greeks and the inhabitants of Troy is based on a memory of historical events – whatever these may have been. If someone came up to me at the excavation one day and expressed his or her belief that the Trojan War did indeed happen here, my response as an archaeologist working at Troy would be: why not?

Manfred Korfmann, 'Was there a Trojan War?', *Archaeology*, vol. 57, issue 3, 2004, p. 41

10.5a Understanding and using the sources

Sources 13 & 14

opinion
a person's belief, judgement or way of thinking about something that is not necessarily substantiated by facts

1   In your own words, explain each scholar's **opinion** on the historicity of the Trojan War. In what respects do they agree?
2   What are some of the 'archaeological and historical findings of the past decade' to which Korfmann refers? (Look ahead in this chapter to Korfmann's excavations at Troy.)
3   What comment would you make about Korfmann's 'Why not?' answer in response to the question about the historicity of the war?

When did the Trojan War take place?

If there was indeed a war, Homer gives no hint as to the date of the events he describes. The Greek historian Thucydides, in his *History of the Peloponnesian War* (late 5th century BC), writes of the Trojan War as having happened in the ancient past. Historians have suggested a likely date for the war between 1250 and 1200 BC. Others place it a little earlier, at about 1275–60 BC, but all of these dates are **speculative**.

speculative
based on guesswork

10.5 Check your learning

1   What judgement would you make about Thucydides as a source for the historicity of the Trojan War?
2   For a recent review of the contestability of the Trojan War, read the online article 'Was there ever a Trojan War?' by Petros Koutoupis.
3   Read Michael Wood's account of the problems of establishing a reliable date for the Trojan War in his book *In Search of the Trojan War* (Chapter 7).
4   A recently published work on Trojan War scholarship, particularly the question of the historicity of the war and its location, is Eric Cline's *The Trojan War: A Very Short Introduction*.

What caused the Trojan War?

According to Homer's *Iliad*, the Trojan War started because of a woman. The myth of the Judgement of Paris lays the blame for the Trojan War on the abduction of Helen and the subsequent naval expedition to Troy, led by Agamemnon, to retrieve her and punish the Trojans. This explains the famous phrase that refers to Helen as 'the face that launched a thousand ships'. Source 15 is a well-known modern retelling of the ancient Greek myth, which provides the background for the war. Note that Bulfinch has used the Roman names for Hera, Aphrodite and Athena who, in this version, become Juno, Venus and Minerva.

Causes of the Trojan War contested

Thucydides, writing 300–400 years after Homer, rejects the mythological story that Helen's father had made all her suitors promise to bring her back if she should ever be stolen (see Source 17). Thucydides' main interest lay in tracing the growth of Athens' naval empire in his own day. Looking back to the distant past, he notes widespread piracy in the Aegean and its contribution to the development of strong navies to deal with it. He argued that the Trojan War may have been the result of a desire by Mycenae, the most important Greek centre in the Late Bronze Age and in command of a large navy, to extend its power over the Mediterranean region.

The Trojan War may well have had an economic cause, based perhaps on competition for trade. Greek trading interests in the north-eastern Aegean may have been threatened by Trojan interests. The strategic position of Troy may have enabled the Trojans to control sea traffic from the Aegean to the Black Sea.

SOURCE 15

Minerva was the goddess of wisdom, but on one occasion she did a very foolish thing: she entered into a competition with Juno and Venus for the prize of beauty. It happened thus: At the nuptials of Peleus and Thetis all the gods were invited with the exception of Eris, or Discord. Enraged at her exclusion, the goddess threw a golden apple among the guests, with the inscription, 'For the fairest'. Thereupon Juno, Venus and Minerva each claimed the apple. Jupiter, not willing to decide in so delicate a matter, sent the goddesses to Mount Ida, where the beautiful shepherd Paris was tending his flocks, and to him was committed the decision. The goddesses accordingly appeared before him. Juno promised him power and riches, Minerva, glory and renown in war, and Venus the fairest of women for his wife, each attempting to bias his decision in her own favour. Paris decided in favour of Venus and gave her the golden apple, thus making the two other goddesses his enemies. Under the protection of Venus, Paris sailed to Greece, and was hospitably received by Menelaus, King of Sparta. Now Helen, the wife of Menelaus, was the very woman whom Venus has destined for Paris, the fairest of her sex. She had been sought as a bride by numerous suitors, and before her decision was made known, they all, at the suggestion of Ulysses, one of their number, took an oath that they would defend her from all injury and avenge her cause if necessary. She chose Menelaus, and was living with him happily when Paris became their guest. Paris, aided by Venus, persuaded her to elope with him and carried her to Troy, whence arose the famous Trojan War, the theme of the greatest poems of antiquity, those of Homer and Virgil.

Thomas Bulfinch, *Myths of Greece and Rome*, London: Penguin, 1981, p. 244, Book 1.9

SOURCE 16 Athena, greek goddess of war and wisdom, known as Minerva in the Roman **pantheon**

pantheon
all the gods of a people or religion

SOURCE 17

Agamemnon it seems to me, must have been the most powerful ruler of his day; and it was for this reason that he raised the force against Troy, not because the suitors of Helen were bound to follow him by the oaths which they had sworn to Tyndareus … at the same time he had a stronger navy than any other ruler; thus in my opinion, fear played a greater part than loyalty in the raising of the expedition against Troy.

As his [Agamemnon's] power was based on the mainland, he could not have ruled over any islands, except the few that are near the coast, unless he had possessed a considerable navy. And from this we can make reasonable conjectures about other expeditions before that time.

Thucydides, *The Peloponnesian War, Book 1.9*

10.5b Understanding and using the sources

Sources 13, 15 & 17

1   What does each of these sources suggest are the reasons for the outbreak of the Trojan War? Identify the political and economic reasons mentioned.
2   Which reason/s do you consider the most or the least plausible and why?

Discovery and excavation of Troy

Troy, with its 4000 years of history, is today one of the most famous archaeological sites in the world. The name of Troy has been kept alive since ancient times in myths, legends and literature, but the location of the city remained unknown until modern times. Many people did not believe in its existence at all. Twenty-four excavation campaigns conducted at a site in modern Turkey known as Hissarlik (the modern name for Troy) over the past 140 years have revealed that several cities had been built over and above each other, creating the mound or 'tell' of Hissarlik. Since excavations began in the 1860s, a number of archaeologists have contributed to the rediscovery of Troy and the interpretation of the evidence revealed by their excavations. A major focus of their investigations has been the attempt to identify from among the many strata the one that belonged to the period of the Trojan War, which is believed to have occurred in the Late Bronze Age around 1200 BC. Source 18 provides an overview of the major discoveries of these archaeologists.

SOURCE 18 Sequence and summary of excavations at Troy

ARCHAEOLOGIST	EXCAVATION DATE	OVERVIEW OF MAJOR DISCOVERIES
Frank Calvert (1828–1908)	1865	In 1865, Calvert, a British archaeologist, sank trial trenches into a mound known as Hissarlik or 'the place of the port'. Calvert realised that the mound at Hissarlik promised much for the excavator who had the resources to carry out such an investigation. He was convinced that Hissarlik was the site of the ancient city of Troy, but lacked the resources to conduct a thorough excavation. He met with Schliemann in 1868 and discussed the Hissarlik site.
Heinrich Schliemann (1822–1890)	1871–74 1878–79	Schliemann, a German amateur archaeologist and self-made millionaire, began to dig at Hissarlik in 1871. He wished to prove, through archaeology, the truth of Homer. During 3 years of excavations, he discovered evidence of seven heavily fortified settlements, which he named Troy, and identified each by a Roman numeral, the earliest being Troy I. He concluded that Troy II, which contained evidence of burning and destruction, was the Troy of Homer's *Iliad*.

Wilhelm Dörpfeld (1853–1940)	1893–94	Dörpfeld had worked with Schliemann at Troy between 1885–90. In his own excavations in 1893–94, he found two more cities, one superimposed on another. Dörpfeld identified Troy VI as the Troy of the Trojan War, for he found wide streets, large houses, defensive walls and watchtowers. Since that time, archaeological excavation has revealed approximately 40 different levels of occupation at the site.
Carl Blegen (1887–1971)	1932–38	Blegen, an American archaeologist, dug in areas untouched by Schliemann and Dörpfeld. He was able to establish a more scientific sequence of buildings and artefacts. Troy VI (identified by Dörpfeld as Homer's Troy) fits the description of Homer, but Blegen proved that its walls were destroyed by an earthquake, not warfare. He identified Troy VIIa as the 'real' Troy of Homer. Troy VIIa's houses were poorly built and cramped, but its walls were strong. It appears to have been destroyed by fire after only 30 years of habitation.
Manfred Korfmann (1942–2005)	1988–2005	Korfmann, a German archaeologist, reopened excavations at Troy after a lapse of 50 years. Working with a large team of international experts, Korfmann used some of the very latest technology to reveal new areas of the site for excavation and study. A geomagnetic survey and spot excavations south of the exposed hilltop stone ruins revealed a much more extensive city than had been uncovered by previous archaeologists.

Heinrich Schliemann and Troy

Seven years after Frank Calvert had begun his exploratory excavations at the site of Hissarlik, Heinrich Schliemann arrived on the scene. He was fulfilling a childhood dream by journeying to Asia Minor in an attempt to discover the ancient city of Troy. With an unshakeable faith in the literal truth of Homer's account of the war in the *Iliad*, Schliemann set out with Homer in one hand and a stopwatch in the other, pacing out distances in the **Troad**. He recognised some scenes from descriptions in Homer, and dismissed other sites that did not agree exactly with the text. This is discussed in Source 19. That the **topography** and coastline had altered greatly in 3000 years did not matter. On the advice of Calvert, and because it agreed in many regards with Homer's description, Schliemann began to dig at Hissarlik.

Troad
an ancient region of north-western Anatolia (Asia Minor) in which Troy was situated

topography
the physical appearance of the natural features of an area of land

Schliemann 'found' Troy by an energetic combination of logic, intuition, self-confidence, and the wholesale borrowing of ideas from previous researchers who had been scouring the area looking for the elusive city. He succeeded where much more learned men before him had failed, not just because he believed in Troy but because he boldly judged the clues in Homer taken all together rather than relying on one single factor. The clue that had been misleading most of his predecessors was the most arresting topographical feature about the Troy that Homer described – the presence of hot and cold springs … Schliemann, with his unshakeable conviction that Troy would conform to the whole scenario of Homer's *Iliad*, disregarded the single false clue of the hot and cold springs and looked elsewhere. Thus he succeeded in finding what others had missed.

Tim Severin, *The Ulysses Voyage: Sea search for the Odyssey*, London: Arrow Books, 1987, pp. 43–4

The task of excavation proved to be extraordinarily difficult. Over a period of 3 years, Schliemann excavated the mound using the labour of as many as 160 workmen. He drove a great trench more than 70 metres wide and 15 metres feet deep into the hillside and removed close to 250 000 cubic metres of earth.

In searching for Homer's city of Troy, Schliemann found not one but seven cities superimposed on one another. The second city from the bottom, Troy II, revealed evidence of burning and destruction and Schliemann concluded that this was the Troy of Homer that the Greeks had sacked and burned. Unwittingly, however, in his search for the Troy of Homer, Schliemann had actually dug through and destroyed the remains of other cities that were more likely contenders for Homer's Troy.

The 'Treasure of Priam'

Schliemann went on to crown his achievement by unearthing the so-called 'Treasure of Priam' (Priam was the king of Troy and Hector's father in Homer's *Iliad*). The treasure consisted of golden pendants, earrings, bracelets, rings and **diadems**, as well as cups, **salvers**, **cauldrons** and vases – more than 8700 pieces in all. Source 21 shows Schliemann's wife, Sophia, wearing some of the jewellery. Source 20 is Schliemann's own account of the discovery during his final season at Hissarlik in 1873.

diadem
a crown

salver
a tray, usually made of silver and used on formal occasions

cauldron
a large metal pot with a lid and handle, used for cooking over an open fire

SOURCE 20

I came upon a large copper article of the most remarkable form, which attracted my attention all the more and I thought I saw gold behind it … I cut out the treasure with a large knife, which it was impossible to do without the very greatest exertion and the most fearful risk of my life, for the great fortification-wall, beneath which I had to dig, threatened every moment to fall down on me. But the sight of so many objects, every one of which is of inestimable value to archaeology, made me foolhardy, and I never thought of any danger. It would, however, have been impossible for me to have removed the treasure without the help of my dear wife, who stood by me ready to pack the things which I cut out in her shawl and to carry them away.

Heinrich Schliemann, cited in Michael Wood, *In Search of the Trojan War*, London: BBC Books, 1987, p. 58

Unfortunately, Schliemann's account of finding the treasure is believed to be untrue. Subsequent checks of dates and events do not support Schliemann's claims. His wife was actually in Athens at the time of the discovery. Some of the items are believed to have been planted by Schliemann himself to be then so dramatically discovered. This is called 'salting' the evidence. However, accurate or not, Schliemann's discoveries excited the public

imagination – and he was careful to advertise his work as widely as possible. His excavations aroused enormous interest around the world and made sensational newspaper headlines. This interest could be compared with the excitement that attended Carter's discovery of Tutankhamun's tomb in the 1920s.

Schliemann and Mycenae

Fired with enthusiasm after his Trojan triumph, and this time following Pausanias, an ancient Greek travel writer of the 1st century AD, Schliemann now decided to excavate at Mycenae. Mycenae, famously described by Homer as 'rich in gold', was the home of Agamemnon, the leader of the Greeks at the time of the Trojan War. Within the walls of the Mycenaean citadel, Schliemann discovered a circle of **shaft graves**. The graves contained 15 skeletons covered in gold. Schliemann immediately announced, 'I do not for a moment hesitate to proclaim that I have found here the **sepulchres** which … tradition attributes to the king of men, Agamemnon.'

Once again, Schliemann was wrong – the skeletons belonged to a much earlier period of Greek history. The authenticity of the golden funeral mask that Schliemann discovered and claimed was a likeness of Agamemnon has also been discounted by both archaeological and scientific evidence.

SOURCE 21 Schliemann's wife, Sophia, wearing some of the Trojan treasure

■ **shaft grave**
a deep rectangular burial structure containing a floor of pebbles, walls of rubble masonry and a roof constructed of wooden planks

■ **sepulchre**
a small room or monument, cut into rock or built of stone, in which a dead person is buried

The importance of Schliemann's finds

Although Schliemann had made mistakes, he had found evidence of a previously unknown Bronze Age civilisation that had existed about 1600 to 1100 BC. Some of the information in Homer had been authenticated by Schliemann's archaeological finds. Homer had described bronze swords, chariots, boar tusk helmets (see Source 22) and great shields. Schliemann had actually found these things as either artefacts or depicted in **frescoes**.

However, there are many discrepancies, inaccuracies and **anachronisms** in Homer's accounts. Historians today generally agree that Homer's account is a 'confused amalgam' of a period of time dating from about 1600 BC to his own time, about 800 BC.

■ **fresco**
painting on wet plaster on walls or ceilings

■ **anachronism**
something that is not in its correct historical or chronological time

SOURCE 22 A boar tusk helmet, similar to the one described by Homer in the *Iliad*. It is made by sewing boar tusks onto a leather cap. Boar hunting was a popular Mycenaean sport.

Schliemann: father of archaeology or fraud?

There can be little doubt that Schliemann made an important contribution to the excavation of Troy. However, the nature of his contribution remains a contested issue. Controversy still surrounds his motives, methods and discoveries both at Troy and Mycenae. Some regard him as the father of Mediterranean archaeology and others as a self-promoting fraud. He was a colourful character with an obsession for finding the Troy described by his beloved Homer, and he had enough money and influence to make his dream a reality. This was a time when archaeological excavation was not financed by government or other public institutions, but relied on the private fortunes of interested individuals. In making judgements about Schliemann's contribution, it is important to take into account the context in which he operated – the early days in the development of archaeology as a discipline.

Dörpfeld and Blegen

When Schliemann died in 1890, his widow called on Wilhelm Dörpfeld to continue the work of her husband. He was more careful and systematic than Schliemann had been. His method of dating based on the strata in which objects were found and the type of materials used in the structure of buildings was an important contribution to archaeological method. However, like Schliemann, he placed too much emphasis on trying to prove the accuracy of Homer's description of places. He was criticised for relying too much on buildings at the expense of artefacts in his dating of various strata. His identification of Level VI as the site of Homer's Troy remained problematic.

Many years after Dörpfeld's excavations in the 1930s, Carl Blegen, from the University of Cincinatti, undertook a new investigation of Hissarlik in the hope that the vexing problem of the dating of the various strata could be resolved. Blegen and his team reviewed the stratigraphic record established by their predecessors and discovered even more phases of occupation within the strata. Most significantly, Blegen suggested that Homer's Troy dated from the period VIIa (c. 1250 BC), which contained evidence of large-scale violence as well as destruction by fire.
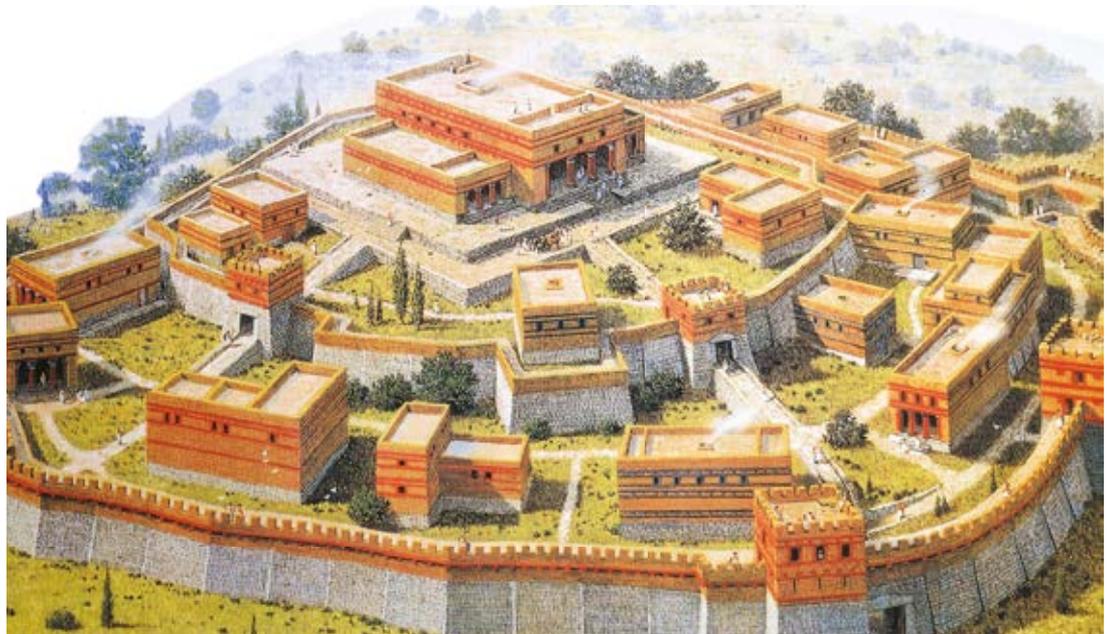
SOURCE 23
An artist's reconstruction of Troy (Level VI) based on excavation of the site. Dörpfeld argued that this was the period in which the Trojan War had occurred.

Manfred Korfmann

Between 1988 and his death in 2005, German archaeologist Manfred Korfmann, from the University of Tübingen, led the excavations at Troy. Source 24 contains details of Korfmann's contribution to the excavation of Troy.

SOURCE 24

A spectacular result of the new excavations has been the verification of the existence of a lower settlement from the seventeenth to the early twelfth centuries BC (Troy levels VI/VIIa) outside and south and east of the citadel. As magnetometer surveys and seven excavations undertaken since 1993 have shown, this lower city was surrounded at least in the thirteenth century by an impressive U-shaped fortification ditch, approximately eleven and a half feet wide and six and a half feet deep, hewn into the limestone bedrock. Conclusions about the existence and quality of buildings within the confines of the ditch have been drawn on the basis of several trial trenches and excavations, some of them covering a very large surface area. The layout of the city was confirmed by an intensive and systematic pottery survey in 2003 … The most recent excavations have determined that Troy, which now covers about seventy-five acres, is about fifteen times larger than previously thought.

Manfred Korfmann, 'Was there a Trojan War?', *Archaeology*, vol. 57, issue 3, 2004, p. 40

SOURCE 25
An artist's reconstruction of the South Gate of Troy

SOURCE 26
A schematic section through the citadel mound of Troy showing the occupation strata of the site
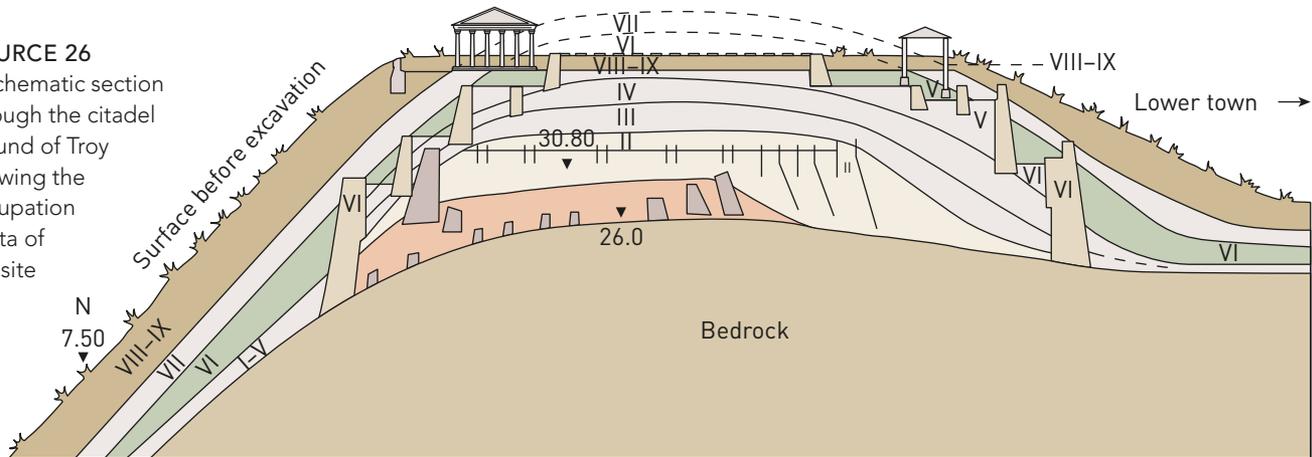
SOURCE 27 An attempted reconstruction of the main phases of occupation and activity at the site of Troy

LEVEL OF OCCUPATION	SUGGESTED DATES BC REVEALED BY EXCAVATION	EVIDENCE OF OCCUPATION/ACTIVITY AS SUGGESTED BY EXCAVATIONS
Troy I	c. 3000–2600	Small group of adjoining mudbrick houses surrounded by stone circuit wall.
Troy II	c. 2600–2150	Well-built citadel with 10-metre-high fortifications, approached by a paved ramp and well-defended gates. Period of economic growth. Development of pottery and metallurgy. Buildings included temple, **audience hall**, and ceremonial gateway. Schliemann found the so-called 'Priam's Treasure' in this level. Destruction by fire c. 2350 BC.
Troy III	c. 2150–2000	Lower town existed, but size still unknown.
Troy IV–V	c. 2000–1700	Period of quiet development. Few details known.
Troy VI (phases d–g)	c. 1700–1280	Most highly developed level of occupation. Mycenaean pottery found.
Troy VIh	c. 1280–1250	Magnificent fortress, strong stone walls and towers, monumental palace. Lower town surrounded by ditch and **palisade** extended 400 metres to south. This Troy believed to be the city in contact with the Mycenaeans at the height of their power. (Dörpfeld argues this is the level of the Trojan War, due to evidence of destruction by fire. However, according to Blegen, the evidence of destruction could be related to earthquake damage rather than warfare.)
Troy VIIa	c. 1250–1180	Evidence of makeshift dwellings, communal kitchen and storage jars set in the floors of houses. (Blegen suggests this is evidence of the disturbance caused by the siege and destruction of Troy.) Limited evidence of Mycenaean pottery. Most pottery is of Trojan manufacture copying Mycenaean designs.
Troy VIIb I	c. 1200–1000	Appearance of different pottery called 'Granary Class'. This could be the level associated with invasions of the Sea Peoples that followed the fall of Troy and the destruction of the Mycenaean palaces on the mainland. Site abandoned at this time.
Troy VIII	c. 730	Site reoccupied by Greek colonists (the time when Homer lived) and the citadel rebuilt.
Troy IX	c. 85 BC – AD 400	City was attacked and burned in 85 BC. Major rebuilding carried out during period of Roman occupation. City destroyed by earthquakes towards end of 5th century AD.

10.6b Check your learning

1 Make a virtual visit to the site of Troy today by using Google Earth. When you arrive, zoom into the site and click on Wikipedia to access information about the site in general and Troy VII in particular (the level that most consider to be Homer's Troy).

2 You be the judge. From your study of Schliemann's excavations and other activities in this section, draw up a table to record arguments for these two conflicting views: 'Heinrich Schliemann, father of archaeology or fraud?' Add a column to include evidence to support the arguments.

3 Undertake some more research on the controversies surrounding Schliemann and add additional arguments and evidence to your table above. Look up the following two sources online as useful starting points:
    • '1320: Section 4: Schliemann and Troy'
    • 'Schliemann's Controversy: Unearthing the Bronze Age'.

4 Conduct a class debate on Schliemann's contribution to archaeology using the research you have done.

5 Using your knowledge of this section and your own research, summarise the work of Calvert, Schliemann, Dörpfeld, Blegen and Korfmann in a table like the example below.

ARCHAEOLOGIST	BIOGRAPHICAL DETAILS	EXCAVATION DATES AT TROY	METHODS	CONTRIBUTION TO OUR UNDERSTANDING OF TROY AND/OR TROJAN WAR

audience hall
a room where a ruler receives official guests

palisade
a wooden fence or enclosure

6 Use the information from your table above to construct a response to the following question: 'Evaluate the contributions of archaeologists at Troy to our understanding of the site.' (Evaluate: Make a judgement based on criteria, determine the value of.)
    To help you plan your response:
    • identify the major contributions of each of the archaeologist and use these to structure your response
    • make a judgement about the value of the contribution of each to our understanding of Troy
    • use specific evidence for each to support your evaluation.

10.6 Understanding and using the sources

Study Source 27. (Archaeologists dispute the dating of the levels and the nature of the evidence, which may or may not support the clear identification of a level as the Trojan War level.)

1 Which levels have been identified as the Troy of the Trojan War? Why?

2 What do you notice about pottery finds in different levels? What is the significance of this?

3 What different interpretations of the evidence relating to the destruction of Troy are offered by Dörpfeld and Blegen?

4 Why could fire be evidence of both warfare and earthquake?

Written sources for the Trojan War

There is very little written evidence for the Trojan War. The main source is Homer's *Iliad*. As we have already seen, some of the issues of evidence associated with this source include the date when it was supposedly written (about 400 years after the events it describes) and the fact that it is an epic poem, not a historical account. It is clear that the world described by Homer is closer to the **Archaic period** in which he lived. This period followed the collapse of Mycenaean civilisation. However, scholars who have studied Homer's work have found in it many **allusions** to the world of the Mycenaean Bronze Age.

Other ancient written sources mention the Trojan War but are even more remote in time from the war than Homer. For example, Thucydides in his *History of the Peloponnesian War*, written in the late 5th century BC, certainly regarded the war as having occurred. The Greek playwrights of his time, such as Euripides and Sophocles, also used the tales from the Trojan War epic cycle as the grand themes of many of their tragedies. Some of these plays include *The Trojan Women*, *Agamemnon*, *Helen*, *Andromache*, *Hecuba*, *Iphigenia in Aulis* and *Ajax*.

With no evidence apart from Homer and the **bardic** traditions, it seems obvious that by the Classical period, the Trojan War had passed into legend and had become part of the Greek cultural tradition. We could compare this with the legends of King Arthur and Robin Hood in the Western tradition.

Two written sources that are much more contemporary with the Trojan War are the remains of the archives from two of the Mediterranean powers of the time: the Mycenaeans and the Hittites. The Mycenaean archive is known as **Linear B**.

Linear B tablets

The Mycenaeans used a written script known today as Linear B, which they inscribed on clay tablets with a sharp **stylus.** The tablets date to the Mycenaean period (c. 1600–1200 BC). Linear B was used mostly to record economic transactions. However, the tablets reveal nothing about the events of the time.

SOURCE 28 A Linear B clay tablet from Pylos

Archaic period
the period of Greek history from c. 700 to 480 BC

allusion
an indirect reference, i.e. an expression that refers to something without mentioning it explicitly

bardic
relating to a person who composed and recited epic or heroic poems, often accompanied by music

Linear B
the main script used by the Mycenaeans

stylus
a tool for writing on clay or wax tablets

The script remained undeciphered until 1952 when Michael Ventris cracked the code and identified it as an early form of Greek.

One important group of tablets from the palace of Pylos may give some clues to events relating to the Trojan War. There is reference to a large group of slave women and their children at Pylos. It is generally assumed that these slaves were foreigners from different places on the coast of Asia Minor, perhaps even as far away as Troy, who had been captured by Mycenaean raiding parties. Another Linear B reference to troop dispositions (stationing) has been compared to Homer's famous catalogue of ships in which the Greeks sailed to Troy. However, the evidence is indirect and inconclusive. The tablets do not contain any recognisable reference to Troy, or any of the personalities mentioned in Homer's *Iliad*.

The Hittite diplomatic archive

The Hittites were a warlike and powerful civilisation of Anatolia that existed at the same time (Late Bronze Age) as the Mycenaean civilisation in mainland Greece. Their script, also preserved on clay tablets, was called cuneiform. Historians and **philologists** have spent many years trying to identify Hittite place names and locate them on maps of the region. J.D. Hawkins, professor of ancient Anatolian languages, sums up what has so far been established about Troy and Mycenae from Hittite records. The key Hittite terms discussed in Source 29 are Arzawa, Wilusa and Ahhiyawa.

SOURCE 29

The kingdom of Arzawa, located roughly in western Anatolia (modern Turkey), was a threat to the Hittites throughout most of the fourteenth century BC but toward the end of that period was decisively defeated and broken up into provinces. The treaties concluded with the **vassal** rulers of these provinces are known among the Hittite texts.

Recent inscription readings have allowed scholars to locate the two main Arzawa lands in the central-west part of Turkey, extending from the inland plateau to the coast … One Arzawa land, Wilusa, is known principally from the treaty between its ruler Alaksandu and the Hittite king Muwatalli II (who ruled c. 1295–1272 BC) …

A long letter from a Hittite king, probably Hattusili III (who ruled c. 1267–1237 BC), to the king of Ahhiyawa mentions that Wilusa was once a **bone of contention** between the two. The location of Ahhiyawa has been controversial since its earliest recognition in the Hittite texts in the 1920s. The scattered references to it suggested that it lay across the sea and that its interests often conflicted with those of the Hittites … Furthermore, the references to the political interests of Ahhiyawa on the west coast mesh well with increasing archaeological evidence for Mycenaean Greeks in the area, so that it is now widely accepted that 'Ahhiyawa' is indeed the Hittite designation for this culture.

From what we now can understand from the Hittite sources, the Arzawa land Wilusa, identified with the archaeological site of Troy, was a point of conflict between the Hittites and Ahhiyawa. This provides a striking background for Homeric scholars researching the origin of the tradition of the Achaean [Homer's Mycenaean Greeks] attack on Ilios [Homer's Troy]. There is every likelihood that the *Iliad* and the traditions of the Trojan War, however, immortalised in epic narrative, do indeed preserve a memory of actual events of the Late Bronze Age.

J.D. Hawkins 'Evidence from Hittite Records' in M. Korfmann, 'Was there a Trojan War?',
Archaeology, vol. 57, issue 3, 2004, p. 40

philologist
a person who studies language in historical literary texts or written records, determining their authenticity, their original form and their meaning

vassal
a person or country in a subordinate position to another

bone of contention
the subject of a disagreement or argument

Source 29

1   Locate 'Arzawa' and 'Wilusa' on the map in Source 4. Which of these is the location of Troy?

2   According to this source, the Hittite name 'Ahhiyawa' refers to which people of this period?

3   What is the significance of the following statement? 'Wilusa was once a bone of contention between the two' (i.e. the Hittite king and the king of Ahhiyawa).

4   From your reading of other sources in this chapter concerning the causes of the Trojan War (e.g. Sources 13, 15 and 17), to what extent does the evidence from the Hittite archives cited support these theories?

5   Does this source support the argument that the Trojan War did occur? Is the evidence conclusive? What other evidence might also be useful?

10.7a Check your learning

1   Make notes on the value of the main written sources for the Trojan War by completing the table below.

SOURCE	INFORMATION ABOUT TROJAN WAR	VALUE FOR HISTORIAN INVESTIGATING THE TROJAN WAR
Homer's *Iliad*		
Linear B		
Hittite archive		

The wooden horse

The wooden horse, almost more than any other aspect of Homer's legend, seems to have emerged as the defining symbol of the war. Over time, it has been the subject of countless representations of the Trojan War. Indeed, a large wooden horse stands today at the entrance to the site of Troy.

If the Trojan War can be accepted as a historical event, what explanation has been offered for the so-called wooden horse, the trick used by Odysseus to get the Greek soldiers inside the fortifications of Troy? There is no reference to the wooden horse in the *Iliad* itself. However, Homer does allude to it in the *Odyssey,* the account of events following the war, which focus on the adventures of Odysseus. The context for Source 31 is as follows: The war is over and Menelaus and Helen have returned to Sparta. They are discussing the war and especially the skill and daring of Odysseus.

SOURCE 30 The wooden horse at the entrance to the site of Troy today

SOURCE 31

Yellow-haired Menelaus continued: 'Wife, indeed you have told it all as it was. I have known before now the thoughts and judgements of many heroes, as I wandered the wide earth, but I have never seen so great hearted a man as enduring Odysseus. That episode too, of the Wooden Horse, how the great man planned it, carried it through, that carved horse holding the **Argive** leaders, bringing the Trojans death and ruin! Then, summoned it may be by some god who thought to hand victory to the Trojans, you arrived, with godlike Deiphobus on your heels. You circled our hollow hiding-place, striking the surface, calling out the names of the Danaan captains, in the very voices of each of the Argives' wives. Diomedes, Tydeus' son, and I, and Odysseus were there among them, hearing you call, and Diomedes and I were ready to answer within, and leap out, but Odysseus restrained us, despite our eagerness.

Homer, *Odyssey* IV Book IV: 220 – 289

Argive
relating to the ancient Greek city of Argos, famous for its horse rearing; the *Iliad* refers to men from Argos fighting in the Trojan War

Eric Cline, a modern Bronze Age scholar, has suggested that the Trojan horse might not have been a horse at all.

SOURCE 32

In *The Iliad,* the Greeks breach the city walls by hiding inside a giant horse, which they present as a gift to the Trojans. The Trojan horse could have been a metaphor for Poseidon, a god associated with horses who was both the god of the seas and earthquakes. 'The suggestion is that Homer knew that the city he was describing had been destroyed by an earthquake,' Cline said. 'But that's not how you want to end your monumental saga – with a whimper. So he concocted this idea of a Trojan horse.'

Stefan Lovgren, 'Is Troy true? The evidence behind movie myth',
National Geographic News, 14 May 2004

10.7b Understanding and using the sources

Sources 31 & 32

1 What are the different suggestions for the origins of the wooden horse in these sources?
2 Do either of these sources have any value for the historian investigating the story of the Trojan horse?
3 What evidence from the excavations at Troy by might be used to support Cline's earthquake argument?

10.7b Check your learning

1 Using what you have learnt in this chapter construct a response to the following question: 'Evaluate the written evidence for the historicity of the Trojan War.' (Evaluate: Make a judgement based on criteria, determine the value of.)
    To help you plan your response:
  • identify the criteria you have chosen and use them to structure your response, e.g. origin and date of source
  • make a judgement about the value of the evidence based on the criteria selected
  • use specific evidence for each to support your evaluation.

Women played an important role in Homer's *Iliad*. We have already seen that, according to Homer, it was the abduction of Helen that was the cause of the war. A later quarrel erupted between Agamemnon and Achilles over the ownership of the war prize, Briseis. She had been captured by Achilles after he had killed her husband, King Mynes, an ally of Troy. Agamemnon's successful claim to Briseis caused Achilles to withdraw from the fighting and thus provided the major theme for the *Iliad*. Just as interesting are the stories of prominent Trojan women such as Hecuba and Andromache. However important they might have been, it must be remembered that they played subservient roles in a male-dominated world.

A major focus of Greek society in Homer's Heroic Age was the need for military strength as a defence against enemy attack. As its name suggests, the Heroic Age was an age of warriors in which men fought and women produced children who would be the warriors of the future. For this reason, all women were expected to marry, and marriage itself often joined powerful families together for economic, political and military advantage.

SOURCE 33 An Athenian red-figure clay vase (c. 500–440 BC) depicting the abduction of Helen by Paris. The figure between the two is Eros, the Greek god of desire.

Ilium
also Ilion, ancient names for Troy

siren
a seductively beautiful or charming woman, especially one who beguiles men (in Homer's *Odyssey*, a sea nymph, part woman and part bird, who lured sailors to destruction by seductive singing)

cult
a system of religious worship dedicated to a particular god

patriarchal
relating to a social system in which men hold primary power through political leadership, moral authority, social privilege and control of property

Helen of Troy

Of all the women in Homer's epic, it is Helen who stands out and whose story has inspired a long and fascinating tradition. The one enduring theme on which most representations seem to agree is that Helen represented the personification of female beauty, perhaps most famously expressed in Christopher Marlowe's lines from his 1604 tragedy *Doctor Faustus*, 'Was this the face that launch'd a thousand ships / And burnt the topless towers of **Ilium**?'

The legends concerning Helen are almost all contradictory. In departing from home and husband to go to Troy with Paris, she is either the victim of an abduction or a willing partner, besotted by love. Similarly, when in Troy, she is depicted either as an unhappy figure who wants to return to her husband Menelaus or as a treacherous **siren**, rejoicing in the misery she is supposed to have caused.

After the death of Paris and the destruction of Troy, one version of the story has her being returned to her husband, while another has her joining the gods on Mount Olympus. Interestingly in ancient times, she became the focus of a religious **cult** that originated in Sparta, her place of origin, and spread to other parts of the Greek world. Sources 33, 34 and 35 are concerned with the different contexts that have shaped interpretations of Helen.

SOURCE 34

The society depicted by Homer … clearly reflects a strong system of **patriarchal** values. In an atmosphere of fierce competition among men, women were viewed symbolically and literally as properties – the prizes of contests and the spoils of conquest – and domination over them increased the male's prestige.

Sarah Pomeroy, *Goddesses, Whores, Wives and Slaves: Women in Classical Antiquity*, London: Pimlico, 1975, p. 25

History is at once both baffled and enraptured by Helen … a pursuit of Helen across the ages throws up three distinct, yet **intertwined guises**: … The most familiar Helen is the brilliant regal beauty from the epics, particularly Homer's Helen … the queen who – led on by the goddess of love, Aphrodite – welcomed a Trojan prince into her bed while her husband was overseas … But Helen was also a demi-god, a heroine worshipped at shrines across the Eastern Mediterranean. Some scholars believe that a mortal Helen never existed, that she is simply the human face of an ancient nature-goddess … Then there is the 'shameless whore', 'the traitorous bitch' – a creature irresistible to men … an idol of female beauty and sexuality; both lusted after and despised.

Bettany Hughes, *Helen of Troy: Goddess, Princess, Whore*,
Jonathan Cape, London: Pimlico, 2005, pp. 10–11

> **intertwined guises**
> representations so closely connected that it is difficult to separate them

> **battlement**
> a wall around the top of a fort or castle, with regular spaces through which weapons could be fired

The Trojan Women by Euripides

One of the most powerful and moving of the Greek tragedies written by Euripides is *The Trojan Women*. It is told from the perspective of the women of Troy and tells what happened to them after the destruction of their city. After the death of their men, the women are assigned one by one to the victorious Greek soldiers as part of the spoils of war. The story of Andromache, wife of Hector, is especially tragic. She is given as a trophy of war to Neoptolemus, the son of Achilles (the man who had killed her husband). To add to her grief, the Greeks take her young son, Astyanax, and throw him from the **battlements** of Troy. No son or heir of Trojan princes must live to make a future claim on the throne. Her story of loss is captured in Homer's *Iliad*, Book VI, on which Euripides based his play.

Another compelling tragic heroine is Cassandra, daughter of Priam and Hecuba. She was also a priestess and a prophetess, and throughout the conflict between the Greeks and Trojans she foretold many of the disasters that were to befall her city. But no one believed her; they thought she was mad. She sought refuge in the temple of Athena during the destruction of Troy. She was later given as a prize of war to Agamemnon, the leader of the Greek forces.

In Source 37, Hecuba, queen of Troy, proud wife of Priam and mother of Hector, learns after the destruction of her city that she is to be given as a prize of war to the Greek general, Odysseus.

Although the play is set in the time of the Trojan War, it gives a universal and timeless message about the victims of war and the suffering it causes. In Euripides' own 5th century, the play was performed in the aftermath of the Athenian destruction of the island of Melos in 415 BC during the Peloponnesian War. The Athenians, having conquered the island, put to death all the men, and sold all the women and children into slavery.
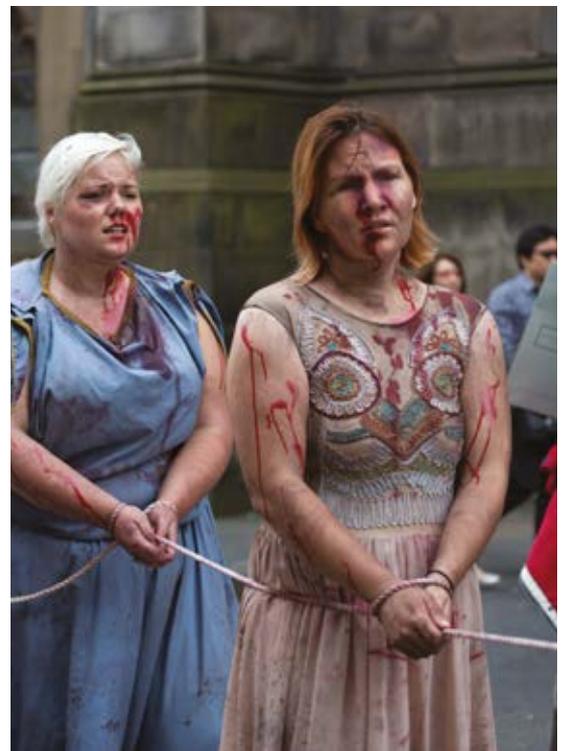
SOURCE 36 A modern production of the *Trojan Women* performed at the Edinburgh Fringe Festival in 2010. Trojan women are being enslaved by Greek warriors after the destruction of Troy.

SOURCE 37

Chorus Leader   You guardians of the grey-haired Hecuba, see how your mistress is sinking speechless to the ground! Take hold of her! Will you let her fall, you worthless slaves? Lift up again, from where it lies, her withered body.

Hecuba   Born to royal estate and wedded to a royal lord, I was the mother of a race of gallant sons; no mere **ciphers** they, but **Phrygia**'s chiefest pride, children such as no Trojan or Hellenic or barbarian mother ever had to boast. All these have I seen slain by the spear of **Hellas**, and at their tombs have I shorn off my hair; with these my eyes I saw their father, Priam, butchered on his own **hearth**, and my city captured, nor did others bring this bitter news to me. The maidens I brought up to see chosen for some marriage high, for strangers have I reared them, and seen them snatched away. Nevermore can I hope to be seen by them, nor shall my eyes behold them ever in the days to come. And last, to crown my misery, I shall be brought to Hellas, a slave in my old age. And there the tasks that least befit the evening of my life will they impose on me, Hector's mother, to watch their gates and keep the keys, or bake their bread, and on the ground instead of my royal bed lay down my shrunken limbs, with tattered rags about my wasted frame, a shameful garb for those who once were prosperous. Ah, woe is me! and this is what I bear and am to bear for one woman's marriage!

Euripides, *The Trojan Women*, lines 462–500

cipher
someone who has no power, or who is not important

Phrygia
an ancient kingdom in central Anatolia and a close ally of Troy in the Trojan War; Hecuba was a Phrygian princess

Hellas
the Greek name for Greece

hearth
a site of a campfire, characterised by ash, charcoal and discolouration of soil

10.8 Understanding and using the sources

Sources 34, 35 & 37

1   According to Pomeroy in Source 34, what was the role and status of women in the Heroic Age in which Homer's *Iliad* is set?

2   'The victim of abduction or a willing accomplice'? Which interpretation of Helen's departure from home and husband can be supported by Pomeroy's source? Explain your choice.

3   What are three 'intertwined guises' of Helen according to Bettany Hughes in Source 35?

4   What audience response does Euripides evoke in Hecuba's monologue and how does he achieve it?

10.8 Check your learning

1   Read a recent (2016) scholarly article about the conflicting interpretations of Helen. Search online for 'Was Helen really to blame for the Trojan War – or just a scapegoat'?

2   Helen has been represented in a range of different media. Search online for examples of interpretations of Helen through the ages.

3   Enjoy a humorous feminist interpretation of some famous artistic representations of the abduction of Helen. Search online for 'The many abductions of Helen of Troy'.

4   The stories of the other women of the Trojan War legend provide compelling reading. Research some of the following women and find out what role they played in the war and what happened to them:

- Andromache
- Briseis
- Cassandra
- Clytemnestra
- Hecuba
- Iphigenia
- Penthesilea
- Polyxena.

5   Read Euripides' play *The Trojan Women*, or selected excerpts from it. You might like to share different readings with the class or rehearse and present a scene from the play. You can also watch selected extracts from modern film and stage productions of *The Trojan Women*.

The legacy of the Trojan War

For the Greeks of the Classical period and beyond, the Trojan War was a favourite narrative of great men and their deeds. It was also a popular subject for ancient artists, including vase painters and sculptors. The Athenian tragedians of the 5th century BC featured the exploits and the themes of the Trojan War in their plays. Many of these plays are still performed today in the remains of the ancient theatres where they were first performed 2500 years ago.

The Trojan War provided a powerful inspiration for both personal values and national identity in ancient times. Greek youths were reared in the Homeric tradition. An important part of their education was learning to recite long passages of Homer by heart. Greek soldiers marched into battle to emulate the great deeds of warrior heroes such as Achilles, Hector and Odysseus.

Modern representations of the Trojan War

Few legendary events have raised so much interest so far beyond their time as the Trojan War. It has become an important part of our cultural heritage and has inspired artists, sculptors, novelists and poets down through the ages as well as film-makers and advertisers in our own times. Some of the greats of literature who have taken up Homer's themes and characters include Chaucer, Shakespeare and Goethe. From **Renaissance** times onwards, the mark of an educated man was his knowledge of Greek and Latin, and especially of Homer. The Trojan War has come to mean many things to many different people. It has been represented as a heroic tragedy, as military history, as a romantic love story, or even as a passionate anti-war tale.

Renaissance
a period in European history, from the 14th to the 17th century AD, regarded as the cultural bridge between the Middle Ages and modern times

Troy in popular culture

Hollywood has had a long love affair with the ancient world. The genre of films inspired by the stories and people of the biblical or ancient world are called 'sword-and-sandal' epics. Some of the best known and most successful of these films were made during the 1950s and 1960s. They include *Ben Hur*, *Cleopatra*, *Spartacus* and *The Ten Commandments*. The plots of many of these films are based only very loosely on the actual events or characters they depict.

The sword-and-sandal epics have made a comeback in recent years, with films such as *Gladiator*, *Alexander the Great* and, of course, *Troy*, starring Brad Pitt as Achilles, and Australian actors Eric Bana and Rose Byrne as Hector and Briseis.

10.9 Check your learning

1 Read a modern version of the *Iliad*. Try the original, or an adaptation (for example, *Song of Troy* by Colleen McCullough).
2 Use what you have learnt in this chapter and your own ideas to write a response to the following question: 'Account for the popularity of the Trojan War legend.' (Account for: state reasons for, report on.)
   To help plan your response:
   • identify key aspects of the legend that have endured and use these to structure your response
   • explain why each of these has continued to be popular through the ages
   • use specific examples to support your response.

What aspect of the Trojan War story has *not* been contested? In this chapter we have explored the many controversial issues associated with the Trojan War story, from the identity of Homer and the historicity of the war to the role of Helen and the famous wooden horse. The modern discovery and excavation of the site by Schliemann has also been controversial. Despite its contested nature – or perhaps because of it – the story has fascinated generations of scholars and the public at large. It is after all a magnificent tale of lust, love, treachery, warfare and heroism, themes that have timeless appeal.

FOR THE TEACHER

Check your <u>o</u>book <u>a</u>ssess for the following additional resources for this chapter:

Answers

Answers to each *Check your learning*, *Understanding and using the sources* and *Profile task* in this chapter

Teacher notes

Useful notes and advice for teaching this chapter, including syllabus connections and relevant weblinks

Class test

Comprehensive test to review students' skills and knowledge

<u>a</u>ssess quiz

Interactive auto-correcting multiple-choice quiz to test student comprehension

11
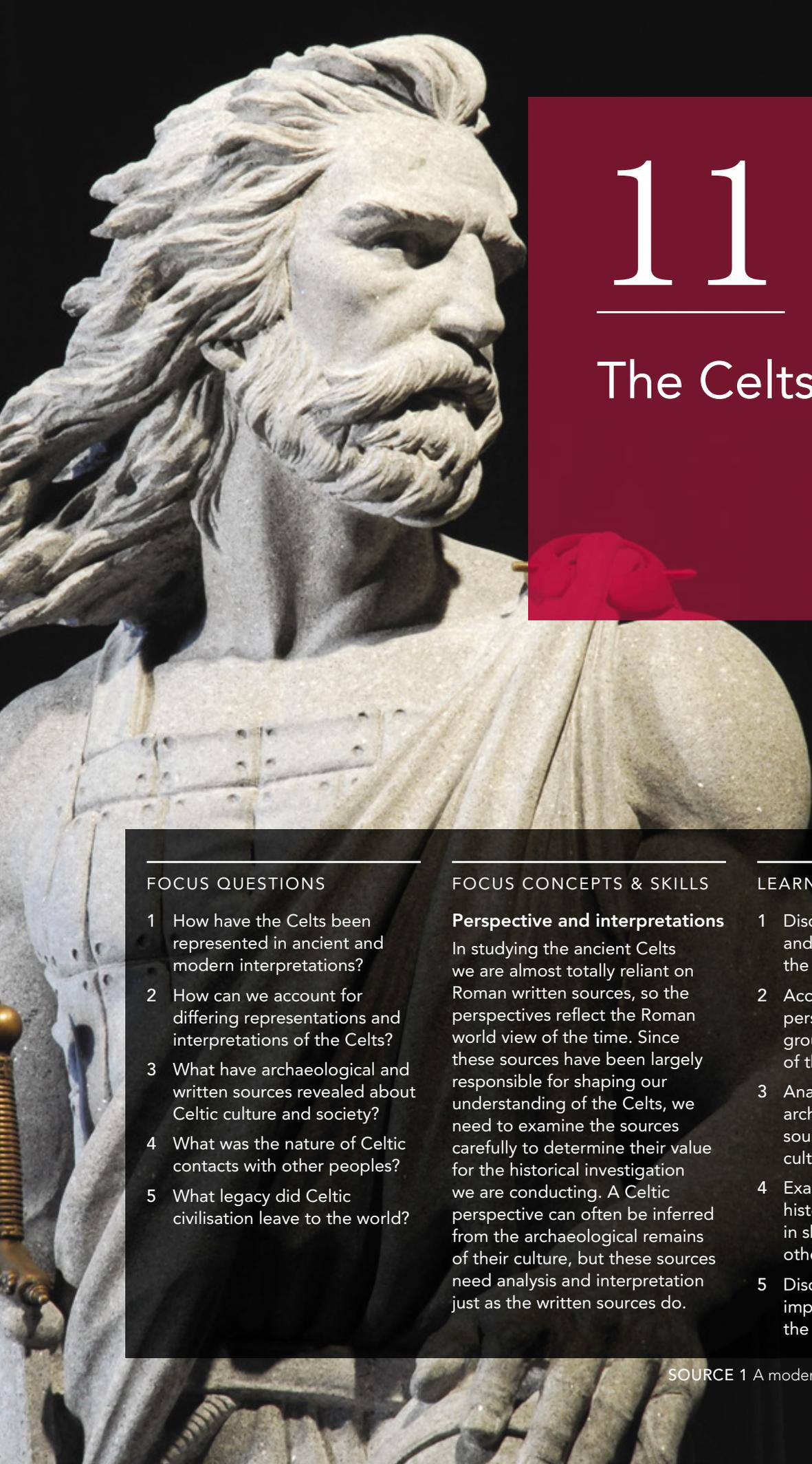
The Celts

1 How have the Celts been represented in ancient and modern interpretations?

2 How can we account for differing representations and interpretations of the Celts?

3 What have archaeological and written sources revealed about Celtic culture and society?

4 What was the nature of Celtic contacts with other peoples?

5 What legacy did Celtic civilisation leave to the world?

FOCUS CONCEPTS & SKILLS

Perspective and interpretations

In studying the ancient Celts we are almost totally reliant on Roman written sources, so the perspectives reflect the Roman world view of the time. Since these sources have been largely responsible for shaping our understanding of the Celts, we need to examine the sources carefully to determine their value for the historical investigation we are conducting. A Celtic perspective can often be inferred from the archaeological remains of their culture, but these sources need analysis and interpretation just as the written sources do.

LEARNING OUTCOMES

1 Discuss and evaluate ancient and modern representations of the Celts.

2 Account for the different perspectives of individuals and groups in their interpretation of the Celts.

3 Analyse and interpret archaeological and written sources for evidence of Celtic culture and society.

4 Examine the significance of historical people and events in shaping Celtic contacts with other peoples.

5 Discuss and evaluate the impact of Celtic civilisation on the modern world.

SOURCE 1 A modern granite statue of a Celtic warrior

Who were the Celts?

Late Bronze Age
the final stage of an ancient historical period (c. 1600–1100 BC) characterised by the use of bronze tools and weapons

occupied territories
the territory occupied by Israel after the Six-Day War of 1967 (originally included the Syrian Golan Heights, the Egyptian Sinai Peninsula and the Jordanian-occupied West Bank)

bard
a poet who composes and/or recites epics, often while playing the harp or lyre

Druids
a priest of the ancient Celtic religion

Pillars of Heracles (or Hercules)
an ancient name for the rocky promontories at the entrance to the Strait of Gibralta

sacked
destroyed, plundered

mercenary
a professional soldier hired to serve in a foreign army

The Celts were an ancient tribal people who inhabited a vast area of Europe from the **Late Bronze Age** onwards. They emerged as a distinct culture about 1000 BC and lasted until their conquest by the Romans that began in the 1st century BC. Given the name 'Celt' by ancient writers, these tribes often migrated and so eventually **occupied territories** from modern Portugal to Turkey (Source 2). One difficulty in understanding or defining the Celts is that they were not a cohesive ethnic group like the Egyptians or the Romans – there was little political unity among the different tribes and they were often at war with each other.

The Celts were spread widely throughout Europe and had different political organisations; yet they shared common ties of culture, art and language, and were particularly renowned for their strong oral tradition. Ancient sources refer to them as proud, boastful people. This 'boasting', though, was an important part of their culture of storytelling. Each Celtic tribal group had at least one **bard** who told rousing stories of love and of the heroic deeds of their warriors and chieftains.

At the top of Celtic society was the king or chieftain and a class of nobles. These included the **Druids**, the intellectuals and spiritual leaders of Celtic society. Below them were the craftsmen, with metalworkers being the most important. Next came the farmers who provided the food.

THE CELTIC-SPEAKING WORLD

Source: Oxford University Press

SOURCE 2 A map of Europe showing the extent of the Celtic-speaking world c. 200 BC. Celtic peoples were spread right across Europe, from Asia Minor in the east to the British Isles in the west.

Ancient representations of the Celts

We first hear of the Celts in the written sources in about 500 BC, when the ancient Greeks called them *Keltoi*. The Greek historian Herodotus writes of them as dwelling 'beyond the **Pillars of Hercules**' (i.e. in Spain) and also of the Danube as rising in their country. However, most of our ancient written sources for the Celts are Roman ones in which they are referred to as *Celtae* and *Galli* (Gauls). The Gauls first appear in early Roman history when they **sacked** Rome in 390 BC. They attacked the Romans again in the Battle of Telamon in 225 BC and were often **mercenary** allies of Carthage during the wars between Rome and Carthage in 264–146 BC, known as the Punic Wars. During the **Late Republic**, **Julius Caesar** fought the Gauls in a series of wars (58–50 BC) and wrote an account of his contact with them in *The Gallic War*. The Celts gained a reputation for being a savage and primitive people, although they earned a grudging respect from their enemies for their bravery.

The representation of the Celts as warlike savages has survived into modern times and is one of the most **pervasive** images of them. It can be clearly seen in the modern depiction of a Celtic warrior in Source 1. The marble statue in Source 3 is a Roman copy of a Greek statue celebrating a Greek victory over the Gauls in the 3rd century BC. It depicts a wounded Celtic warrior. He has the characteristic Celtic hairstyle and moustache, and wears a **torc** around his neck. There is a sword puncture in his lower right chest. He lies on his fallen shield with his sword, belt and a curved trumpet beside him.

Late Republic
the period of Roman history between 133 and 31 BC

Julius Caesar
a significant Roman general and statesman of the late Roman Republic

pervasive
widespread

torc
a collar or neck ring of twisted metal, worn especially by the ancient Celtic tribes of Gaul and Britain

SOURCE 3 The *Dying Gaul* marble sculpture in the Capitoline Museum in Rome

Source 4 provides some contextual information about the writers who refer to the Celts in their various works. It should be noted that the writers who are of Greek origin are mostly writing from a Roman perspective. Greece became a province of Rome in 146 BC. Sources 5 and 6 give brief examples of the Roman view of the Celts.

SOURCE 4 Ancient written sources on the Celts

WRITER AND DATES	CONTEXT AND WORKS
Polybius 200–118 BC	Greek historian. Famous for his work *The Histories*, which covered Roman history for the period 264–146 BC.
Posidonius 135–51 BC	Greek Stoic philosopher politician, geographer and historian from Roman Syria. His *Histories* described events from 146 to c. 63 BC. He made important contributions to the **ethnology** of the Germans (Cimbri and Teutones), Celts and others.
Julius Caesar 100–44 BC	Roman politician and general. Led a series of successful campaigns against the Gauls. Wrote an account of these campaigns in *The Gallic War*.
Diodorus Siculus c. 1st century BC	Greek historian. Wrote a monumental history from ancient times to the period of Caesar's Gallic Wars. He selected the name *Bibliotheca Historica* (*Library of History*) for his work to indicate that he was assembling a composite work from many sources.
Strabo 64 BC – AD 21	Greek geographer. His *Geography* is the only surviving work covering the whole range of peoples and countries known to both Greeks and Romans during the reign of Augustus (27 BC – AD 14).
Pliny (the Elder) AD 23–79	Roman author and naturalist, as well as naval and army commander and imperial administrator during the reign of Vespasian (AD 69–79). His *Natural History* is an early encyclopedia covering topics such as astronomy, mathematics, geography and anthropology.
Tacitus AD 58–120	Roman **senator** and historian of the Roman Empire. His two major works, the *Annals* and the *Histories,* examine the reigns of the Roman emperors from the death of Augustus in AD 14 to AD 70.
Appian AD 95–165	Roman historian of Greek origin who lived during the reigns of Roman emperors Trajan, Hadrian and Antoninus Pius. His 24 books of *Roman History* cover the period from the beginning of Rome to the reign of Trajan (AD 98–117).
Cassius Dio AD 155 – c. 235	Roman statesman and historian of Greek origin. He published an 80-volume history of Rome from its founding until AD 229. Many of his books have survived intact, or as fragments, providing modern scholars with a detailed perspective on Roman history.

Roman representations of the Celts

Polybius wrote a series of books about the Roman conquest of the Mediterranean world. In Source 5 he describes the wars Rome fought against the Celts. Caesar presents his view of the Celts in Source 6. Because the Celts did not have a written language, we are almost entirely reliant on ancient Roman sources.

ethnology
a branch of anthropology that analyses cultures, especially their historical development

senator
a member of the senate, an advisory body for the emperor

SOURCE 5

Such was the end of the war against the Celts, a war which, if we look to the desperation and daring of the combatants and the numbers who took part and perished in the battles, is second to no war in history, but is quite contemptible as regards the plan of the campaigns, and the judgement shown in executing it, not most steps but every single step that the Gauls took being commended to them rather by the heat of passion than by cool calculation.

Polybius, *The Histories,* Book 2, 35. 2–4

SOURCE 6

The whole nation of the Gauls is greatly devoted to ritual observances, and for that reason those who are smitten with the more grievous maladies and who are engaged in the perils of battle either sacrifice human victims or vow to do so, employing the Druids as ministers for such sacrifices. They believe, in effect, that, unless for a man's life a man's life be paid, the majesty of the immortal gods may not be **appeased**; and in public, as in private, life they observe an ordinance of sacrifices of the same kind. Others use figures of immense size, whose limbs, woven out of twigs, they fill with living men and set on fire, and the men perish in a sheet of flame. They believe that the execution of those who have been caught in the act of theft or robbery or some crime is more pleasing to the immortal gods; but when the supply of such fails they resort to the execution even of the innocent.

Julius Caesar, *The Gallic War*, Book VI, Chapter 16

appease
pacify, placate or satisfy

11.1 Understanding and using the sources

Sources 1 & 3–6

1 Compare the modern representation of a Celt in Source 1 and the ancient representation of the *Dying Gaul* in Source 3. What are the similarities and differences between the two? How might you account for these?
2 Identify the **facts** and the **opinions** in the extracts from Polybius and Caesar (Sources 5 and 6).
3 What opinion about the Celts does each writer offer? Choose specific language and phrases that indicate their attitude.
4 How does the context of each writer help to explain his interpretation of the Celts?

fact
a thing that is known or generally agreed to be true

opinion
a person's belief, judgement or way of thinking about something that is not necessarily substantiated by facts

11.1 Check your learning

1 Search online for 'modern images of ancient Celts' and make a list of the aspects of the Celts that are represented in these images. What impression of the Celts do you gain?
2 Choose one of the writers from the table in Source 4. Working in pairs, conduct further research on his life and particularly the historical context in which he wrote that will help to explain his interpretation of the Celts. Record your findings in digital format, e.g. Fakebook Profile or other of your choice. Share your profiles with other members of the class.

Development of Celtic society and culture

Celtic society developed over a period of 1000 years. It has been suggested that the earliest features of a Celtic culture can be traced to the Bronze Age Urnfield culture of central Europe. From these beginnings emerged the two most distinctive periods of Celtic culture known as Hallstatt and the La Tène period, which witnessed the most sustained expansion and migration.

The Urnfield culture

The people of the Urnfield culture may have spoken an early form of the Celtic language. They cremated their dead and placed the remains in pottery urns that were then buried in communal plots of ground. They produced bronze weapons, tools, and eating and cooking vessels. From this early culture, the Celts emerged as an agricultural people.
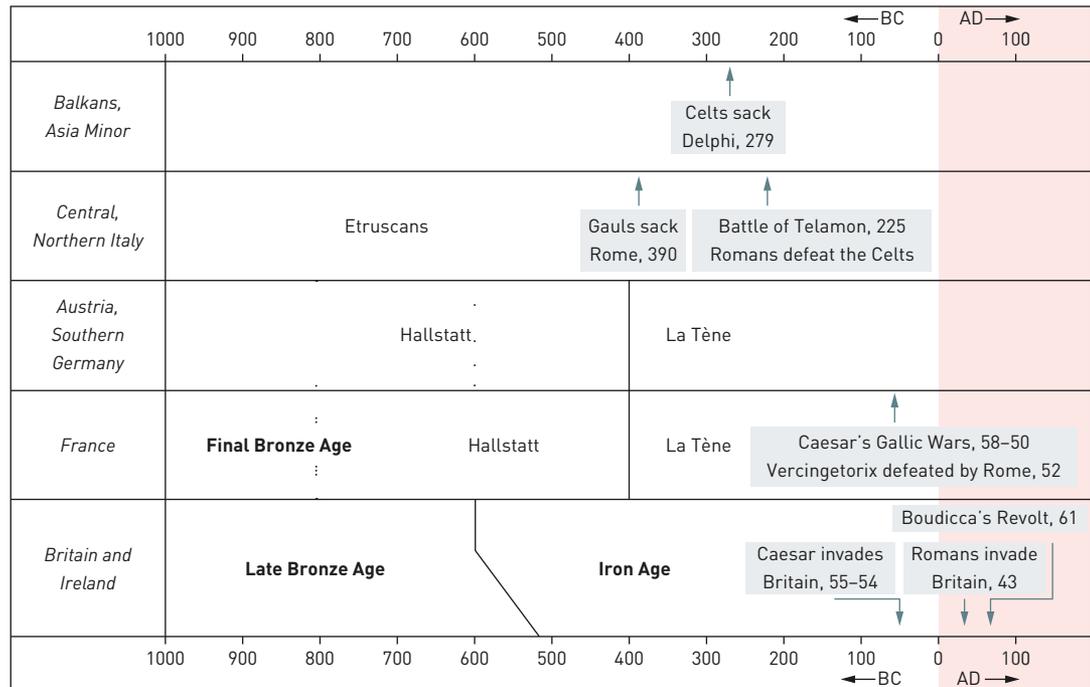
SOURCE 7
A timeline of ancient Celtic civilisation

Region												←BC	AD→
	1000	900	800	700	600	500	400	300	200	100	0		100
Balkans, Asia Minor								Celts sack Delphi, 279					
Central, Northern Italy			Etruscans				Gauls sack Rome, 390	Battle of Telamon, 225 Romans defeat the Celts					
Austria, Southern Germany				Hallstatt				La Tène					
France	**Final Bronze Age**			Hallstatt			La Tène		Caesar's Gallic Wars, 58–50 Vercingetorix defeated by Rome, 52				
Britain and Ireland	**Late Bronze Age**				**Iron Age**				Caesar invades Britain, 55–54	Romans invade Britain, 43 / Boudicca's Revolt, 61			
	1000	900	800	700	600	500	400	300	200	100	0	←BC	AD→ 100

Adapted from S. James, *Exploring the World of the Celts*, pp. 16–17

The Hallstatt culture

Archaeological evidence suggests that the main period of Hallstatt culture in central Europe lasted from about 800 to 500 BC. It takes its name from the Austrian village of Hallstatt (see Source 2) where an important Celtic site was uncovered. During the Hallstatt era, the Celtic economy was based on a variety of activities: mixed farming, mining of metals (iron, copper and tin) and minerals (such as salt), and trading throughout Europe. Until the 8th century BC, these Celts lived on farms and in villages, but between 800 and 600 BC, fortified hilltop settlements or **oppida** became common. Fine examples of such hillforts have been found throughout Europe, for example at Heuneburg in Germany, and at Danebury and Maiden Castle in Britain.

The Heuneburg hillfort

The Heuneburg hillfort is situated on a natural plateau overlooking the Danube at Baden-Würtemberg in Germany. Excavations have established that this was an important centre of power in the early **Iron Age** with connections as far away as Etruria and the Greek colonies.

The site has remains of a substantial settlement of timber-framed houses surrounded by a wall of unbaked bricks covered with **lime rendering** (see Sources 8 and 9). By about 550 BC, the settlement covered an area of 100 hectares and would have contained up to 5000 inhabitants.

Many items of Celtic jewellery were discovered, including torcs, bracelets of bronze, **lignite** and **jet** earrings, beads (of horn, jet, amber and green glass), coral and amber hairpins, and brooches. Evidence of Celtic arts and crafts can be readily seen in the burials of **elite** members of their society – see the Woman of Vix and Hochdorf graves later in this chapter.

SOURCE 8 An artist's reconstruction of the Heuneburg hillfort. During the Iron Age, the mudbrick fortification wall was white-washed and included **crenellated** watchtowers.

SOURCE 9 Houses within the fortification walls of Heuneburg were timber-framed structures built closely together. Excavation in the south-east corner of the site revealed furnaces and foundries, indicating the workshops of the metalsmiths.
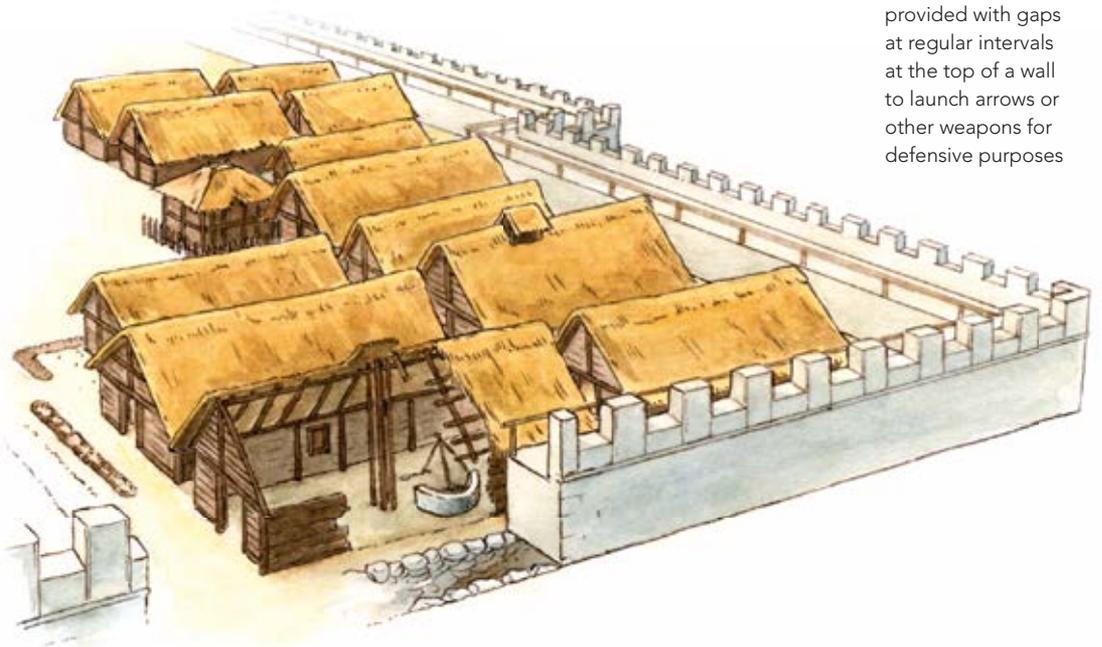
Iron Age
an archaeological era following the Stone Age and Bronze Age, and characterised by the use of iron for toolmaking

lime rendering
a coat of lime plaster applied to the external surfaces of stone or brick buildings

lignite
a soft brown sedimentary rock formed from naturally compressed peat

jet
a black or dark-brown organic stone formed from fossilised wood

elite
the group of people considered to be superior to others because of their social standing, wealth and gender

crenellated
provided with gaps at regular intervals at the top of a wall to launch arrows or other weapons for defensive purposes

Hallstatt trade

While the Celts often came into conflict with other ancient civilisations, they also traded with them. For example, they exchanged their metal ores and amber in return for luxury goods from the Greeks. They also began to control the trade in salt, crucial when there were few other means to preserve food. Control of two important trade goods – iron and salt – became the basis for a steady growth in wealth and influence during this time. Massilia (modern-day Marseilles in France) was an important trading centre. This is confirmed by Hecataeus, a Greek historian, who noted in 500 BC that Massilia was in contact with 'Celtica'. The ancient trade routes went through the valleys of the Rhône and Saône rivers, which then provided access to the Rhine and Danube (see Source 2).

Around 500 BC, the trading pattern shifted from Massilia to the Italian coastline. This was where the **Etruscan** settlements had been established in the Po valley and now there was a broader pattern of trade throughout Europe. Pliny, in his *Natural History*, explains why this may have occurred (see Source 10).

Etruscan
people belonging to the civilisation of ancient Etruria, a region in central Italy c. 500 BC, who influenced the Romans

SOURCE 10

The Gauls, imprisoned as they were by the Alps … first found a motive for overflowing into Italy from the circumstances of a Gallic citizen from Switzerland named Helico, who had lived in Rome because of his skill as a craftsman, and brought with him when he came back some dried figs and grapes and some samples of oil and wine: consequently we may excuse them for having sought to obtain these things even by means of war.

Pliny, *Natural History*, 12.2.5

11.2 Understanding and using the sources

Sources 8 & 9

1   What would be the advantages and disadvantages of building a hillfort settlement?

2   What were some of the main activities that took place at Heuneburg?

3   What do the artefacts found at Heuneburg reveal about Celtic culture?

Source 10

1   Who was Helico? What information did he give the Gauls?

2   What is Pliny's attitude towards the Gauls? What positive information about Helico can be gained from this source?

3   Compare Pliny's attitude in Source 10 with that of Polybius in Source 5. What judgement would you make about the value of each of these sources for a study of Roman contact with the Celts?

11.2a Check your learning

1   For a more detailed description of the history of excavation and discovery at Heuneburg, search online for 'Heuneburg' and choose one or more websites.

2   Find out about other famous Celtic hillforts, such as those at Danebury and Maiden Castle in Britain. What information about Celtic culture and daily life is provided by these hillfort settlements?

La Tène culture

From about 500 BC onwards, another significant development in Celtic culture was the period known as La Tène, named after the site on Lake Neuchatel in Switzerland. La Tène culture flourished all over Europe, with sites in modern-day Belgium, eastern France, Switzerland, Austria, southern Germany, the Czech Republic, Poland, Slovakia, Slovenia, Hungary and Romania.

The new Celtic style of art appears to have been heavily influenced by the Mediterranean cultures, particularly the Greeks and the Etruscans with whom they traded. It may have been created by Celtic craftsmen in response to the influx of Greek and Etruscan goods. Items produced in this period featured intricate and decorative designs on weapons, armour, drinking vessels and personal ornaments in bronze, silver and gold (see Sources 11 to 14).

■ **peat**
partially decayed vegetation or organic matter found in peatlands or bogs

SOURCE 11 A Celtic bowl featuring ornamental gold foil mounts from Schwarzenbach in Switzerland.

SOURCE 12 The Gundestrop Cauldron, a large silver bowl (67.5 cm wide) found in a Danish **peat** bog

SOURCE 13 Gold and silver torcs found at Snettisham in England

11.2b Check your learning

1 What are the main features of the Halstatt and La Tène periods of Celtic development?

2 What conclusions can you draw about the La Tène culture from Sources 11–14?

3 The origins, artistic influences and interpretation of the **motifs** on the Gundestrup Cauldron are all debated by scholars today. To research these issues, look up 'UNC Gundestrup Cauldron' online.

4 Check out the ownership history of the gold fibula in Source 14 before its acquisition by the British Museum. Search online for 'British Museum – Braganza Brooch'.

■ **motif**
dominant or recurring idea or image in an artistic work that forms a pattern

SOURCE 14 A gold fibula, or brooch, decorated with the figure of a naked warrior who is wearing a Celtic helmet and carrying a sword. The figure of a hunting dog is shown leaping up to him. The British Museum bought this at an auction in 2001 for almost A$2 million.

Celtic religion

The Celts were **polytheistic**, but there was no organised **pantheon** as in the Roman and Greek belief systems. In the Celtic religious system, it appears that each tribe had its own particular local deities and cults as well as those that were worshipped more widely. Among the hundreds of gods and goddesses that are known by name, interestingly, there are many female divinities such as Epona, a fertility goddess and also protector of horses, ponies, donkeys and mules.

The worship of natural phenomena such as water, sky, mountains, trees and earth was common in Celtic life. Because of their medicinal and healing **attributes**, water deities were worshipped among all Celtic groups. Numerous deposits of **votive objects** have been found in rivers, springs and wells where the Celts threw them as offerings to the gods. A famous Celtic healing site associated with water is Bath (called Aquae Sulis by the Romans) in England.

Animals were also venerated because of their special qualities of speed, strength, ferocity and cunning. Favoured animals include boars, stags, bears, hares, birds and horses. Because of their close affinity with nature, the Celts also made offerings to their gods in sacred groves and forest clearings. In Source 15, the ancient Greek writer Diodorus Siculus provides an interesting insight into their practices.

SOURCE 15

And a peculiar and striking practice is found among the upper Celts, in connection with the sacred precincts of the gods; for in the temples and precincts made consecrate in their land, a great amount of gold has been deposited as a dedication to the gods, and not a native of the country ever touches it because of religious **scruple**, although the Celts are an exceedingly **covetous** people.

Diodorus Siculus, *Bibliotheca Historica*, 5.27.4

Did the Celts practise human sacrifice?

Not only did the Celts give offerings of weapons and jewellery to the deities, but according to the ancient sources they practised human sacrifice in honour of their gods. At Ribemont in France, archaeologists found a site containing the bodies of 1000 men and women, 10 horses, remains of animal sacrifices and numerous weapons. Source 16 suggests a context for this practice, while Source 17 describes in Strabo's words some of the methods used for sacrifice.

SOURCE 16

After a victory they sacrifice such living things as they may have taken, and all the other effects they gather in one place. In many states heaps of such objects are to be seen piled up in **hallowed** spots, and it has not often happened that a man, in defiance of religious scruple, has dared to conceal such spoils in his house or to remove them from their place, and the most grievous punishment, with torture, is ordained for such an offence.

Julius Caesar, *The Gallic War*, 6.17

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polytheistic
believing in many gods

pantheon
all the gods of a people or religion

attributes
a characteristic quality or feature

votive objects
objects offered to gods as an appeal for divine favour

scruple
hesitation about doing something because it might be inappropriate or illegal

covetous
very much wanting to possess something that someone else has

hallowed
holy or sacred

They used to strike a human being, whom they had devoted to death, in the back with a sword, and **divine** from his death-struggle. But they would not sacrifice without the Druids. We are told of still other kinds of human sacrifices; for example, they would shoot victims to death with arrows, or **impale** them in the temples, or, having devised a **colossus** of straw and wood, throw into the colossus cattle and wild animals of all sorts and human beings, and then make a burnt-offering of the whole thing.

Strabo, *Geographica*, 4.4.5

Archaeological evidence has confirmed that human sacrifice was practised by the Celts. In Gaul, at Entremont and Roquepertuse, **lintels** with skull niches have been found as well as a pile of human skulls. At other archaeological sites in Europe, evidence has been uncovered of animal as well as human sacrifice.

Posidonius was a Syrian Greek philosopher who travelled extensively in the ancient world observing people's customs. His writings and observations have not survived but his work was used by others such as Strabo, who notes Posidonius' description of the Celtic reverence for heads.

SOURCE 18

They possess a trait of barbarous savagery which is especially peculiar to the northern peoples, for when they are leaving the battle-field they fasten to the necks of their horses the heads of their enemies, and on arriving home they nail up this spectacle at the entrances to their houses. Posidonius says he saw this sight in many places, and was at first disgusted by it, but afterwards, becoming used to it, could bear it with **equanimity**. But they embalmed the heads of distinguished enemies with cedar-oil, and used to make a display of them for strangers, and were unwilling to let them be redeemed even for their weight in gold.

Posidonius in Strabo, *Geographica*, 4.4.5

SOURCE 19 An artist's impression of a skull niche at Roquepertuse
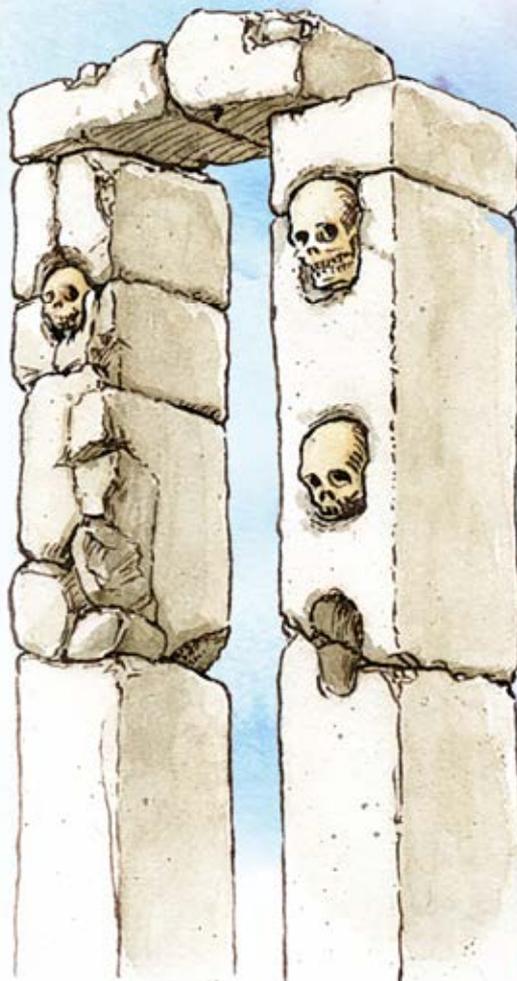
divine
gain knowledge about the will of the gods or foretell the future by supernatural means, e.g. by studying signs, flight of birds, animal entrails

impale
to pierce or transfix with a sharp instrument

colossus
someone or something gigantic

lintels
a horizontal piece of stone or timber that supports the wall above a door or window

equanimity
mental or emotional calmness or stability

11.3a Understanding and using the sources

1 Using your knowledge of Celtic gods, goddesses, religious beliefs and practices, suggest reasons for the Celtic practice of human sacrifice and the treatment of the heads of enemies.

2 Do you agree with Posidonius (Source 18) that such practices were merely examples of 'barbarous savagery'?

3 What kind of bias is revealed in comments such as 'peculiar and striking practice' (Source 15) and 'barbarous savagery' (Source 18)?

4 What comment would you make about the attitudes of the Roman writers to Celtic practices, considering the Romans' love of blood sports as shown in their gladiatorial games?

5 Both Diodorus Siculus (Source 15) and Julius Caesar (Source 16) note that it was rare for individual Celts to steal gold or war trophies from their offering places. What does this suggest about Celtic religious practices and values?

11.3a Check your learning

1 Create a table, like the one shown below, and use it to record the relevant information for each of the following Celtic gods and goddesses: Cernunnus, Sulis, Epona, Belenus, Camulos, Deae Matres (mother goddesses), Lug, Sucellos, Taranis, Silvanus, Rosmereta.

GODS/GODDESSES	RESPONSIBLE FOR	ASSOCIATED SYMBOL OR EPITHET AND/OR IMAGE
Cernunnus, earth god	Fertility and plants	'Horned one'

Role of the Druids in Celtic society

caste
a social group whose members are of the same rank, occupation and economic position

rite
a traditional or religious ceremony

The Druids were an important priestly **caste** in Celtic society. Not much is known of them because they kept their **rites** secret. The Druids also passed their knowledge from person to person and generally did not commit anything to writing. Therefore, most of their secrets died with them. What we do know of the Druids comes largely from Roman sources such as Julius Caesar and Tacitus.

SOURCE 20

The Druids officiate at the worship of the gods, regulate public and private sacrifices, and give rulings on all religious questions. Large numbers of young men flock to them for instruction, and they are held in great honour by the people. They act as judges in practically all disputes, whether between tribes or between individuals; when any crime is committed, or a murder takes place, or a dispute arises about an inheritance or a boundary, it is they who adjudicate the matter and appoint the compensation to be paid and received by the parties concerned. Any individual or tribe failing to accept their award is banned from taking part in sacrifice – the heaviest punishment that can be inflicted upon a Gaul … The Druids are exempt from military service and do not pay taxes like other citizens. These important privileges are naturally attractive: many present themselves of their own accord to become students of Druidism, and others are sent by their parents or relatives. It is said that these pupils have to memorise a great number of verses – so many, that some of them spend twenty years at their studies.

Julius Caesar, *The Gallic War*, 6.13 and 6.14

During the Roman conquest of Britain in the 1st century AD, the Roman governor of Britain, Suetonius Paulinus, attacked the island of Mona, which was believed to be a stronghold of the Druids. Tacitus, the Roman historian, gives an account of this in Source 21.

SOURCE 21

So Suetonius planned to attack the island of Mona, which although thickly populated had also given sanctuary to many refugees. Flat-bottomed boats were built to contend with the shifting shallows, and these took the infantry across. Then came the cavalry; some utilised fords, but in deeper water the men swam beside their horses. The enemy lined the shore in a dense armed mass. Among them were black-robed women with dishevelled hair like Furies, brandishing torches. Close by stood Druids, raising their hands to heaven and screaming dreadful curses. This weird spectacle awed the Roman soldiers into a sort of paralysis. They stood still – and presented themselves as a target. But then they urged each other (and were urged by the general) not to fear a horde of fanatical women. Onward pressed their standards and they bore down their opponents, enveloping them in the flames of their own torches. Suetonius **garrisoned** the conquered island. The groves devoted to Mona's barbarous superstitions he demolished. For it was their religion to drench their altars in the blood of prisoners and consult their gods by means of human entrails.

Tacitus, *The Annals of Imperial Rome*, XIV, 28

garrisoned
troops stationed in a fortress or town to defend it

The Coligny Calendar

The Romans tried to wipe out the Druids and their practices in Gaul and Britain. However, the Coligny Calendar, an authentic Druid document, survived. The calendar, engraved on bronze, dates from the 2nd century AD, long after the **Druidic cult** had been banned. The fragments of the calendar lay buried until their discovery in the late 19th century.

Druidic
relating to the ancient Druids, a pre-Christian religious order among the ancient Celts of Gaul, Britain and Ireland

cult
a system of religious worship dedicated to a particular god

SOURCE 22 The reassembled Coligny calendar was found in Coligny, France, in 1897. The calendar was engraved on a bronze tablet, which was preserved in 73 fragments. It originally measured 1.48 m wide by 0.9 m tall. It is now in the Gallo-Roman Museum in Lyons.

Fragments of another calendar have also been found, which indicate that Roman efforts to wipe out Druidic practices had not been entirely successful. What is known about the Druids and their roles in Celtic society is summarised in Source 23.

Conveners of meetings
Met annually at Chartres in Gaul (according to Caesar)

Educators
Trained young nobles to be Druids (it took 20 years to train a Druid)

Supporters of warriors
Encouraged resistance to Rome

Conservers of tradition
Maintained knowledge of customary lore

Astronomers
Organised the calendar
Fixed the days of festivals and sacrifice
Determined 'lucky' and 'unlucky' days

ROLE OF THE DRUIDS

Intermediaries
Interceded with the gods

Diviners
Predicted the future

Mediators
Decided disputes:
• between nobles
• between tribes

Judges
Administered tribal law, decided punishments, (e.g. exclusion from sacrifices)

Healers
Had special knowledge of herbal medicines

Priests
Performed sacrifices and rituals

SOURCE 23 The roles of the Druids in Celtic society

11.3b Understanding and using the sources

Sources 20–23

1   Why were the Druids held in great honour by the Celts?
2   What privileges did the Druids enjoy?
3   To what extent can the Roman depiction of the Celts as 'barbarous savages' be challenged by the information in these sources?
4   Why was it in Rome's interest to destroy the Druids and their cult?

11.3b Check your learning

1   The Romans themselves consulted their gods by examining the entrails of sacrificed animals. Find out about their methods of divination known as *extispicy* and *haruspicy*.
2   The details of how the Druids calculated their calendar are fascinating and give a valuable insight into Celtic knowledge and culture. Find out more about this by searching online for 'Coligny Calendar'.

Celtic burial practices

An important source of archaeological evidence about the Celts comes from their **tumulus** graves. These are large burial mounds (also called 'barrows') constructed over the grave. The largest of the burial mounds excavated at Heuneburg is called Hohmichele. In 1936, archaeologists found a timber-lined burial chamber that had been ransacked. Next to it was another chamber containing the bodies of a man and a woman buried beneath a wagon, complete with all its gear.

A discovery at Heuneburg occurred in 2010 when archaeologists unearthed a subterranean burial chamber measuring 4 by 5 metres. It contained jewellery including elaborate pearl earrings, solid gold clasps, an amber necklace and a bronze belt. Its contents including the intact oak floor of the chamber are unusually well preserved and should enable the age of the tomb to be determined by tree-ring dating. This is a rare find, because Celtic structures usually made of mud and clay have not survived.

Other burial mounds of this type have been discovered throughout Europe. In Britain, for example, at Garton Slack in the Yorkshire Wolds, a chariot burial and cemetery have been excavated. The occupant of the tomb had been placed on the frame of the dismantled chariot and parts of the chariot were included – the iron-rimmed wheels, the harness fittings and the whip.

The following section considers two prominent examples of Celtic burials, the Woman of Vix and the Hochdorf burials.

The Woman of Vix

bier
a movable structure on which a body or coffin can be transported to the grave or tomb

black-figure
relating to a type of Greek pottery with one or more bands of figures silhouetted against a tan or red background surface

Attic
belonging to Athens and the region immediately surrounding it

krater
ancient jar or vase with a large round body and wide mouth, used for mixing wine and water

The grave shown in Source 25, dating to the late 6th and early 5th century BC, was found in 1953 near Mount Lassois in France. It was a 3-metre square chamber containing the body of a woman lying on a wagon with a golden torc on her head. Forensic tests have shown that the woman was about 35 years old. The wheels of the wagon had been removed and placed in the chamber; the body of the wagon had been used as a funeral **bier.**

The tomb contained amber jewellery, a silver bowl, bronze basins, a **black-figure Attic** cup, an Etruscan beaked flagon and a huge bronze *krater* (Source 24) standing 1.63 metres high and weighing over 200 kilograms. It is the largest known metal vessel from Western antiquity. These latter items are evidence of the widespread Celtic trading networks of the period.
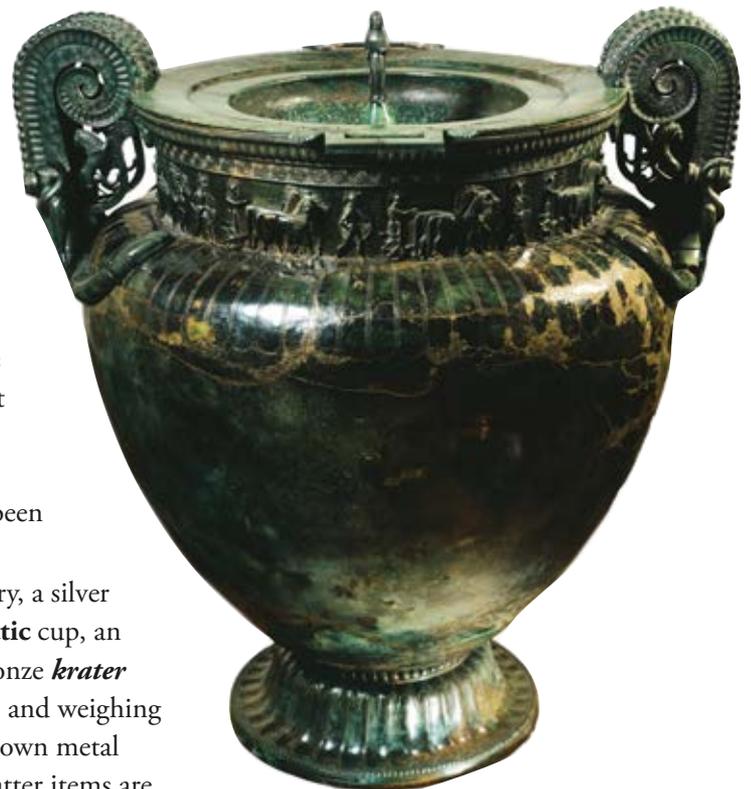
SOURCE 24 The magnificent, elaborately decorated bronze *krater*, one of the many rich burial goods of the Woman of Vix

SOURCE 25 (a) A sketch of the burial chamber of the Woman of Vix (b) A facial reconstruction of the Woman of Vix based on the skull bones

The Hochdorf grave

Another significant find was the spectacular Hochdorf grave in the late 1970s. The grave is an enormous barrow mound dating to about 530 BC and measured 6 metres high and 60 metres in diameter when it was constructed (Source 26). It had shrunk to about 1 metre in height and was barely noticeable due to centuries of erosion and agricultural use.

Within the barrow was a central grave chamber, measuring about 4.7 by 4.7 metres and made of looped oak beams (Source 27). In the chamber was a man's skeleton lying on a bronze bier. He was about 40 years of age and 1.87 metres tall. He was wearing a gold neck ring, gold brooches to fasten his clothing, a leather belt with gold on it and a gold-plated dagger. Even the man's shoes had gold strips on them (Source 28). He has been called the 'Tutankhamun of the Celts'.

The tomb also contained a hat made of birch-bark, a wooden comb, three fish hooks, iron nail clippers, a huge bronze **cauldron** with a capacity of 400 litres (with the powdered remains of **mead** in it) and a gold drinking bowl. Along the walls were nine drinking horns made from the horn of an auroch. Opposite the man was a large four-wheeled wagon with harnesses for two horses. Within the wagon was a drinking service and a dinner set of three serving bowls, nine bronze dishes and plates. The chamber was decorated with wall hangings and carpets.

The fragments of clothing worn by the man revealed that they were made from Chinese silk. Textiles and fabrics buried in the earth usually rot more quickly than other objects. However, in the Hochdorf grave, because of the presence of bacteria-killing oxides, the textiles had been preserved.

cauldron
a large metal pot with a lid and handle, used for cooking over an open fire

mead
an alcoholic drink made from fermented honey and water
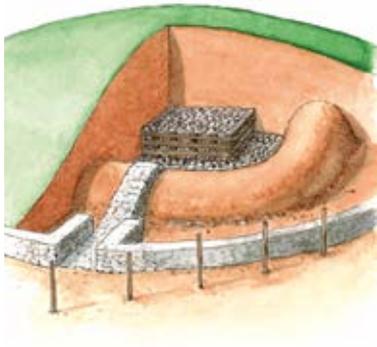
SOURCE 26 A cross-section of the mound (tumulus), showing the ceremonial ramp and the stone and timber supports that protected the crypt or actual burial place

SOURCE 27 A reconstruction of the Hochdorf grave

SOURCE 28 The embossed gold plaques that decorated the shoes of the Hochdorf man. The shoes have long since disintegrated.

11.4 Understanding and using the sources

Sources 24–28

1   Identify and account for the similarities and differences between each burial.
2   What conclusions can you draw about the status and lifestyle of these two people and the technology of the society to which they belonged?
3   What conclusions can be drawn from these sources about women in Celtic society?

11.4 Check your learning

1   Conduct research on Celtic burial practices and answer the following questions:
    a   Were the Hallstatt burials typical of Celtic practice?
    b   Were all classes in Celtic society buried in this manner?
    Two useful online articles to start your search:
    • 'Bountiful Celtic Burials', by Jarrett Lobell
    • 'Chariots of the Celts', by Chris Hellier
2   Read more about the latest exciting archaeological discovery of the underground tomb at Heuneburg. Search online for 'Archaeologists revise image of ancient Celts'.
3   A useful resource: Look up 'Iron Age Celts: Hochdorf' online for visuals of the Hochdorf grave and its contents.
4   Using the information in this section, including the diagrams of the burials and the grave goods, construct a response to the following question: 'What do Celtic burial practices reveal about Celtic society?' (Explain: Relate cause and effect, make the relationships between things evident, provide why and/or how.)
    To help you plan your response:
    • identify features of Celtic society revealed by burial practices (e.g. social status, technology, trade)
    • use these features to structure your explanation and show how each provides evidence of this aspect of Celtic society
    • support your explanation with specific evidence. (Refer to more than one burial.)

Celtic weapons and warfare

The weapons, armour and fighting tactics of the Celts varied over time, from tribe to tribe and region to region. Distance combat weapons included javelins, harpoons, bows and slings. For close-range fighting they used spears, two-handed hammers, axes and swords. Swords, both long and short, had double-edged and straight blades, and were made from iron or steel. Many finely decorated sword **hilts** featured human heads and other animal motifs. The early Celts fought mainly on foot, but later in chariots and on horseback.

Julius Caesar had experience of Celtic chariot warfare during his wars against the Celtic tribes in Gaul. They were pulled by two horses, and open in the front and back. Each chariot held two men. In battle they attacked the enemy first by throwing javelins from a distance. Then, at closer range one man would leap from the chariot to fight on foot while the driver would take the chariot to a safe distance from the fighting. Caesar recounts that they were driven very skilfully and were a very effective weapon of disruption and attack.

Early La Tène-era Celtic warriors did not wear armour, although nobles sometimes wore chest plates and chain mail. Later, leather armour, light bronze breast plates, chain shirts and scale armour were worn, although they were probably used more by nobles than ordinary fighting men. Helmets were also not usually worn in earlier periods except by nobles. Weapons and armour often varied between tribes and regions. Some Celtic warriors attached real or metal horns to their helmets to create a fearsome look. Shields were typically used during all periods.

hilt
the handle of a sword or dagger

SOURCE 30 Replicas of a Celtic warrior's garments in the Museum Kelten-Keller, Biebertal-Rodheim, Germany

SOURCE 29 Three La Tène Celtic spearheads. They are leaf-shaped and have finely ridged blades.

SOURCE 31 A Celtic sword and scabbard, c. 60 BC

Celtic contact with other peoples

We have already seen the influence of Mediterranean cultures such as the Etruscans and Greeks on the development of Celtic arts and crafts. This was a result of both peaceful trading and warfare. We know from Pliny's *Natural History* that the Celts were mightily interested in Italian luxury goods such as wine, olive oil and grapes, and were not averse to obtaining them by warfare (see Source 10).

The Celts were at their height during the 5th and 4th centuries BC (see Source 32). During this time they were successful in a number of battles, conquering Spain in about 500 BC and the Etruscans in northern Italy in about 400 BC, where they then settled in large numbers. The Celts were allies of the Greeks for some time and assisted them in battles against Phoenicians and Persians. Alexander the Great made an alliance with them in 334 BC before he embarked on his campaigns of conquest in Asia.

The Celts' first recorded clash with the Romans occurred in the 4th century BC when they led a successful attack on Rome itself. Two hundred years later, in 225 BC, they suffered a major defeat at the hands of Romans in the famous Battle of Telamon. Among the most well-known conflicts are the battles that the Celts of Gaul fought against Rome in the so-called Gallic Wars of 58–52 BC. These were led by Julius Caesar and his legions and resulted in the conquest of Gaul, which became another province of the expanding Roman Empire.

The Celts in Britain experienced their first contact with Rome when Julius Caesar attempted an invasion during his conquest of Gaul in 55 and 54 BC. However, it was not until the reign of the emperor Claudius in AD 43 that Britain was added to the Roman Empire. Boudicca, queen of the local Celtic Iceni tribe, led an unsuccessful revolt against the Romans in AD 60–61. Read about her revolt against Rome in Chapter 3.

IRON AGE EUROPE

Source: Oxford University Press

SOURCE 32 Iron Age Europe, showing some of the main Celtic tribes

Celtic chieftains: Commius, Cassivellaunus and Vercingetorix

Some important Gallic chieftains in Gaul and Britain are known to us from Caesar's Gallic Wars. They are Commius, chief of the Atrebates in Gaul; Cassivellaunus, a British chieftain; and perhaps most famous of all, Vercingetorix, chief of the Arverni in Gaul and leader of the revolt against Caesar's forces in 52 BC.

Caesar attempted two invasions of Britain during his wars in Gaul, the first in 55 BC and the second in 54 BC. Before the first invasion, several British tribes, having been warned of Caesar's plans, sent envoys offering hostages and allegiance to Rome. In response, Caesar sent Commius, a chief of the Celtic tribe of the Atrebates in Gaul and ally of Rome at this time. His mission was to persuade the British tribes not to offer any resistance to the Romans when they landed in Britain.

However, when he arrived in Britain, Commius was taken prisoner by the Britons. He was later handed back as part of Caesar's peace negotiations with the Britons at the end of his first campaign. During Caesar's second campaign against Britain in the following year, Commius again played a role as Rome's ally when he negotiated the surrender of the British chieftain Cassivellaunus, who had led the defence of the British tribes against the attempted Roman invasion. Commius did not remain an ally of Rome. He switched sides to join the revolt in Gaul led by Vercingetorix.

11.5 Profile

Vercingetorix

Vercingetorix, chief of the Arverni tribe, was perhaps the most able leader of the opposition to Caesar during the Gallic Wars. He came to prominence at the start of the revolt in 52 BC when he assumed command of the combined Gallic army, and for most of the year he managed to hold together a powerful alliance of tribes. Despite some early success, the revolt eventually failed and Vercingetorix surrendered to Rome. Even his enemy, Julius Caesar, noted that he was a great warrior.

One of the methods Vercingetorix used against the Romans was a 'scorched earth' policy. This obviously had some success, because in *The Gallic War*, Caesar frequently refers to the problems of supplying his men. All the Gallic towns were burnt with the exception of Avaricum. The Celtic chiefs begged Vercingetorix to allow this town to survive 'because it was the finest in Gaul'.

SOURCE 33 A modern representation of Vercingetorix. This 7-metre-high statue was erected in 1865 on the supposed site of Alesia.

The final showdown between the two men and their respective forces came at Alesia (see its location on the map in Source 2). Vercingetorix and his Gallic army had moved to the hillfort of Alesia. Using Roman siege tactics, Caesar surrounded the Gallic army. Another Gallic army then surrounded Caesar, so he found himself as both the besieger and the besieged. Caesar calculated the strength of the Gallic forces at 350 000 men; the Romans were greatly outnumbered.

The siege of Alesia was an important historical event and is widely studied by military historians. How did Caesar manage to win even though he was surrounded and outnumbered? Caesar gives a detailed description of the siege in his *Gallic War*, Book 7, 26–89. When the site of Alesia was excavated in the 19th century, archaeologists found evidence to verify his account. In Source 34, Caesar presents the perspective of Vercingetorix in planning the Celtic strategy of resistance to the Romans.

SOURCE 34

'We must strive by every means,' he said, 'to prevent the Romans from obtaining forage and supplies. This will be easy, since we are strong in cavalry and the season is in our favour. There is no grass to cut; so the enemy will be forced to send out parties to get hay from the barns, and our cavalry can go out every day and see that not a single one of them returns alive. What is more, when our lives are at stake we must be prepared to sacrifice our private possessions. Along the enemy's line of march we must burn all the village and farms within the radius that their foragers can cover … We should also burn all the towns except those which are rendered impregnable by natural and artificial defences; otherwise they may serve as refuges for shirkers among our own numbers, and give the enemy the chance of looting the stores of provisions and other property that they contain.'

Julius Caesar, *The Gallic War*, VII, 14
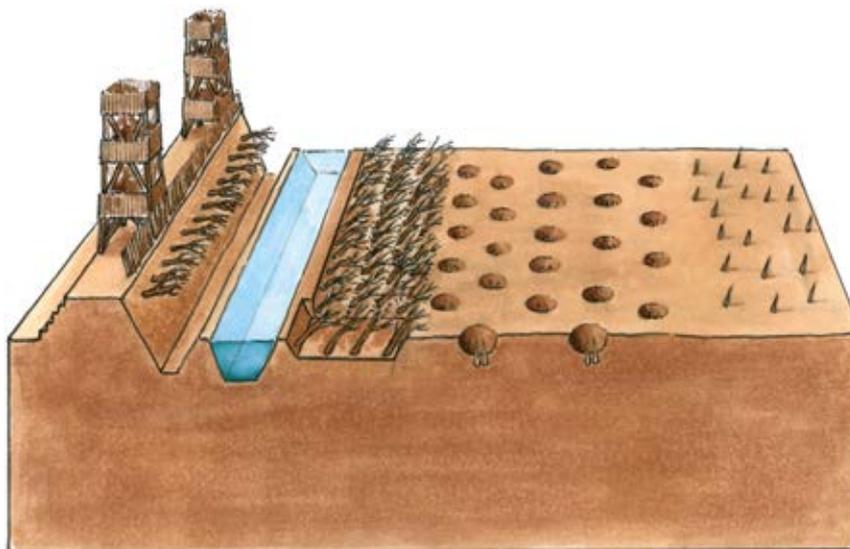
SOURCE 35 A reconstruction of part of Caesar's siege works at Alesia. Note the stakes, cut like stags' horns, some projecting from the parapet to prevent the enemy from climbing up and others in front of the water-filled trench. The entire works were surrounded with turrets spaced at approximately 30-metre intervals.

triumph
a celebration parade held in Rome for a general who had won an important military victory

Vercingetorix was taken prisoner after the battle and taken back to Rome where he was paraded as part of the celebrations of Caesar's **triumph**. He suffered a gruesome death. However, as Sources 33 and 36 indicate, Vercingetorix is remembered today in France, the modern name of ancient Gaul.

SOURCE 36

Every summer, a village in eastern France celebrates a Gallic chieftain who lost a major battle to Julius Caesar in 52 BC. Despite that defeat, the mythic Vercingetorix, leader of the Gauls, is a French national hero today.

But Vercingetorix wasn't always remembered with such fanfare: For 2000 years, he lay nearly forgotten.

legionnaires
Roman soldiers, professional heavy infantrymen of the Roman army

On a recent day [2013], actors posing as Gauls and Roman **legionnaires** engage in a mock battle at Alesia MuseoParc, a newly opened museum in Burgundy, where the real battle of Alesia, also known as the Battle for Gaul, is believed to have taken place.

In the verdant countryside not far from the museum, a giant statue of the sandal-footed Vercingetorix rises from a hilltop, with his sword by his side, long hair and mustache flowing. Oliva Surge says even though Vercingetorix lost to Caesar, it was a noble defeat.

'We might have lost, but we held on,' the museum visitor says. 'And Vercingetorix was the first leader in France to speak of liberty. And that's our motto today: liberty, equality, fraternity.'

Romanise
make Roman in character; adopt Roman customs etc.

Surge has brought her children to watch the jousting. Every French schoolchild learns about 'our ancestors the Gauls'. Although vanquished and **Romanised**, the Gauls are seen as the moral victors in the collective memory of France, and are now a national symbol. There are the iconic Gauloise cigarettes, and millions of readers around the world know the beloved comic book characters Asterix and Obelix, whose Gallic village is the last to resist Roman invaders thanks to a druid's magic potion that grants super strength.

Eleanor Beardsley, 'How Gaul-ing! Celebrating France's first resistance fighter', *NPR Morning Edition* (radio program transcript), 8 August 2013

11.5 Profile tasks

1   Explain the 'scorched earth' policy of Vercingetorix described by Caesar in Source 34.

2   Why does Caesar write from the perspective of Vercingetorix in Source 34? What is the effect of this?

3   How is Vercingetorix represented in Source 36? Why is he an important figure in modern France?

4   Read Caesar's account of the Battle of Alesia and later events in Book 7 of his *Gallic War*. For an online version search for 'Internet Classic Archive – Gallic Wars'.

5   How did Caesar manage to turn the tables on Vercingetorix and win the battle of Alesia?

6   Read the account of Vercingetorix' surrender to Caesar after the Battle of Alesia. What impression of Vercingetorix and the Celts in general is created?

11.6 The legacy of the Celts

Most of Europe, apart from Ireland and Scotland, became part of the Roman Empire in the years after the defeat of the Celts. The Celts were brave and fierce fighters, although ultimately no match for the Roman troops with their sophisticated siege weapons. However, they have provided us with figures of heroic and national symbolism, such as Vercingetorix and Boudicca.

Impact of Celtic culture on the modern world

Ancient Ireland and Scotland were not conquered by Romans and **Saxons**, so some Celtic customs and practices have survived there more strongly than in other parts of Europe. In the Middle Ages, the oral tradition of the Celts was written down by Irish monks, and so Celtic **myths** and stories have survived. A famous example is the love tragedy of Tristan and Iseult. These Celtic stories have inspired modern writers such as W.B. Yeats, James Joyce and Dylan Thomas.

The Celts of the ancient world left an enduring legacy through their art, music and mythology. One of the most powerful echoes of Celtic traditions can be seen in the popularity of Tolkien's *Lord of the Rings*. Today, the flowing and spiralling lines that were a feature of ancient Celtic art are reproduced in a wide range of media, including tattoos and jewellery.

SOURCE 37 Modern art by Welsh artist Jen Delyth, inspired by Celtic motifs. It represents the Hounds of Annwn, a pack of snow-white spectral hounds in Celtic mythology.

Modern descendants of the Celts live in all parts of the world. Many Australians are aware of their Celtic heritage through Irish, Welsh and Scottish descent. Today, Celtic languages are being revived in Ireland, Scotland, Wales and Brittany.

11.6 Check your learning

1 The story of Tristan and Iseult is one of the great love tragedies of Western culture. Read a modern version of the story.

2 Research Celtic music and the **bardic** tradition. What influences can be heard in modern Celtic musical genres such as Celtic hip hop, Celtic rock and Celtic metal?

3 Writing task: 'Evaluate ancient or modern representations of the Celts.' (Evaluate: Make a judgement based on criteria, determine the value of.)

To help you plan your response:
- select the representations you will evaluate (two or three)
- briefly explain the representation provided by the sources you have chosen
- analyse and make a judgement about the representation based on the particular criteria you have selected.
- use specific evidence from the sources to support your evaluation.

In this chapter on the Celts we have had an opportunity to gain an understanding of ancient Celtic society and culture from both a Celtic and a Roman perspective. In the absence of a Celtic written tradition, a Celtic perspective can be inferred from the archaeological evidence provided by the excavation of Celtic sites, including their burials, and occasionally from the Roman written sources. These written sources, based largely on the Romans' experience of conflict with the Celts, tend to be hostile, while observations and judgements of Celtic cultural practices usually reflect Roman rather than Celtic values. In studying all of these sources, you will have gained an understanding of the need to be aware of how important it is to understand the perspectives that have shaped the sources, and to apply your interrogation skills to assess their reliability and usefulness.

FOR THE TEACHER

Check your <u>o</u>book <u>a</u>ssess for the following additional resources for this chapter:

Answers	Teacher notes	Class test	<u>a</u>ssess quiz
Answers to each *Check your learning*, *Understanding and using the sources* and *Profile task* in this chapter	Useful notes and advice for teaching this chapter, including syllabus connections and relevant weblinks	Comprehensive test to review students' skills and knowledge	Interactive auto-correcting multiple-choice quiz to test student comprehension

12

Ancient Australia: Lake Mungo

FOCUS QUESTIONS

1 How has ancient Australia been represented over time?

2 What have sources revealed about Lake Mungo, the Aboriginal people who lived there and their way of life?

3 How does Lake Mungo contribute to our understanding of Australia's ancient past?

4 Why is Lake Mungo significant to Aboriginal communities and other groups?

5 What conservation issues are relevant to the preservation of Lake Mungo as a World Heritage site?

FOCUS CONCEPTS & SKILLS

Significance

One of the key criteria for determining the significance of a site is the extent to which it reveals important information about the past and the present. Lake Mungo meets this criterion on a number of grounds. It sheds light on the ancient history of the Australian continent and the Aboriginal occupation of Australia. Significance can mean different things to different people. Lake Mungo has a special meaning for Aboriginal people, their identity and their connection to their past and present. It also has a particular value for the geologists, archaeologists, scientists and other specialists who have studied the site.

LEARNING OUTCOMES

1 Explain how ancient Australia has been represented over time.

2 Explain what sources have revealed about Lake Mungo, the Aboriginal people who lived there and their way of life.

3 Discuss the contribution of Lake Mungo to our understanding of Australia's ancient past.

4 Analyse the significance of Lake Mungo for Aboriginal communities and other groups.

5 Explain the conservation issues that are relevant to the preservation of Lake Mungo as a World Heritage site.

SOURCE 1 The dramatic landscape of Lake Mungo in the Willandra Lakes region of south-western NSW

Ancient Australian time capsule

The exciting discoveries made at Lake Mungo in the Willandra Lakes Region of New South Wales in the 1960s and 1970s revolutionised knowledge about the human occupation of Australia, pushing back, at that time, the known presence of Aboriginal people from 10 000 years to more than 40 000 years. The region is the site of one of the oldest known examples of **_Homo sapiens_** in the world. This now arid, sandy, windswept landscape was once a freshwater lake whose shores were inhabited for some 2000 generations by the Mungo people and their descendants. In fact, the Lake Mungo area is unique in being the only Australian landscape that has evidence of continual occupation by Aboriginal people for over 40 000 years. Most significantly, the human remains recovered at the site have revealed the oldest known example of the ritual of human cremation in world history. These discoveries attracted worldwide attention and gave Australian archaeology and the **Dreaming** a global significance.

The Dreaming

The Aboriginal perspective of what non-Indigenous people refer to as the 'ancient past' is expressed in the complex spiritual concept of the Dreaming. Time – whether past, present or future – is not part of this concept. The Dreaming is not located in time; in fact, there is no word for time in the many Aboriginal languages. The Dreaming is about the significance of place and the timeless ancestral spirits associated with it. The Dreaming also explains the process of creation. The barren, featureless land was inhabited by spiritual ancestor beings who created the many features that we see today. Having created this 'sacred world', these beings became part of the landscape, its rocks, trees, rivers and mountains.

Australian beginnings

According to scientific theory, 200 million years ago Australia was part of a great continental landmass called Pangaea. Ten million years later it split into two supercontinents called Laurasia and Gondwanaland. A process referred to as continental drift later caused Laurasia to separate into the Eurasia and North America that we know today. Gondwanaland became Africa, Antarctica, Australia, India, Madagascar, New Zealand and South America.

Human beginnings in Australia

Until recently, archaeological evidence indicated that the first modern humans arrived in Australia about 50 000 years ago. However, a new discovery based on the excavation of a **rock shelter** in Majedbebe, in the Kakadu region of northern Australia, has now pushed that date back to 65 000 years. If we compare the longevity of Aboriginal and European occupation of Australia using these figures, then Europeans have been here for just 5 minutes in comparison to 24 hours of Aboriginal history!

There are two theories that explain the origins and dispersal of the human species around the globe: the 'Out of Africa' and the 'Multiregional' models. According to the 'Out of Africa' theory, the first humans to arrive in Australia about 50 000 or more years ago came from a recent migration of *Homo sapiens*. They belonged to one distinct **genetic lineage** and were descended from a human population originating in Africa. The archaeological evidence of these earliest Australians shows a range of physical variation that would be expected in a population descended from a single, genetic lineage that was spread over a wide geographical area. Source 2 shows the dispersal of *Homo sapiens* according to the 'Out of Africa' theory.

The alternative 'Multiregional' theory suggested that the physical variation found in the archaeological record of early Indigenous Australians indicated that Australia was originally settled by two separate genetic lineages of modern humans. One was argued to have descended from Indonesian *Homo erectus* and the other lineage from Chinese *Homo erectus*. This theory argued that modern Aboriginal people came from the combination of these two genetic lineages.

However, the results of a recent **genome** study now clearly supports the 'Out of Africa' theory. In 2016, an international team of experts sequenced the genome of 83 Aboriginal Australians of the Pama-Nyungan-speaking language group, which covers 90 per cent of the continent, and 25 Highland Papuans. The results showed evidence for only one colonisation event in Australia, and a continuity of occupation from that genomic signature for 40 000-odd years. According to these findings, the ancestors of modern-day Papuan and Aboriginal peoples reached the supercontinent of 'Sahul', which originally united Tasmania, Australia and New Guinea, about 50 000 years ago.

genetic lineage
a series of mutations that show descendence from a common ancestral genetic type

genome
an organism's complete set of DNA, including all of its genes

MIGRATION OF HOMO SAPIENS (OUT OF AFRICA)
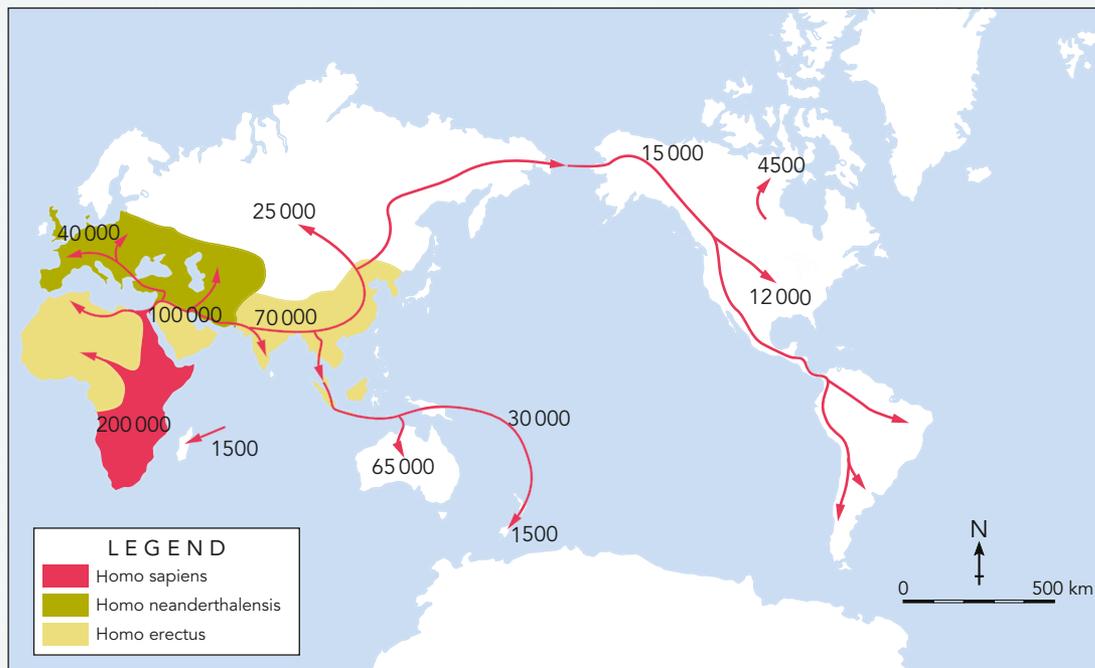
Source: Oxford University Press

SOURCE 2 Timeline and likely migration patterns of *Homo sapiens* across the world.

Dispersal of Aboriginal people across Australia

The ancestors of modern-day Aboriginal people either came via the land bridge connecting Australia to its northern neighbours or by boat, island hopping along a chain of islands to Australia's north. Having arrived, archaeological evidence suggests that these first Australians spread relatively quickly across the continent, taking perhaps only a few thousand years to do so. This is supported by the recent discovery of evidence of the earliest inland occupation in Australia, a rock shelter in the Flinders Ranges at Warratyi in the desert region of central Australia. The excavation revealed that people were settled here 49 000 years ago. The archaeological team that excavated the cave recovered more than 4000 artefacts, including bones, plant and animal remains, and **ochre**, used for painting. Another important discovery was the remains of **megafauna** – a **diprotodon** and a giant bird. These were dated to between 45 000 and 50 000 years ago.

The Aboriginal people who spread across the Australian continent were not a single group of people, but many different groups who had their own languages, culture and beliefs. It is estimated that there were as many as 600 different languages spoken before European colonisation. Only 263 remain today.

ochre
consolidated earth made up of clay and iron oxide, used to make red or yellow pigment

megafauna
large mammals of a particular region, habitat or geological period

diprotodon
the first fossil mammal named from Australia and the largest known marsupial ever to have lived
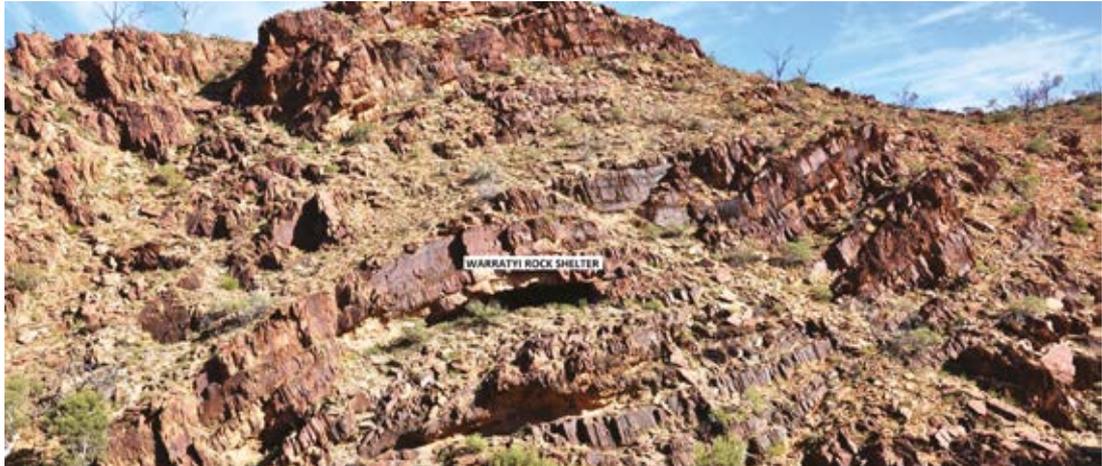
SOURCE 3 Warratyi rock shelter in the northern Flinders Ranges in South Australia. Archaeologists worked with members of the local Aboriginal community, the Adnyamathanha people.

12.1 Check your learning

1   Find out about the evidence discovered in the Kakadu excavation for the earlier date of Aboriginal occupation of Australia, first published in *Nature* in 2017. Enter 'Human arrival in Australia pushed back 18 000 years'.

2   Read more about the 2016 genome study. Search online for 'World-first genome study reveals rich history of Aboriginal Australians'.

3   Look up 'Warratyi rock shelter' online and find out more about this exciting discovery in the Flinders Ranges.

4   The discovery of megafauna remains in the Warratyi cave is important in the debate about whether it was human activity or climate change that led to the extinction of the megafauna. Go online and find out more about this controversy. See also, the link between Lake Mungo and the megafauna extinction debate on page 280.

5   Search online for 'AIATSIS map of Indigenous Australia' to see a map of Indigenous Australia before 1788.

Lake Mungo: geographical context

The Willandra Lakes complex in south-western New South Wales forms a chain of dried-up lakes of which Lake Mungo is a part. These lakes once formed a continuous drainage system that carried the waters of the Lachlan River to the Murray (see inset map in Source 5). The lake beds all have a similar structure with wind-blown, dry dunes known as lunettes along the shores of their north-eastern banks.

About 40 000 years ago, the lakes were full, with a surface area of more than 1000 square kilometres of fresh water. Lake Mungo itself would have been 20 kilometres long, 10 kilometres wide and 15 metres deep. The sand dunes on its eastern banks, formed by strong westerly winds, provided a sheltered site for the Aboriginal people who camped there.

Today the Mungo lunette is 25 kilometres long and is a dramatic, eerie landscape sculpted by thousands of years of erosion into spectacular shapes. The Mungo lunette is more commonly referred to as the 'Walls of China'. It was probably given this name by Chinese who had moved into the area during the 1860s after the gold rushes and who worked on the nearby Mungo sheep station. It was in this lunette, where erosion had stripped away part of the surface to reveal the various strata or **stratigraphic** deposits, that the first discoveries were made.

stratigraphic
relating to stratigraphy, the order and position of strata or layers of rock or sediment

SOURCE 4 A pillar of layered sand sticks out from the Walls of China. These layers were formed by wind action 17 000 years ago, but are now being eroded by winds.

SOURCE 5 The Willandra Lakes Region, showing the dry lake beds and lunettes on their north-eastern banks. The inset map shows the location of the Willandra Lakes Region in NSW.

Archaeological context of Lake Mungo

The Willandra Lakes is one of the most famous archaeological regions in Australia. Excavation of the site has revealed three distinct phases of sediments or deposits, illustrated in Source 6. The earliest deposits, called the Golgol sediments, were laid down between 100 000 and 45 000 years ago when the lakes were dry. The Mungo sediments were formed between about 45 000 and 26 000 years ago when the lakes were full. The third layer, called the Zanci sediments, was deposited between about 26 000 and 16 000 years ago. The site and its finds have been dated using a range of scientific methods, including **radiocarbon dating** for organic materials and **optically stimulated luminescence (OSL)** for **geological** sediments.

radiocarbon dating
a method of determining the age of organic material by analysing the amount of carbon-14 remaining in a sample

optically stimulated luminescence (OSL)
a scientific technique applied to geological sediments to determine when they were last exposed to light, enabling researchers to establish how long an artefact has been buried

geological
relating to the science of geology, which is the study of the earth, the rocks of which it is composed and the changes it has undergone

WILLANDRA NSW

C-14 years BP Dry Overflow
x 1000

Lakes dry	5000 BP	Conditions similar to present
	10–5000 BP	Relatively humid conditions
	15–10 000 BP	Relatively dry conditions
	16 000 BP	Most lakes dry
		Change to seed-grinding economy
Zanki	17 500 BP	Major drying of lakes
	18 000 BP	Brief high-water levels: last phase of lunette formation
	26–19 000 BP	Drop in lake levels: formation of clay-rich dunes
Mungo	33–26 000 BP	Lakes fresh and probably overflowing; onset of major cold phase and last glaciation in the Australian Alps
	44–33 000 BP	Lakes filled, fresh and overflowing, strong westerly winds caused lunette formation
		Human occupation commences
Golgol	100–45 000 BP	Long period of dry lakes; conditions rather cooler and drier than today
		No evidence of human occupation of region

Limits from C-14 errors

Note: (1) BP stands for 'Before Present' (it is the standard dating terminology used in carbon-14 dating).
(2) All dates are approximate.
(3) Thickened lines indicate high lake levels of low salinity.

SOURCE 6
A timeline showing stratigraphy of the Willandra Lakes complex

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12.2 Understanding and using the sources

Source 6

1 Suggest why no evidence of human occupation has been discovered in the Golgol sediments.
2 What is the earliest date for human occupation at Lake Mungo? How long did the Mungo period of occupation last and what conditions at the site supported it?
3 Why did Aboriginal people occupying the site after the Mungo period change to **seed-grinding** as a source of food? What does it indicate about their technology and culture?
4 Briefly outline the major changes in climatic and environmental conditions across the 40 000 years of occupation at Lake Mungo. What conclusions could be drawn about the Aboriginal people's adaptation to their environment over that time?

seed-grinding
the crushing of small, hard wild grass seeds to make flour, using flat grindstones or mortars

12.3 Life at Lake Mungo in Pleistocene times

hearth
a site of a campfire, characterised by ash, charcoal and discolouration of soil

chopper
a large, heavy tool made from a lump of rock

core tool
a lump of rock showing trimming or wear on its surface, indicating its use as an implement

hammerstone
a lump of stone or river pebble used for shaping small stone tools or pounding foodstuffs

Human occupation of Lake Mungo is believed to have begun between 50 000 and 45 000 years ago. A variety of artefacts and other evidence of human occupation from the 'Mungo period' of occupation between 45 000 and 26 000 years ago have been recovered in excavations at the site. Most of the finds were recovered from the remains of ancient **hearths** around which the Mungo people camped, cooked and ate their food.

Stone tool technology at Lake Mungo

The Aboriginal people of Lake Mungo used stone tools for many purposes. Some of the most common stone tools recovered from the Lake Mungo site include **choppers**, as seen in the **core tool** in Source 7 (bottom). Choppers are large, heavy tools made from lumps of rock, and have a flaked cutting edge. A flake is a piece of stone formed when a lump of rock is struck with a **hammerstone** in a process called knapping. The force of the percussion blow detaches a flake of stone that has sharp edges and can be used to cut or scrape flesh, sinew or fur. Sturdy, steep-edged flakes were also used for woodworking, such as scraping, sawing, incising and chiselling. Sources 8 and 9 are from the Lake Mungo archaeological excavation reports.
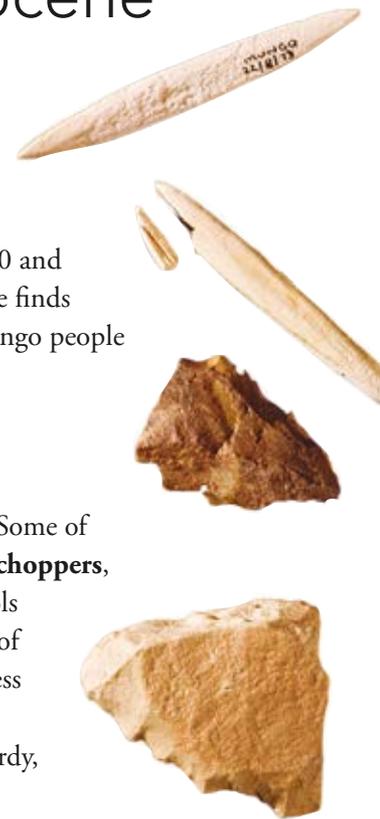
SOURCE 7 Typical knapped stone artefacts from Lake Mungo

SOURCE 8 Contents of 16 hearths excavated at the Mungo site

HEARTH NUMBER	MAMMAL (LARGE)	MAMMAL (SMALL)	BIRD	FISH	SHELL	EMU EGG	STONE TOOL
1	x			x	x	x	
2				x			
3		x	x	x			
4		x	x				
5	x	x		x			
6	x			x			
7		x		x		x	
8		x	x	x	x	x	x
9		x	x	x			
10	x	x	x	x	x	x	x
11	x			x			
12		x		x	x		
13	x	x	x		x	x	
14	x			x			
15							x
16							x

Source: J.M. Bowler, R. Jones, H.R. Allen and A.G. Thorne, 'Pleistocene human remains from Australia: a living site and human cremation from Lake Mungo', *World Archaeology*, Vol. 2, 1970, p. 51

Fish otolith geochemistry at Lake Mungo

A current research project into the **geochemistry** of fish otoliths aims to shed more light on the ancient people of Lake Mungo. Fish otoliths are calcium carbonate structures that form within the inner ear of certain fish. Many otoliths have been recovered from a range of hearth sites at Lake Mungo, and they are being examined to determine the nature of the diet of the Mungo people. They are also being used for dating purposes. The tiny otoliths of the golden perch or Murray cod have microscopic growth bands, similar to tree rings. They can also reveal information about water temperature and the salt levels of the lakes at the time.

The megafauna extinction debate

The question of how the Australian megafauna became extinct has been one of the most hotly contested issues in Australian archaeology. The most widely accepted theory until recently was that megafauna were wiped out as a result of human action within a relatively short time span. However, a recent report on the dating of a megafauna fossil find from Lake Mungo clearly challenges this 'rapid kill' **hypothesis**.

hypothesis
a proposed explanation based on limited evidence that is used as a starting point for further investigation

The fossil, which had been excavated in the 1980s at Lake Mungo, had been stored in the Lake Mungo Museum. It has been identified as *Zygomaturus trilobus,* one of the largest marsupials that ever lived.

SOURCE 9 A representation of *Zygomaturus trilobus*, a giant marsupial, whose fossil remains were found at Lake Mungo

Michael Westaway from the Research Centre for Human Evolution at Griffith University and his colleagues published a report on their research in the February 2017 *Quaternary Science Reviews*. Source 10 is an extract from their report.

… One way of testing the various extinction models is by looking for megafauna in landscapes that show continuous Aboriginal occupation over the past 50 000 years. These landscapes should ideally also have conditions for the preservation of fossil bones. There are very few localities like this but one exception in Australia is the Willandra Lakes World Heritage Area, in New South Wales.

… *Zygomaturus trilobus* was a large lumbering wombat-like marsupial, the size of a very large bull. We know very little about its **ecology**, and we know even less about when and how it became extinct … The upper jaw (maxilla) of the animal [excavated in the Willandra Lakes] was sent to the Australian Museum in Sydney where it was kept encased in its original sediments. … By taking sediment samples for OSL dating and by dating the fossil directly with **U-series dating** we were able to show that the specimen died sometime around 33 000 years ago. Aboriginal people arrived in the Willandra some 50 000 years ago.

… The *Zygomaturus* specimen shows that people and megafauna co-existed for at least 17 000 years … This single fossil has changed the nature of the megafauna extinction debate. We can now abandon the rapid/over-kill hypothesis and start to untangle how climate may have played a role, or how changes in Aboriginal population numbers may have impacted on the ecology of the megafauna.

Michael Westaway, Jon Olley & Rainer Grun, 'Aboriginal Australians co-existed with the megafauna for at least 17 000 years', *The Conversation*, 12 January 2017

ecology
the relationship between plants, animals and the environment in a particular area

U-series dating
uranium-series dating, a scientific dating technique used to determine the age of calcium carbonate materials

12.3 Understanding and using the sources

Source 8

1   What were the chief sources of food of the Mungo people according to the contents of the 16 hearths excavated at the site?

2   What does the evidence of food sources from hearths indicate about the climate and natural resources of the Mungo region at this time?

Source 10

3   Explain the significance of the discovery and dating of the *Zygomaturus trilobus* fossil.

12.3 Check your learning

1   Watch a 2-minute video clip of the knapping process. Go online and search for 'Basic flint knapping'.

2   A comprehensive account of the archaeological finds and technology of the Mungo People can be found online. Search for 'Tools, Shells and Bones from Lake Mungo in Australia'.

3   Read Kelsie Long's Blog explaining her research into fish otoliths at Lake Mungo. Go online and enter 'Fish Ears at an Ancient Lake'. What has the study of fish otoliths contributed to an understanding of the Lake Mungo site?

4   For a full account of the megafauna extinction debate in the context of Lake Mungo, read the online article 'Aboriginal Australians co-existed with the megafauna for at least 17 000 years'.

Human remains at Lake Mungo

geomorphologist
someone who studies the structure, origin and development of the topographical features of the earth's surface

calcrete
a limestone formed by the cementation of soil, sand, gravel and shells

physical anthropologist
someone who studies the physical characteristics of the human race, especially human fossil remains

The discovery of the first human remains at Lake Mungo was made quite by accident in July 1968 when Jim Bowler, a **geomorphologist** from the Australian National University, was making a study of the geological strata at the site in order to discover evidence for patterns of climatic change over many thousands of years. He was particularly interested in Lake Mungo because, as we have already seen, advanced erosion of its lunette had revealed a significant part of the core and thus the different layers or sediments that were the object of his research.

Bowler noticed some burnt, carbonate-encrusted bones protruding from the sandy surface of the dune. He marked the site with an iron peg and left it intact for detailed excavation by archaeologists. In March 1969, a team of archaeologists came to Lake Mungo to inspect Bowler's find. The bones were embedded in a **calcrete** block, which they carefully cut out of the dune and, together with other broken pieces of bone that had been lying nearby, took it back to the laboratory for study. This was done only after a full record of the bones within the context of the site had been made.

Mungo Lady

Alan Thorne, a **physical anthropologist**, undertook the labour-intensive task of removing the hard concrete-type crust from the bones and reconstructing the skull from the 175 small fragments that had been recovered. When this task was completed, the skull, together with other fragments of the skeleton, now officially labelled 'Mungo I', revealed a young, lightly built woman with delicately structured bones, giving her an appearance that experts call 'gracile' (distinct from the heavier or 'robust' human skeletons that have been recovered from other sites).

It was not possible to determine the cause of death, but careful study of the bones indicated that she had received an elaborate burial ritual. Her body had been cremated. The charred skeleton, especially the face, was then deliberately smashed, and finally the bone fragments were buried in a small pit. The date that was subsequently established for Mungo Lady makes this the oldest known evidence of ritual cremation in the world.

Mungo Man

In 1974, Jim Bowler was once again investigating the stratigraphy of the Mungo site when he came across another human skull in the sand just 500 metres from the site of his 1968 discovery. Subsequent excavation caused great excitement among the archaeologists when an entire human skeleton was unearthed. This is an extremely unusual find, as Wilfred Shawcross, one of the archaeologists who was present, recounted in Source 11.

SOURCE 11

Two to three people worked flat out for two days. All the time, you felt it couldn't go on; but it did. A neck appeared, then a rib. Normally you are lucky to get a skull; in Africa they are lucky to get a jaw. But this was a whole skeleton.

Wilfred Shawcross, cited in 'Australia: life and death at Lake Mungo', *Jane's Oceania*

A study of the skeleton revealed an adult male, about 50 years of age, 1.7 metres tall and of a similar gracile build to Mungo Lady. Two lower canine teeth were missing and his molar teeth were scratched and worn. He had apparently suffered from arthritis, judging from the bones of the right elbow, which were badly worn and broken away.

He had been laid in a shallow grave on his side with his hands clasped together. A dark red stain in the grave indicated that his corpse had been covered with powdered red ochre, which is believed to have come from the Broken Hill district, about 200 kilometres to the north-west of Lake Mungo. Unlike Mungo Lady, the body had not been cremated, but the use of red ochre as part of the burial ritual gives an even earlier date for beliefs and ritual associated with burial practices.

Ochre in traditional Aboriginal culture

Ochre is a natural earth **pigment** that has been used by Aboriginal people for many thousands of years. It is believed to possess a spiritual power that can be released through ceremonial ritual. Red ochre, in particular, is considered sacred. In traditional Aboriginal culture, ochre was a highly prized commodity used as **currency** in the Aboriginal trade system when clan groups travelled great distances for ceremony and trade.

The dating controversy

Establishing accurate dates for Mungo Lady and Mungo Man has been a controversial issue since the remains were first discovered. The first estimates of the age of Mungo Man ranged from 28 000 years to 32 000 years. Then in 1999, new methods suggested that Mungo Man had lived up to 62 000 years ago. This caused a sensation at the time because it added fuel to the debate between the supporters of the 'Out of Africa' and the 'Multiregional' theories regarding human evolution and the time frame for human migration across the globe.

However, this date has since been abandoned. In a 2003 study, four universities and the **CSIRO** used a range of methods and four separate dating laboratories to reach an agreement on new dates: 40 000 years for Mungo Man and up to 42 000 years for Mungo Lady.

pigment
a natural substance that gives colour to animals and plants

currency
the quality of information being up to date or current in the scholarship

CSIRO
Commonwealth Scientific and Industrial Research Organisation

12.4 Check your learning

1　What contribution have the sciences of geomorphology and physical anthropology made to our understanding of Lake Mungo and the archaeological finds?

2　Why is it unusual for skeletal remains as old as Mungo Man to be found intact?

3　Why is the evidence of burial ritual associated with Mungo Lady and Mungo Man such an important discovery?

4　What does the use of ochre in the burial of Mungo Man suggest about:
 a　cultural beliefs and values of the Mungo people?
 b　the Mungo people's contacts with other Aboriginal groups?

5　Is it reasonable to assume that the beliefs about ochre and its use held by traditional Aboriginal groups in more recent times would have been the same for the Mungo people 40 000 or more years ago?

Representing the people of Lake Mungo

The representation of daily life at Lake Mungo shown in Source 12 is a modern artist's impression based partly on the archaeological evidence we have already examined and partly on the artist's imagination.

Ethnography and archaeology

While many of the details in the pictorial reconstruction in Source 12 are based on specific archaeological finds such as animal and fish bones, stone tools and the carbonised remains of fireplaces, you may have realised that there would be some aspects of the scene for which material archaeological evidence would be non-existent.

In cases such as this, modern archaeologists turn to a branch of anthropology called **ethnography**, which is the study and description of living human societies and cultures. When used for archaeological purposes, a study of living Aboriginal people or ethnographic accounts from the recent past becomes **ethnoarchaeology**. In this case, a study of the culture of Aboriginal societies since the beginning of European colonisation has been used to help reconstruct what life might have been like in ancient times. However, we need to be aware of the difference between conclusions based on archaeological evidence and those based on ethnographic evidence.

Problems of ethnoarchaeology

Apart from the problem that pictorial reconstructions of Aboriginal people as shown in Source 12 tend to be based on generalisation, stereotype and modern evidence, another concern arises in drawing comparisons and finding commonalties between ancient and modern cultures that are not founded in specific archaeological evidence. Consider the view of Peter Hiscock, Professor of Australian Archaeology at Sydney University, in Source 13.

ethnography
the study and description of living human societies and cultures

ethnoarchaeology
the study of contemporary cultures with a view to understanding the culture and behaviours of an older culture
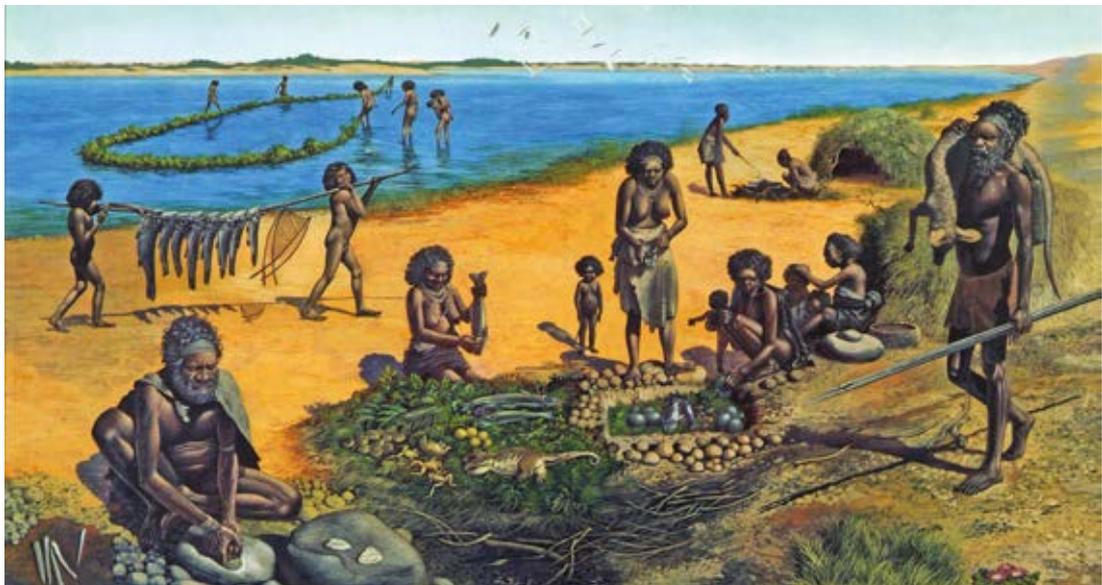
SOURCE 12 An artist's representation of life in Pleistocene times at Lake Mungo

These examples of archaeological interpretations [e.g. Source 12] at Lake Mungo clarify the way assumptions of cultural continuity and completing reconstructions of **prehistory** with details of daily life borrowed from historical Aboriginal lives can construct images of a changeless Aboriginal society. When this happens archaeologists are not assisting us to understand what life was like for prehistoric people in Australia. Instead, they are reproducing images of what life might have been like during European colonization. [These not only] fail to illuminate the prehistoric past but also actively construct a veil that obscures the past and misleads us into thinking it must have been like the present.

Peter Hiscock, *Archaeology of Ancient Australia*, London: Routledge, 2008, p. 8

prehistory
in general terms, the period before written records; in the Australian context, the period before European colonisation

Continuity of burial ritual?

Consider how ethnography has been used in Source 14 to interpret the burial **rites** practised at Lake Mungo 40 000 years ago.

rite
a traditional or religious ceremony

SOURCE 14

There are remarkable similarities between the burials and the elaborate and varied ways in which tribal Aboriginal people still dispose of the dead. Cremation, decorating the corpse, smashing the bones and reburying them have all been observed in recent times. These **mortuary rites** form part of ceremonies that usually aim to sever connections between the living and the spirit of the dead person and send it on its way to the spirit world to reside among the great creative spirits of the Dreaming. This is not merely care for the dead, but also concern for the living: Aboriginal people believe that a disgruntled spirit, not properly dispatched by the correct rites, can cause havoc. Moreover, the ceremonies imply a belief in the indestructibility of the human spirit, a concept shared by most other religions. From the traces of red ochre and charred fragments of human bone recovered by archaeologists, can we accept that the people at Mungo held such beliefs more than 20 000 years ago? To do so stretches the material evidence to the limits. However, because such beliefs are universal throughout Aboriginal Australia in recent times, accompanied by mortuary practices that are almost identical to those used at Mungo, this interpretation is probably correct.

Peter White & Ronald Lampert, 'Creation and discovery', in D.J. Mulvaney & J.P. White (eds), *Australians to 1788*, Sydney: Fairfax, Syme & Weldon Associates, 1987, pp. 21–2

mortuary rites
burial rituals and customs

12.5 Understanding and using the sources

Sources 12–14

1 How much of the scene shown in the representation in Source 12 can be supported by the material evidence cited in Sources 7 and 8?

2 Which aspects of this scene are not supported by specific archaeological evidence?

3 Can reliable conclusions be drawn about social organisation and gender roles from the pictorial representation in Source 12? Explain.

4 What issue does Professor Hiscock raise in Source 13 regarding the **reliability** of reconstructions based on ethnography?

5 What conclusion about the continuity of cultural practices is drawn in Source 14?

6 Is Hiscock's concern in Source 13 justified by the representation in Source 12 and the interpretation of Mungo burial rituals in Source 14? Discuss your answers.

reliability
the accuracy of a source judged on its context, purpose, origin and intended audience

Footprints in the sands of time

The human history of the Lake Mungo region is not restricted to the period examined here. Evidence so far points to an extraordinary continuity of occupation over long periods of time. In 2003, nearly 460 fossilised human footprints were discovered, the largest collection of its kind in the world. The prints were made by children, adolescents and adults in wet clay, 19 000 to 23 000 years ago. The clay, containing calcium carbonate, hardened like concrete, and a layer of clay and sand protected the prints. In the top layers of sediments at Lake Mungo there is abundant evidence of occupation over the last 10 000 years.

SOURCE 15 A trail of 20 000-year-old footprints preserved in the sands of Lake Mungo

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12.5 Check your learning

1 Use the data provided in Sources 7, 8 and 12, and your answers to the questions on the sources, to compile notes on the finds and the conclusions to be drawn from them. Draw up a table as shown below. Make notes for each item of evidence.

MATERIAL EVIDENCE/ ARTEFACT	DESCRIPTION	POSSIBLE CONCLUSIONS ABOUT DAILY LIFE

2 Write an archaeological report, entitled 'Daily life of the Mungo people'. Structure your report using the suggested headings below. You may think of others as well.

- Diet
- Technology

- Social organisation and gender roles
- Death and burial

12.6 Aboriginal heritage and custodianship at Lake Mungo

Three traditional tribal groups – the Paakantji, Ngyiampaa and Mutthi Mutthi peoples – have important links to the Willandra Lakes Region. Four highly respected Aboriginal women liaised between their tribal groups and government agencies to develop a management plan for the site. They also gave advice on respectful procedures for the treatment of the human remains excavated at Lake Mungo. Tribal elder **Aunty** Alice Kelly of the Mutthi Mutthi people explains the significance of Lake Mungo for her people in Source 16.

SOURCE 16

Mungo is the dreaming place for the Mutthi Mutthi people. It is where our people come to hold ceremonies. Mungo is a place of love, peace and harmony for the Mutthi Mutthi people. It is also the meeting place of the Tribes, where we held meetings, ceremonies and traded things. The Mutthi Mutthi had a long association with the Willandra Lakes and Mungo long before the white settlers came through this country. The dreaming lines of the Mutthi Mutthi are still there today; and so are those of the other tribes associated with that place today.

Mungo is the most 'cultured' place as it reflects the past of the people and the land, it is a place that requires respect. It is the creation place where all things were brought into being.

We realise today that this is the place where people and the land become one, where our people walk with the spirits of our ancestors.

Today we look at this place and we belong. It is a place where all our concerns and worries disappear – it has that effect on people. It is our most sacred site and demands respect …'The children and students must come to Mungo to learn and enjoy the spiritual and cultural significance of this, our most important place of our people, as this is the place of love, peace and harmony.'

Alice Kelly, cited in 'Mungo National Park: plan of management', *NSW National Parks and Wildlife Service*, Department of Environment and Conservation (NSW), 26 July 2006, p. 14

Where are Mungo Lady and Mungo Man today?

The treatment of Aboriginal skeletal remains has become a matter of great concern to Aboriginal communities in recent years. Before 1980, little consideration was given to Aboriginal attitudes to excavation of burials, or to the research into and display of skeletons in museums. Today it is a different story. As a result of negotiations with Aboriginal Elders of the local Aboriginal tribal groups, Mungo Lady was brought back to her Country in 1992. There are plans to build a special 'keeping place' to store Mungo Lady's remains because the continuing erosion of the lunette where she was discovered makes reburial impractical. For the present, Mungo Lady is kept in a locked safe at Mungo National Park, which requires two keys for access. One key is held by scientists, the other by the Elders.

The remains of Mungo Man were taken to the Australian National University (ANU) for study after the discovery of his skeleton in the 1970s. They were kept at ANU until 2015 when, at the request of the traditional owners, they were returned. The university offered a formal apology for the distress that may have been caused by removing the remains and carrying out research on them without the approval of the traditional owners. Preparations are being made for the return of Mungo Man to his Country in November 2017. A celebration led by Archie Roach will be held in nearby Mildura when he arrives.

SOURCE 17 Aboriginal Elders at a **smoking ceremony** at the ANU before the return of the remains of Mungo Man to the traditional owners

■ **smoking ceremony**
an ancient custom among Indigenous Australians involving the burning of native plants to produce smoke, believed to have cleansing properties and the ability to ward off evil spirits

12.6 Understanding and using the sources

Source 16

1 Explain in your own words the significance of Lake Mungo for the Dreaming of the Mutthi Mutthi tribe.

2 What is your understanding of 'dreaming lines' to which Aunty Alice Kelly refers?

3 In what ways is this Indigenous perspective of the significance of Lake Mungo different from a non-Indigenous perspective?

Willandra Lakes: a World Heritage Area

■ **UNESCO**
United Nations Educational, Scientific and Cultural Organisation

The Willandra Lakes Region, which includes Lake Mungo, was inscribed on the **UNESCO** World Heritage List in 1981. It covers an area of 240 000 hectares and includes both national park and rural grazing properties run by leaseholders. It gained World Heritage listing for the outstanding nature of both its natural features and its cultural features, particularly the longevity of its occupation by Aboriginal people. It also has significant spiritual significance.

Management of the site is shared between the federal and the New South Wales governments. New South Wales National Parks and Wildlife (NWPS) manages Mungo National Park and the leaseholders manage the grazing properties. Overall supervision of world heritage values in the region is carried out by a World Heritage Management Committee consisting of representatives of NPWS, landholders, local Aboriginal traditional tribal groups, scientists and other **stakeholders**.

■ **stakeholder**
someone who has a particular interest in an issue, project or organisation

Willandra Lakes: State and National Heritage listings

The Willandra Lakes Region has also been listed on the NSW State Heritage Register, the Register of the National Estate (Australian Heritage Commission) and the Register of the National Trust of Australia (NSW). The region has significance in both the Indigenous and non-Indigenous history of Australia.

Preservation and conservation at Lake Mungo

The first management plan for the preservation and conservation of Lake Mungo, entitled *Sustaining the Willandra*, was introduced in 1996 following extensive consultation with all stakeholders. The aim of the management plan was to maximise conservation of both the natural and the cultural heritage values of the site. Tourist access, particularly to sensitive areas, is carefully controlled to minimise potential adverse impact on the site. The latest management plan, adopted in 2006, focuses on the protection of cultural heritage, both Aboriginal and European (e.g. pastoral heritage), control of weeds and feral animals, fire management and provision of controlled access to the site for tourists and other visitors.

Significance of Lake Mungo

At the beginning of this chapter we introduced the historical concept of significance as a key issue for study in relation to Lake Mungo. You will have developed an understanding of two key criteria for determining significance in this study:

- the extent to which it reveals valuable information about the past
- the value that it holds for different groups of people.

The archaeological discoveries made at the site have certainly revealed important, often groundbreaking information about the geological history of the region, the 40 000 years of unbroken history of occupation at this site and the culture of its Aboriginal inhabitants. Scientific analysis has made a huge contribution to our understanding, especially in determining dates for significant developments and helping to resolve issues such as the megafauna extinction debate.

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12.6 Check your learning

1   Use online resources and the information in this section to find details of the features of Willandra Lakes and Lake Mungo that have been selected for World Heritage listing.

2   Using the 'Understanding Mungo' website (among others) and information in this chapter, answer the following questions:

   a   What particular examples of climate and environmental change have been recorded?

   b   Give examples of 'human responses to major changes over time in climate and environments'.

   c   What is pastoral heritage? Find some examples. Search online for 'Lake Mungo pastoral heritage'.

3   How has the Willandra Lakes Region benefited from its inclusion on the World Heritage List?

4   What are some of the conservation issues facing the Lake Mungo site today? See the 2006 'Mungo National Park: Plan of Management' for details.

5   The following is a range of perspectives on the significance of Lake Mungo: geologists, archaeologists, local Indigenous communities, local non-Indigenous communities, UNESCO World Heritage, NSW State Heritage. In groups, use these **perspectives** to prepare for a forum discussion on the 'Significance of Lake Mungo'. Compile evidence from this chapter and your own research to present the perspectives of the different groups. Appoint a moderator for the forum.

perspectives
the points of view held by individuals or groups about the past that are based on their contexts and motivations

- -

Lake Mungo has been shown to have special cultural and spiritual value for Indigenous people. This continues to be reflected in their important contribution to the preservation, conservation and management of the Lake Mungo World Heritage site today and the continuing campaign for the return of the human remains of Mungo Man to their place of origin. Lake Mungo is also important in the history of European exploration, settlement and the development of the pastoral industry in New South Wales. All of these examples of significance have culminated in the inclusion of the Willandra Lakes/Lake Mungo site on state, national and international heritage lists. As a World Heritage site, it occupies an important place in the heritage not only of Australians, but of people the world over as an important chapter in the history of humankind.

FOR THE TEACHER

Check your obook assess for the following additional resources for this chapter:

Answers	Teacher notes	Class test	assess quiz
Answers to each *Check your learning*, *Understanding and using the sources* and *Profile task* in this chapter	Useful notes and advice for teaching this chapter, including syllabus connections and relevant weblinks	Comprehensive test to review students' skills and knowledge	Interactive auto-correcting multiple-choice quiz to test student comprehension

13

Ashoka

FOCUS CONCEPTS & SKILLS

Perspectives

This chapter focuses on two perspectives: Ashoka's edicts give us an insight into his motivations and actions, while later Buddhist sources on Ashoka are driven by agendas of their own. We need to ask questions about the social, cultural, intellectual and religious contexts reflected in the sources. Other perspectives include interpretations of modern scholars, both Indian and non-Indian, and a modern political agenda that claims Ashoka as a national hero.

LEARNING OUTCOMES

1   Explain the significance of the Mauryan Empire in the context of Indian history.

2   Analyse sources for evidence of Ashoka and his times.

3   Explain Ashoka's role in shaping India in his time.

4   Analyse ancient and modern representations and interpretations of Ashoka.

SOURCE 1 A poster for the 2001 film *Aśoka*, an Indian epic historical drama in the Bollywood tradition

13.1   Ashoka's place in history

Ashoka (also Aśoka) was the third king of the Mauryan Dynasty that ruled India between 322 and 185 BC. His reign is often regarded as a high point in the history of ancient India. Ashoka is even considered by some as the greatest and noblest of India's rulers. This view reflects a largely post-Mauryan Buddhist perspective, since Ashoka was an adherent of Buddhism and also adopted a policy of non-violence in the aftermath of his victory at the Battle of Kalinga, an event that marked a turning point in his reign. Ashoka's empire was well administered and prosperous. His famous **edicts**, inscribed on rocks and pillars all over the empire, advertised his policy of *dharma* or ***dhamma***, a concept that can be variously translated as 'duty, mercy, charity, truthfulness, virtue and good conduct'. Today his *dharma chakra*, also called the 'Ashoka *chakra*', or wheel of virtue, adorns the national flag of India (see Source 3).

However, Ashoka was just another name in Indian dynastic king lists until the early 19th century, when James Prinsep, an amateur British **philologist** working at the Calcutta mint, deciphered an ancient Indian script and identified a king named Piyadassi, a name not found in other Indian sources. A search of other ancient **chronicles** and inscriptions eventually revealed that this was another name for the king identified as Ashoka. The subsequent decipherment of Ashokan inscriptions all over the Indian subcontinent, and a wide range of literary references to him, enabled historians to begin to construct a tentative account of his reign. A range of contested views about Ashoka has emerged from a study of the sources. These include questions about his accession to the Mauryan throne, the character of the early years of his rule, the nature and extent of his promotion of Buddhism, and his policy of **pacifism**.

India before the Mauryas

India's long history can be traced back to prehistoric times. There are few remains of this earliest period before the emergence of the first great civilisation with the cities of Harappa and Mohenjo-daro around 2600 BC. These Indus Valley civilisations flourished at the same time as the pyramids were being built in Old Kingdom Egypt. About 200 years after the decline of the Indus Valley civilisations, the Aryans crossed the Hindu-Kush into north-west India as part of a vast migration from the area between the Black and Caspian seas. Our knowledge of the Indian Aryans comes from their religious texts, the Vedas, which give their name to this period, the Vedic period. **Brahmanism**, which led to the later development of Hinduism, had its origins during this time, and the **caste system** also made its appearance. The subsequent period witnessed the emergence of other sects, including **Jainism** and Buddhism. The timeline in Source 2 lists some of these key developments in the ancient history of India.
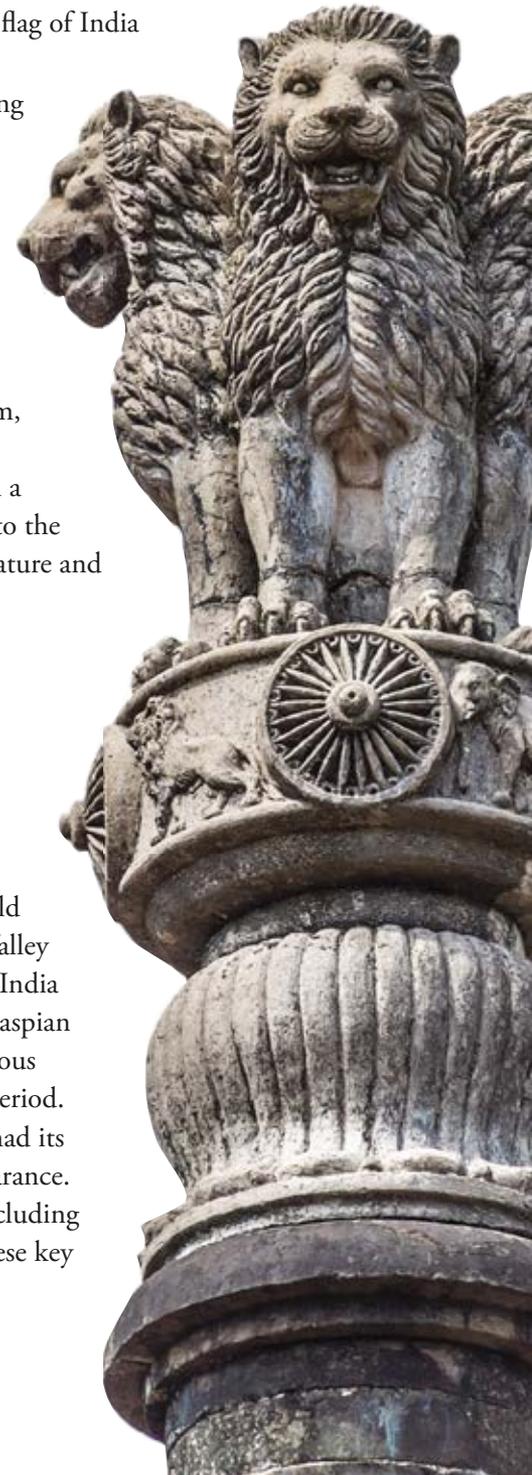
edict
a decree or announcement

dhamma
the Prakrit (ancient language) form of the more widely used Sanskrit word *dharma*

philologist
a person who studies language in historical literary texts or written records, determining their authenticity, their original form and their meaning

chronicle
a record of events in chronological order

pacifism
opposition to war or violence

Brahmanism
relating to the caste of Brahmins, the highest caste in Hinduism

caste system
a Hindu system dividing society into hierarchical categories

Jainism
an ancient Indian religion with a focus on the concept of non-violence or *ahimsa*

PREHISTORIC PERIOD C. 75 000–2500 BC
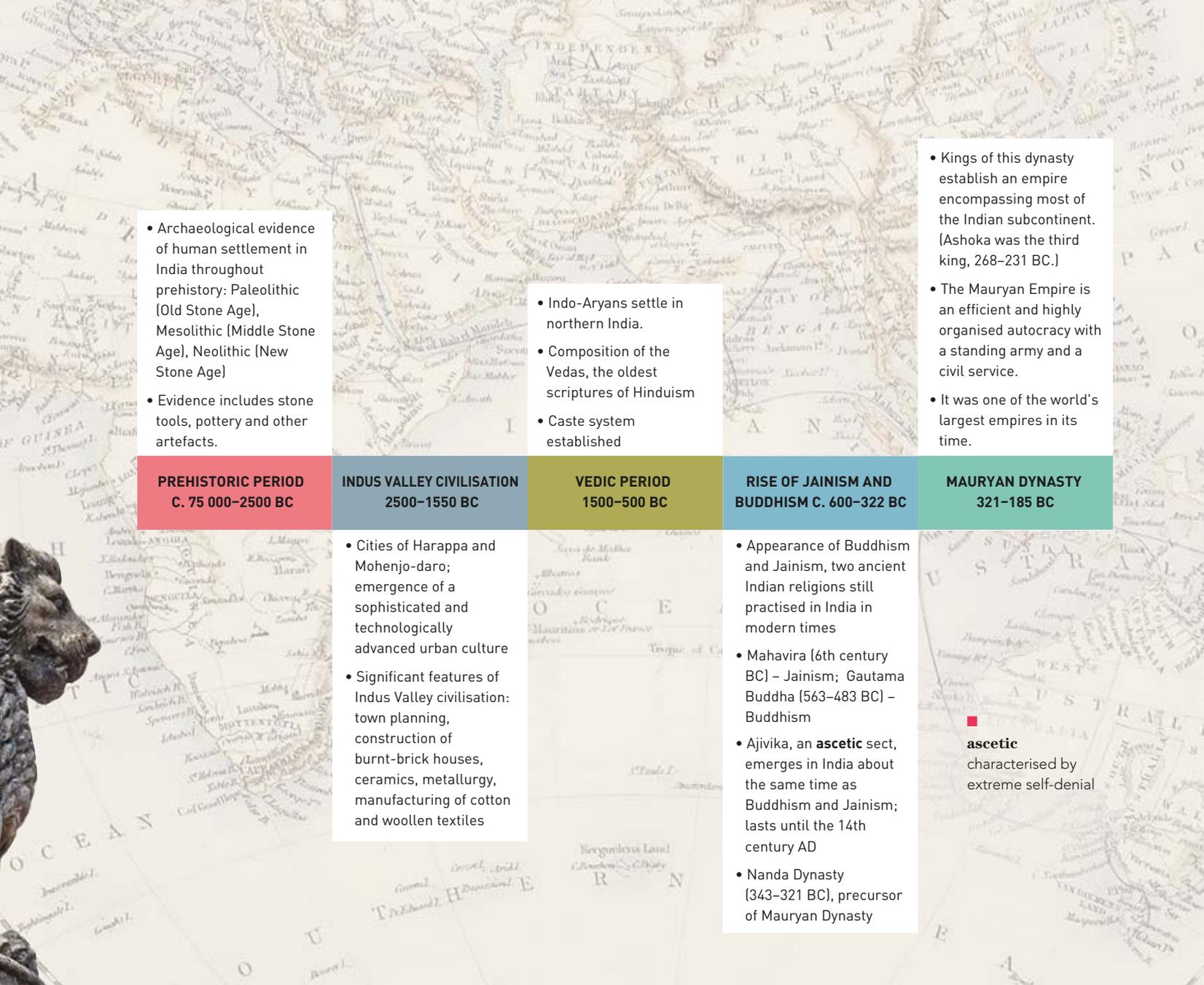
- Archaeological evidence of human settlement in India throughout prehistory: Paleolithic (Old Stone Age), Mesolithic (Middle Stone Age), Neolithic (New Stone Age)
- Evidence includes stone tools, pottery and other artefacts.

INDUS VALLEY CIVILISATION 2500–1550 BC

- Cities of Harappa and Mohenjo-daro; emergence of a sophisticated and technologically advanced urban culture
- Significant features of Indus Valley civilisation: town planning, construction of burnt-brick houses, ceramics, metallurgy, manufacturing of cotton and woollen textiles

VEDIC PERIOD 1500–500 BC

- Indo-Aryans settle in northern India.
- Composition of the Vedas, the oldest scriptures of Hinduism
- Caste system established

RISE OF JAINISM AND BUDDHISM C. 600–322 BC

- Appearance of Buddhism and Jainism, two ancient Indian religions still practised in India in modern times
- Mahavira (6th century BC) – Jainism; Gautama Buddha (563–483 BC) – Buddhism
- Ajivika, an **ascetic** sect, emerges in India about the same time as Buddhism and Jainism; lasts until the 14th century AD
- Nanda Dynasty (343–321 BC), precursor of Mauryan Dynasty

MAURYAN DYNASTY 321–185 BC

- Kings of this dynasty establish an empire encompassing most of the Indian subcontinent. (Ashoka was the third king, 268–231 BC.)
- The Mauryan Empire is an efficient and highly organised autocracy with a standing army and a civil service.
- It was one of the world's largest empires in its time.

■ **ascetic** characterised by extreme self-denial

SOURCE 2 Timeline of ancient India

Geographical context

The Indian subcontinent is surrounded in the north by a great arc of mountains, including the Himalayas and the Hindu Kush, which form a natural boundary between India and its northern neighbours. South of the Himalaya Mountains lie vast plains created by the Indus River in the west and the Ganges River in the east. These plains extend across northern India for about 2000 kilometres and are up to 300 kilometres wide. This region is the heart of India's fertile farming land. The southern part of India is formed mostly by the Deccan plateau, which is bordered by two mountain ranges: the Western Ghats along the Arabian Sea and the Eastern Ghats that lie parallel to the Bay of Bengal. India is home to an extraordinary variety of terrain and climatic regions; the terrain varies from jungle to mountains, desert and flood plain, and the climate from tropical in the south to temperate and alpine in the Himalayan north.

SOURCE 3 The national flag of modern India, with the Ashoka *chakra*, a 24-spoke wheel, at its centre

Sources for the Mauryan period

There are both literary and archaeological sources for the Mauryan period that present a range of perspectives, both Indian and non-Indian. Source 4 provides an overview of the major texts and artefacts available.

SOURCE 4 Major literary and archaeological sources for the Mauryan period

SOURCE	DESCRIPTION
Rock and Pillar Edicts of Ashoka	Proclamations of Ashoka's reforms and policies, particularly his policy of *dharma*, which focused on social and moral **precepts**, based on doing good deeds, generosity and respect for others.
The *Indica*	A collection of observations by the Greek historian and diplomat Megasthenes at the court of Chandragupta Maurya, founder of the Mauryan Dynasty. Although the original has been lost, some of it survives in the works of the later Greek writers Strabo, Diodorus and Arrian.
The *Arthashastra*	A handbook on statecraft, economic policy and military strategy in the Mauryan period and later. It provides theories and principles on how government should be conducted. It is attributed to Kautilya, an Indian statesman and philosopher believed to have been Chandragupta's prime minister. The date of its origin is problematic. Most authorities agree that the core of the book was written by Kautilya, but was supplemented by others over time.
The *Mudrarakshasa*	A drama written in **Sanskrit** by Visakadatta. Although written during the later Gupta period (AD 320–550), it describes socio-economic conditions under the Mauryas.
Buddhist literature	Various texts including the *Jataka* tales, *Dipavamsa* and *Mahavamsa* (Ceylonese chronicles). They shed light on Ashoka's role in spreading Buddhism in Sri Lanka. Like the *Ashokavadana* (or *Narrative of Ashoka*), another Ceylonese Buddhist text, many contain legends and narratives that glorify Ashoka as a Buddhist emperor.
Remains of structures	These include the Pillar Edicts (one with the famous Lion Capital), stupas, the 80-pillared hall in the ancient Mauryan capital city of Pataliputra and artefacts unearthed by archaeologists.

SOURCE 5 An Ashokan Pillar, located at Kolhua near modern Patna. It is a 12-metre-high monolithic sandstone column surmounted with a lion **capital**.

precept
a general rule intended to regulate behaviour or thought

Sanskrit
a classical language of India

capital
the decorated top part of a column

13.1 Check your learning

1 What are some of the key contested issues about Ashoka and his reign raised in the introduction to this chapter?

2 In groups, conduct some research on each of the four periods in the timeline before the Mauryan Dynasty. Find out about the events listed in each period and their contribution to the development of ancient India.

3 Consider the range of sources listed in Source 4 for the Mauryan period. What questions could be asked about each of these sources to test their value as evidence for the history of the Mauryan Dynasty?

4 What different perspectives are indicated in these sources?

The Mauryan Empire

Hellenistic
relating to Greek and Mediterranean history between 323 and 31 BC

Seleucid
relating to a dynasty that ruled over Syria and a great part of western Asia from 312 to 64 BC

The Mauryan kings created the first great empire of Indian history. In 321 BC, only six years before the accession of Chandragupta Maurya, founder of the Mauryan Dynasty, Alexander the Great had invaded north-west India and defeated King Porus. Alexander did not stay to consolidate his victory but left an occupying force. After his death, the Indian provinces he had conquered became part of the **Hellenistic** kingdom of the **Seleucids**, following the division of Alexander's empire among his generals. Its founding ruler, Seleucus I Nictator, sent his ambassador, Megasthenes, to the court of Chandragupta.

Chandragupta was largely responsible for establishing the Mauryan Empire and introducing a number of major reforms that created a strong central administration. Many details of these are described in the *Arthashastra*, the handbook on government and politics (see Source 4).

During his reign, Chandragupta extended the empire westwards by defeating the Seleucids in the north-west. Chandragupta's son and successor, Bindusara, is thought to have extended the empire to the south. During Ashoka's reign, the empire reached its greatest extent; it stretched to the northern natural boundaries of the Himalaya Mountains, and to the east into Assam as shown in Source 6. To the west, it reached beyond modern Pakistan and significant portions of Afghanistan. It covered the whole subcontinent except the far south.

MAURYAN EMPIRE

Source: Oxford University Press

SOURCE 6 The Mauryan Empire under Ashoka

Indian society in the Mauryan period

Indian society was highly stratified and based on the Hindu caste system, which had developed during the Vedic period. In this system, society became organised in groups based on their *karma* (work) and *dharma* or *dhamma* (duty). You were born into your caste and could not move or marry out of your **caste**. Over time, caste rules came to govern all aspects of life, including where people lived, what they ate and how they dressed. The structure of ancient Indian society is shown in Source 7.

caste
a social group whose members are of the same rank, occupation and economic position
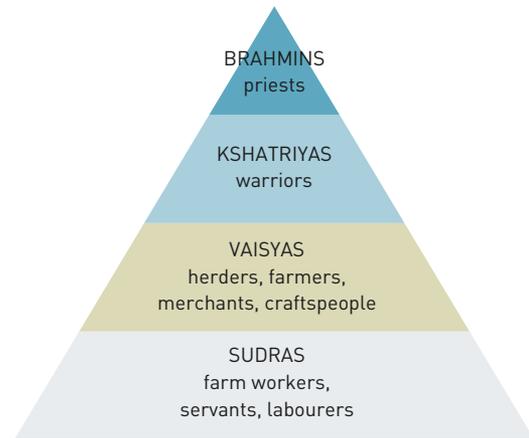
SOURCE 7 The caste system in ancient India

Administration of the Mauryan Empire

Our main sources for Mauryan government, imperial administration and economy include the works of Kautilya, the Indian statesman and adviser to Chandragupta, and Megasthenes, the Greek ambassador at the court. The king was an absolute monarch; however, according to the sources, he had a council of ministers who assisted and advised him. There were high councillors or *mahamatras* who took care of the day-to-day administration. Below them was a large, well-organised bureaucracy of lesser officials.

The Mauryan Empire was divided into four provinces with their capitals at Taxila, Ujjain, Suvarnagiri and Tosali. Provincial governors were usually members of the royal family. They were responsible for law and order and tax collection. The governors in their turn appointed subordinate officials. An official called a *gopa* supervised the administration of up to 15 villages, while individual village administration was in the hands of a *gramani* (a clan head).

The administration of the imperial capital at Pataliputra (modern Patna) was carried out by six committees of five members each. These committees were responsible for the following departments: industries, foreigners, registration of birth and deaths, trade, manufacture and sale of goods, and collection of sales tax.

Mauryan economy and trade

The Mauryan economy was administered by the revenue department and the department of commerce and industry.

Agriculture was the most important part of Mauryan economy. Farmers cultivated rice, pulses, vegetables, fruits, spices, wheat and sugar cane. Land was intensively tilled with iron-sheared ploughs drawn by oxen, and jungle areas were cleared of wild animals to increase the land available for cultivation.

Manufacturing and commerce formed an important source of individual and state wealth. The *Jataka* tales mention 18 types of industries, including silk and muslin production, iron and gold mining, and forestry. Artisans belonged to guilds known as *shrenis*, which provided warehouses and workshops for their members, and also offered patronage for work and financial support in times of trouble. Artisans' positions often became hereditary, so a father could pass his skill to his son.

The revenue department collected all the revenues of the empire. These came from land, irrigation, customs, shop tax, ferry tax, forests, mines and pastures, license fees paid by craftsmen, and fines collected in the law courts.

The department of commerce and industry controlled the retail and wholesale prices of goods. It also controlled weights and measures, levied custom duties and regulated foreign trade. The main items of expenditure of the state related to the king and his household, the army, government servants, public works and relief for the poor.

Internal trade was conducted along the great river systems of northern India. The Khyber Pass became strategically important for access to the **Silk Road**. Located on the modern border between Pakistan and Afghanistan, it was the only route in and out of north-west India. The main exports were silk, textiles, spices and exotic foods.

Silk Road
an ancient network of trade routes connecting the East and the West

Law and order

The *Arthashastra* mentions the existence of both civil and criminal courts, and there were also courts at the provincial capitals and districts. Punishments such as fines, imprisonment, mutilation and death were given to offenders, and torture was often used to extract information. Police stations were located in all principal centres. Both the *Arthashastra* and Edicts of Ashoka refer to jails and jail officials. **Remission** of sentences is also mentioned in Ashoka's inscriptions.

remission
a cancellation of a penalty

Religion under the Mauryas

The ritual Brahmanic culture that was to develop into Hinduism had been introduced into India by the Aryan peoples who arrived during the Vedic period and was the dominant religion of the period. A number of **atheistic**, ethical philosophies were also becoming popular. They included Jainism, a **monastic** culture with a focus on the concept of non-violence or *ahimsa*. There were also many followers of Ajivika, an ascetic sect that emerged in India about the same time. Buddhism, another monastic culture, was also gaining in popularity. Its strong ethical tradition was to have an important influence on Ashoka. These rival sects tended to threaten the dominance of the Brahmans, who enjoyed high status in Indian society. Although Ashoka became a supporter of Buddhism, his edicts indicate that he favoured a policy of inclusiveness and tolerance towards other religious sects. This was part of the spirit of *dharma* that he sought to impart to his subjects.

atheistic
holding the belief that there is no god

monastic
living the life of a monk

13.2 Check your learning

1 Conduct some additional research on Chandragupta Maurya, the founder of the Mauryan Dynasty. What were his main contributions to this period?

2 The *Arthashastra* is an important source for the Mauryan Empire and is cited by most modern scholars who write about this period. Find out more about this text, the context in which it was written and its purpose. What are its strengths and limitations?

3 Find out more about the Mauryan administration and economy by consulting relevant chapters of the *Arthashastra*. Look up a translation of 'Kautilya's *Arthashastra*' online.

4 Find out about the central teachings and beliefs of the various sects in India at this time: Hinduism, Buddhism, Jainism and Ajivika. What were their main similarities and differences?

The reign of Ashoka

Ashoka is thought to have been born in 304 BC. His grandfather was Chandragupta Maurya who, according to some sources, became a **Jain** towards the end of his reign and abdicated the throne. Chandragupta's son, Bindusara, became the next king. Little is known of his reign beyond his possible extension of the Mauryan Empire to the south.

Jain
a follower of Jainism

Ashoka may have been involved in military and administrative affairs during his father's 25-year reign. It has been suggested that he may have been appointed as a governor for one of the provinces of the empire. Such appointments were usually reserved for the king's immediate family.

It is generally accepted that Ashoka was not the chosen heir of his father, but how he came to the throne remains unclear. The gap

SOURCE 8 A modern Buddhist representation of Ashoka

of four years between his father's death and Ashoka's accession clearly indicates a struggle for the throne. Buddhist legendary accounts of his life, the *Dipavamsa* and *Mahavamsa* dating to hundreds of years after his time, claim that he tricked his father on his deathbed into naming him as his heir and that he killed 99 of his brothers (many would have been half-brothers from different wives) to secure his succession. These Buddhist chronicles, however, are essentially **hagiographies**. They depict Ashoka as a manipulative and violent man before his adoption of Buddhism, and as a wise and benevolent king afterwards. So the representation of bad king versus good king is largely Buddhist propaganda.

hagiography
a biography that puts its subject in a very flattering light (e.g. the life of a saint)

Ashoka became king in 268 BC. His given name was Ashoka, but he assumed the title Devanamipiya Piyadassi (Beloved of the Gods, gracious of appearance). There are virtually no reliable sources about the early years of his reign, until the Battle of Kalinga, the event that marked the turning point of his almost 40-year reign.

The Battle of Kalinga

Eight years into his reign, Ashoka conducted a military campaign against Kalinga (modern Odisha) in eastern India. In the absence of sources giving reasons for the campaign, it could be assumed that Ashoka may have been keen to follow in the footsteps of his grandfather by expanding the Mauryan Empire. There would no doubt have been economic benefits in additional territory for taxation. Perhaps most significantly, Kalinga, in the eastern coastal kingdom of Tosali, which would have given the Mauryas access to the ports and maritime trade in the Bay of Bengal.

No details of the conduct of the campaign except for its outcome have survived. However, details of the Mauryan army are recorded in the *Indica* of Megatheneses. There were four types of troops: 9000 elephants (*gaja*), 8000 chariots (*ratha*), a 30 000 strong cavalry (*turanga*) and a 600 000 strong infantry (*pada*).

Ashoka recorded the conquest of Kalinga on the most important of his Major Rock Edicts. The inscription includes details of the slaughter and aftermath: 100 000 dead, an even greater number who subsequently perished (no doubt from wounds sustained in the battle) and 150 000 who were deported. According to Ashoka's own declaration, the great loss of life at Kalinga was the event that caused him to renounce warfare forever and to begin to promote the policy of *dharma*. Henceforth, violence was to be abandoned. In its place there should be peace, good conduct, respect for others, generosity and decency. Not for military conquest, wealth or majesty did Ashoka wish to be remembered by his people and by **posterity**, only for *dharma*. It was a policy that characterised the rest of his reign.

The 13th Rock Edict (see Source 10) expresses Ashoka's regret for the suffering inflicted in Kalinga.

SOURCE 9 A modern artist's representation of the Battle of Kalinga

SOURCE 10

On conquering Kalinga the Beloved of the Gods [Ashoka] felt remorse, for, when an independent country is conquered the slaughter, death and deportation of people is extremely grievous to the Beloved of the Gods and weighs heavily on his mind … Even those who are fortunate to have escaped, suffer from the misfortunes of their friends, acquaintances, colleagues and relatives …

This inscription of *dhamma* has been engraved so that any sons or great-grandsons that I may have should not think of gaining new conquests …They should only consider conquest by *dhamma* to be a true conquest …

Cited in John Keay, *India: A History*, London: HarperPress, 2010, pp. 91–2

SOURCE 11 The Ashoka Edicts were mostly written in the Brahmi script

13.3 Understanding and using the sources

1 According to Source 10, why was the Battle of Kalinga a turning point in Ashoka's reign?

2 What does Ashoka mean by 'all future conquest should only be by *dhamma*'?

13.3 Check your learning

1 What are the limitations of the Buddhist accounts of Ashoka as sources for understanding his reign?

2 What reasons are suggested to explain Ashoka's campaign against Kalinga?

posterity
descendants, future generations

13.4 Extent of Ashoka's pacifism

Ashoka's adoption of Buddhism and his renunciation of violence and warfare have led to the belief that he became a complete pacifist. However, the Rock Edict of Kalinga was not inscribed in Kalinga itself but elsewhere on the borders of his empire. Neither did his edicts refer to reducing the size of the army, or the abolition of torture or the death penalty. Source 12, another extract from the Kalinga Edict, and Source 13, the view of a modern scholar, raise questions about this aspect of his policy of *dharma*.

benign
gentle and kind or well-intentioned

repatriation
the return of someone to their own country

conciliate
to appease or placate

SOURCE 12

Today if a hundredth or a thousandth part of those who suffered in Kalinga were to be killed, to die, or even be taken captive, it would be very grievous to the Beloved of the Gods. If anyone does him wrong, it will be forgiven as far as it can be forgiven. The Beloved of the Gods even reasons with the forest tribes in his empire and he seeks to reform them. But the Beloved of the Gods is not only compassionate he is also powerful, and he tells them to repent, lest they be slain.

Cited in Arthur L. Basham, *The Wonder That Was India*, London: Sidgwick & Jackson, 1967, pp. 54–5

SOURCE 13

Whether it was quite as **benign** as it seems may … be questioned … Why, for instance, if the emperor was so overcome with remorse did he not arrange for the **repatriation** of all those deportees? Or why the Edict [is] omitted from the only rock inscription in Kalinga itself … In its stead are two separate Edicts ordering imperial representatives to **conciliate** the natives with lenient policies [so that] people may come to think of Ashoka as their father. Policy as much as conscience dictated this approach …

Cited in John Keay, *India: A History*, London: HarperPress, 2010, p. 92

Ashoka's 'conversion' to Buddhism

Buddhist sources have represented Ashoka's change of heart after the battle of Kalinga as clear evidence of a sudden 'conversion' to Buddhism. However, the process may have been more gradual, given his background and early influences. Moreover, the idea of '**conversion**' is a modern concept. In ancient India, the religious sects may have competed with each other for followers, but they were not mutually exclusive. The Buddhist Chronicles (for example the *Mahavamsa*) written centuries after his death claim that Ashoka became a Buddhist monk, but that would have required him to renounce his kingship.

conversion
implying the renunciation of one set of beliefs for another

13.4 Understanding and using the sources

1 What questions does Source 13 raise about Ashoka's remorse (Source 10) for the suffering caused by his Kalinga campaign?

2 What conclusion about Ashoka's policy in the two separate Kalinga edicts is suggested by the statement 'Policy as much as conscience dictated this approach'?

13.4 Check your learning

1 Summarise the Buddhist perspective of Ashoka presented in the Buddhist chronicles.

2 What problems of evidence arise from a consideration of the Buddhist chronicles as evidence for Ashoka's religious policy?

The edicts of Ashoka

Pali
a Prakrit ('unpolished') language as opposed to ('polished') Sanskrit

Prakrit
relating to a group of languages between Sanskrit and its modern derivatives, which were the languages or dialects spoken by ordinary people in ancient times

Aramaic
a Semitic language originally of the ancient Arameans, but which came to be used widely by non-Aramean peoples throughout south-west Asia

Ashoka addressed his edicts to the entire populace, inscribing them on rock surfaces or on specially erected and finely polished sandstone pillars, in places where people were likely to gather. Many of them were also read aloud to gatherings of people, given the widespread illiteracy, particularly in regional areas. The rock and pillar inscriptions of Ashoka were first deciphered by James Prinsep in 1837. The edicts were written in the different regional languages and scripts of the empire, including **Pali** and other **Prakrit** languages. In north-western India, the inscriptions were in the Karoshti script and in **Aramaic** and Greek, languages spoken in the border regions of the empire. Elsewhere in India they were written in the Brahmi script.

SOURCE 14 A Rock Edict of Ashoka from ancient Kalinga

There are 14 Major Rock Edicts, perhaps the most important of which is the 13th Rock Edict with details of the war against Kalinga. The Major Pillar Edicts were erected in important cities. The most significant is the 7th Pillar Edict containing a summary of Ashoka's efforts to promote *dharma* within his kingdom. There are also a number of Minor Rock Edicts and Minor Pillar Edicts. These inscriptions remain valuable sources for the study of Ashoka and the Mauryan Empire.

EDICTS OF ASHOKA
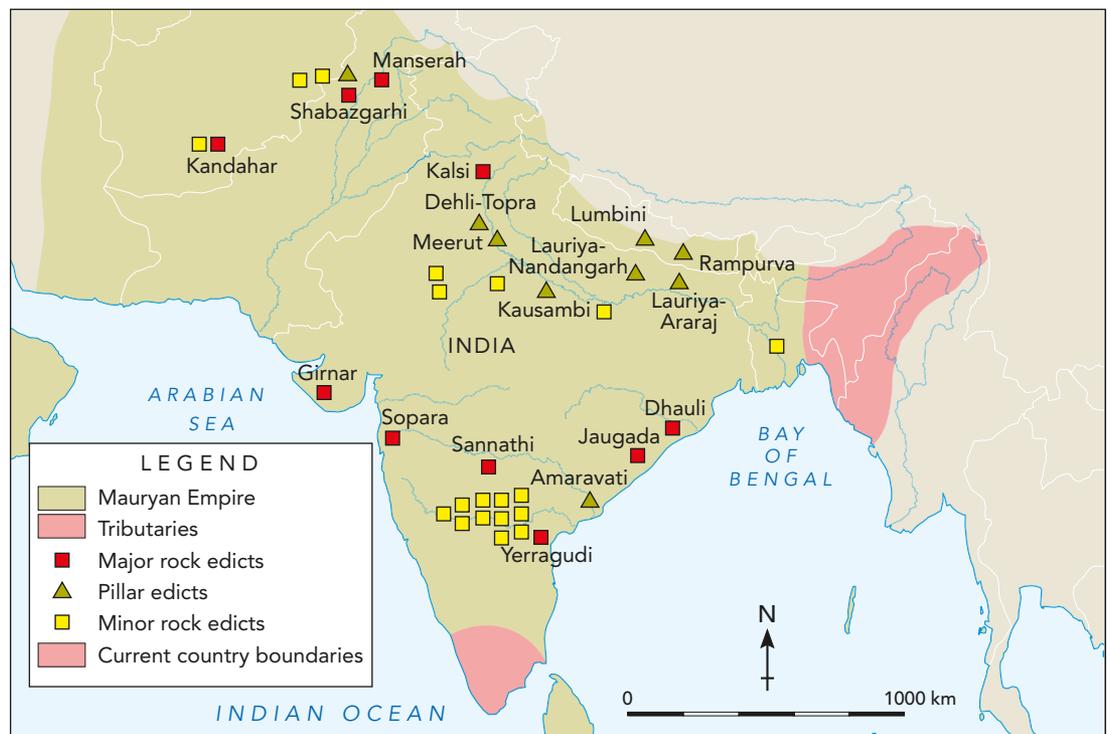
SOURCE 15 The distribution of the edicts of Ashoka

Source: Oxford University Press

Ashoka's approach to religion

Dharma was a system of morality consistent with most of the sects of the Mauryan empire and was based more on ethical conduct than religious belief. While Ashoka gave his chief patronage to the Buddhists, his tolerance of different religious sects and promotion of harmony acknowledged the realities of India's religious **pluralism**. Of the basic principles of *dharma,* Ashoka appears to have emphasised the quality of tolerance both of people themselves and of their religious beliefs and ideas. Source 16, an extract from Ashoka's 12th Rock Edict, clearly conveys this message.

SOURCE 16

The Beloved of the Gods … honors members of all sects whether ascetics or householders, by gifts and various honors. But he does not consider gifts and honors as important as the furtherance of the essential message of all sects. This essential message varies from sect to sect but it has one common basis, that one should so control one's tongue as not to honor one's own sect or disparage another's on the wrong occasions; for on certain occasions one should do so only mildly, and indeed on other occasions one should honor other men's sects. By doing this, one strengthens one's own sect and helps the others while by doing otherwise one harms one's own sect and does a disservice to others … **Concord** is best with each hearing and respecting the other's teaching …

<div align="right">

Wm. Theodore de Bary (ed.), 'Asoka: the Buddhist emperor', *Sources of Indian Tradition*, vol. 1, New York: Columbia University Press, 1958, p. 148

</div>

The influence of Jainism can be seen in Ashoka's concern with respect for life in its many forms and in providing medical facilities for both animals and humans. The foremost principle of Jainism was *ahimsa* or non-injury to living creatures. Source 17, Ashoka's 1st Rock Edict, expounds this idea.

SOURCE 17

Here [a possible reference to the Mauryan royal capital of Pataliputra] no animal is to be killed for sacrifice … Formerly in the Beloved of the God's kitchen several hundred thousand animals were killed daily for food; but now … only three are killed – two peacocks and a deer, though the deer not regularly. Even these three animals will not be killed in future.

<div align="right">

Wm. Theodore de Bary (ed.), 'Asoka: the Buddhist emperor', *Sources of Indian Tradition*, vol. 1, New York: Columbia University Press, 1958, p. 145

</div>

Ashoka's welfare and administrative policy

Ashoka was also concerned for the general well-being of his subjects. This is reflected in the many practical arrangements that he ordered to be carried out and which could be regarded as social welfare. Such measures included the provision of medicinal herbs, roots and fruits for the treatment of humans and animals. Along the roads of the empire he had rest houses built, trees planted and wells dug to provide shelter and water for travellers.

'All men are my children', proclaimed Ashoka in another of his edicts, and he was at pains to point out that their well-being was his constant concern regardless of whatever he was doing or wherever he might be. This was the central message of Source 18, his 6th Major Rock Edict.

Thus speaks the Beloved of the Gods, the king Piyadassi. In the past the quick dispatch of business and the receipt of reports did not take place at all times. But I have now arranged it thus. At all times, whether I am eating, or am in the women's apartments, or in my inner apartments, or at the cattle-shed, or in my carriage, or in my gardens – wherever I may be, my informants should keep me in touch with public business. Thus everywhere I transact public business. And whatever I may order by word of mouth, whether it concerns a donation or a proclamation or whatever urgent matter is entrusted to my officers, if there is any dispute or deliberation about it in the Council, it is to be reported to me immediately, at all places and at all times …

Anonymous, '6th Major Rock Edict', *A translation of the Edicts of Asoka*, Leiden: Katinka Hesselink, 1999

Supervision and surveillance

The reference to 'informants' in his 6th Major Rock Edict indicates Ashoka's concern for efficient and timely administration. His officials were required to remain on constant tour of duty and supervise their subordinate officials so that they did not fail in their duty of seeing to the welfare of the people. This also served as a means for the king to be kept informed of public **opinion** and keep a watch on the more remote parts of the empire.

An innovation of Ashoka's reign was the appointment of officers known as *Dhamma-mahamatras* or 'commissioners of equity'. Their role was to promote *dharma;* their duties included checking the sentences handed down by courts. These might be mitigated or remitted after reviewing the particular circumstances of each case.

opinion
a person's belief, judgement or way of thinking about something that is not necessarily substantiated by facts

13.5 Understanding and using the sources

Sources 16–18

1   What is your understanding of the key principles of *dharma* as promoted by Ashoka?
2   What influence did the Jainist concept of *ahimsa* have on Ashoka's policies?
3   What inferences about the society and culture of Mauryan India can be drawn from these edicts?
4   To what extent can the edicts be regarded as reliable evidence for Ashoka's reign?
5   What impression of Ashoka have you gained from a study of his edicts?

13.5 Check your learning

1   What do some of the other Rock and Pillar Edicts of Ashoka reveal about his policies and Indian society in his time? Search for 'A Translation of the Edicts of Ashoka' online.
2   Draw up a table like the example below and summarise the main principles of the edicts referred to in this section and others you have researched.

EDICT	SUMMARY	MAIN PRINCIPLE/S
13th Major Rock Edict	Remorse expressed for death and destruction caused by the Battle of Kalinga	Renunciation of policy of warfare; all future 'conquest' by *dharma*

3   Write the tweet Ashoka might have posted in the aftermath of the Battle Kalinga. Use the twitter handle @belovedofthegods.
4   Imagine you are a journalist in Ashoka's time. Write an article on the edicts. Consider the possible responses of different religious sects and the people of the empire.

13.6 The spread of Buddhism

Although the edicts clearly demonstrate Ashoka's tolerance for other sects, it is also clear that he was keen to promote Buddhism. Ashoka's son Mahinda, who is thought to have become a Buddhist monk, went on behalf of Ashoka to Sri Lanka probably more on missionary than diplomatic duties. Indeed, Buddhism spread quickly in Sri Lanka and its success there has been largely attributed to Ashoka.

Perhaps most significantly, Ashoka continued the royal tours of inspection around the empire, but replaced the traditional Mauryan hunting parties with regular pilgrimages to Buddhist sites. In his Minor Pillar Edicts, Ashoka records a pilgrimage to the birthplace of Buddha in Year 21 of his reign where he ordered the building of a pillar and a stupa, a hemispherical mound-like shrine in honour of Buddha. Ashoka did build many stupas in northern India and the other territories of the Mauryan Empire in areas now known as Nepal, Pakistan, Bangladesh and Afghanistan. As Buddhism spread beyond India it took different routes: to the south, monks brought it by land and sea to Sri Lanka and South-East Asia; to the north, they spread the word across central Asia and along the Silk Road into China, from where, over time, it made its way to what are now Korea and Japan (Source 19).

THE SPREAD OF BUDDHISM

MONGOLIA

Ashoka helped Buddhism to spread across India. He also sent missionaries into central Asia.

KOREA

TIBET
NEPAL
BHUTAN

CHINA

JAPAN

INDIA

BURMA

VIETNAM

Buddhism was carried along trade routes into China. It was firmly established there by the 1st century AD.

Ashoka's son, Mahinda, took Buddhism to southern India and Sri lanka.

THAILAND

CAMBODIA

LEGEND

→ Direction in which Buddhism spread

SRI LANKA

Source: Oxford University Press

SOURCE 19 This map shows how Buddhism spread through India and beyond.

The Great Stupa at Sanchi

The most famous of the stupas erected during the reign of Ashoka is the Sanchi Stupa located in the modern Indian state of Madhya Pradesh. The stupa of the Mauryan period was built of mud and brick, stone not having been widely used in the construction of these buildings until some time after Ashoka's reign. At its simplest, a stupa is a dirt burial mound. In Buddhism, the earliest stupas contained portions of the Buddha's ashes and, as a result, the stupa began to be associated with the body of the Buddha.

The original stupas were modest, undecorated structures. As Buddhism developed and spread throughout Asia, the stupa grew in size and features representing aspects of Buddhist symbolism were added. These include the four stone gateways (*toranas*), which date from the 1st century BC, and intricate sculptural **reliefs** depicting scenes from the Buddha's life. The stupa today (see Source 21) measures 36 metres in diameter and 16 metres in height.

■ **reliefs**
wall sculptures, sometimes painted, where the sculpted or carved elements are left attached to a solid background, giving the impression that the relief has been raised above it

■ **tenet**
principle or belief

13.6 Check your learning

1 In what ways did Ashoka promote Buddhism?
2 Find out more about the significance of the stupa in the Buddhist tradition.
3 Research some of the major Buddhist sites in India, for example Buddha's birthplace.
   What is their significance in the life of Buddha?
4 Find out about the following **tenets** of Buddhism: the Four Noble Truths, the Noble Eightfold Path, enlightenment, nirvana, reincarnation.

SOURCE 20 (a) The Sanchi Stupa, the oldest surviving structure in India, was built by Ashoka. (b) A model of the original stupa of Ashoka, as reconstructed by archaeologists
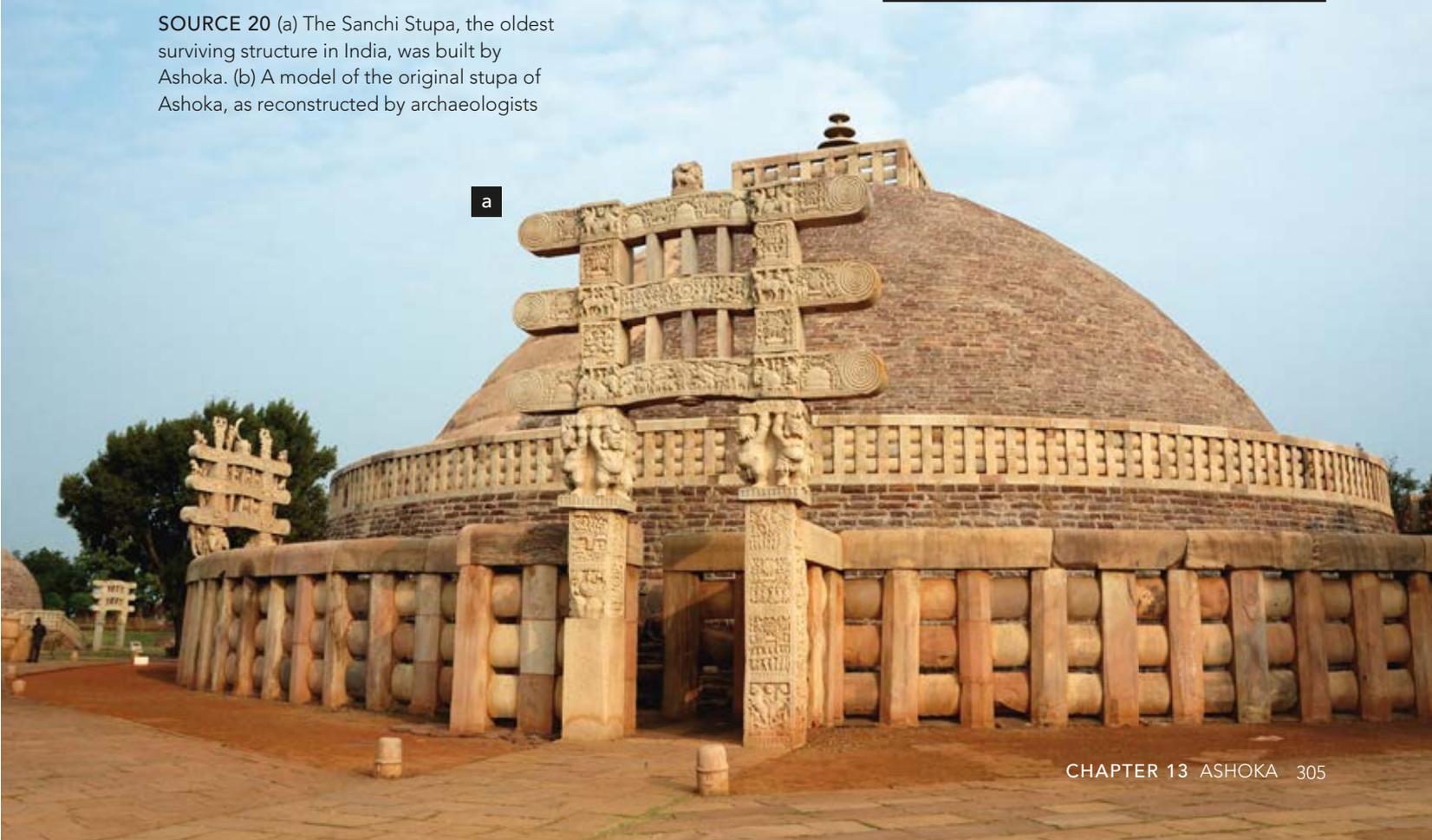
Archaeological remains of the Mauryan Empire

We are fortunate in having the Edicts of Ashoka as sources for his own time. If we were to rely on archaeological sources alone, there would be very little to say about the Mauryan Empire or the 40-year reign of Ashoka. The sources we have are restricted to pillars, stupas and the meagre remains of the Mauryan capital at Pataliputra.

Lion Capital of Ashoka

abacus
a flat slab forming the uppermost part of a column's capital

Achaemenid
relating to the dynasty that ruled the Persian Empire from Cyrus I to Darius III (553–330 BC)

The Ashokan pillars on which many of the edicts were carved are the best examples of Mauryan art. These massive, beautifully proportioned cylindrical sandstone monoliths range in height from 12 to 15 metres and many are topped with exquisitely carved animal sculptures. They are among the finest examples of the little that survives of Mauryan art. The most famous of them is the pillar and its lion capital (the Ashokmudra) located at Sarnath in the modern Indian state of Uttar Pradesh. It features four snarling lions standing back to back on an **abacus** adorned with a sculptured relief of animals with a *dharma* wheel set between them. The abacus is set in turn on an elaborate, inverted bell-shaped lotus base similar to those of the typical **Achaemenid** pillar from Persepolis. The Sarnath pillar bears an inscription of one of Ashoka's edicts which reads, 'No one shall cause division in the order of monks'.

An average pillar probably weighed about 13 tonnes, so transporting them over great distances from the places where they were quarried would have required considerable engineering skill. The Sarnath pillar, usually referred to as the 'Ashoka Column' is still in its original location, but the Lion Capital is now in the Sarnath Museum. Only 19 of the many Ashokan pillars with inscriptions have survived and only six with animal capitals.

There have been different interpretations of the significance of the animal sculptures on Ashoka's pillars, religious and non-religious. The Buddhist version suggests that they represent different stages in the life of Buddha. A representation of the Lion Capital was adopted as the official national emblem of India in 1950 by the Indian government.
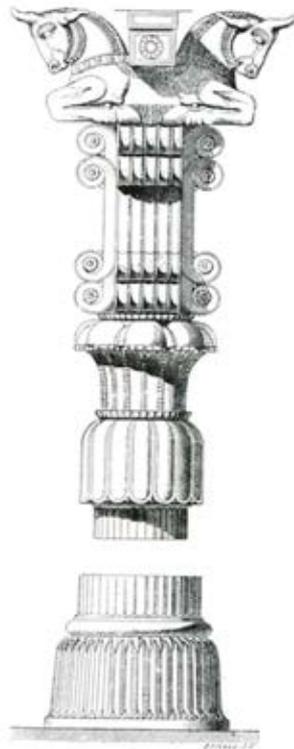
SOURCE 21 (a) The Sarnath Lion Capital of Ashoka and (b) A sketch of an Achaemenid pillar from the *Apadana* of Darius I at Persepolis

The 80-pillared hall

The meagre archaeological remains of ancient Pataliputra, the capital of the Mauryan Empire, and specifically the 80-pillared hall, are located at Kumrahar, a suburb of modern Patna. The building has been variously interpreted as the palace of the Mauryan kings, or an **audience hall** or conference hall.

An American archaeological team excavated the site in 1912–13 and discovered one pillar of polished stone, and a large number of fragments. The excavators were able to trace 72 'pits' of ash and rubble on the site marking the position in which other pillars must once have stood. The sandstone pillars were arranged in eight rows of ten pillars each with each row separated by a distance of 4.5 metres. The pillars stood 9.75 metres high, of which 2.74 metres were below ground level. During later excavations, eight more such pits were found, giving the hall its present name, 'Assembly hall of 80 pillars'. The *Apadana* or audience hall of the Achaemenid king Darius I at Persepolis is believed to have inspired the design of the Pataliputra pillared hall.

We have a description of Pataliputra in the *Indica* of Megasthenes, the Greek ambassador to the court of Chandragupta. According to his account, the city was in the general shape of a parallelogram. It had a perimeter of 36 kilometres and extended for about 14 kilometres east–west along the Ganges and 3 kilometres north–south. It was surrounded by massive timber **palisades** and a deep moat.
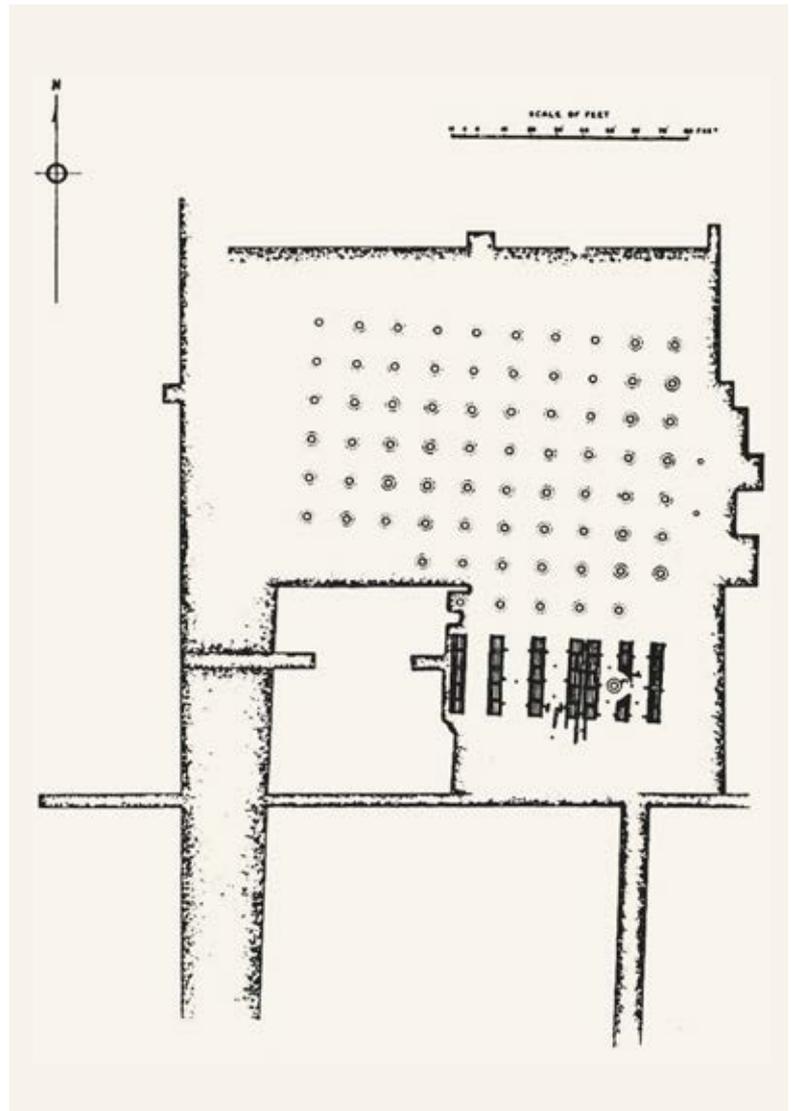
SOURCE 22 A plan of the 80-pillared hall of the Mauryans at Pataliputra

audience hall
a room where a ruler receives official guests

palisade
a wooden fence or enclosure

13.7 Check your learning

1   What aspect of Ashoka's policy is reflected in the inscription on the Sarnath Lion Pillar which reads, 'No one shall cause division in the order of monks'?

2   Conduct some research on Indian Prime Minister Jawaharlal Nehru. Why was he such an important figure in the history of modern India?

3   What aspects of Ashoka's Lion Pillar and the reign of Ashoka in general might have symbolic significance for modern India? See Chapter 14, Persepolis, for details of Achaemenid art and architecture as shown in the Apadana built by the Persian king Darius I.

<table>
<tr><td>13.8</td></tr>
</table>

India after Ashoka

The Mauryan Empire at its height under Ashoka was one of the great empires of ancient times. After Ashoka's death, there was a struggle between his heirs for the succession. With numerous local governors competing with the royal princes, the Mauryan Empire began to disintegrate. In 185 BC, the last Mauryan emperor, Brihadratha, was assassinated by his Brahmin general, Pushyamitra, who established a new **dynasty**, called the Shunga. There are many views about the reasons for the decline of the Mauryan Empire, representing again many different perspectives.

The state support that Ashoka had given Buddhism continued for many centuries until the Muslim conquest of northern India in the 12th century when many Buddhist monasteries were destroyed. Over time, the memory of Ashoka faded and Hinduism reasserted its dominance in Indian life. Ashoka was all but forgotten until the 19th century, when his edicts and his identity were rediscovered.

Assessing Ashoka

Assessments of Ashoka the man, the emperor, his reign and his legacy represent the many perspectives from which he is viewed. Some are clearly more valuable than others, depending on the questions we ask about them. Some of them often find common ground, for example in assessing the impact of his policy of *dharma*. In the final analysis, it should be clear that the Ashoka we think we have come to know is essentially a construct created from a range of sources and perspectives. Is it possible to know the Ashoka of Mauryan times? The writers of the following two sources offer their particular assessments for your consideration.

SOURCE 23

The Ashoka of the Buddhist legends is in the words of a 19th century authority 'half monster and half idiot', his humanity and practical benevolence overlaid by the **accretion** of monkish legends of later centuries; but the king of the rock and pillar inscriptions comes alive, as a real man, and a man far ahead of his times. Asoka was by no means an other-worldly dreamer but every inch a king, a little naïve, often rather self-righteous and pompous, but **indefatigable**, strong-willed and imperious …

Arthur L. Basham, *The Wonder That Was India*, London: Sidgwick & Jackson, 1967, p. 58

SOURCE 24

The Ashokan legacy of an empire … was mislaid and would remain so for a couple of millennia. Likewise Ashoka's **historicity**. But tradition cherished his memory; Indian historians insist that the ideal of a **pan-Indian** empire was never forgotten; and nor … was the spirit of humanity embodied in his Edicts. The innovation which he pioneered of appealing across the barriers of sect, caste and kin, to the community of India would be revived by a host of other reformers, not least Guru Nanak of the Sikhs and eventually Mahatma Gandhi.

John Keay, *India: A History*, London: HarperPress, 2010, p. 100

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dynasty
a family of hereditary rulers

accretion
a gradual accumulation

indefatigable
tireless or untiring

historicity
historical quality or character, especially in relation to establishing the authenticity of people and events

pan-Indian
relating to the whole of India, or to all its ethnic, religious or linguistic groups

13.8 Understanding and using the sources

1 List the different aspects of Ashoka's character that are identified in Source 24. What evidence from this chapter can be used to support or refute them?

2 What perspectives of Ashoka are presented in this source?

3 What judgement of these perspectives is implied?

4 What does the writer of Source 24 identify as Ashoka's legacy?

5 In what respects do the two sources agree?

13.8 Check your learning

1 Who were Guru Nanak and Mahatma Gandhi? Why are they mentioned in Source 24? What assessment of Ashoka and his legacy are suggested by these modern **appropriations**?

2 Research some other modern assessments and representations of Ashoka. For example, how is he represented in the 2001 **Bollywood** epic historical drama (see Source 1)?

3 The criteria listed in the mind map could be used to analyse representations of Ashoka. Find evidence in this chapter that can be used for your analysis. Don't forget to consider the trustworthiness and value of the different sources available. Record your evidence in a copy of the mind map.

4 Use the information in your mind map to write a response to the following: 'Analyse the different representations of Ashoka presented in ancient and modern sources.' (Analyse: Identify components and the relationship between them, draw out and relate implications.)

   To help you plan your response:

- identify some key representations of Ashoka in the sources
- use these representations to structure your answer
- explain the representations and the evidence for them
- draw conclusions about the perspectives responsible for the different representations
- use specific evidence from the sources to support your analysis.

■ **appropriation**
the action of taking or using something for one's own purpose, usually without the owner's permission

■ **Bollywood**
a name for the Indian popular film industry, based in Mumbai

Buddhist chronicles

ANALYSING REPRESENTATIONS OF ASHOKA

Archaeological sources

Edicts of Ashoka

Modern sources and representations

Having made a study of Ashoka and the sources referring to his reign, you are now in a position to understand how different perspectives have shaped our understanding of his impact on his own times and beyond. Ashoka's edicts provide an unusual wealth of sources in his own voice. However, this does not exempt them from the same type of analysis that we apply to other sources. We have also noted the agenda underpinning the Buddhist chronicles and the effect this has had on constructing the Ashoka that is more widely known in modern times.

FOR THE TEACHER

Check your <u>o</u>book <u>a</u>ssess for the following additional resources for this chapter:

Answers	**Teacher notes**	**Class test**	**<u>a</u>ssess quiz**
Answers to each *Check your learning*, *Understanding and using the sources* and *Profile task* in this chapter	Useful notes and advice for teaching this chapter, including syllabus connections and relevant weblinks	Comprehensive test to review students' skills and knowledge	Interactive auto-correcting multiple-choice quiz to test student comprehension

14

Persepolis

FOCUS QUESTIONS

1   What was the geographical and historical context of Persepolis?

2   How was Persepolis discovered and how has it been excavated over time?

3   Why was Persepolis significant as a centre of Persian power?

4   What do sources reveal of the layout and features of the city of Persepolis and their role in everyday life?

5   What is the debate over the role of Alexander the Great in the destruction of Persepolis?

FOCUS CONCEPTS & SKILLS

Significance

In studying Persepolis, you will draw some conclusions about its importance in the Persian Empire. You will consider the role of Persepolis as a centre of Persian power during the reign of Darius I and his successors, and the debate surrounding its destruction at the hands of Alexander the Great. You will also consider whether the importance of Persepolis in the past has continued into the present and the nature of its significance in modern times.

LEARNING OUTCOMES

1   Explain the geographical and historical context of Persepolis.

2   Describe the discovery of Persepolis and the features of its excavation over time.

3   Assess the significance of Persepolis as a centre of Persian power.

4   Explain what sources reveal of the layout and features of Persepolis and their role in everyday life.

5   Discuss the debate over the role of Alexander the Great in the destruction of Persepolis.

SOURCE 1   The ruins of Persepolis

Persepolis: capital of the Achaemenid Persian Empire

Achaemenid
relating to the dynasty that ruled the Persian Empire from Cyrus I to Darius III (553–330 BC)

monumental
relating to a monument or a large impressive structure

The site of Persepolis is one of the most famous ruins of ancient times. The **Achaemenid** king Darius I began building there in the early 6th century BC, but most of the building was completed during the reign of his son, Xerxes. The later king, Artaxerxes I, added to Persepolis before it was destroyed by fire in 330 BC, after Alexander the Great's conquest.

Source 1 shows the **monumental** nature of Persepolis. The palace complex covers an excavated terrace measuring 12 hectares (or 120 000 square metres), with the buildings erected on a 9-metre-high platform. Striking features include the giant columns of the palaces and treasure houses, and the monumental gateway bearing the guardian sculptures of massive stone bulls. One modern visitor describes her impression in Source 2.

SOURCE 2

What's so striking about the ruins of Persepolis in southern Iran, an ancient capital of the Persian Empire that was burned down after being conquered by Alexander the Great, is the absence of violent imagery on what's left of its stone walls. Among the carvings there are soldiers, but they're not fighting; there are weapons, but they're not drawn. Mainly you see emblems suggesting that something humane went on here instead – people of different nations gathering peacefully, bearing gifts, draping their hands amiably on one another's shoulders. In an era noted for its barbarity, Persepolis, it seems, was a relatively cosmopolitan place – and for many Iranians today its ruins are a breathtaking reminder of who their ancestors were and what they did.

Marguerite Del Giudice, 'Persia: ancient soul of Iran',
National Geographic, August 2008

For an ancient description of Persepolis, we rely on Diodorus Siculus, the only Greek historian to provide a description of the site (see Source 3). He never went there, so perhaps he was relying on the work of a Persian writer.

cubit
an ancient linear unit based on the length of the forearm, about 45 centimetres

battlement
a wall around the top of a fort or castle, with regular spaces through which weapons could be fired

SOURCE 3

The citadel is a noteworthy one, and is surrounded by a triple wall. The first part of this is built over an elaborate foundation. It is sixteen **cubits** in height and is topped by **battlements**. The second wall is in all respects like the first one but of twice the height. The third circuit is rectangular in plan, and is sixty cubits in height, built of a stone hard and naturally durable. Each of the sides contains a gate with bronze doors, beside each of which stand bronze poles twenty cubits high; these were intended to catch the eye of the beholder, but the gates were for security.

… Scattered about the royal terrace were residences of the kings and members of the royal family as well as quarters for the great nobles, all luxuriously furnished, and buildings suitably made for guarding the royal treasure.

Diodorus Siculus, *Bibliotheca Historica*

Geographical context

Persepolis is located 70 kilometres north-east of the modern city of Shiraz in the Fars Province of southern Iran. The ancient Persians knew the city as Parsa, or the 'City of Persians'. The name Persepolis is Greek for 'Persian city'. The remains dominate the Marvdasht plateau and are framed by the Zagros Mountains, visible in the distance. The city is near the small river Pulvar, formerly called Medus, which flows into the Kur River. Persepolis is set on a terrace measuring 125 000 square metres that has been partially cut out of Rahmet Mountain. Retaining walls form the other three sides, which vary in height according to the slope of the ground.

14.1 Understanding and using the sources

Source 2

1 What evidence does Marguerite Del Giudice use to form her judgement that 'something humane' went on at Persepolis? Do you think this evidence justifies her conclusion?

Sources 3 & 4

2 What feature of Persepolis was Diodorus Siculus keen to convey? Does the view in Source 4 support or contradict his description?

14.1 Check your learning

1 Watch a film on Persepolis by the Parsa-Pasargadae Research Foundation. Search online for 'Persepolis – A New Perspective'.
2 Find a virtual tour of Persepolis online. Identify some of the features mentioned in Sources 2 and 3.
3 Imagine you are a visitor to Persepolis. What are your impressions as you enter the site and walk around its many buildings? Using what you have read and watched, write a post on Facebook or Twitter recording your impression.

SOURCE 4 A view taken from the heights east of Persepolis, showing its location on the Marvdasht plateau and the Zagros Mountains in the distance

Historical context: the Persian Empire

The Persian Empire was one of the largest and most powerful empires of the ancient world. Source 5 summarises the contributions made to the development of the Persian Empire by its Achaemenid kings, while Source 6 shows the limits of the Empire at its greatest.

SOURCE 5 A summary of the expansion of the Persian Empire

KING AND DATES OF REIGN	CONTRIBUTION TO THE PERSIAN EMPIRE
Cyrus the Great c. 560–530 BC	• Founded and expanded the empire • Incorporated the neighbouring kingdoms of the Medes, Lydians and Babylonians
Cambyses II 530–522 BC	• Added Egypt to the empire
Darius I 522–486 BC	• Expanded the empire to its greatest extent, eventually including 30 nations • Added Thrace and Macedonia, bringing the extent of the empire to 7.5 million square kilometres • 499 BC – Put down the Ionian revolt and reimposed peace • 490 BC – Invaded the Greek mainland in an attempt to add this region to his empire and punish Athens for supporting the Greek Ionian cities. Darius' forces were defeated by the Athenians at the Battle of Marathon.
Xerxes I 486–465 BC	• Suppressed revolts in Egypt and Babylon • 480–479 BC – **Graeco-Persian Wars** • 480 BC – Victory over Greeks at the Battle of Thermopylae followed by burning of Athens. (This act took on new significance when Alexander the Great conquered Persepolis in 322 BC.) Defeat of the Persian navy at Salamis and army at Plataea ended the campaign.

Graeco-Persian Wars a series of wars fought between the Greek states and the Persian or Achaemenid Empire in 499–449 BC

THE PERSIAN EMPIRE IN 486 BC
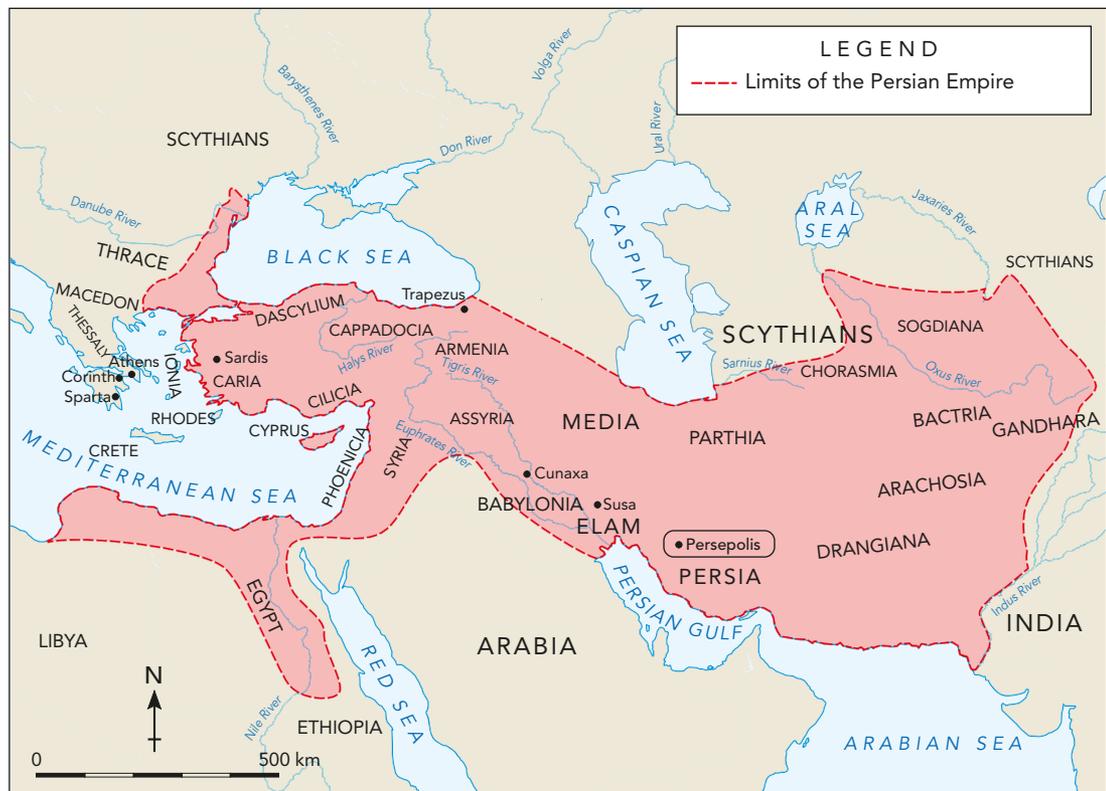
SOURCE 6 The Persian Empire at the death of Darius I

Source: Oxford University Press

The Persian Empire was remarkable for the system put in place under Cyrus and Darius I to control its people and administer their affairs. This was the **satrapy system** in which the territory of the empire was divided into 23 administrative districts. Each district was governed on behalf of the king by a high-ranking Persian official known as a **satrap**. Cyrus refrained from interfering in the religions, customs and trades of the **subject peoples**, thereby winning the support of the people and ensuring the smooth running of the empire. Because of this policy, the resources of the empire could be harnessed in relative peace.

Achaemenid capitals

The Achaemenid kings had five residences. Ecbatana, Babylon and Susa came with the conquered kingdoms, while Pasargadae and Persepolis were built specifically for their own use.

Ecbatana

The ancient city of Ecbatana was the capital of the Median kingdom, and was taken over when Cyrus conquered the Medes. We rely on ancient writers and **chroniclers** for an idea of what the city was like because its remains lie beneath the modern Iranian city of Hamadan. Polybius of Megalopolis, a Greek historian, described Ecbatana in his *World History*. He tells us that the city was well fortified and surrounded by a 1300-metre wall. The buildings were constructed of cedar and cypress, and covered with silver and gold, as were the roof tiles, columns and ceilings. It was clearly a royal palace.

Pasargadae

Pasargadae, like Persepolis, was built for a specific purpose. Cyrus ordered its construction to celebrate his conquest of the Medes. It had not been completed at the time of Cyrus' death, and construction continued into the reign of Darius I. Despite its impractical location, well to the east of the economic and military centres of the empire, Pasargadae had special significance as a national shrine, the setting for the royal coronation ceremonies. The Greek writer Plutarch, in his *Life of Artaxerxes*, recorded a royal **rite** that took place at these ceremonies. The new king, wearing the robes that had belonged to Cyrus before he became king, ate a cake of figs and some bitter leaves of a **terebinth** tree, and drank sour milk. This ritual seems to have established the new king's connection with the first ruler of the empire.

Pasargadae is situated in the centre of a fertile plain, surrounded by mountains. The palace itself consisted of two sections, a residential building and a 30-columned **audience hall**, both built from white stone. In addition, there were two garden pavilions and a gatehouse bearing a carved **bas-relief** of a 2.7-metre four-winged guardian spirit, known as a genius. The buildings featured elements from the Persian pre-Achaemenid culture as well as some that were Assyrian, Greek and Egyptian.

An important structure at Pasargadae is the tomb of Cyrus the Great, located about 1 kilometre south-west of the other structures. It consists of a large, rectangular, vaulted tomb chamber sitting on a 5-metre-high platform. Alexander the Great is said to have visited the tomb two centuries after Cyrus was buried there.

satrapy system
the system used by the Persian kings to govern the empire, based on regions run by provincial governors or satraps

satrap
a provincial governor in the ancient Persian Empire

subject peoples
the people of various nations who are subject to or controlled by an invading nation

chronicler
a person who wrote accounts of important events

rite
a traditional or religious ceremony

terebinth
a tree of the cashew family

audience hall
a room where a ruler receives official guests

bas-relief
a type of sculpture in which the figures are raised up from a flat background to give a 3D effect

SOURCE 7 The remains of the columned Audience Hall at Pasargadae

Susa

Susa, previously an Elamite capital, became an important Achaemenid city after its capture by Cyrus during his defeat of Elam in 539 BC. Cyrus' son, Cambyses II, transformed the city into a major Persian capital. His successor, Darius I, constructed a palace and an *apadana* or audience hall there. He left inscriptions recording his restoration works, which he portrayed as part of his bid to establish order and his right to rule. Important evidence of the subject peoples of the Persian Empire comes from inscriptions at Susa that record the artisans and craftsmen who undertook the rebuilding of the city and the raw materials they brought with them.

Babylon

Babylon enjoyed a reputation as the intellectual and cultural capital of the region long before it was conquered by Cyrus in 539 BC. It had been substantially rebuilt by the Babylonians in the early 6th century BC. Under Cyrus and Darius, it became the administrative capital of the Persian Empire. The Achaemenid kings upheld the major cults of the city and their associated shrines.

14.2 Understanding and using the sources

1   Using Sources 5 and 6, summarise the expansion of the Persian empire from the reign of Cyrus the Great to that of Xerxes I.

14.2 Check your learning

1   Explain how the Persian kings controlled the people of the empire and administered their affairs.
2   What evidence is there that Pasargadae was a capital with ritual significance?
3   Why did Persian kings incorporate architectural elements from Assyria, Greece and Egypt at Pasargadae?
4   What does archaeological evidence from Susa reveal of the subject peoples of the empire?

14.3 Discovery and excavation of Persepolis

cuneiform
a system of wedge-shaped writing on clay tablets first developed by the ancient cultures of Mesopotamia and Persia

Like some other monumental structures of the ancient world, Persepolis never actually disappeared from view; however, its name and significance were lost for some time. The site was known as *Sad-sotun* ('Hundred columns') or *Čehel Menār* ('Forty-columned') during the Sasanian period from AD 224 to 651. These rulers started the mythological tradition of trying to explain the presence of the ruins, which they adopted as the achievements of their own ancestors. Investigations of the 17th and 18th centuries resulted in the collection of sufficient examples of inscriptions from the site to enable the decipherment of **cuneiform** script. The first organised excavations of the Persepolis ruins took place in the early 19th century. Along with these came the first reliable sketches, engravings and photographs of the site. Some interesting figures from this time include Herbert Weld, whose particular interest was in making casts of the sculptures, and Lord Curzon, who wrote an extensive, highly regarded study of the site and its history.

SOURCE 8 Persian cuneiform and carvings at Persepolis

Excavation in the 20th century

foundation tablet
tablet placed in the foundations of new buildings

In the early 20th century, there was an increased interest in excavating Persepolis, especially in Iran itself. This is reflected in the government support that was given to Ernst Herzfeld's expedition in 1931, conducted by the Oriental Institute of the University of Chicago. His brief as first field director was to conduct a thorough exploration, excavation and restoration of Persepolis. He found the north and eastern staircases of the Apadana, and the so-called Harem of Xerxes. The expedition's architect, Friedrich Krefter, discovered the gold and silver **Foundation Tablets** of Darius I in the Apadana, written in Old Persian, Elamite and Babylonian.

Herzfeld was succeeded in 1934 by Erich Schmidt, who carried out a more organised, large-scale excavation of the site and its environs. His major finds included seven foundation tablets belonging to Xerxes' reign. He also discovered two archives of cuneiform texts. The older is a collection of about 30 000 tablets called the Persepolis Fortification Tablets. A smaller set, the Persepolis Treasury Tablets, recorded the origins of workers and the amounts they were paid. Schmidt's work at Persepolis ended with the outbreak of World War II in 1939.

Iranian excavation

The excavation and restoration of the site was renewed in 1941 by the Iranian government under the Iranian archaeologist Ali Sami. His architect, Ali Hakemi, made an important study of the **topography** of the site and was responsible for excavating the underground canal system as well as restoring the Apadana stairways, the Central Palace and the Treasury walls.

Sami was succeeded by Ali-Akbar Tadjvidi in 1961. In his vision, Persepolis, or Parsa as it is called in Iran, was part of a much larger settlement on the surrounding plain. The government funded his research generously because it coincided with the preparation of the site as a venue for the festivities that would mark the 2500th anniversary of Iranian monarchy to be held in 1971. The Institute of Achaemenid Research at Persepolis was established in 1973, which directed and coordinated excavation and restoration, and published excavation records of the monuments at the site.

After the Islamic Revolution

Persepolis was inscribed on the **UNESCO** World Heritage List in 1979, the year of the Islamic Revolution. Between 1979 and the visit of the president of Iran in 1991, archaeological work came to a virtual standstill. The president's visit renewed government support and funding for new excavation and conservation of Persepolis. The Parsa-Pasargadae Research Foundation was established in 2002. New archaeological investigations have taken place as a result. These include:

- a geomagnetic survey of the Marvdasht plateau
- a study of pottery found in fortifications on the top of the adjacent mountain
- excavation and dredging of underground canals.

In the early 21st century there has been an interest in the reconstruction of Persepolis, particularly in the making of models and in digital form. In 2006, archaeologists working at Persepolis made a film called *Persepolis Recreated*. It used a mixture of real-life and computer images, many based on the drawings of Friedrich Krefter, to give an impression of the site as it was in the past as well as the activities that took place there.

14.3 Check your learning

1 Find out more about cuneiform script and the role of Persepolis in its decipherment.
2 Research the archives of tablets found at Persepolis. What information have they provided about the activities that took place there? Go online and research 'Persepolis Treasury Tablets' and 'Persepolis Fortification Archive'.
3 Visit the official Persepolis website to find out what the Parsa-Pasargadae Research Foundation has achieved in recent times. Search online for 'Parse Pasargad Iran'.
4 Watch the film *Persepolis Recreated* online. What perspective of Persepolis does the film present? What impression of Persepolis is created? What cinematic or special effects are used to convey this?

The purpose of Persepolis

The purpose of Persepolis is one of the many contested aspects of the site. Ernst Herzfeld, who excavated the site in the 1930s, held that Persepolis was built as the venue for celebrating *Now Ruz*, the Persian New Year festival. Other scholars see it as an administrative centre, a central bank, a fortress, or even a type of calendar or observatory for marking the passing of the seasons.

A venue for the *Now Ruz* festival

The *Now Ruz* festival was celebrated at the time of the spring equinox. According to this view, the Persepolis **reliefs** depict the ritual of the New Year festival. The **motifs** included on them are all aspects of the festival:

- the lion and bull in combat – the lion represents summer heat and the bull the winter rain
- the **tribute** or gift procession – this shows representatives of subject nations coming to Persepolis for the New Year
- the people carrying food for banquets – these are festival banquets
- the scenes of audience with the king – the court official here introduces the representatives of the subject peoples
- the throne scene in the Tripylon and the Hall of a Hundred Columns – this represents an actual procession where the king is carried high by the subject peoples.

More recently, this interpretation of Persepolis has been questioned. Scholars now think that the *Now Ruz* was unlikely to have been celebrated in Achaemenid times at all. If it was, it was not celebrated at the time of the spring equinox. According to ancient Greek scholars who were familiar with Persian culture, the king's birthday was the most celebrated festival, followed by the festival in honour of the god Mithras. Many scholars agree that the reliefs are best explained as an expression of kingship.

A centre of royal power

Persepolis operated as a symbolic centre of Persian power and kingship. Writers of Achaemenid history have commented on the way in which the reliefs and the architecture give the impression that the Achaemenid kings were unanimously supported by their subjects. Margaret Cool Root, an expert on Achaemenid art, gives her **opinion** in Source 9.

SOURCE 9

Perhaps we shall never be able to determine absolutely whether the Achaemenid reliefs should be read as a pure metaphor of royal power or as a metaphorical description of an actual ceremonial display of imperial might. But … the motif of the king carried by anonymous representatives of the subject peoples of the empire … was certainly designed to convey in its role as art a political message of calculated significance … a new vision of hierarchical order and kingship on earth …

Margaret Cool Root, *The King and Kingship in Achaemenid Art: Essays on the Creation of an Iconography of Empire*, Leiden: Diffusion E. J. Brill, 1979, p. 161

reliefs
wall sculptures, sometimes painted, where the sculpted or carved elements are left attached to a solid background, giving the impression that the relief has been raised above it

motif
dominant or recurring idea or image in an artistic work that forms a pattern

tribute
a tax or payment made periodically by a subordinate state to a superior power, especially as a sign of dependence

opinion
a person's belief, judgement or way of thinking about something that is not necessarily substantiated by facts

SOURCE 10 A relief from the North Stairs of the Apadana, later moved to the Treasury at Persepolis. The king, possibly Darius I, and his **crown prince**, Xerxes, receive a Persian court official who touches his hand to his lips as a sign of respect. Two personal attendants, the royal towel bearer and the royal weapon bearer, hold their signs of office. The king's feet do not touch the ground and both he and the heir carry lotus flowers.

crown prince
the heir to the throne

SOURCE 11 A doorjamb from the southern doorway of the 'Harem' at Persepolis. It shows a king fighting with a 4-metre-high animal with the body of a lion, the head of a **griffin** and the tail of a scorpion.
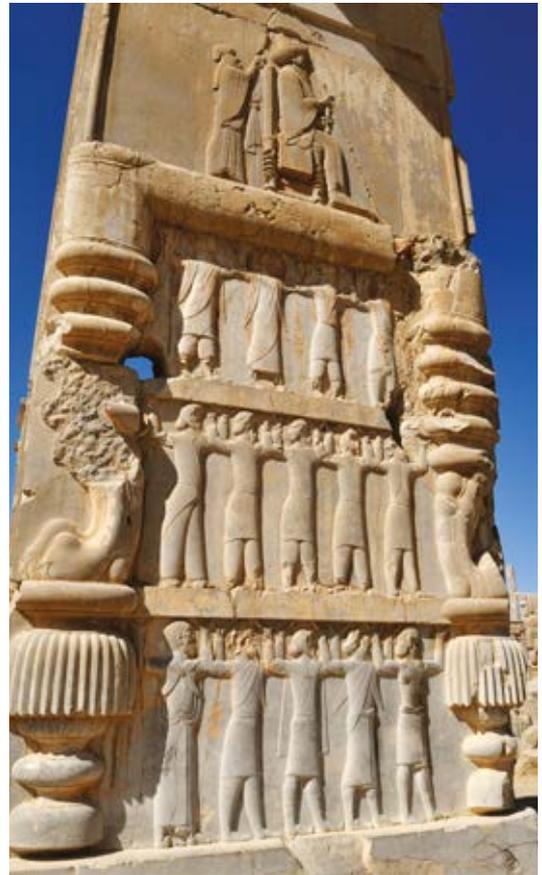
SOURCE 12 A relief from the Hall of a Hundred Columns at Persepolis showing a king seated under a baldachin or canopy. He is supported by images of the subject peoples of the empire.

griffin
a mythical creature with the head and wings of an eagle and the body of a lion

14.4 Understanding and using the sources

Source 9

1 Discuss Margaret Cool Root's opinion with your partner or with the members of your group.

Sources 10–13

2 This source observation activity is designed to help you develop an understanding of the power and image of the Persian kings, Achaemenid kingship and the role of Persepolis in communicating this. Study the four images from Persepolis and draw conclusions about what these reveal of the Persian kings' power and image. Include your conclusion in the table below. The first one has been started to help you.

SOURCE 13 A relief from the Apadana stairs showing Persian and Median soldiers

NAME AND LOCATION OF RELIEF	DESCRIPTION	SIGNIFICANCE FOR UNDERSTANDING POWER AND IMAGE OF PERSIAN KINGS AND PERSIAN KINGSHIP
Treasury relief – originally located on the North Stairs of the Apadana and later moved to the Treasury	• The king, possibly Darius I, sits on a throne, his feet on a small stool to prevent them touching the ground. • The crown prince, possibly Xerxes, stands behind the throne. He carries a lotus flower like the king. • They receive a Persian court official who touches his hand to his lips as a sign of respect. • **Incense** burners are placed in front of the king. • Two personal attendants, the royal towel bearer and the royal weapon bearer, hold their signs of office.	The king and crown prince can be seen as **stylised** figures who represent the monarchy. The continuation of the Achaemenid Dynasty can be seen in: • the lotus flowers carried by the king and crown prince, which symbolise eternity (they each have 12 petals for the months of the year) • the presence of the successor who is depicted the same size as the king.

14.4 Check your learning

1 Use your work in this section to answer the following question: 'Assess the role of the Persepolis reliefs in communicating the power and image of the Persian kings.'
(Assess: Make a judgement of value, quality, outcomes, results or size.)

To help you plan your response:
- identify some key criteria for judging the role of the reliefs (e.g. they show the power of the king over the subject peoples; they show the continuation of the Achaemenid Dynasty)
- use these criteria to structure your answer
- make judgements about the role of the Persepolis reliefs
- use specific evidence to support your evaluation.

incense
an aromatic substance used in religious rituals, e.g. frankincense

stylised
depicted in a non-realistic style

In investigating the site of Persepolis it is important to consider the layout of the site and its characteristic architectural features, the significant archaeological finds and the purpose of the site. Source 14 contains a plan of the site and some images and information about the main structures.

lintel
a horizontal piece of stone or timber that supports the wall above a door or window

cavetto cornice
a hollow moulding at the top of a wall or a window frame

concubine
a secondary wife or mistress

GATE OF ALL NATIONS

This was the formal entrance to Persepolis, reached by an imposing double staircase near the north-west corner of the site. The gateway was flanked by two colossal guardian figures in the shape of human-headed bulls.

APADANA

This 60-square-metre audience hall had 36 columns holding up a 25-metre-high roof. It could accommodate 10 000 people. Its north and east stairs feature reliefs of guards, dignitaries and subjects bringing gifts to the king.

PALACE OF DARIUS (TACHARA)

This building measures 40 by 30 metres, and had 12 columns. Its 5 doors and 16 windows are all inscribed with Darius' name. The window frames are notable for their Egyptian-style **lintels**, known as **cavetto cornices**.

PALACE OF XERXES (HADISH)

A square hall with 36 columns and two double, sculpture-decorated staircases. The doorjambs have images of the king entering the palace.

'HAREM'

A collection of buildings in the south-eastern part of the site. The main wing contained two rows of six apartments. Each one consisted of a large pillared room with one or two smaller rooms. The west wing had another 16 apartments. There is no evidence that it housed the king's **concubines** as the name suggests.
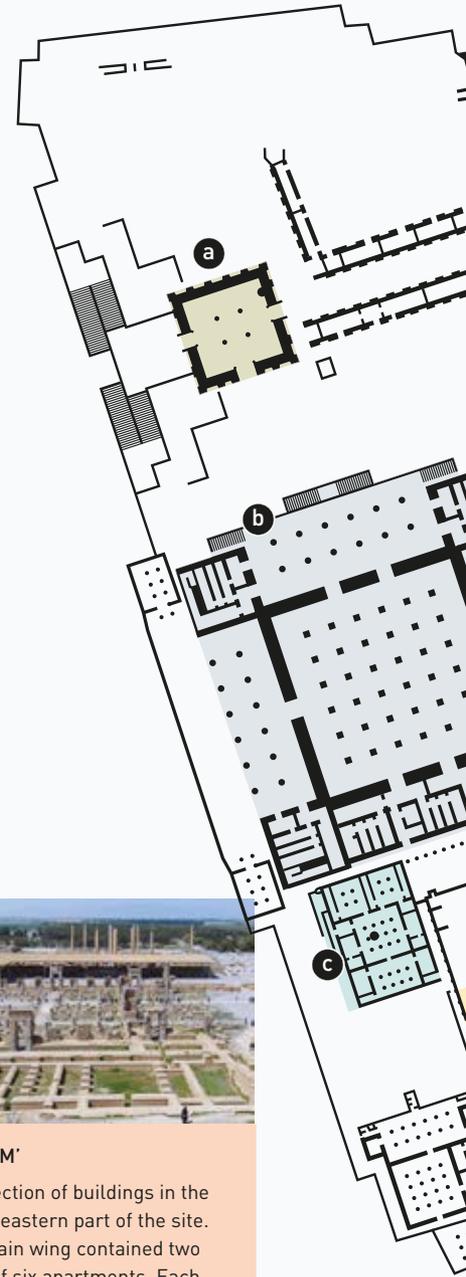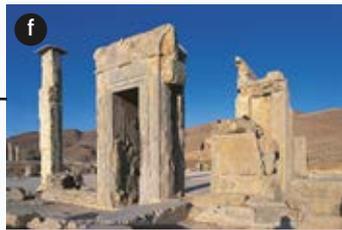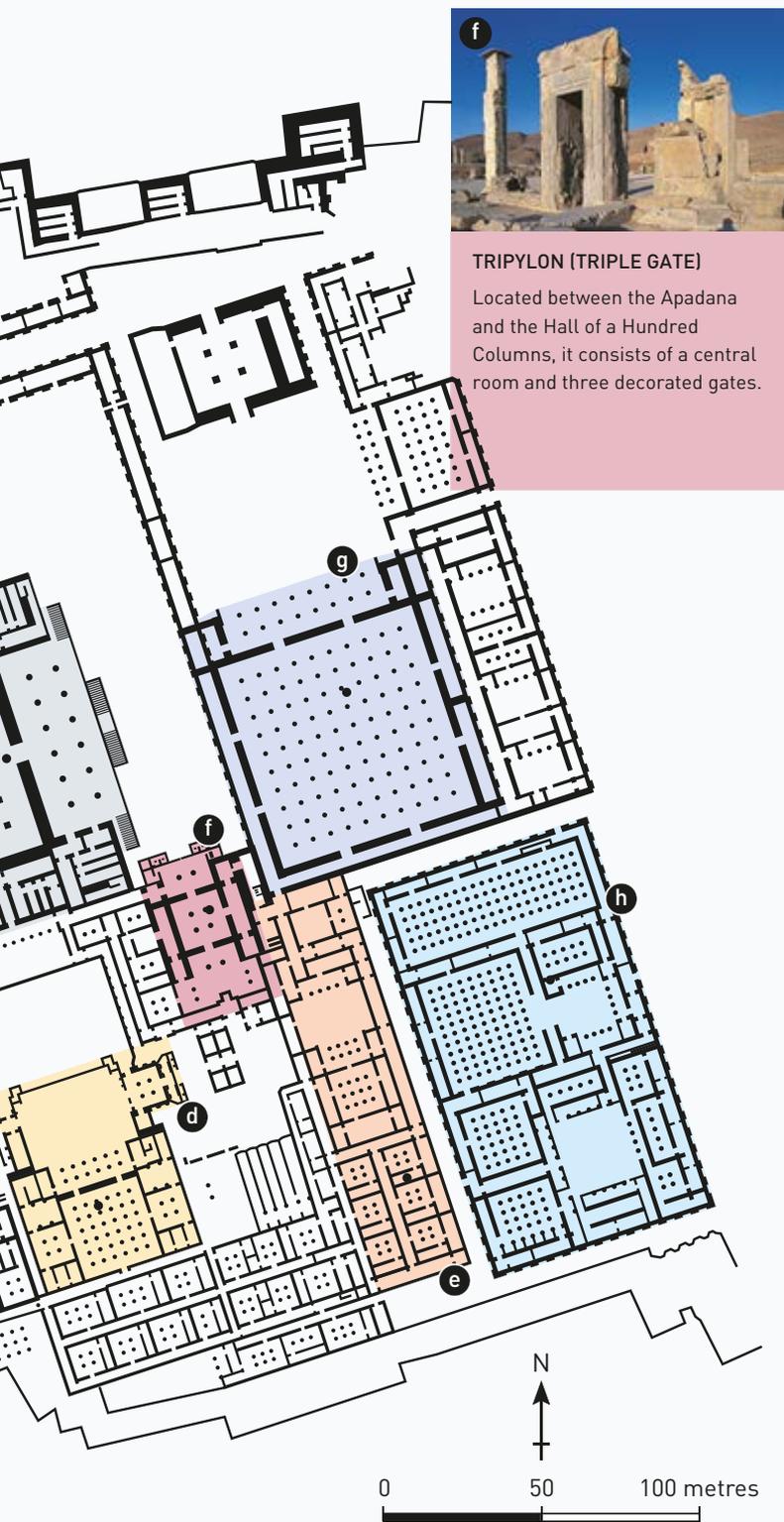
TRIPYLON (TRIPLE GATE)

Located between the Apadana and the Hall of a Hundred Columns, it consists of a central room and three decorated gates.

HALL OF A HUNDRED COLUMNS (THRONE HALL)

This 70-square-metre hall had 10 rows of 14-metre-high columns. It features reliefs of throne scenes and the king in combat with lion monsters.

TREASURY

At 120 by 60 metres, this was a huge structure. A large cache of clay tablets was discovered here, which have supplied much information about the Achaemenid Empire.

N

0   50   100 metres

SOURCE 14 A plan of Persepolis

14.5 Check your learning

1 Using the Google Earth website or app, locate 'Persepolis, Ancient ruins of terraced capital, Iran' and align it with the perspective in Source 14. Turn on 3D Buildings and Wikipedia to access information on the buildings. If you do not have access to Google Earth you can use an encyclopaedia, actual or online, to find the information. Make sure you visit the official Persepolis website (search online for 'Parse Pasargad Iran').

2 Create your own table using the headings below. Record all the information you find about the buildings and structures shown in Source 14. Other useful websites include:
   • 'Persepolis: Images of an Empire'
   • 'Persepolis – Google Arts & Culture'
   • 'Persepolis – Encyclopaedia Iranica'.

BUILDING	IMAGES	FEATURES	ROLE IN EVERYDAY LIFE	SIGNIFICANCE

3 Share your files with your class or turn them into a presentation. You can use your school's intranet, a class Wiki or Google Classroom, or use Prezi, PowerPoint or other presentation software.

Achaemenid design and ornamentation

Achaemenid architects, designers and artists drew on different artistic traditions from neighbouring cultures to create a style that was uniquely Persian. Influences from Assyria, Babylonia, Media, Greece, Egypt and others are evident in Achaemenid architecture and art.

Architecture

The early kings of the Achaemenid Empire devised new styles in monumental architecture and sculpture to decorate their capital cities and convey their dominion over the known world. Here is an overview of some of the main features of this architecture.

Columned halls

The huge columned spaces or **hypostyle** halls were possibly inspired by Median architecture. Cyrus used columned halls at Pasargadae. At Persepolis, Darius I modified the rectangular Apadana to a square to achieve an even number of columns in each row. The Hall of a Hundred Columns was another of these columned halls, featuring 10 rows of 10 columns.

Columns

The inspiration for columns seems to have been the temples of the Greeks. Made from either wood or stone, they featured capitals of animals or humans placed back to back. The shafts of the columns were often ornately **fluted**, and the bases or **plinths** were bell-shaped and made of stone. Columns at Susa and Persepolis were more than 19 metres high (see Chapter 13, Source 20b).

Monumental staircases

Staircases were necessary at Persepolis' terrace location. Xerxes replaced the entrance staircase in the south with a new double staircase in the north-west. Containing 11 steps nearly 7 metres wide, it had long **treads** and low **risers**, enabling an easy climb for robed visitors or even horses. The Apadana was also reached by two double staircases on the north and east of the structure.

Masonry

The masonry or stonework techniques used at both Pasargadae and Persepolis may have come from Lydia and Ionia. Examples include the stone columns at both locations and the gable-roofed tomb of Cyrus at Pasargadae. Median, Egyptian, Phoenician and Mesopotamian influences can also be identified.

Glazed brickwork

Glazed and moulded brickwork was an Elamite technique and Darius' choice of style for Susa. Best known are the scenes of the Ten Thousand Immortals (see Source 15), the Susian archers and the Babylonian-style protective **sphinxes**.

hypostyle
having a roof supported by rows of pillars

fluted
grooved or ridged

plinth
a square block, usually of stone, used as the base for a statue or pillar

tread
the top surface of steps

riser
the vertical section between the steps of a staircase

sphinx
a mythical creature with the head of a human and the body of a lion

SOURCE 15 A fragment of the Ten Thousand Immortals from Susa

Iconography

The **iconography** used by the Achaemenid kings to proclaim their royal and imperial power was largely borrowed. Both Cyrus and Darius seem to have valued Assyrian iconography and **appropriated** it for their own use; for example, the bas-relief of the four-winged genius from Pasargadae. The iconography of the bas-relief is used by Cyrus not only to say that he has taken ancient Elam into his sphere of influence, but that he has access to resources from as far away as Egypt.

Ornamentation

As with architecture, Achaemenid ornamentation was a blend of different cultural styles and traditional Persian motifs, as can be seen in examples of metalwork and sculpture.

SOURCE 16 This gold roundel, or decorative medallion, has the Achaemenid motif of a winged lion with goats' horns looking over its shoulder to confront an enemy.

Metalwork

Achaemenid metalwork was highly prized. Craftsmen used bronze, silver and gold to make objects such as bowls, plates, vases, statuettes, jewellery and **rhytons**. Examples of the Achaemenid goldsmiths' skill came to light in the cache of treasure found near the Oxus River in what had once been the satrapy of Bactria. The Persian motifs of lions and griffins appear on many pieces (see Source 16), which were made using the Assyrian and Egyptian techniques of embossing, enamelling and inlaying of precious stones.

Sculpture

Most Achaemenid sculpture was devoted to the ornamentation of the palaces. As a result it is primarily large-scale, as seen in the animal **capitals** on the columns of several buildings at Persepolis and the huge bulls at the entrances to the Gate of All Lands. It is also seen in the bas-reliefs on palace walls and staircases, and on cliff faces. Foreign influences are evident, such as the stylised forms of Mesopotamian art, but these are combined with local motifs to form a new Achaemenid style.

An important example of Persian sculpture is the Behistun Inscription of Darius I, carved into a cliff face beside the road from Babylon to Ecbatana. It depicts representatives of the subject peoples who rebelled against his rule in the first months of his reign.

iconography
the representation of abstract ideas in drawings, paintings or carved figures

appropriated
taken for one's own purpose, usually without the owner's permission

rhyton
an ancient drinking or pouring vessel

capital
the decorated top part of a column

14.6 Check your learning

1 Access online images of Achaemenid art and architecture. Find examples of the features discussed in the text. Compile an image file of the various types of Achaemenid ornamentation, e.g. column capitals, bas-reliefs, gold and silver jewellery, and rhytons.
2 Research the Behistun inscription of Darius I. Who rebelled against his rule and how did Darius deal with them? Why did he record his victory in such an inaccessible place?
3 Using the information in this section and elsewhere in the chapter, create a mind map summary with the central theme 'Foreign influences in Achaemenid design and ornamentation'. A first entry could be 'Greek/Ionian: Use of columns – bases and shafts'.

What was Alexander the Great's role in the destruction of Persepolis?

When Alexander the Great defeated the Persians at the Battle of the Persian Gate in 330 BC his army occupied Persepolis. After some time the troops were permitted to loot the Persian capital and as an outcome of this, Persepolis was destroyed by fire. Or was it? A study of both the ancient sources and the archaeological evidence from the site raises several questions:

- Did Alexander's army loot Persepolis?
- How much of the site was destroyed by fire?
- Where did the fire begin?
- Was the fire deliberately started or was it an accident?

- If the fire was deliberately started, what was the motive?
- What was Alexander's role in the destruction?
- Was anyone else involved besides the soldiers? Who, and what was the nature of their involvement?

Below are some ancient and some modern sources regarding the answers to the questions above. A task follows requiring you to draw conclusions from these sources.

Ancient sources

Sources 17, 19 and 20 are extracts from the work of three authors: Diodorus Siculus, a Greek historian (1st century BC); Plutarch, a Greek biographer, later Roman citizen (1st century AD); and Arrian, a Greek historian (2nd century AD).

SOURCE 17

Attic
belonging to Athens and the region immediately surrounding it

Alexander held games in honour of his victories. He performed costly sacrifices to the gods and entertained his friends bountifully. While they were feasting and the drinking was far advanced, as they began to be drunken a madness took possession of the minds of the intoxicated guests. At this point one of the women present, Thaïs by name and **Attic** [Greek] by origin, said that for Alexander it would be the finest of all his feats in Asia if he joined them in a triumphal procession, set fire to the palaces, and permitted women's hands in a minute to extinguish the famed accomplishments of the Persians. This was said to men who were still young and giddy with wine, and so, as would be expected, someone shouted out to … light torches, and urged all to take vengeance for the destruction of the Greek temples … Thaïs the courtesan …was the first, after the king, to hurl her blazing torch into the palace. As the others all did the same, immediately the entire palace area was consumed, so great was the conflagration. It was most remarkable that the impious act of Xerxes, king of the Persians, against the **Acropolis** at Athens should have been repaid in kind after many years by one woman, a citizen of the land which had suffered it, and in sport.

Acropolis
an ancient citadel located on a rocky outcrop above the city of Athens

Diodorus Siculus, *Bibliotheca Historica*, 17.72.1–6

SOURCE 18 A marble head of Alexander the Great from the Archaeology Museum in Istanbul, Turkey

SOURCE 19

Thaïs, an Athenian, the mistress of Ptolemy, … as the drinking went on, was moved to utter a speech … She said, … it would be a … greater pleasure to … set fire to the house of the Xerxes who burned Athens, she herself kindling the fire under the eyes of Alexander … As soon as she had thus spoken, tumultuous applause arose, and the companions of the king eagerly urged him on, so that he yielded to their desires, and leaping to his feet, with a garland on his head and a torch in his hand, led them the way. This is the way the deed was done, according to some writers; but others say it was **premeditated**. However, it is agreed that Alexander speedily repented and gave orders to put out the fire.

Plutarch, *The Parallel Lives*, Life of Alexander, 38

premeditated
deliberate

SOURCE 20

He burnt down the Persian palace, though Parmenio [one of Alexander's generals] advised him to preserve it, for many reasons, and especially because it was not well to destroy what was now his own property, and because the men of Asia would not by this course of action be induced to come over to him, thinking that he himself had decided not to retain the rule of Asia, but only to conquer it and depart. But Alexander said that he wished to take vengeance on the Persians, in retaliation for their deeds in the invasion of Greece, when they **razed** Athens to the ground and burnt down the temples.

Arrian, *The Anabasis of Alexander*, 3.18

razed
destroyed, demolished, levelled to the ground

Modern sources

Sources 21 and 22 offer modern **perspectives** on the reasons for Alexander the Great's destruction of Persepolis.

perspectives
the points of view held by individuals or groups about the past that are based on their contexts and motivations

SOURCE 21

It is reasonable to think, therefore, that one reason, and, I would suggest the decisive reason why Alexander destroyed Persepolis, was its status in Asia as the religious centre of the Persian Empire. By this view, the destruction of Persepolis not only enacted the long-awaited vengeance against the Persians, but it was also in accord with Alexander's proclamation as King of Asia at Arbela, as a clear signal that his own kingship was not a continuation or renewal of Persian kingship, but superseded it, not by the grace of Ahuramazda, but by his own prowess and the grace of the **Graeco-Macedonian** gods.

A. B. Bosworth & Elizabeth Baynham (eds), *Alexander the Great in Fact and Fiction*, New York: Oxford University Press, 2002, p. 148

Graeco-Macedonian
a mixture of Greek and Macedonian as in the Hellenistic Period of Alexander the Great

SOURCE 22

The reason Alexander himself gave, according to Arrian, was that 'his act was retribution for the destruction of Athens, the burning of our temples, and all the other crimes they had committed against the Greeks.' But, as Arrian remarks, this 'could hardly be considered as punishment for Persians long since dead and gone,' and it seems likely that there was a deeper motive in Alexander's multiple harshnesses at Persepolis.

He must have understood that Parsa was the part of the Persian empire from which determined resistance to his own **usurpation** was likely to rise. It is therefore conceivable that the plunder and massacre of the city below the great platform were acts of deterrent terror, and that the destruction of Persepolis itself was intended to remove a royal centre around which Persian feeling might rise again under the influence of a native **pretender** to the Achaemenian throne.

George Woodcock, 'Persia and Persepolis, part II', *History Today*, vol. 17, issue 5, May 1967

usurpation
taking a position that belongs to someone else

pretender
a person who claims a position

14.7 Understanding and using the sources

Sources 17–22

1 Either alone or in small groups, assess these sources and see if you can reach some conclusions about what they reveal. Remember to consider who wrote the source and their context, the audience and purpose, before you assess them for accuracy and trustworthiness.

2 The following table will help you to organise your analysis of the ancient and modern sources. The first one has been done for you.

WRITER AND WORK	ALEXANDER'S INVOLVEMENT	ALEXANDER'S MOTIVES	RELIABILITY/USEFULNESS
Diodorus Siculus, *The Library of History*	Alexander joined the drunken mob and was the first to throw a torch into the palace.	Alexander wanted revenge for Xerxes' burning of the Acropolis in Athens.	Diodorus has a pro-Greek bias and was writing approximately 200 years after the event. We need to know his sources. Useful for providing a motive that other sources consider likely.

14.7 Check your learning

1 Use your work on the task above to answer the following question: 'Discuss some ancient and modern sources' interpretations of Alexander's role in the burning of Persepolis.' (Discuss: Identify issues and provide points for and/or against.)

   To help you plan your response:

   • identify some key issues raised by sources concerning Alexander's role in the burning of Persepolis

   • use these issues to structure your answer

   • provide points for and/or against these issues in terms of the **reliability** and **usefulness** of the sources

   • use specific evidence from the sources to support your discussion.

2 Hold a class debate on the role of Alexander the Great in the destruction of Persepolis. Your topic could be 'That Alexander the Great destroyed Persepolis to avenge Greece'.

■ **reliability**
the accuracy of a source judged on its context, purpose, origin and intended audience

■ **usefulness**
a judgement about the value of sources for researching particular people, events and developments of the past

SOURCE 23 A representation of Alexander agreeing to set fire to Persepolis, from *Hutchinson's History of the Nations*, published in 1915

Modern representations of Persepolis

Persepolis is a World Heritage site and as such is considered to be among the world's greatest archaeological sites. The UNESCO website describes it as follows:

SOURCE 24

Persepolis was the seat of government of the Achaemenid Empire, though it was designed primarily to be a showplace and spectacular centre for the receptions and festivals of the kings and their empire. The terrace of Persepolis continues to be, as its founder Darius would have wished, the image of the Achaemenid monarchy itself, the summit where likenesses of the king reappear unceasingly, here as the conqueror of a monster, there carried on his throne by the downtrodden enemy, and where lengthy cohorts of sculpted warriors and guards, dignitaries, and tribute bearers parade endlessly.

UNESCO, 'Persepolis', <http://whc.unesco.org/en/list/114>

SOURCE 25 The parade to celebrate the 2500th anniversary of Iranian monarchy in 1971 taking place in front of the Persepolis ruins

Today, Persepolis is not only 'the image of the Achaemenid monarchy itself', but intimately linked to the 'Iranian spirit'. As nationalistic sentiment has grown in Iran, Persepolis has increasingly become a political site as well as an archaeological one. This was particularly apparent during the 1971 celebrations of the 2500th anniversary of Iranian monarchy, which were staged at Persepolis by the former Shah of Iran. He announced that this would be 'the biggest party on earth'. Eighteen tonnes of food were flown in to feed the guests, who included emperors, kings, princes, presidents and sheikhs from all over the world. They were entertained by thousands of Iranians dressed to act out the processions of gift bearers and soldiers depicted in the sculptures of the ancient capital. It is likely that the extravagance of this event contributed to the eventual fall of the Shah from power, only seven years later.

14.8 Understanding and using the sources

1   Does your study of this chapter incline you to agree or disagree with UNESCO's description of Persepolis? Give reasons.

14.8 Check your learning

1   Read the rest of UNESCO's entry on Persepolis. Search online for 'World Heritage Persepolis'.
2   Read some of the staff's recollections of the Shah of Iran's party to celebrate the 2500th anniversary of Iranian monarchy. Search online for 'Alimentarium: The most expensive party ever'.

Persepolis remains a significant site. It has come to be a symbol of modern Iranian national identity and is one of the most popular tourist attractions in Iran. Some even regard it as a place of pilgrimage for contemporary Iranian citizens. Its artistic features, the bull capitals, stairways and friezes can be found on bank buildings, company headquarters and public buildings all over Iran. These modern representations mirror those of the ancient past, when Persepolis represented the might of Achaemenid kingship and the centre of the Persian Empire.

FOR THE TEACHER

Check your obook assess for the following additional resources for this chapter:

Answers

Answers to each *Check your learning*, *Understanding and using the sources* and *Profile task* in this chapter

Teacher notes

Useful notes and advice for teaching this chapter, including syllabus connections and relevant weblinks

Class test

Comprehensive test to review students' skills and knowledge

assess quiz

Interactive auto-correcting multiple-choice quiz to test student comprehension

15

Palmyra and the Silk Road

FOCUS CONCEPTS & SKILLS

Significance

In studying the significance of Palmyra and the Silk Road, a critical consideration is its importance to different people in different times. For the people of Palmyra, its relationship to the Silk Road trade was perhaps the most important factor in its ancient history. For the Romans, this and other factors played a part in its changing significance. Today, Palmyra's significance is determined by very different circumstances.

LEARNING OUTCOMES

1 Explain the importance of the Silk Road in the history of Palmyra.

2 Examine the effect of Eastern and Western traditions on Palmyrene culture.

3 Analyse the sources for evidence of the relations between Palmyra and Rome.

4 Examine Zenobia's role in the history of Palmyra.

5 Account for the significance of Palmyra in its own time and in the present.

SOURCE 1 The Monumental Arch at Palmyra before its destruction in 2015

Palmyra, trading post of the Silk Road

Silk Road
an ancient network of trade routes connecting the East and the West

Palmyra, the 'city of palm trees', also known as Tadmur, was once one of the greatest cultural centres in the ancient world. Its location between the Mediterranean Sea and the Euphrates River was critical to its development as a major trading city on the east–west trade route, the famed **Silk Road**. Local entrepreneurs maximised the advantages of their situation to create a trading enterprise that would enrich them all. They would go on to exchange goods with India via the Persian Gulf route and also with such cities as Coptos in Egypt, Rome and Dura-Europos in Syria.

The city is known from as early as the 19th century BC, but its first significant description comes from the 1st century AD, during a period of Roman control. The Roman naturalist and author Pliny described the city in his *Natural History*.

SOURCE 2

Palmyra is a city famous for the beauty of its site, the riches of its soil, and the delicious quality and abundance of its water. Its fields are surrounded by sands on every side, and are thus separated, as it were, by nature from the rest of the world. Though placed between the two great empires of Rome and Parthia, it still maintains its independence; never failing, at the very first moment that a rupture between them is threatened, to attract the careful attention of both.

Pliny the Elder, *Natural History*, Book V, 21.25

ANCIENT SYRIA, 1ST CENTURY AD

Source: Oxford University Press

SOURCE 3 Ancient Syria in the 1st century AD showing the location of Palmyra

SOURCE 4 The mountain range to the north of Palmyra, one of the city's natural barriers

Palmyra has been inscribed on the **UNESCO** World Heritage List for its outstanding universal value. Its **citation** emphasises the unique architecture of the city, which synthesises Graeco-Roman techniques with Palmyrene art and Persian influences. The remains of its beautiful buildings have drawn the admiration of travellers for hundreds of years, but today its future is uncertain. The very location that enabled Palmyra to become the trading post of the Silk Road puts it in the middle of a modern war that is highly destructive of both life and heritage.

Geography

Palmyra is a palm-fringed oasis in the Tadmorean Desert surrounded by natural barriers. These include the Lebanon and Anti-Lebanon Mountains to the north, west and south-west, which cut it off from the Mediterranean coast. To the east and south is the Syrian Desert and the modern countries of Jordan, Iraq and Saudi Arabia. The great Euphrates and Tigris rivers lie to the east of Palmyra. At the height of the Palmyrene Empire, the Euphrates provided the means for the transport of goods coming up the Persian Gulf from India and countries further east. A small **wadi**, the Wadi al-Qubur, stretches from the western hills past the city before entering the eastern gardens of the oasis. The Efqa spring, to the south, important in ancient times, no longer exists.

■ **UNESCO**
United Nations Educational, Scientific and Cultural Organisation

■ **citation**
a reference or quotation from a historical source

■ **wadi**
a river valley that is dry except when it rains

- -

15.1 Understanding and using the sources

1 According to Pliny, what are the natural advantages of Palmyra's location?
2 What comment does Pliny make about Palmyra's location? What potential problem might arise from this?

- -

15.1 Check your learning

1 What features of Palmyra's geographical location contributed to its success as a trading post?
2 Watch a brief introductory film on Palmyra by searching online for 'UNESCO Site of Palmyra video'.

- -

Layout and architectural features of Palmyra

Corinthian
referring to an order of architecture in which the columns were slender and fluted, and the capitals incorporated sculpted leaves

Palmyra had its beginnings close to the Efqa spring on the southern bank of the Wadi al-Qubur. By the 1st century AD, most of the important monumental structures that came with Palmyra's growth in wealth were on the northern bank of the wadi. Source 5 contains a plan of the site's layout, and some images and information about the main structures.

SOURCE 5 A plan of Palmyra

Zenobia/Justinian wall

Funerary temple

Temple of Allat

Principia

Palmyra

h
Temple of Baal-Shamin

a

Colonnated axis

Diocletian's camp

Damascus gate

Oval forum

g Tetrapylon

Baths of Diocletian

Monumental Arch b

Senate house

d

Theatre

Banquet hall

i

f Agora

Valley of Tombs

Temple of Nebo

e 'Tariff Court'

Cella

Roman houses

Temple of Bel

c

Efqa spring
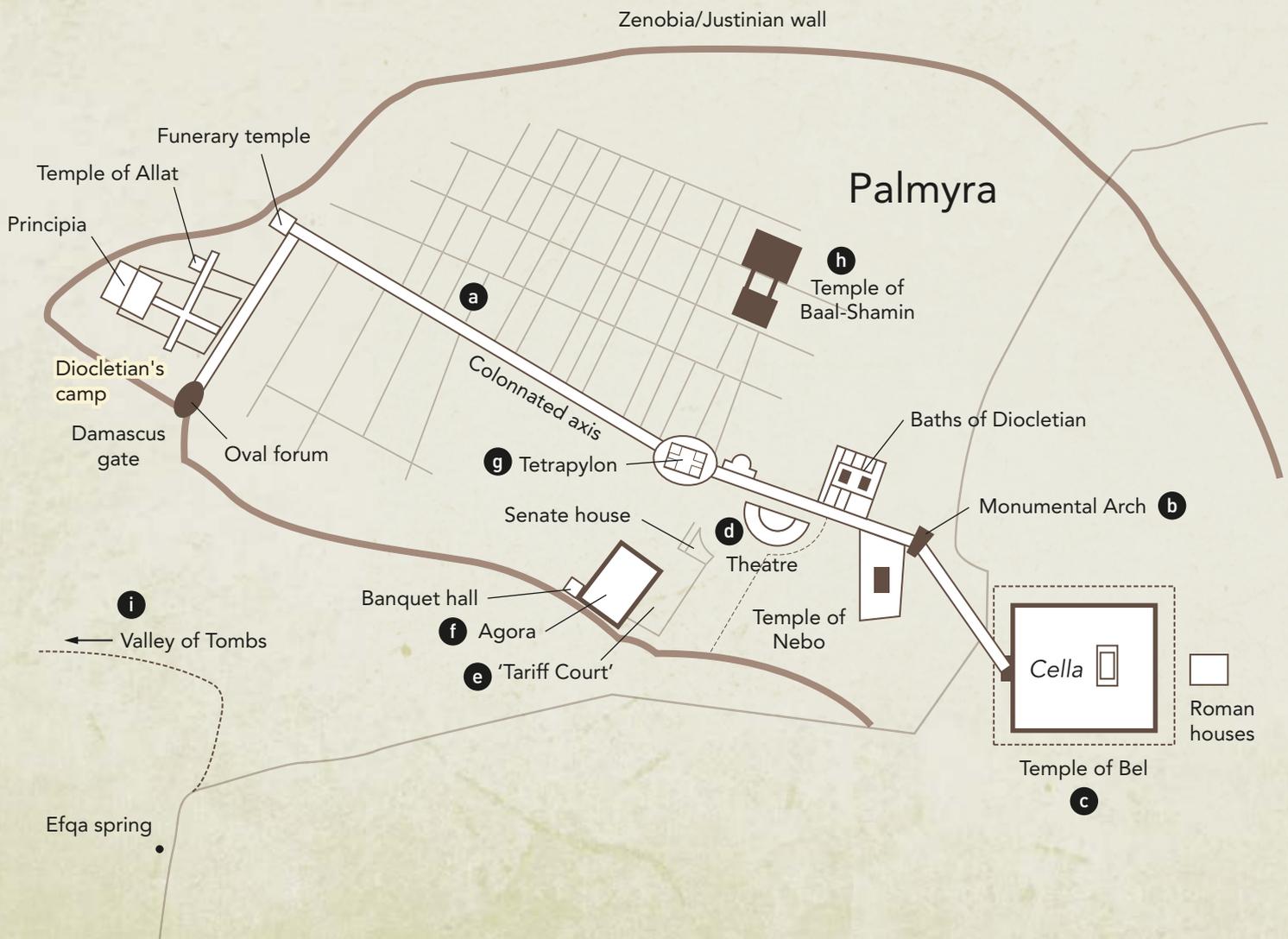
15.2 Check your learning

1 Study the plan of Palmyra in Source 5. Using the Google Earth website or app, locate 'Palmyra, Temple of Bel, Syria'. Turn on 3D Buildings, Wikipedia and 360 Cities to tour the site and access information on the buildings. If you do not have access to Google Earth you can use an encyclopaedia, actual or online, to find the information.

2 Create your own table using the headings below. Record all the information you find about the buildings and structures shown in Source 5. Other useful websites include:

- Encyclopaedia Britannica, Palmyra
- Khan Academy, Temple of Bel, Palmyra
- Palmyra: a Pleiades place resource.

BUILDING	IMAGES	FEATURES	ROLE IN EVERYDAY LIFE	SIGNIFICANCE

3 Share your files with your class or turn them into a presentation. You can use your school's intranet, a class Wiki or Google Classroom, or use Prezi, PowerPoint or other presentation software.

orchestra
the large circular floor of a theatre

cella
the inner area of an ancient temple

Great Colonnade: a colonnaded avenue linking the Temple of Bel to the West Gate, via the Monumental Gate. The columns were **Corinthian** in style and featured decorated, inscribed brackets for the placement of statues.

Monumental Arch: built in the 3rd century AD during the reign of Emperor Septimius Severus, maybe to commemorate victory over the Parthians, it linked the Colonnade and the Temple of Bel. It was decorated with stone carvings of plants and geometrical designs.

Temple of Bel: the rectangular temple was built in the middle of a paved court surrounded by a 205-metre-long wall. The **cella**, surrounded by Corinthian columns, had inner sanctuaries dedicated to Bel and other deities, two pairs of high windows and stairs leading to rooftop terraces.

Theatre: built in the 2nd century AD, the theatre's main entrance led to a stone-paved **orchestra** surrounded by a circular wall. The proscenium, or rear wall, had columned, rectangular and curved niches. The stage was reached by two staircases.

Tariff Court: a courtyard with a huge entrance doorway big enough for camels to enter. The 5-metre-long stone slab, the Tariff of Palmyra, bearing the tax requirements for goods coming in and going out of the city, was found here.

Agora: a huge structure with 11 entrances, it had 200 column bases for the placement of statues of important citizens. The complex included the tariff court and the *triclinium* or banquet hall.

Tetrapylon: erected by Diocletian at the end of the 3rd century AD. There were groups of four pink granite columns at the corners of a square platform. Each group of columns was topped by a cornice and contained a statue on a pedestal.

Temple of Baal Shamin: begun in the late 2nd century BC, it was added to in AD 115 and largely rebuilt in AD 131. It had a central cella and two colonnaded courtyards featuring Corinthian columns.

Valley of Tombs: located on the outskirts of the city on the road from Emesa, modern-day Homs, the valley features numerous tower tombs and underground tombs or *hypogea*.

Historical context of Palmyra

Palmyra's location meant that it was subject to the fortunes of the major powers that established their empires in the Mesopotamian region. In the Hellenistic period (312–64 BC), it was subject to the **Seleucid** Kingdom. When the Romans **annexed** the Seleucid Kingdom in the 1st century AD, it became a subject of the Roman Empire, but maintained its independent status.

The timeline in Source 6 summarises the history of Palmyra from its beginnings until the Muslim conquest in the 7th century AD.

BC	• Initially called Tadmur • 312—64 BC – Hellenistic period; Palmyra incorporated into the Seleucid Kingdom • 64 BC – Roman Republic annexes the Seleucid Kingdom; Palmyra remains independent • Is an indispensable staging post for caravans travelling between the Mediterranean, Mesopotamia and Arabia • 42 BC – Roman general Mark Antony attacks
1ST–2ND CENTURIES AD	• Becomes a buffer between Rome and Parthia; keeps the east–west trade routes open • AD 14 – Becomes a **tributary** of the Roman Empire, included in province of Syria; retains much independence, a prosperous period; called 'Palmyra' by Rome • AD 129 – Visited by emperor Hadrian and declared a 'free city'; sets and collects its own taxes • AD 167 – Roman **garrison** established • AD 109 – Assigned to the province of Phoenicia; trade affected by Roman–Parthian war
3RD CENTURY AD	• AD 212 – Made a Roman *colonia* or colony under Emperor Caracalla • AD 229 – Visited by Emperor Severus Alexander • AD 256 – Emperor Valerian gives Odaenathus the title 'Corrector of the East' and charge of Roman forces • AD 267 – Odaenathus and son assassinated; his wife, Zenobia, assumes power and defeats many neighbours • AD 271 – Palmyra besieged by Emperor Aurelian; Zenobia escapes but is captured by Romans • AD 273 – Palmyrenes massacre 600 Roman archers; Aurelian's legionaries retaliate, razing the city and slaughtering the citizens. Palmyra never recovers
4TH–7TH CENTURIES AD	• AD 303 – Emperor Diocletian fortifies Palmyra as a stronghold on the eastern boundary of the Roman Empire • AD 312 – Roman emperor Constantine converts to Christianity • AD 325 – Palmyra becomes a Christian city; record of a bishop in residence • AD 527 – Emperor Justinian rebuilds Palmyra's defences; city now primarily a military outpost • AD 634 – Palmyra conquered by a Muslim army led by Khaled ibn al-Walid

SOURCE 6
A timeline of key developments in Palmyra's history

15.3 Check your learning

1 What evidence is there that the Romans valued Palmyra?
2 What does the eventual Muslim conquest of Palmyra reveal about the importance of the city?

15.4 The Silk Road

The Silk Road was a network of trade routes that linked many regions of the ancient world. Historians sometimes prefer the term 'Silk Routes' because it was made up of several routes by which goods made their way from China in the East to a variety of destinations in the West. It is thought that the first contact between China and the West occurred around 200 BC. By 130 BC, the Silk Road was in operation when Emperor Wu of the Han Dynasty recognised the value of trade with the West after seeing the superiority of Western horses.

The Silk Road routes began in China and extended through India, Asia Minor and Mesopotamia to Egypt, Africa, Greece, Rome and Britain. By these routes, the West gained paper, gunpowder, spices and especially Chinese silk, which was highly prized in Rome. In return, the East obtained goods such as gold, wool and horses from the West. Along with these commodities came culture: art, religion, philosophy, technology, language, science and architecture.

Silk Road goods were usually carried overland by camels. Different caravans carried goods through different sections of the road. Sea routes were also used for transporting goods between the East and West. Advances in shipbuilding and navigation enabled sea routes to be opened to areas in the Indian Ocean and the Persian Gulf.

THE SILK ROAD
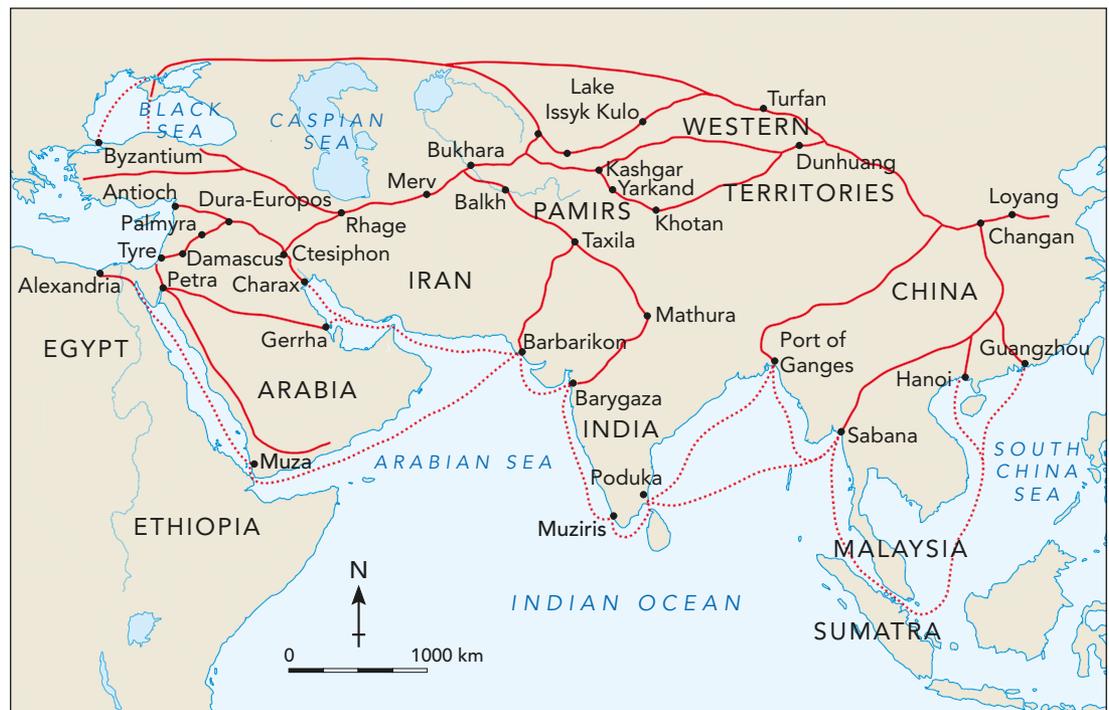
Source: Oxford University Press

SOURCE 7 The Silk Road, showing both overland and sea routes that connected Palmyra to the East and West

Palmyra, caravan city

It was the development of its caravan trade that made Palmyra a city. Our evidence for this comes from inscriptions found on the site (see 15.5 Trade and economy in Palmrya). The big rise in Palmyra's importance coincided with the Roman conquest of Syria. Palmyra first became a tributary city of Rome with a garrison in AD 19. Rome's attempts to conquer Parthia 100 years later caused trouble for Palmyra because it depended on peace between the two powers for the caravan trade to thrive. The desired peace was restored and Palmyra, as a 'free city' and later a *colonia,* could set and collect its own taxes and have its own forms of government.

The uneasy peace between Rome and Parthia meant that Palmyra occupied what was a type of no man's land with a network of caravan routes. Palmyra profited from both the Roman demand for Eastern luxuries such as silks and spices, and the Parthian desire for the goods of the West. Palmyrene traders became the middlemen in this highly profitable trade.

The traditional view of Palmyra's role in the caravan trade is that it profited from its fortunate location, at the hub of the caravan routes. A modern scholar, Gary Young, disputes this, arguing that the Palmyrenes were not just in the right place at the right time, but rather they acted as entrepreneurs, providing incentives for traders to re-route their caravans through their city. The route across the desert from the Euphrates via the oasis of Palmyra was not the usual one for caravans travelling from Mesopotamia to the Roman East, which had gone through Damascus (see Source 3). Young points out that the desert around Palmyra does not have a good supply of food and water, essential for desert travel. He continues his argument in Source 8.

SOURCE 8

For Palmyra to become a commercial success required the Palmyrenes to create a trade route which passed through their city … The picture that we … have of the development of Palmyrene commerce is not that of the city benefitting from its fortuitous location on the trade route. Rather we see the merchants of this oasis city, in concert with the landowning aristocracy of the town, deliberately utilising the city's qualities and contacts with the surrounding tribes to *develop* a trade route which enabled them to prosper.

Gary K. Young, *Rome's Eastern Trade: International Commerce and Imperial Policy*, *31 BC – AD 305*, London: Routledge, 2001, p. 124

15.4 Understanding and using the sources

1   What is the traditional view of Palmyra's role in the caravan trade of its region?
2   What is Young's argument in Source 8 about the way in which Palmyra became an important trading city?

15.4 Check your learning

1   What incentives might Palmyra have offered traders to encourage them to divert their routes through Palmyra?
2   Go online to watch some clips from the BBC film *The Silk Road* to consolidate your understanding.

15.5 Trade and economy in Palmyra

An important source of evidence for Palmyrene trade comes from over 2000 inscriptions found on the site, commemorating individuals who assisted the formation and operation of the caravans. The inscriptions were placed on the **plinths** or pedestals of statues in their honour, which were erected along the Great Colonnade or in the Agora (see Source 5). Written in both Greek and the Palmyrene **dialect** of **Aramaic**, they record the names of some of the caravan chiefs who were members of the city's **elite**. Source 9 is an example.

SOURCE 9

Statue of Marcus Ulpius Yarhai, son of Hairan, son of Abgar, dedicated by the caravan that came from Charax Spasinou, as he has helped in all things, in his honor, during the time that Zabdela, son of Yadaya, was chief of the caravan. In the month Adar, year 480.

Statue inscription, cited in Albert Dien, 'Palmyra as a caravan city', *The Silk Road*, vol. 2, issue 1, June 2004, p. 23

The inscriptions reveal that Palmyrene merchants set up branches in other cities, some as far away as Rome and Egypt. Palmyra is also recorded as maintaining archers mounted on camels and horses to protect caravans against bandits among the desert nomads. Although there are several such inscriptions, they give little information on the nature of the goods carried. However, they do give some evidence about trade routes. For example, one route went from Charax on the Persian Gulf, along the Euphrates River to a river port such as Dura-Europos and then overland to Palmyra (see Source 7). Two inscriptions record ships owned by Palmyrenes that arrived from north-west India. In fact, the route from China preferred by the Palmyrenes seems to have been via the Indian ports and up the Persian Gulf rather than overland through Iran and central Asia. Caravans starting at Palmyra took the same route in reverse. Some inscriptions mention Palmyrene merchants embarking at Charax and sailing to the ports of northern India to engage in trade. Several funerary **reliefs** from Palmyra depict ships as well as the tomb owners.

Caravan organisation

The Palmyrene inscriptions reveal a little of the organisation of caravans and the types of Palmyrene citizens who were involved in the caravan trade. There appear to have been a few roles undertaken, particularly:

- the *synodiarch* – the commander or leader of the caravan, later called the *archemporos*. He was a professional or expert in caravan organisation who was hired by a group of merchants to assemble the caravan and conduct it to its destination and back again. He would have been responsible for securing food and water supplies.

- the *strategoi* – the people responsible for the caravan's security, usually an armed escort. They would have carried out diplomatic negotiations with the relevant authorities to smooth the passage of the caravan along its route.

plinth
a square block, usually of stone, used as the base for a statue or pillar

dialect
a particular form of a language that is peculiar to a specific region or social group

Aramaic
a Semitic language originally of the ancient Arameans, but which came to be used widely by non-Aramean peoples throughout south-west Asia

elite
the group of people considered to be superior to others because of their social standing, wealth and gender

reliefs
wall sculptures, sometimes painted, where the sculpted or carved elements are left attached to a solid background, giving the impression that the relief has been raised above it

Some scholars have argued for a further role, that of the caravan patron. According to this view, the patron was likely to have been an entrepreneur, the person who provided the funds, the animals and, when needed, the armed escort to make sure that the caravan reached its destination safely. Marcus Ulpius Yarhai (referred to in Source 9) is thought to have been a patron.

More recently, another reconstruction of the evidence has been suggested. This view argues that the person who provided the financial backing, the logistical support and led the caravan was likely to have been the *synodiarch* himself. An inscription from the 3rd century AD recording a person called Julius Aurelius Salamallat, who returned a caravan to Palmyra and paid for it himself, seems to support this view. He must have been a rich, influential man to accomplish this, which suggests that caravan leaders could have been wealthy enough to mount a caravan expedition without the backing of a patron. It might have been the case that when some merchants wished to send their goods on a trading caravan, they would approach one of the wealthy men of Palmyra. He would organise the caravan and lead it himself. The inscriptions, then, were a method by which the merchants could display their gratitude to the caravan leaders, especially if they did something out of the ordinary to help them.

The Tariff of Palmyra

The permission granted by the emperor Hadrian to Palmyra to set and collect its own taxes when he declared it a 'free city' in AD 129 was the background for the first customs tariff. The *Portoria Palmyrenorum* (Tariff of Palmyra) was engraved on a large stone slab or **stela** measuring 175 by 480 centimetres and dates to AD 137. It was set up in the tariff court within the Agora in Palmyra and lists the various municipal taxes payable on imports and exports of the caravan trade, as well as different types of merchandise in the market. The greatest revenue was derived from customs duties (or taxes) on items such as laden and unladen camels, fat, salted provisions, leather, wine, corn, straw and pine cones. Source 11 is an extract from the Tariff of Palmyra.

■
stela (*pl*. stelae)
an upright stone slab or pillar bearing inscriptions or designs and serving as a monument

SOURCE 10 A modern camel caravan travelling on the Silk Road in China

§1 From those who import male slaves into Tadmor or its territory, the Customs agent shall collect 22 denarii per slave.

§2 For each slave exported, 22 denarii.

§5 The Customs agent himself shall levy a duty in respect of each camel load: 3 denarii for each camel-load entering Tadmor, and 3 denarii for each camel-load leaving Tadmor.

§6 For each donkey-load imported or exported, he shall collect 1 denarius.

§7 Wool dyed purple. For each fleece imported or exported, 3 denarii.

§8 For each camel-load of aromatic oil imported in alabaster jars, 25 denarii.

…

§13 Per camel-load of olive oil comprising four goatskin bags, 10 denarii at importation and exportation.

Hironori Asakura, 'Customs Tarriff of Palmyra', *World History of the Customs and Tariffs, Brussels:* World Customs Organization, 2003, p. 70

§ (section mark) used to refer to a particular section of a document

The caravan trade was not the only source of income available to Palmyra. For example, farming and animal herding were known to have taken place to the north-west of the city. Crops grown include barley, figs, olives and pistachios. It is thought that the city owned most of the land and that grazing taxes were levied on pastoralists.

Ottoman Empire a vast Turkish dominion in south-west Asia, north-east Africa and south-east Europe, lasting from AD 1200 until the end of World War I

The Tariff of Palmyra in the Hermitage Museum

The Tariff of Palmyra was discovered in 1881 by a Russian traveller and amateur archaeologist, who published the inscription in 1884. At that time, Syria was a province of the **Ottoman Empire**, which gave permission for the tariff to be transported to the Imperial Hermitage in Saint Petersburg to be studied. The stela has been held in the Hermitage since 1903.

SOURCE 12 The remains of the Tariff of Palmyra at the Hermitage museum in Saint Petersburg, Russia

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15.5 Understanding and using the sources

1 According to Source 9, what did Marcus Ulpius Yarhai do to deserve a statue in his honour?

2 Who else is mentioned in the source? What was their role?

3 Using Source 11, what is the most valuable import or export? Why?

4 Why would a woollen fleece dyed purple have been so valuable?

15.5 Check your learning

1 Read the full text of the Tariff of Palmyra. Search online for 'MIT Palmyra tax law'.

2 Find out what a denarius would be worth in today's **currency**. Use it to calculate the value of one purple-dyed woollen fleece and one camel load of olive oil.

3 Research the purple dye industry of the ancient world. What was its significance?

currency the quality of information being up to date or current in the scholarship

Cultural exchange: East meets West in Palmyra

Palmyra's location between the East and the West was reflected in its culture. The Eastern cultures included those of the countries to the east of Palmyra, including the Parthian Empire, China and India. To the west were Egypt, Greece and Rome. The language, religion, art and architecture of Palmyra all reflect the various influences of these cultures.

Language

Palmyra was a bilingual city, its two languages being Greek and a Palmyrene dialect of Aramaic. Other languages such as Arabic would have been heard in the bazaars and temples, spoken by the many people living in the city connected to its trading pursuits. Despite the connection with Rome for a large part of its history, Latin was not in common use. The few Latin inscriptions come from the later years of the city. Palmyra had two systems of writing – a **monumental** script and Mesopotamian **cursive**. Evidence comes from over 2000 inscriptions found throughout the city, especially the bilingual inscription on the Tariff of Palmyra. The use of a local language in inscriptions was unparalleled in Roman Syria and reflects the unusual status the city enjoyed within the empire.

Art

The art of Palmyra was clearly influenced by Greek and, later, Roman art, but like other features of Palmyrene culture it had its own individual style. Artists did not attempt to convey personal characteristics of the people or gods they were depicting, resulting in forms that are stiff and rigid. **Bas-relief** was the common form of sculpture and statues tended to be two-dimensional, static and often used architecturally, placed against pillars or walls. The best examples are the reliefs of the deceased that formed part of the decoration of family **mausoleums**.

Palmyrene funerary reliefs show a fusion of eastern and western influences. The funerary banquet was a Roman **motif**, but the subjects are often shown wearing Greek or sometimes Parthian dress. The **frontality** could have been derived from Egypt, or from Parthia or even Syria. Persian and Eastern influences can be seen in the large eyes with two concentric circles to mark the pupils and are also present in the heavily ornate jewellery.

- **monumental**
  relating to a monument or a large impressive structure

- **cursive**
  a script that has joined characters

- **bas-relief**
  a type of sculpture in which the figures are raised up from a flat background to give a 3D effect

- **mausoleum**
  a stately or impressive building for burial of the dead

- **motif**
  dominant or recurring idea or image in an artistic work that forms a pattern

- **frontality**
  the depiction of the front view of figures or objects in a work of art

SOURCE 13 A sculptured relief of the funeral banquet of Marle and Bolaia from Palmyra, 2nd century AD

Architecture

The architecture of Palmyra is also reflective of Eastern and Western influences. Evidence of early architecture, mostly deposits of architectural mouldings, **capitals** and other fragments in the **Hellenistic** style, comes from the 1st century BC. The early years of the 1st century AD saw a change in orientation that can be seen best in the Temple of Bel, which was dedicated in AD 32, but was added to over the 1st and 2nd centuries AD. The temple's ground plan comes from the Eastern ritual tradition. For example, the cella features a bent-axis approach to the main shrine, which would have required priests celebrating the ritual to make a 90-degree turn after entering the sanctuary in order to approach the offering table. Other architectural elements of the temple, however, are Graeco-Roman, such as the **fluted** Corinthian columns and the decoration of the **frieze** and roofline. The temple bears masons' marks and graffiti made by artisans of various backgrounds, including Greeks, Romans and local Palmyrenes.

Religion

The religion of Palmyra seems to have been influenced mainly by the East. Its two main deities belonged to two different Eastern traditions: Baal Shamin was Syro-Phoenician in origin, while Bel was Mesopotamian, related to Bel Marduk, the major god of the Babylonian **pantheon**. The **cult** of Nabu at Palmyra was also Babylonian, associated with Marduk, and a number of other Babylonian deities such as Nanai and Herta were honoured in Palmyra.

Palmyra had deities of its own, such as the guardian of the spring, Yarhibol; the god of the sun, Malakbel; and the moon god, Aglibol. Deities from neighbouring regions were also worshipped in Palmyra, including Astarte, Baal Hamon and Atargatis. The Arab deities worshipped include Azizos and Allat. A statue of Allat in which she strongly resembles the Greek goddess Athena has been found. Arab people living in the countryside seem to have worshipped camel and horse-riding gods with Arab names. These have also been found in the city, showing the cultural influence of the semi-nomadic desert Arab tribes on the religion of Palmyra.

SOURCE 14
A 1st-century AD limestone sculpture of the Palmyrene gods Baal Shamin (centre), Aglibol (left) and Malakbel (right)

■ **capital**
the decorated top part of a column

■ **Hellenistic**
relating to Greek and Mediterranean history between 323 and 31 BC

■ **fluted**
grooved or ridged

■ **frieze**
a wide, horizontal band of decoration, either of a painting or a sculpture, on a wall

■ **pantheon**
all the gods of a people or religion

■ **cult**
a system of religious worship dedicated to a particular god

Art
- Greek – dress of funerary relief subjects
- Persian/Parthian - seen in frontality, dress and eyes
- Roman - funerary banquet motif

Language
- Palmyrene – a dialect of Aramaic
- Latin – minimal use
- Greek – used by the wealthy for commerce and diplomacy
- Two scripts – monumental and Mesopotamian cursive
- Arabic – used after Arab conquest; a Palmyrene dialect evolved

EASTERN AND WESTERN INFLUENCES

Architecture
- Graeco-Roman style, e.g. Corinthian columns
- Semitic elements, e.g. sanctuary of Temple of Bel

Religion
- Semitic, e.g. Bol/Baal
- Mesopotamian, e.g. Bol/Bel from Babylon
- Arabic, e.g. Allat, Azizos
- Roman – Christianity in 4th century AD

SOURCE 15 A summary of Eastern and Western influences on Palmyra

15.6 Understanding and using the sources

1   List the features of Palmyrene art that can be identified in Sources 13 and 14.
2   Using Source 5, identify the different cultural influences on the architecture of Palmyra.

15.6 Check your learning

1   Draw up a diagram that summarises the information in Source 15 using the categories 'Eastern' and 'Western'. You might like to divide them further into categories such as Mesopotamian, Egyptian, Parthian and so on.
2   Using what you have learnt in this section, write a response to the following question: 'How was Palmyrene culture affected by Eastern and Western traditions?' (Explain: Relate cause and effect, make the relationships between things evident, provide why and/or how.)
    To help you plan your response:
- identify the aspects of the topic you will address, e.g. art, religion, or Greek, Roman, Babylonian etc.
- use these aspects to structure your answer
- show how aspects of Palmyrene culture were affected by Eastern and Western traditions
- use specific evidence from the sources to support your discussion.

15.7 Palmyra and Rome

Palmyra had a long and varied association with Rome. Palmyra's strategic position in the Middle East between the might of Rome and whichever power ruled the east was always going to determine its future. The city's role in east–west trade was only part of the power relations that existed in this period. While Palmyra's interests coincided with those of Rome, it enjoyed a degree of independence; however, if those interests came into conflict with Roman interests, as would happen in time, that independence would be threatened.

One of Palmyra's earliest contacts with Rome dates to the 1st century BC. When the Roman general Pompey established the province of Syria in 64 BC, after annexing the Seleucid Kingdom, Palmyra managed to remain independent. By 41 BC, the situation had changed, and we have the first literary evidence of the city when it appears in the Roman historian Appian's record of an attack by Mark Antony, another Roman general.

SOURCE 16

… Antony sent a cavalry force to Palmyra, situated not far from the Euphrates, to plunder it, bringing the trifling accusation against its inhabitants, that being on the frontier between the Romans and the Parthians, they had avoided taking sides between them; for, being merchants, they bring the products of India and Arabia from Persia and dispose of them in the Roman territory; but in fact, Antony's intention was to enrich his horsemen. However, the Palmyreans were forewarned and they transported their property across the river, and, stationing themselves on the bank, prepared to shoot anybody who should attack them, for they are expert bowmen. The cavalry found nothing in the city. They turned round and came back, having met no foe, and empty-handed.

Appian, *The Histories*, 5.1.9

Around AD 14, Palmyra was annexed by Rome and was included in the province of Syria as a tributary city. Far from being a negative event, this marked a period of prosperity and privileged status for the city and the region it controlled. Although a Roman legion was stationed at Palmyra soon after its annexation, no officials were sent to govern the city. It was during this period that Palmyra developed into a major trading city with a network of merchants working in what were effectively Palmyrene colonies in neighbouring trading cities.

The emperor Hadrian visited Palmyra in AD 129 and declared it a free city. This status gave the city the right to set and collect its own taxes. Later in the century, garrisons were stationed there, including a cavalry division. When the **Severan** Dynasty established a new province in the area called Syria Phoenice, late in the century, Palmyra was included in it. The city was given preferential treatment, seen in its elevation to the status of a *colonia*, and the replacement of Greek governmental institutions with Roman ones. The citizens of Palmyra gained equal rights with those of Rome and, significantly, were exempted from paying taxes to Rome. It was during this time that the Great Colonnade was enlarged and more temples were erected. In AD 229, the emperor Severus Alexander visited the city.

Severan
a Roman imperial dynasty founded by the Roman general Septimius Severus, in power over the Roman Empire between 193 and 235 AD

Odaenathus, King of Palmyra

Septimius Odaenathus was a member of Palmyra's ruling family and a Roman citizen who had attained **consular** rank before becoming the first king of the Palmyrene kingdom in AD 260.

In AD 224, thirty-six years before Odaenathus became king, the Persians established the Sassanid monarchy, which would go on to be a stronger enemy of Rome than the Parthians had been. This new power situation greatly disrupted the eastern caravan trade with its frequent military campaigns against the Romans. In the middle of the 3rd century, the Persian king Shapur I launched a series of invasions of Roman territory, which culminated in the defeat and capture of Emperor Valerian in AD 260. At this time, Dura-Europos, the important city on the Euphrates River, was captured and destroyed by the Persians. Palmyrene trading outposts along the Euphrates were also lost. Palmyra was therefore threatened militarily and commercially. The Roman authorities were unable to send assistance and Palmyra no doubt felt that, to survive, it had to take action.

Odaenathus, maintaining his loyalty to Rome, formed an army of Palmyrenes and Syrian peasants to fight against Shapur I. In AD 260, he attacked and defeated Shapur I's army as it was returning home from an expedition, preventing it from crossing back over the Euphrates. He then sided with Valerian's son and successor, Gallienus, who was facing a rebellion and quashed it. As a result, Odaenathus restored a deteriorating situation in the East, and preserved Roman rule. He was given the title *corrector totius Orientis* ('governor of all the East') and although Palmyra officially remained part of the Roman empire, it actually became a Roman allied state instead of a provincial city. Odaenathus' loyalty to Rome paid off in the increasing status of Palmyra in the empire.

A question regarding the source of Odaenathus' military power has been raised by some historians. It is thought that his troops would have originally been from Palmyra itself, probably the caravan police, or militia. This would have provided him with experienced troops, which he could expand into a larger force. Eventually, regular Roman troops in the area would have come under his command as well. With these forces, Odaenathus reclaimed all Roman lands that had been occupied by the Persians since AD 252. He then declared himself king of Palmyra and, in time, 'king of kings', and crowned his son Hairin I as co-ruler. By AD 263, Odaenathus' kingdom of Palmyra effectively controlled the **Levant**, Mesopotamia and eastern Anatolia (see Source 3).

SOURCE 17 A limestone bust thought to be of Odaenathus, from Palmyra c. AD 230–250

Odaenathus' rapid rise to power came to a sudden end when he and his son Hairin I were assassinated in AD 267 as they were returning from a campaign in Asia Minor. He was succeeded by his younger son, Vaballathus, the child of his second wife, Zenobia. Odaenathus' achievements are recorded in the *Historia Augusta*, a late Roman collection of biographies. Source 18 is an extract from the biography of the Roman emperor Gallienus.

SOURCE 18

One excellent deed of his [Gallienus], to be sure, is mentioned with praise. For in the consulship of his brother Valerian and his kinsman Lucillus, when he learned that Odaenathus had ravaged the Persians, brought Nisibis and Carrhae under the **sway** of Rome, made all of Mesopotamia ours, and finally arrived at Ctesiphon, put the king to flight, captured the **satraps** and killed large numbers of Persians, he gave him a share in the imperial power, conferred on him the name Augustus, and ordered coins to be struck in his honour, which showed him **haling** the Persians into captivity. This measure the senate, the city, and men of every age received with approval.

Unknown, *Historia Augusta*, 12.1

sway
control or influence

satrap
a provincial governor in the ancient Persian Empire

haling
dragging forcibly

15.7 Understanding and using the sources

1 In Source 16, how did Mark Antony justify his attack on Palmyra?
2 What did the Palmyrene merchants do when they were warned of Mark Antony's approach?
3 What does this suggest about the development of Palmyra at this stage of its history?
4 Using Source 18, list the deeds that earned Odaenathus the praise of the Romans.
5 What rewards did he receive? What was the significance of giving him the title 'Augustus'?

15.7 Check your learning

1 What was the importance of Syria in the Roman Empire in 41 BC?
2 What special privileges did Rome grant to Palmyra? Why?
3 Complete a sequence chart to record the main events in Palmyra's relationship with Rome from 41 BC to the death of Odaenathus.
4 Find out about Odaenathus' administration of Palmyra. How was the city governed while Odaenathus was engaged in his many military campaigns?
5 There is much debate about who was responsible for Odaenathus' assassination. Research the theories and decide which one you think is most likely. Search online for 'Odaenathus assassination'.

Queen Zenobia

Zenobia, queen of the Palmyrene Empire in the 3rd century AD, challenged the authority of Rome in the period known as the Crisis of the Third Century (AD 235–284). Under her leadership, Palmyra would achieve its greatest power and influence, if only for a brief time.

Zenobia came from a noble Palmyrene family and was the second wife of Odaenathus, the first king of Palmyra. After her husband's assassination in AD 267, Zenobia became **regent** for her young son, Vaballathus. She went on to exercise considerable power in her own right. She claimed ancestry from Dido of Carthage as well as Cleopatra VII of Egypt. Several ancient sources record her life and period of power, including the historian Zosimus (c. AD 490) and the *Historia Augusta* (c. 4th century AD).

In the early years of Zenobia's ascendancy, it was likely that she continued to rule the territories that had been under her husband's control. There appears to have been no local opposition to her assumption of power. However, at some point the queen decided to strengthen her authority by military means. Whatever her motivation, Zenobia sent her forces to attack Bosra, capital of the province of Arabia Petraea. The attack was successful and the Roman governor was killed.

regent
a person appointed to rule in the place of a monarch who is a minor

PALMYRENE EMPIRE IN AD 271

Source: Oxford University Press

SOURCE 19 The Palmyrene Empire at its height in AD 271

In the late AD 260s, when Rome was preoccupied with struggles over the succession, Zenobia took advantage of the situation to launch a campaign into Egypt, an important province of the Roman Empire. This was a provocative act because Rome relied on Egypt for its grain supply. Zenobia's general Zabdas led the Palmyrene forces, which were eventually driven out of Egypt by the Roman army. The Roman pursuit of the Palmyrene army into Syria was stopped by a successful counterattack in which the Roman army was defeated and Egypt became part of the Palmyrene Empire. Zenobia then took possession of the rest of the Levant and some parts of Asia Minor by either military or diplomatic means. By AD 271 the Palmyrene Empire had reached its height (see Source 19).

Zenobia and Rome

Despite Zenobia's establishment of an empire in opposition to Rome, it does not appear that she envisaged a complete revolt from Rome. The succession issue in Rome had been solved in the person of Emperor Aurelian, and Zenobia paid him due homage by including his name in inscriptions and official correspondence. She also issued coins from Antioch bearing both his image and that of her son, Vaballathus, as joint rulers of Egypt. Aurelian is called *Augustus* (Emperor), while Vaballathus is called variously *Rex* (King), *Imperator* (Commander) and *Dux Romanorum* (Leader of the Romans).

However, during AD 271, Aurelian's portrait disappeared from coins and was replaced with coins bearing the names of Vaballathus and Zenobia with the imperial titles *Augustus* and *Augusta*. This was done without permission from Rome since the Roman **imperial family** were the only ones allowed to use these titles. Presumably from this time, the break with Rome was seen as irretrievable and Zenobia was making a clear statement that she meant to rule an eastern empire.

SOURCE 20
A Roman **antoninianus** bearing the image of Zenobia as empress and her title, *Augusta*

antoninianus
an ancient Roman coin originally worth two denarii

imperial family
the family of an emperor or empress

Revolt from Rome

By AD 272, Aurelian was ready to take on Zenobia and reclaim Rome's eastern provinces. He marched on the Palmyrene Empire, sending another force to recapture Egypt. The Roman army marched through Asia Minor meeting little resistance. The Palmyrene army, led by Zabdas, was defeated at Antioch, and Aurelian marched further south to meet Zenobia at the Battle of Emesa (modern Homs). The Palmyrene army of 70 000 had initial success, but then withdrew to Palmyra to prepare for a siege. The Roman army blockaded the city's food-supply routes. Aurelian sent a letter to Zenobia demanding her surrender, along with all of her jewels, gold, silver, silks, horses and camels. Source 21, quoted in the *Historia Augusta*, is Zenobia's reply.

'From Zenobia, Queen of the East, to Aurelian Augustus. None save yourself has ever demanded by letter what you now demand. Whatever must be accomplished in matters of war must be done by valour alone. You demand my surrender as though you were not aware that Cleopatra preferred to die a Queen rather than remain alive, however high her rank. We shall not lack reinforcements from Persia, which we are even now expecting. … If those forces, then, which we are expecting from every side, shall arrive, you will … lay aside that arrogance with which you now command my surrender …'

Unknown, 'The Life of Aurelian', *Historia Augusta*, Part 2, 27, 2–6

Zenobia's fate

The reinforcements from Persia mentioned by Zenobia in her letter to Aurelian never arrived. She fled Palmyra on a camel intending to reach Persia and beg for help. Aurelian sent cavalry to intercept her, and she was captured trying to cross the Euphrates River. Zenobia, Vaballathus and members of the Palmyrene court were put on trial in Emesa. Most of the latter were executed, but Zenobia and her son were taken to Rome. Her subsequent fate is unclear as the sources disagree about the extent of her punishment. There is some agreement, however, that Zenobia was paraded through the streets of Rome as part of Aurelian's **triumph** in AD 274. It is also possible that Aurelian permitted Zenobia and her family to live in Rome and some sources even write of her remarriage.

With Zenobia's defeat came the end of Palmyra's brief ascendancy. When another rebellion broke out in Palmyra in AD 273 and 600 Roman archers stationed in the city were slaughtered by the Palmyrenes, Rome retaliated. Large numbers of the population were executed and parts of the city were destroyed.

■ **triumph**
a Roman general's ride into ancient Rome after a victory

■ **appropriation**
the action of taking or using something for one's own purpose, usually without the owner's permission

15.8 Check your learning

1 Find out about Dido of Carthage and Cleopatra VII of Egypt. Why would Zenobia have claimed a connection with these women?
2 Research the historian Zosimus (c. AD 490) and the *Historia Augusta* (c. 4th century AD). How far are we able to trust the information these sources provide on Zenobia?
3 The coins of Zenobia and Vaballathus are examples of their **appropriation** of Roman symbols and titles. Look for images of both sides of these coins and research their significance.

15.8 Profile

Palmyra's significance in the modern world

After the defeat of Palmyra by the Romans in AD 273, the city continued to function, but on a greatly reduced scale. Trade continued along other routes that had been in use even when Palmyra was a significant hub on the Silk Road. The city was partially restored by Emperor Diocletian about 20 years after its defeat by Aurelian, becoming a military outpost of the Roman Empire. Since the conquest by the Muslim army in the 7th century AD, Palmyra has remained part of the Middle East to this day.

In recent years, Palmyra has featured in world news as a casualty of the Syrian Civil War.

Since 2015, several of the buildings featured earlier in this chapter no longer exist, or are very badly damaged. Possession of Palmyra has passed from the Syrian Arab Army to militant forces of the Islamic State of Iraq and Syria (**ISIS**) and back again.

The impact on Palmyra has been substantial. In 2015, ISIS militants destroyed the temples of Baal Shamin, Bel and Elahbel, and the Monumental Arch. In 2017, following their reoccupation of Palmyra, ISIS further destroyed the Tetrapylon and severely damaged the **façade** of the Roman Theatre. Funerary sculptures were also damaged by a hammer attack. Tragically, Khaled al-Asaad, Palmyra's head of antiquities, was publicly beheaded in August 2015 for refusing to reveal where he had hidden priceless artefacts that he had quietly removed from the city for safe-keeping.

International concern for the fate of Palmyra and its people has been expressed in many forums. For example, solidarity and support were shown in the 3D replica of the Monumental Arch erected in Trafalgar Square and elsewhere around the world.

Zenobia in the modern world

Zenobia's critical role in the fortunes of ancient Palmyra has ensured her survival into modern times, albeit as a figure of **legend**. Works such as the *Historia Augusta* and Edward Gibbon's history of the Roman Empire, in which she appears prominently, have contributed to these romantic representations. In these works Zenobia is depicted as a great warrior queen who, like Boudicca and Cleopatra before her, took on the might of the Roman Empire and nearly prevailed.

The intellectual and cultural **milieu** of her court has been a model for much later monarchs such as Catherine the Great of Russia. Zenobia has inspired many in the artistic world and while she is known in the West, she is more prominent in the Middle East. Here she is a heroine and a national symbol. She appears in books, in operas, on banknotes and in television series. Like many romantic historical figures, there is a Zenobia for everyone.

In Source 24, the great 18th-century English writer of *The Decline and Fall of the Roman Empire*, Edward Gibbon, offers an assessment of Zenobia.

ISIS
Islamic State of Iraq and Syria: a fundamentalist, jihadist terrorist group, also known as IS, ISIL and Daesh

façade
the front of a building

legend
an old story about famous people and events, but not necessarily true

milieu
social environment

SOURCE 22 *Queen Zenobia's Last Look Upon Palmyra*, a painting by Herbert Schmalz, 1888

SOURCE 23 Anita Ekberg as Zenobia in the 1959 Italian film *Nel Segno di Roma* (or *Sign of the Gladiator*)

Modern Europe has produced several illustrious women who have sustained with glory the weight of empire; nor is our own age destitute of such distinguished characters … Zenobia is perhaps the only female whose superior genius broke through the servile indolence imposed on her sex by the climate and manners of Asia … She claimed her descent from the Macedonian kings of Egypt, equalled in beauty her ancestor Cleopatra, and far surpassed that princess in chastity and valour. Zenobia was esteemed the most lovely as well as the most heroic of her sex. She was of a dark complexion … Her teeth were of a pearly whiteness, and her large black eyes sparkled with uncommon fire, tempered by the most attractive sweetness. Her voice was strong and harmonious. Her manly understanding was strengthened and adorned by study. She was not ignorant of the Latin tongue, but possessed in equal perfection the Greek, the Syriac, and the Egyptian languages. She had drawn up for her own use an epitome of oriental history, and familiarly compared the beauties of Homer and Plato under the tuition of the sublime Longinus.

Edward Gibbon, *The History of the Decline and Fall of the Roman Empire*, Chapter 11

15.8 Profile tasks

1 How is Zenobia represented in Sources 22 to 24?

2 What possible evidence might each be drawing on to produce their representation?

3 To what extent do these representations reflect the **perspectives** of the composers and their times?

4 Find other modern representations of Zenobia, e.g. the sculptures of Harriet Hosmer, *The Chronicle of Zenobia* (2006) by Judith Weingarten, or the painting *Queen Zenobia Addressing her Soldiers* by Giambattista Tiepolo. Interrogate these representations with the same questions you have used for the sources in this section.

5 Watch part of *Nel Segno di Roma* by searching online for 'Sign of the Gladiator 1959'.

6 Investigate the present state of Palmyra. There are many online news reports.

7 Using what you have learnt in this chapter and in the Profile section, the suggestions in Source 24 and any others you think relevant, construct a response to the following question: 'Account for the significance of Palmyra in its own time and in the present.' (Account for: state reasons for, report on.)

To help you plan your response:

- identify the aspects of the topic you will address
- use these aspects to structure your answer
- state reasons for the significance of Palmyra in ancient and modern times
- use specific evidence from the sources to support your discussion.

■ **perspectives**
the points of view held by individuals or groups about the past that are based on their contexts and motivations

Palmyra has occupied a strategically important position at many times of its history. An accident of geography has had both positive and negative implications for its development and survival. It benefited from its location on the great ancient trading network of the Silk Road, but it was also at the mercy of the great powers of the East and West. Under Odaenathus and Zenobia, Palmyra enjoyed a brief moment of glory before becoming just another small player in its region. Today, Palmyra has a very different significance in the world as a result of its being caught up in the present conflict in Syria. Its significance has been recognised by its inscription on the World Heritage List but, sadly, that is no guarantee for its continuing survival.

FOR THE TEACHER

Check your obook assess for the following additional resources for this chapter:

Answers	Teacher notes	Class test	assess quiz
Answers to each *Check your learning*, *Understanding and using the sources* and *Profile task* in this chapter	Useful notes and advice for teaching this chapter, including syllabus connections and relevant weblinks	Comprehensive test to review students' skills and knowledge	Interactive auto-correcting multiple-choice quiz to test student comprehension

A relief from the palace at Nimrud,
c. 728 BC, featuring Assyrian soldiers

PART
C

Features of ancient societies

SOURCE 1 An Attic red figure kylix (drinking bowl) depicting women in their apartment

16

Women in ancient Greece and Rome

FOCUS CONCEPT & SKILLS

Perspectives

From a modern perspective, the lives of women in the Western world are vastly different from those lived by women in ancient Greece and Rome. Things women take for granted today, such as the right to work and vote, were generally unknown to women back then. Considering historical perspectives, we need to understand the social and cultural contexts of women in ancient Greece and Rome, in particular the nature of the sources about them that were mostly produced by men. We must also be aware of the gaps in the evidence and other limitations of the sources.

LEARNING OUTCOMES

1. Analyse sources for evidence about ancient Greek and Roman women.
2. Identify and explain the strengths and weaknesses of the sources.
3. Describe the family, economic, religious and political roles of ancient Greek and Roman women.
4. Examine the significance of influential ancient Greek and Roman women in their times.
5. Compare the lives of ancient Greek and Roman women.

The nature of the sources

There is a range of sources available for women in both ancient Greece and ancient Rome. **Frescoes**, pottery and figurines frequently depict aspects of their family lives. For some women of high status we have statues and coins. Evidence of their death can be found in **sarcophagi,** grave **stelae** and tomb inscriptions.

Most of our evidence for women in ancient Greece and Rome comes from written sources: literary, political, legal and artistic texts. Plays and poetry feature women prominently. Historians have provided commentaries about women, and they often figure in legal documents. However, these documents were mostly written by men of the upper social classes and therefore reflect a narrow male perspective.

Women's voices are hard to find. The reasons for this vary; in some cases a lack of access to education is to blame, in others social opposition to women's attempts to write. But in many cases, whatever sources might have existed have simply not survived. Some women in ancient Greece and Rome certainly wrote, though, because we have examples of their poetry, prose and letters, and we have the names of the women who wrote them.

SOURCE 2 The 4th-century
BC grave stela of Polyxene

16.1 Check your learning

1 Find out about some of these female writers of the ancient world: Sappho, Aesara, Julia Balbilla, Pamphile of Epidaurus, Sulpicia I and II.
2 The Vindolanda writing tablets from the Roman fort at Vindolanda in the United Kingdom contain the earliest surviving letters in a woman's hand. Find out what Claudia Severa wrote to her sister, Sulpicia Lepidina, the wife of Flavius Cerialis.

Attitudes to women in ancient Greece and Rome

Women were a popular topic in the writings of men in ancient Greece, but did not appear as frequently in the works of Roman writers. The Greeks had conflicting views of women. They were regarded as highly important as the mothers of citizens and for passing on legitimacy, but they were protected and sheltered, even in their own homes, from the prying eyes of men. They had limited access to society and the activities that took place there. In the texts written by contemporary men they were often seen as representing the forces of chaos. They were also frequently depicted as highly sexual beings who could not control their sexuality and therefore had to be restricted for their own good.

Although Roman women were more highly regarded as wives and mothers than Greek women, the attitudes of Roman men were similar to those of the Greeks. They had very fixed views of what women should be like. Such views were challenged during the **imperial period**, when Roman women of the **imperial family** were able to exert considerable influence over public affairs through their relationship with the emperor.

Source 3 provides examples of some of the male attitudes to women in ancient Greece and Rome.

SOURCE 3 Greek and Roman male attitudes to women

WRITER	TEXT	EXTRACT
Demosthenes Greek statesman and orator of Athens 384–322 BC	*Against Neaera*, 122	For this is what living with a woman as one's wife means – to have children by her and to introduce the sons to the members of the clan … and to betroth the daughters to husbands as one's own. Mistresses we keep for the sake of pleasure, **concubines** for the daily care of our persons, but wives to bear us legitimate children and to be faithful guardians of our households.
Euripides Greek playwright c. 480–406 BC	*Melanippe* [Spoken by Melanippe]	Women run households and protect within their homes … and without a woman no home is clean or prosperous. Consider their role in religion, for that, in my **opinion**, comes first.
Xenophon Greek historian and soldier c. 430–354 BC	*Oeconomicus*, 7.22–24	For the god made a man's body and soul better able to endure the cold and heat of travel and military service, so that he assigned to him the outdoor work. But the god endowed the woman with a body less able to endure these hardships and so … I believe that he assigned the indoor work to her … the god made the nursing of young children instinctive for women and gave her this task, and he allotted more affection for infants to her than to a man.
Menander Greek playwright 342 – c. 290 BC	*Synkrisis*, 1.209–210	A man who teaches a woman to write should recognise that he is providing poison to an asp.
Juvenal Roman poet 1st and 2nd centuries AD	*Satire VI*	There never was a case in court in which the quarrel was not started by a woman. If Manilia is not a defendant, she'll be the **plaintiff**; she will herself frame and adjust the pleadings; she will be ready to instruct Celsus himself [a Roman lawyer] how to open his case, and how to urge his points.
Aulus Gellius Roman author c. AD 125 – c. 180	*Attic Nights*, 1.6.1	If we could get on without a wife, Romans, we would all avoid that annoyance; but since nature has ordained that we can neither live very comfortably with them nor at all without them, we must take thought for our lasting well-being rather than for the pleasure of the moment.
Pliny the Elder Roman naturalist, author, philosopher AD 23–79	*Natural History*, 28.23	…there is no limit to the marvellous powers attributed to [menstruating] females … that linen boiling in the **cauldron** will turn black, that the edge of a razor will become blunted, and that copper vessels will contract a fetid smell … on coming in contact with her.
Livy Roman historian 59 BC – AD 17	*History of Rome*, 34.2 [Response to women objecting to limited use of luxuries]	If we had made it a rule to uphold the rights and authority of the husband in our own households we should not now have this trouble with the whole body of our women … our liberty of action, which has been checked and rendered powerless by female **despotism** at home, is actually crushed and trampled on here in the Forum.

■ **concubine**
a secondary wife or mistress

■ **opinion**
a person's belief, judgement or way of thinking about something that is not necessarily substantiated by facts

■ **plaintiff**
a person bringing a case against another in court

■ **cauldron**
a large metal pot with a lid and handle, used for cooking over an open fire

■ **despotism**
the use of absolute power, often in a cruel manner

16.1 Understanding and using the sources

1 Briefly explain the attitude to women revealed in Source 3.
2 What do these sources reveal about the roles women were expected to perform in society?
3 What do the sources suggest about aspects of women's lives and conduct that men disapproved of?
4 What possible conclusions can be drawn about male attitudes to women from these sources?
5 Comment on the contexts of the writers of these sources. What other sources would be useful to construct a picture of ancient Greek and Roman attitudes?

Social status of women

In the **Classical period**, the two most powerful Greek city-states were Athens and Sparta. In Athens, men took responsibility for public life, while Athenian women appear to have led very restricted lives, as described in Source 4. Sparta was renowned as a great military power, and everyone, including women, served this military end. The status of Spartan women was therefore very different.

Women in ancient Rome enjoyed freedoms generally denied to their Athenian counterparts. While men dominated public life as elsewhere in the ancient world, Roman women dominated social life.

Status of women in ancient Greece

There were clear divisions in Greek society, the most notable being between men and women. Women were not a **homogeneous** group; there were different classes of women according to wealth, status and where they lived. Wealthy women of the citizen class were restricted and led secluded lives. Despite restrictions on their political and public roles, women had status as wives, as holders of certain legal rights, as mothers who bore and raised male citizens, and as property holders.

GYNAIKES	• Married to citizen men; their children were legitimate • Did not appear in public without a male relative or slave • Usually poorly educated • Spent most of their time secluded at home
HETAIRAI	• Generally foreign born and educated • Hired to serve as sexual and intellectual companions or hostesses to wealthy and prominent Athenian men at symposia (dinner parties) • Their children were illegitimate
PALLAIKAI	• Owned as concubines or slave girls
PORNOI	• Prostitutes of the streets or brothels

SOURCE 4 Types of women in Athenian society

Athens had large numbers of resident foreigners, called metics, who came to Athens seeking employment. Many were craftsmen who became wealthy through their work. Neither they nor their wives had citizen status. Slave women formed another significant group. They lived under the control of their masters or their families. The terms in Source 4 are used for different types of Greek women, though there is some scholarly debate about their precise meanings.
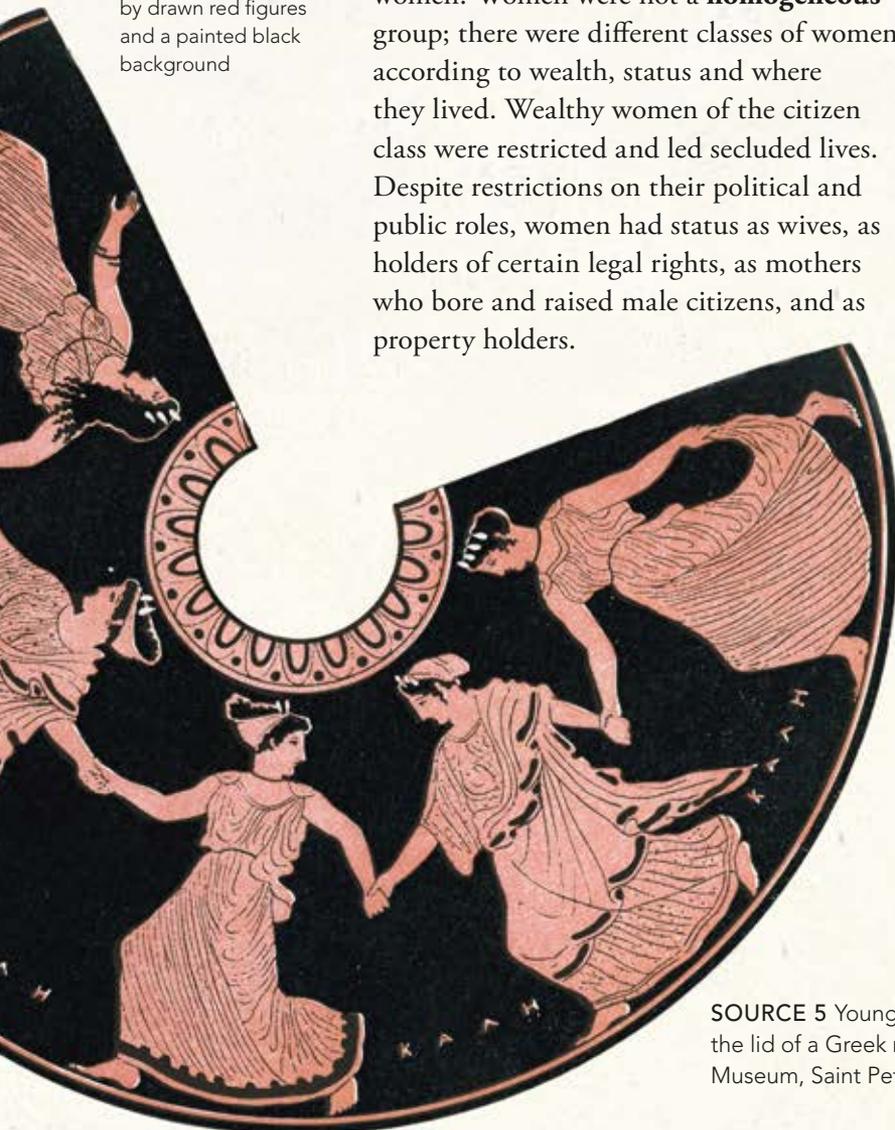
SOURCE 5 Young women dancing, a drawing on the lid of a Greek **red-figure** vase at the Hermitage Museum, Saint Petersburg, Russia

Status of women in Sparta

The landowning upper classes in Sparta were called Spartiates and they possessed full citizenship rights. Other social groups included the *mothakes*, non-Spartan free men who were raised as Spartans; *perioikoi* or 'dwellers around', a manufacturing and commercial class; and *helots*, who were state-owned **serfs** and foreign-born slaves. Spartiate women enjoyed a social status and respect unknown to their sisters in the rest of Greece. From birth they were treated like their brothers, having the same access to food and exercise. They could not be married until their late teens or even early 20s to protect them from the dangers of early child-bearing. Spartan women were not confined to their homes and could wear much less constricting clothing. They were also literate and numerate because they ran their households when their men were preoccupied with military duties.
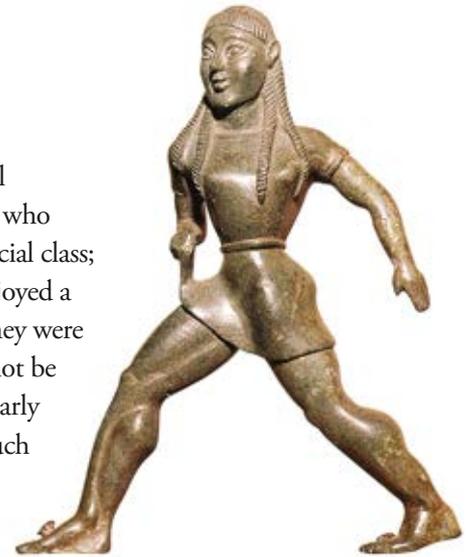
SOURCE 6
A Spartan girl athlete

Status of women in ancient Rome

Women had no status of their own in ancient Rome but belonged to the classes of their fathers and husbands. Upper-class women could belong to the **senatorial** class or the **equestrian** class depending on the wealth and political status of their men. Women from these two groups enjoyed benefits of the special economic and legal privileges afforded to them. Women of the lower classes could be **plebeians**, **freedwomen** or slaves. Plebeian women could marry other Roman citizens and have legitimate children who would also be citizens. Freedwomen or former slaves had restricted rights but could become citizens if their former owners had been citizens. Women who were slaves had no status but could be **manumitted** by their owners, enabling them to become freedwomen.

In the imperial period, upper-class women began to enjoy social status in their own right. Women of the imperial household could have titles, such as the title *Augusta* bestowed on Emperor Augustus' wife Livia. Later, women claimed the social status that went with rank, eventually being able to use the title *clarissimae* or 'most distinguished', which denoted their membership of the senatorial class.

16.2 Check your learning

1 Compare the social status held by women in Athens, Sparta and Rome. You could draw up a table with categories like citizenship, privileges, personal freedom, slavery, access to education.

2 What conclusions can you draw from this comparison about the extent to which a woman's social class determined her rights and/or freedoms?

■ **serf**
a member of the class above slaves, owned by the Spartan state

■ **senatorial**
relating to an aristocratic class whose ancestors had served in the Roman Senate

■ **equestrian**
relating to the lower of the two aristocratic classes in ancient Roman society, also known as knights or equites

■ **plebeian**
a person of the lower social classes in ancient Rome

■ **freedwoman**
a woman freed from slavery

■ **manumitted**
set free

SOURCE 7 A fragment of a wall painting showing two Roman women from the early imperial period

The role of women within the family

The most important role of a woman in ancient societies was to be a wife and mother. In both ancient Greece and Rome, women were expected to marry and bear children. One reason for the seclusion of women and restriction of their freedom outside of the home was to ensure that the children of a marriage were the legitimate offspring of the husband. Marriages could also function as a way of connecting families for political, economic and social benefit.

Women and family in ancient Greece

In Athens, young women were married at about 14 years of age to much older husbands who were chosen by their fathers or closest male relatives. Romantic love was not a concern of Athenian marital unions, and couples might not even have met beforehand. Frequently, the chosen husband was a relative, particularly if the bride had no brothers. In this case the young woman was an *epikleros*, an heiress who could inherit property, but not take charge of it. It was vital that property remained in the family, so the production of children who could inherit their parents' property was the main point of marriage. A young woman was provided with a dowry, her portion of her father's estate, and on her marriage, control of the dowry passed to her husband. The dowry was to be used for her maintenance and was returned if the couple divorced. Either husband or wife could initiate divorce, and the dowry had to be returned or the woman was to be paid annual interest, to enable her to live or remarry. Until a woman had produced a child, her father had the right to end the marriage.

Athenian upper-class married women were responsible for running the household or *oikos* efficiently and for looking after the health of everyone in it. Most important was the bearing and raising of children, followed by weaving to clothe the family, supervising its slaves and managing the housekeeping budget. They also fetched water from the public fountains, and supervised the cooking and cleaning carried out by slaves. Married women of the lower classes often worked in the fields or in the marketplace stalls of their husbands.

Women in Spartan families

In Sparta, young women were married when they were physically mature, probably in their late teens. They were expected to marry within their own class. Although Spartan mothers are thought to have had a say in the choice of their daughter's husband, a practice of marriage by capture apparently took place. This could well have been a symbolic practice in which the husband abducted the girl and carried her off.

The main function of upper-class Spartan women was to be wives and mothers of citizens. They were encouraged to undertake physical exercise so that they might bear healthy children for the state. A Spartiate, or free woman, was educated to be the proper mother of warriors in a warrior state. Spartan children, however, did not belong to their families but to the state.

Women and family in ancient Rome

In Rome, **aristocratic** women married young, sometimes as young as 12 years of age, although lower-class girls might have been a few years older. The young age was a way of ensuring that the girl was a virgin when she married. Fathers were legally able to marry their daughters to men of their choice, thereby forming partnerships that would benefit them politically and economically. The only way in which a daughter could reject a match made by her father was by demonstrating the bad character of her prospective husband. In **republican Rome** a bride was subject to her husband, but in the imperial period she had achieved a form of independence by maintaining her legal relationship with her father rather than her husband. Her husband had no legal power over her.

SOURCE 8 An ancient Greek **black-figure** vase depicting women fetching water at a public fountain

A Roman matron was valued for bearing and rearing children, especially for the number of children she had. However, aristocratic women gradually rejected the traditional aspects of motherhood such as breastfeeding, preferring to hire **wet nurses** instead. Large families became uncommon to the extent that Emperor Augustus passed laws to reward women who bore at least three children. One reward was to be released from the power of her father.

Like Athenian women, aristocratic Roman women managed large households, often comprising homes in town, country estates and large numbers of slaves. Many of their husbands spent long periods away from home on military or government business and, as a result, women ran the properties and businesses. A virtuous Roman matron was known for her thrift and seriousness. She was expected to clothe the family, often through her own spinning and weaving, even though she had slaves to do the majority of the work. Augustus' wife Livia is recorded as weaving the fabric for the clothes worn by her husband.

aristocratic
a person from the upper classes

republican Rome
the period from the overthrow of the last Roman king in 509 BC until the beginning of the imperial period under Augustus in 27 BC

wet nurse
a woman who is paid to feed another woman's baby with her own breast milk

black-figure
relating to a type of Greek pottery with one or more bands of figures silhouetted against a tan or red background surface

16.3 Check your learning

1 Find out more about the Spartan practice of marriage by capture, particularly what Plutarch had to say about it. Search online for 'Plutarch: customs of the Spartans'.

2 What greater independence did Roman women enjoy during the imperial period?

3 Julius Caesar's wife, Calpurnia, managed his property during the years he spent away from Rome. Go online and find out about her life and responsibilities.

4 What was family life like for lower-class Roman women? Research this online.

5 List the similarities and differences you notice between ancient Greek and Roman family life for women.

Economic and political roles of women

The ancient Greeks and Romans had differing views on the involvement of women in economic and political affairs. In general, there were more opportunities for women in the economic than the political sphere.

Women and the economy in ancient Greece

It has already been noted that women often entered marriage with large dowries, and the income from these supported them during their lifetime. A large dowry could give a woman influence in the household because she retained it in the event of divorce. A woman could also inherit property if she was an *epikleros*, giving her some economic weight, but she could not buy or sell property. Nor could she own or sell slaves.

A Greek woman was expected to stay away from the *agora*, the central community space where political, judicial, cultural and economic activity took place. In reality, though, women of the lower classes, possibly the majority of Athenians, both visited and worked in the *agora*, but it is unclear whether they were citizen women, metics or slaves. Women kept taverns, were wool workers, traded goods (such as foodstuffs, perfume, ribbons and garlands), laundered clothes, boiled **unguents** and hired themselves out as wet nurses. They also worked as cobblers, gilders, net-weavers, potters and grooms.

Women could not engage in occupations where money could be made. However, they could control prostitution. Many foreign-born or metic women and slaves worked in the sex industry, as *hetairai* and *pornoi*, operating from brothels that were run by both men and women.

SOURCE 9
A *hetaira* ties her gown while a customer watches.

unguent
a thick, sweet-smelling ointment

Spartan women and the economy

Spartan women played important economic roles in the transfer of property. Marriage alliances ensured that property ownership remained with the upper classes. Initially a Spartan woman could inherit part of her family's estate, but she did not own it and it passed to her offspring. By the end of the Classical period, Spartan women were required to have male guardians to manage their estates. They owned their dowries, but the king chose their husbands, possibly because the women would be managing their husband's estates and economic affairs while they were away fighting. Writers such as Aristotle (see Source 10) comment on the concentration of landownership in Sparta in the hands of women towards the end of the Classical period. It was feared that this might give women undue influence over Spartan affairs.

SOURCE 10

This was exemplified among the Spartans in the days of their greatness; many things were managed by their women … And nearly two-fifths of the whole country are held by women; this owing to the number of heiresses and to the large dowries which are customary. It would surely have been better to have given no dowries at all, or, if any, but small or moderate ones.

Aristotle, *Politics*, Book 2, Part IX

Women and the economy in ancient Rome

Women were allowed to engage in business in Roman society; they borrowed money, invested money and gave loans. Wealthy aristocratic women lent money to their peers. There is evidence from the imperial period that women invested in public works. They bought and sold slaves, and there is evidence from the reign of Claudius that they owned and operated shipping companies. Information about many of the occupations of women comes from funerary inscriptions. For example, women are recorded as owning and operating brick factories. Women are also known to have managed aspects of their husbands' businesses. Eumachia, known to us from her building at Pompeii, was a very wealthy woman who became the patron of the economically significant fullers' guild, which consisted of dyers and clothing-makers.

Lower-class women could be scribes and secretaries, wet nurses, midwives, dancers, acrobats, actresses and prostitutes. The latter two were low-status occupations with little to no legal protection. Women from the poorer classes all had to earn their own living.

We know very little of Roman women's working lives. In recent times, historians have become more aware of the gaps in the historical record where women are concerned.

SOURCE 11

After the 1970s … in the search of women or 'the female' in history, new methodologies developed. These entailed new ways of reading ancient sources and started from the notion that gaps and silences are as significant as what is actually in the sources. … Suzanne Dixon … in her paper on the **epigraphy** of textile production aptly called, 'How do you count them if they're not there?' … argued that, in addition to what is in the sources, it is also vital to look at what is *not* there … In short, recent scholarship has emphasised the need for a deepened rereading of various genres and types of evidence, and for an alertness to gaps, silences and absent information. In this way, it becomes possible to reach not only a reliable, but also a more complex and nuanced, picture of female working lives, and to give women their due place in debates about craftsmen and traders in the Roman world.

Andrew Wilson & Miko Flohr (eds), *Urban Craftsmen and Traders in the Roman World*, Oxford University Press, 2016, pp. 201–2

epigraphy
the study of inscriptions

16.4 Understanding and using the sources

1 Why was Aristotle critical of Spartan women's increased ownership of property?
2 What questions can we ask about his perspective and attitude to women?
3 Suggest reasons why there are not more sources for women's working lives in ancient Greece and Rome.
4 What important issue of evidence is raised by Dixon's references to 'gaps' and 'silences'?

16.4a Check your learning

1 Research the lives of two well-known women from Pompeii: Eumachia and Julia Felix. What do we know about their role in the economy and their social status?
2 What is the nature of the sources for these two women?

Women in political life

Women were unable to participate in politics in most ancient societies. In Athens, men had a duty to take part in voting, to attend assembly meetings, to hold public office to administer the law and workings of the city-state, and to do military service. Women were largely excluded from public life. They were not permitted to vote or to take part in the functioning of the state.

In Sparta, the landowning Spartiates possessed most of the political, legal, economic and military power. Even though Spartan women seem to have had more personal freedom than their Athenian sisters, they had no political role. They were forbidden to speak in assemblies and Spartan men actively kept them out of all political activities.

Roman women were similarly denied a role in public life. Men dominated the political system and women could neither hold formal office, nor vote. However, aristocratic Roman women realised that they could influence politics by influencing their husbands and in this way managed to gain a place for themselves in public affairs. For example, Agrippina the Younger, mother of the Roman emperor Nero, played an important role in securing her son's accession as emperor. They often paid a high price for this influence, being exiled or even murdered by the powerful men of their families.

Richard Bauman, in his book *Women and Politics in Ancient Rome*, identifies five phases in the expansion of Roman women's political lives:

1   Mid 4th to the end of the 3rd century BC – women campaigned against their disadvantaged position in marriage and demonstrated against wartime casualty rates.

2   First half of the 2nd century BC – increased education of upper-class women led them to question and even challenge their roles in society.

3   150 BC to the death of **Julius Caesar** in 44 BC – many women, some named in the sources, gained political maturity and become more involved in public affairs and the law, e.g. Cornelia, mother of the **Gracchi**.

4   Mid-1st century BC to the end of the **triumviral** period – women such as Clodia and Servilia were virtual politicians who exercised real power over **senators** and magistrates. Octavia and Livia were vital in the rise of the early rulers of imperial Rome.

5   Accession of Augustus in 27 BC to the death of Nero in AD 68 – a new political system was advantageous to women. The **Julio-Claudian** family achieved the highest status and the women of the family shared its status.

16.4b Check your learning

1   What expansion in opportunities for women's involvement in public life in Rome is evident in Bauman's five phases of Roman history?

2   Investigate the influence exercised by Clodia and Servilia during the republican period.

3   Roman women who paid a high price for their political influence in Roman imperial times include Agrippina I (wife of Germanicus and mother of Agrippina II), Julia (daughter of Augustus), and Messalina and Agrippina II (wives of the emperor Nero). Research these women. What price did they pay and why?

Julius Caesar
a significant Roman general and statesman of the late Roman Republic

Gracchi
two influential brothers who served as magistrates during the Roman Republic

triumviral
a period when Rome was ruled by a triumvirate or group of three powerful men

senator
a member of the senate, an advisory body for the emperor

Julio-Claudian
the family of the first five Roman emperors

The roles of women in religious life

rite
a traditional or religious ceremony

Religion was an area where women were able to participate in both ancient Greece and Rome. They were priestesses of many deities, frequently those associated with aspects of female life such as childbirth and marriage. They were involved in festivals, sometimes performing **rites** that were restricted to women. They were also involved in funerary rites.

Women and religion in ancient Greece

Athenian women played vitally important roles in the religious life of the city. For example, the main deity of Athens, Athena Polias (Athena of the city), was served by a priestess. They were priestesses to many other deities, including Athena Nike, Hera, Artemis and Aphrodite. Women participated in significant festivals and death rites. Some festivals were specifically for women, and they took the roles of priestesses and attendants.

SOURCE 12 Priestesses adorn two bulls with garlands in preparation for sacrifice.

The Thesmophoria

The Thesmophoria, the festival of Demeter Thesmophoros, was an important festival that was celebrated in Athens and throughout the Greek world. Men were strictly prohibited and only married women could attend. Demeter was the goddess of crops and female fertility, and the festival, held in autumn, was celebrated to secure her blessing on the corn shortly to be planted. The participants abstained from sexual relations before and during the festival, and took the name *melissai*, 'the bees of Demeter', as a sign of their domestic virtue. The sacred rites of the festival were kept secret, on pain of death. Excavations at Mytilene on the island of Lesbos in the 1990s shed some light on what took place. They uncovered a sacrificial pit within the sanctuary grounds that contained thousands of charred piglet remains and seeds. The archaeologists concluded that on the last day of the festival the remains of rotten piglets were brought up from underground caves, mixed with the seeds to be planted and placed on the altar to ensure a successful crop. Some might then have been spread on the fields.
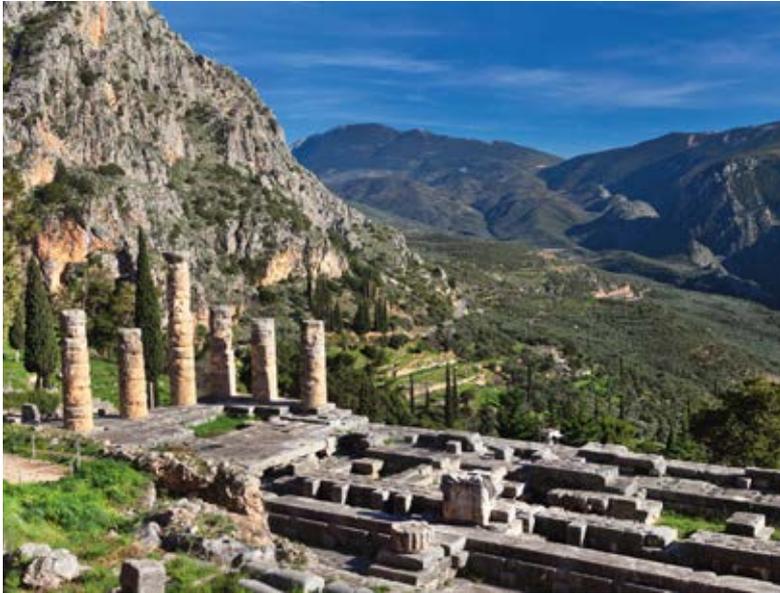
SOURCE 13 Remains of the Temple of Apollo at Delphi

The Delphic Oracle

The Pythia or the Oracle of the Temple of Apollo at Delphi is one of the best-known priestesses of the ancient world. Travellers from all over the ancient world came to Delphi to consult the Pythia, on both private and political matters. According to tradition, the priestess inhaled gases escaping from cracks in the earth, which caused her to fall into a trance. During this trance, she delivered unintelligible **utterances** that were then translated by the priests of the sanctuary and given to those who had requested them. The oracles or prophecies thus delivered were famous for their ambiguity.

utterance
a statement

Poseidon
the Greek god of the sea, and the Earth shaker, whose domain was Atlantis

cult
a system of religious worship dedicated to a particular god

Other festivals

Other festivals attended by women include:

- the *Haloa* – another women-only festival, dedicated to the protection of sowing the grain. It was open to all classes of women who participated in the sacrifices made to Demeter and her daughter Kore, and the celebration of the rituals. Sacrifices were also made to **Poseidon**, the god of the sea
- the festival of the mystery **cult** at Eleusis – although a predominantly male ritual, it was open to women
- the *Panathenaia* – dedicated to the goddess Athena, patron goddess of Athens, celebrated annually by all groups in society including women
- the Heraean Games – conducted by women and girls at Olympia to honour the goddess Hera.

Religious roles of Spartan women

Cults focusing on fertility, women's health and beauty were popular among women in Sparta. An important cult associated with women was dedicated to Artemis Orthia, a goddess of childbirth. Large quantities of offerings have been found at the sanctuary, brought by women who were barren, pregnant or survivors of childbirth. The cult of Eileithya, another goddess of childbirth, was also important. Helen, known to us from the Trojan War stories, was a cult figure too, with many artefacts used by women (such as mirrors, combs and perfume bottles) found at her cult sites.

Spartan women had roles to play at festivals, performing special dances. Examples of these are the *hyporchema* in honour of Apollo and the *caryatis* in honour of Artemis at Caryae. Women took part in the *Hyakinthia* festival in honour of Apollo, where they rode on decorated wicker work carriages. It is possible that women could have their name inscribed on their tombstone if they died while holding 'sacred office', which could refer to being a priestess or even to dying in childbirth.

Women and religion in ancient Rome

Roman women had an important place in religious life despite its domination by men, and carried out a number of important roles. As in Athens, these roles were in the cults and festivals, several of which were specifically for women, such as the cult of Fortuna. Adolescent girls were protected by Fortuna Virginalis and they dedicated their childhood clothes to her when they came of age. When they put on the adult **stola**, it signified that they were now protected by Fortuna Primigenia. Another women-only cult was that of Bona Dea, the 'Good Goddess'. Roman women could be priests or *sacerdotes*, usually of the cult of a goddess such as Ceres, goddess of agriculture and fertility.

Vestal virgins

The six women of the College of the Vestals were Rome's only full-time priesthood. They served Vesta, goddess of the **hearth**, an important state cult. Vestal virgins served for 30 years, caring for the sacred, eternal fire that was considered essential to the security of Rome. By maintaining this sacred fire, which anyone could access for household use, vestals were like religious housekeepers for all of Rome. In the time of Augustus, the sacred fire was considered to be his household fire.

Vestals were not required to marry and have children like other Roman women. They were originally of aristocratic birth, but later the office was opened up to women of lower classes, even eventually to freedwomen. Vestals took a vow of chastity and dedicated themselves to their ritual duties. These included caring for the sacred cult objects, preparing ritual food and conducting the events of the annual *Vestalia*, the festival of Vesta, held in early June. They also ritually prepared the herbs used at sacrifices and made the bread offered on feast days. When their period of office was over, they retired, were given state pensions and were permitted to marry.

Over time, vestals gained much power and influence in the Roman state. Augustus included them in all religious ceremonies. Pliny the Elder comments on their supposed magical powers in Source 14.

SOURCE 14

At the present day, too, it is a general belief, that our Vestal virgins have the power, by uttering a certain prayer, to arrest the flight of runaway slaves, and to rivet them to the spot, provided they have not gone beyond the precincts of the City. If then these opinions be once received as truth, and if it be admitted that the gods do listen to certain prayers, or are influenced by set forms of words, we are bound to conclude in the affirmative upon the whole question.

Pliny the Elder, *Natural History*, 28.3
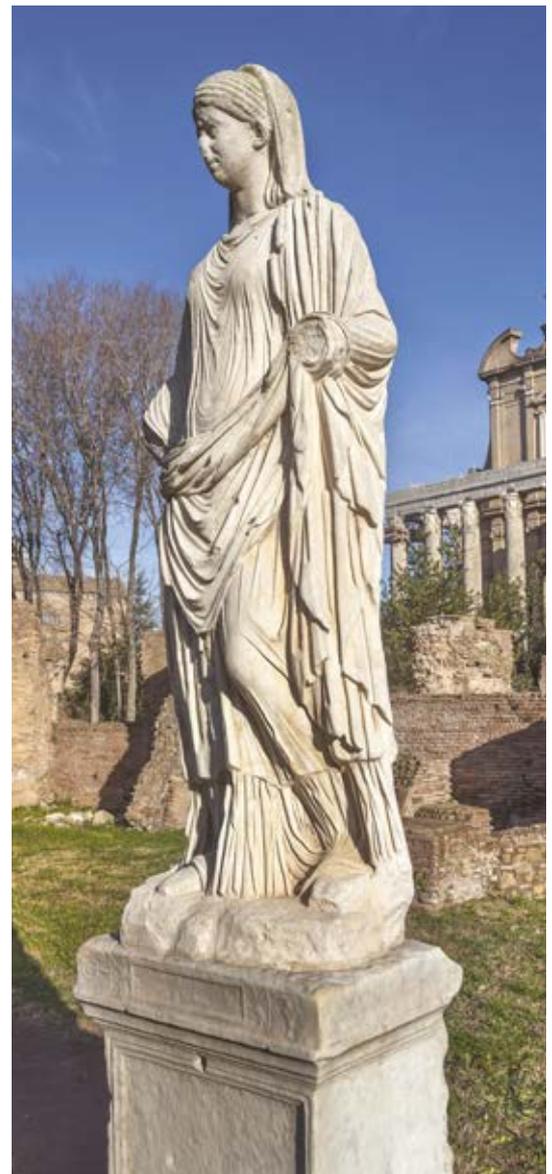
SOURCE 15 A statue of a vestal virgin in the Roman Forum

16.5 Understanding and using the sources

1 What roles did women play in religious sacrifice as suggested in Source 12?
2 To what extent are you prepared to accept Pliny's account of the power of vestal virgins? Consider what he has said about women in Source 3.
3 Why were vestal virgins credited with magical powers by the Romans?

16.5 Check your learning

1 Read an online report of the interesting excavations at Mytilene: 'Thesmophoriazousai: Mytilenean Women and their Secret Rites'.
2 Find out more about the Oracle of Delphi and some of the famous oracles delivered, e.g. to Croesus of Lydia and to the Athenians before the Persian invasion.
3 Find out more about the vestal virgins, particularly their special privileges and what happened to them if they broke their vows of chastity.
4 Research the roles Greek and Roman women had in the funerary rites of their societies.
5 Summarise the status and roles of women in the religious lives of Athens, Sparta and Rome using the table below. An entry for each society has been done for you.

ATHENS	SPARTA	ROME
Participated in festivals, some for women only (e.g. the *Thesmophoria*, the feast of Demeter Thesmophoros)	Participated in the cult of Artemis Orthia	Observed the rites of Bona Dea, the Good Goddess

16.5 Profile

Significant influential women: Artemisia I and Livia

Two women who made a substantial impact on the world of their time were Artemisia I of Caria, a Greek queen of the ancient Greek city-state of Halicarnassus in Asia Minor, which was a subject state of the Persian Empire, and Livia, wife of the Roman emperor Augustus.

Artemisia I

Artemisia became the ruler of Halicarnassus after the death of her husband. When the Persians invaded Greece in 480 BC, she personally led her naval force into battle and advised Xerxes, king of the Persians, on naval strategy. At the naval battle of Salamis, which Artemisia had advised Xerxes to avoid, she captained her own ship and managed to avoid attack by an Athenian ship by ramming and sinking a ship on her own side. Xerxes was so impressed by her manoeuvre that he said, 'My men have turned into women, my women into men.' The Persian navy was defeated at Salamis and the Athenians put a price on her head. Xerxes had to decide his next move. His general Mardonius proposed using the large Persian army to invade the **Peloponnese**, leaving the navy to return to Persia. Herodotus, the Greek historian who provides our information about Artemisia, records her advice in Source 16.

Peloponnese
a geographical region in southern Greece

'Tis a hard thing, O king! to give the best possible advice to one who asks our counsel. Nevertheless, as thy affairs now stand, it seemeth to me that thou wilt do right to return home. As for Mardonius, if he prefers to remain, and undertakes to do as he has said, leave him behind by all means, with the troops which he desires. If his design succeeds, and he subdues the Greeks, as he promises, thine is the conquest, master; for thy slaves will have accomplished it. If, on the other hand, affairs run counter to his wishes, we can suffer no great loss, so long as thou art safe, and thy house is in no danger. The Greeks, too, while thou livest, and thy house flourishes, must be prepared to fight full many a battle for their freedom; whereas if Mardonius fall, it matters nothing – they will have gained but a poor triumph – a victory over one of thy slaves! Remember also, thou goest home having gained the purpose of thy expedition; for thou hast burnt Athens!' The advice of Artemisia pleased Xerxes well; for she had exactly uttered his own thoughts.

Herodotus, *The Histories*, Book 8
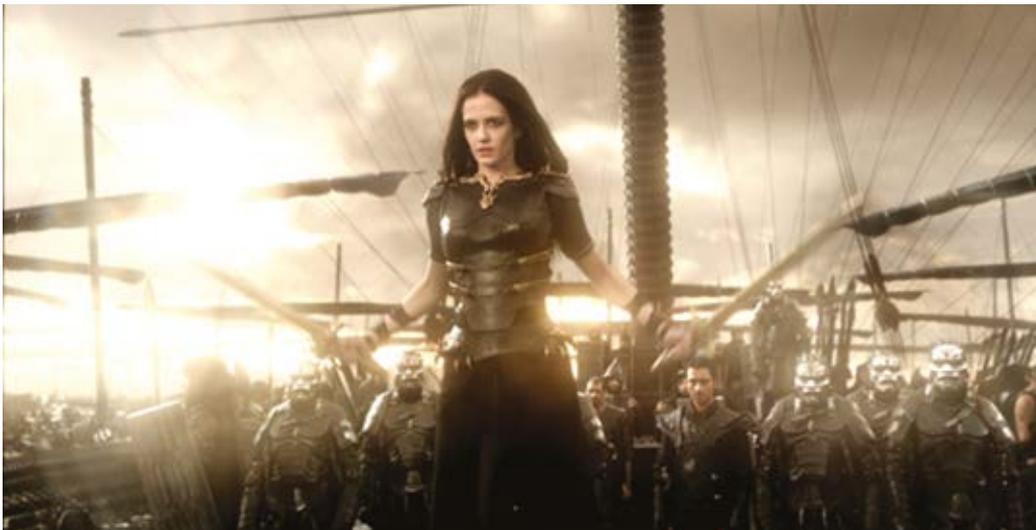
SOURCE 17 A very modern representation of Artemisia in the 2014 film *300: Rise of an Empire*

Livia

Besides being the wife of Augustus, Livia Drusilla was the mother of the emperor Tiberius, grandmother of the emperor Claudius, great-grandmother of the emperor Caligula, and great-great-grandmother of the emperor Nero. She was married first to Tiberius Claudius Nero and had two small children when Octavian, later to become Augustus, fell in love with her. Two divorces were secured and Augustus and Livia married, a marriage that lasted for the next 51 years. Livia enjoyed a privileged status, taking the role of counsellor to her husband.

She was considered by many to have had a significant influence on Augustus' administrative affairs. She petitioned him on behalf of others, encouraging him to be merciful. She influenced his policies in a manner that was unusual for a Roman wife of her time.

Livia was considered by some in her own time to be a ruthless schemer. Tacitus, a Roman historian writing several decades after Livia's lifetime, recorded her supposed intrigues to ensure her son, Tiberius, succeeded Augustus (see Source 18).

When Agrippa died, and Lucius Caesar as he was on his way to our armies in Spain, and Caius while returning from Armenia, still suffering from a wound, were prematurely cut off by destiny, or by their step-mother Livia's treachery, Drusus too having long been dead, Nero [Tiberius Nero, Livia's son] remained alone of the stepsons, and in him everything tended to centre. He was adopted as a son, as a colleague in empire and a partner in the **tribunician power**, and paraded through all the armies, no longer through his mother's secret intrigues, but at her open suggestion. For she had gained such a hold on the aged Augustus that he drove out as an exile into the island of Planasia, his only grandson, Agrippa Postumus, who, though devoid of worthy qualities, and having only the brute courage of physical strength, had not been convicted of any gross offence.

Tacitus, *The Annals of Imperial Rome*, Book 1

tribunician power the authority possessed by a tribune, a Roman official chosen by the lower classes to protect their interests

SOURCE 19 A statue of Livia Drusilla

16.5 Profile tasks

1 What does Source 16 reveal about Artemisia's influence on Xerxes?

2 What advice does Artemisia give Xerxes? Why is he pleased with it?

3 What questions need to be asked about Herodotus' account to determine its accuracy?

4 In Source 18, what is the 'treachery' Tacitus accuses Livia of?

5 What allegations against Livia does Tacitus make in this source? What questions need to be asked about Tacitus to test the trustworthiness of his account?

6 Compare the representations of these two women by each of the ancient writers. What are the similarities and differences? How would you explain these differences?

7 Research the influential Greek and Roman women listed below. Who were they? What political impact did they make? What happened to them?

Lucretia, Cornelia, Hortensia, Sempronia, Octavia, Fulvia

8 Find out what happened to Artemisia after her involvement in the Persian Wars.

9 Artemisia was a main character in the 2014 film *300: Rise of an Empire*. Find out about this modern representation of her impact on her times.

10 Aspasia was an influential Greek woman of the Classical period. Find out about her background, who she influenced and how. What impact did she have?

16.6 Comparing women in ancient Greece and Rome

As you have worked through this chapter, you will have noticed where aspects of the lives of women in ancient Greece and Rome were similar and where they differed.

SOURCE 20 An **Attic** red-figured bowl, c. 500 BC, showing a Greek woman playing a flute

SOURCE 21 A 1st-century Roman woman pouring perfume into a flask. From the Villa Farnesina in Rome

Attic
belonging to Athens and the region immediately surrounding it

16.6 Check your learning

1   Make a comparison of the lives of women in ancient Greece and Rome. You could address the aspects in a table like the one below and add any others you consider important.

FEATURE	ANCIENT GREECE	ANCIENT ROME
Family life		
Economy		
Religion		
Politics		
Representation		

2   Write a response to the following: 'Compare the lives of women in ancient Greece and Rome.' (Compare: Show how things are similar or different.)

To help you plan your response:

• identify the main aspects of the lives of ancient Greek and Roman women you will address
• use these aspects to structure your answer
• draw conclusions about the similarities and differences in the aspects
• use specific evidence from sources to support your comparison.

In this chapter we have seen how in many ways the lives of women in ancient Greece and Rome were similar. For example, both cultures placed a strong emphasis on women as wives and mothers. Upper-class Athenian and Roman women at some periods of their histories were largely confined to their homes, protected by their male relatives and prevented from participating in public affairs. The lives of Spartan women differed in that they were much less restricted, for different reasons. The most noticeable difference was the degree of participation in public life that imperial Roman women were able to achieve in comparison to their Greek counterparts. Most importantly you will have had the opportunity to recognise some critical issues of evidence. First, women are presented almost exclusively from a male perspective, and one that is often hostile. Second, we hear little from women themselves about their roles in society, which is a significant gap in the evidence we have for their lives.

FOR THE TEACHER

Check your <u>o</u>book <u>a</u>ssess for the following additional resources for this chapter:

Answers

Answers to each *Check your learning*, *Understanding and using the sources* and *Profile task* in this chapter

Teacher notes

Useful notes and advice for teaching this chapter, including syllabus connections and relevant weblinks

Class test

Comprehensive test to review students' skills and knowledge

<u>a</u>ssess quiz

Interactive auto-correcting multiple-choice quiz to test student comprehension

17

Death and funerary customs in Old Kingdom Egypt

FOCUS QUESTIONS

1   Who were the gods associated with death and burial in Old Kingdom Egypt?

2   What role did the afterlife play in Old Kingdom funerary beliefs?

3   What was the significance of mummification for Old Kingdom Egyptians?

4   What types of tombs did the Old Kingdom Egyptians construct for the dead?

5   What evidence of change and continuity can be seen in the funerary beliefs of the Old Kingdom?

FOCUS CONCEPTS & SKILLS

Change and continuity

In history we investigate aspects of life that have remained the same and those that have changed over time. We are interested in the nature of the change, how quickly or slowly it takes place and the reasons for this. We also want to find out about the impact of the change that occurs. In studying death and funerary customs in Old Kingdom Egypt, we will look at the features that remained constant during this period, such as gods and the afterlife, pyramids and mummification, but we will also look at their development and the reasons for any changes.

LEARNING OUTCOMES

1   Describe the gods associated with death and burial in Old Kingdom Egypt.

2   Analyse the role played by the afterlife in Old Kingdom funerary beliefs.

3   Examine the significance of mummification for Old Kingdom Egyptians.

4   Analyse the types of tombs Old Kingdom Egyptians constructed for the dead.

5   Explain change and continuity in the funerary beliefs of the Old Kingdom.

SOURCE 1 An offering scene from the Dynasty IV tomb of Nefertiabet, Tomb G 1225 at Giza

The Old Kingdom

Archaeology has provided most of what we know about ancient Egypt – their religious beliefs, rituals and funerary practices. These originated in the **Predynastic period**, when the earliest settlements of people lived along the fertile edges of the Nile, as shown in Source 2. We know about their lives largely through the pottery they left behind. The historical records of the time come from stone artefacts such as the Scorpion Macehead and the Narmer Palette. These record the wars that led to the unification of **Lower** and **Upper Egypt**, the two political and cultural regions of the south and north of Egypt. Legends give the responsibility for the unification that occurred around 3100 BC to King Menes, who established the 1st Dynasty (or Dynasty I) with its capital at Memphis. In the centuries following unification, Egyptian culture blossomed. The archaeological record provides evidence of developments in architecture, writing, sculpture, bureaucracy, trade and government, and burial customs.

OLD KINGDOM EGYPT

Source: Oxford University Press

SOURCE 2 The division of Old Kingdom Egypt before it was unified

The period known as the Old Kingdom covers the four dynasties of Egyptian history from the beginning of Dynasty III to the end of Dynasty VI (c. 2686–2181 BC). This is often referred to as the 'age of the pyramids', so called for the building of those monumental pyramids as royal tombs by kings from Djoser in Dynasty III to Pepy II in Dynasty VI. The timeline in Source 3 outlines some of the key developments of the Old Kingdom.

Old Kingdom society

In the Old Kingdom, the king exercised absolute power in both the political and religious spheres of society. His family, including queens, princes and other royals, were the **elite** of Egyptian society. The king delegated much of his authority to a large bureaucracy of officials, headed by the vizier (or king's deputy), who carried out the administration of Egypt's religious and economic affairs. Beneath this privileged noble class were the artists and craftsmen, followed by the peasantry who engaged in animal husbandry and food production. Women in Egyptian society derived their

Predynastic Period	• c. 3400 BC, 'Ginger' buried at Gebelein in southern Egypt, earliest evidence of natural mummification • Hierakonpolis a main city in southern Egypt; origin of Horus **cult** • Scorpion Macehead and Narmer Palette record historical events leading to unification.
Early Dynastic Period	• Unification of Upper and Lower Egypt • King Menes establishes capital at Memphis • Development of bureaucracy and patterns of Egyptian culture, including art, architecture, sculpture and writing • Construction of royal mastaba tombs at Saqqara and Abydos
Dynasty III	• Djoser builds step pyramid at Saqqara with architect Imhotep; first building entirely made of stone • Step pyramid evidence of advances in technology and royal control of resources • Beginning of stellar afterlife cult • First use of **cartouche** to surround king's name
Dynasty IV	• Golden Age of the Old Kingdom – major artistic and cultural developments • Sneferu builds first true pyramid – Red Pyramid at Dahshur • Peak of achievement in pyramid building – evidence at Giza complex of Khufu, Khafre and Menkaure • Rise of the solar afterlife cult (cult of Re)
Dynasty V	• Height of cult of Re – emphasis on building sun temples at cost of pyramids • Appearance of **Pyramid Texts** in burial of Unas, last king of Dynasty V • Rise of cult of Osiris
Dynasty VI	• Decline in quality of pyramid construction • Rise in influence and status of nobility – evidence in their mastaba tombs at Saqqara, high point in artistic development • Decline in power of the king

SOURCE 3 A timeline of key developments of the Old Kingdom

status from their male relatives. Some held official positions, for example in the cults of female gods.

17.1 Check your learning

1   Find images of the Scorpion Macehead and the Narmer Palette referred to in Source 3. What evidence might they provide about the unification of Upper and Lower Egypt?

2   Research Nefertiabet (see Source 1). Who was she and what does her tomb reveal of her status?

Religious beliefs

Egyptian religion of the Old Kingdom was a complex mix of gods, **myths** and **legends**. We have only a few sources to help us to understand their beliefs, and most of these sources focus on the kings. Social class was an important factor in determining the nature of the beliefs and practices of different groups. Sources for the beliefs of all social classes include their tombs, the scenes depicted on the walls and the burial goods. Knowledge of the gods that Old Kingdom Egyptians believed in is essential for understanding their burial customs.

Creation myths

The creation myths of the Old Kingdom reveal important religious beliefs. The towns of Hermopolis, Memphis and Heliopolis all had creation stories in which their local god played the most important role. In these myths, Atum the creator god, Khepri the sun god in the form of the beetle, and Osiris, the god of the underworld, are each shown to be the original creator god. Following is the Heliopolitan creation story.

At the beginning, the waters of the Nun covered the whole earth. Atum-Re was the first god. He created himself, on the primaeval (first) mound that emerged from the waters. Atum-Re proceeded to create his own children. First he sneezed Shu, the air, then spat out Shu's sister, Tefnut, the moisture. Shu and Tefnut became the parents of Geb, the Earth god, and Nut, the sky goddess. Shu placed himself between Geb and Nut separating the earth from the sky. Nut lowered herself again at night and she and Geb became the parents of four children: Isis, goddess of motherhood, Osiris, god of vegetation and resurrection, Seth, god of the desert and of chaos, and the protector goddess Nephthys. These nine gods formed the Heliopolitan **Ennead**. Horus, son of Isis and Osiris, and Anubis, son of Seth and Nephthys, were two additional gods.

SOURCE 4
A New Kingdom representation of the Heliopolitan creation story from the Book of the Dead of Nesitanebtashru. Shu supports the sky goddess Nut as she arches over the earth god Geb.
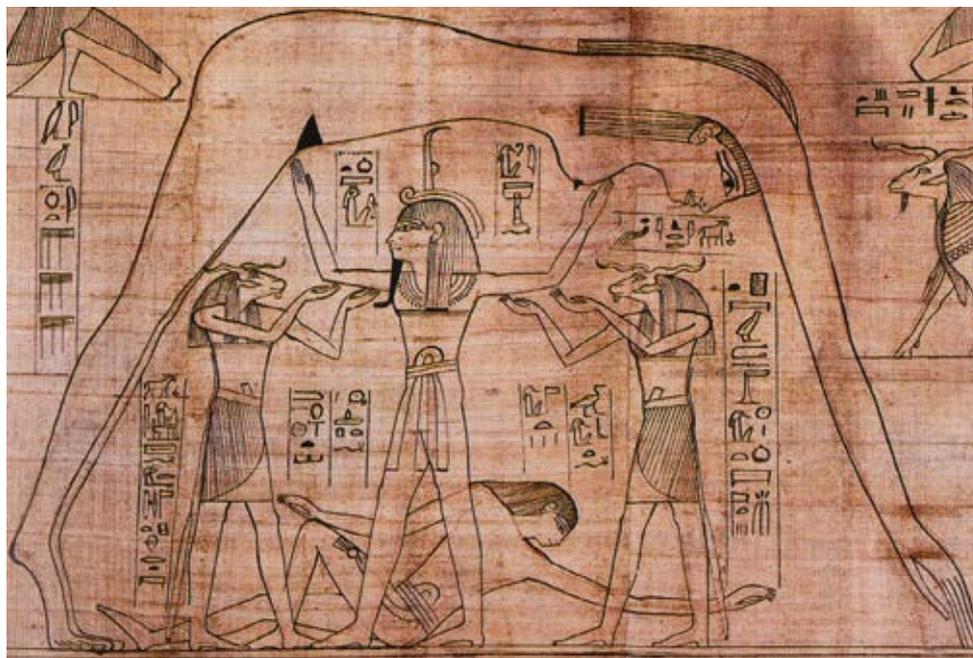
Main cults of the Old Kingdom

The creation myths introduce us to some of the most important deities or gods of the Old Kingdom: Horus, Re and Osiris. These gods become associated with the king, with their tombs, their sacred texts, and their funerary customs and rituals.

Horus

Horus was the major Old Kingdom deity until the 4th Dynasty. He was a sky god, the son of Isis and Osiris, and was worshipped at some of Egypt's earliest sites, such as Hierakonpolis. Horus was also a sun god and he is referred to in the Pyramid Texts as the 'god of the east' (see 17.3 Afterlife beliefs). Horus was particularly important in the Old Kingdom as a god of kingship. Most importantly, the king became known as the 'living Horus', placing him on the same level as the god. The kingship imagery associated with Horus can be seen in the beautiful statue of Khafre, a king of the 4th Dynasty, where Horus sits on the back of the king's head in a protective pose (Source 5).
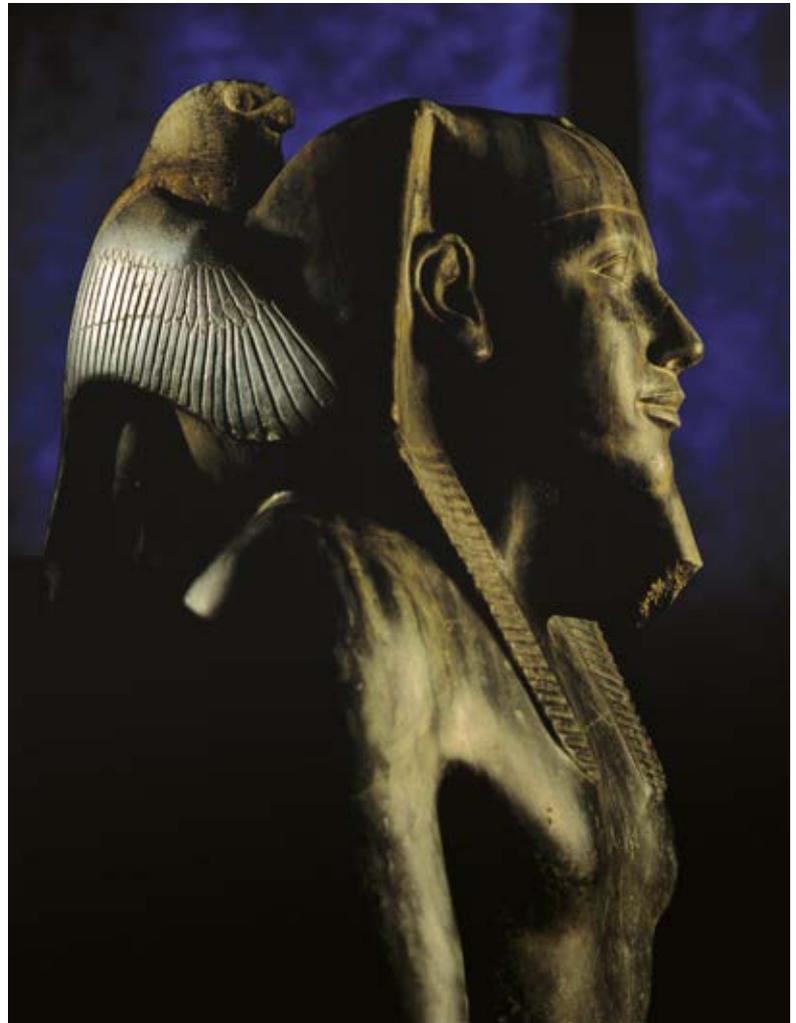
SOURCE 5 The Horus falcon protecting King Khafre of Dynasty IV

Re

Re, the sun god originating in Heliopolis, was possibly Egypt's most important deity. Because of his role as creator god, Re became the first king of Egypt, only departing for the heavens, where he continued to reign when he became too old to stay on earth. In his form Re-Atum, he appears in the Pyramid Texts as the father of the king. The first king to incorporate Re in his name was Raneb of the 2nd Dynasty. The cult of Re became very powerful in the 4th Dynasty when, from the time of Khafre, kings were no longer called the 'living Horus', but changed the **epithet** to 'Son of Re' in their titles. From this time they also linked their temples to Re. By the 5th Dynasty, Re had become Egypt's **state god**, and several kings of this dynasty built **sun temples** next to their pyramids and **mortuary temples** in his honour.

SOURCE 6 The cartouche of Khafre, depicting his name in hieroglyphs, which spell out 'Appearing like Re'. The sun god Re is shown as the disc at the top of the cartouche.

■ **epithet**
an adjective or phrase describing a quality or attribute of a person

■ **state god**
the principal god of a people or nation

■ **sun temple**
a religious building of the late Old Kingdom dedicated to the worship of the sun god, Re

■ **mortuary temple**
a religious building dedicated to the funerary cult of a deceased person

Osiris

Osiris is the third god in the group of important kingship gods of the Old Kingdom. He was originally a fertility god, but in the later Old Kingdom, his cult grew. Osiris took on the **attributes** of many other gods; for example, from Anubis he took 'he who is in the god's [embalming] tent'. Along with Horus and Re, Osiris is mentioned most frequently in the Pyramid Texts. His rising popularity seems to have resulted in his incorporation in the Heliopolitan myths. The story of his murder and dismemberment by his jealous brother Seth, and his recovery and revitalisation by his loyal wife Isis, and their sister Nephthys, became one of the core myths. Subsequently, the account of the struggle for supremacy between Seth and Osiris' magically conceived son Horus, provided a foundation for Egypt's system of government. Horus' victory and accession to the throne led to Osiris being associated with the dead king, and the successor with Horus. The story also offered the hope of immortality. Until the end of the Old Kingdom, only the kings could claim to be 'the Osiris (name)' on their death, but after this time nobles and commoners also claimed the right.

17.2 Check your learning

1 Research these important Old Kingdom gods: Re, Maat, Ptah, Nun, Atum, Isis, Nephthys, Seth and Anubis. Find an image of each, the places they were associated with and their areas of responsibility.

2 Identify some of the gods from the Heliopolitan creation story in Source 4.

3 Research the creation stories belonging to Hermopolis and Memphis. Which are the important gods in these stories?

4 Find and read the full versions of the myths of Osiris and Isis, and the wars of Horus and Seth online.

5 What aspects of continuity and change in the role and importance of key gods can you identify?

SOURCE 7 A 19th-dynasty **relief** depicting Osiris and Isis on the inner wall at the Temple to Osiris, at Abydos

<div style="border-left: 4px solid #e5305a; padding-left: 1em;">

17.3

Afterlife beliefs

There are some important concepts associated with Egyptian afterlife beliefs that had their origins in the Old Kingdom or earlier (see Source 8). These fundamental concepts, once established, continued throughout the rest of Egyptian dynastic history.

</div>

SOURCE 8 Old Kingdom afterlife concepts

AKH	KA	BA	MA'AT KHERU
• A 'blessed spirit' • A righteous person whom the king allowed to buried in the official cemetery could become an *akh*.	• The 'life force' of any living person • On death, the *ka* and the body separated, and the deceased's resurrection depended on their reunion in the afterlife. • A *ka* statue was provided in the tomb for the *ka* to inhabit. • It had to be fed with offerings, pictures of offerings or words.	• A spiritual presence possessed only by the king and the gods • It was depicted as a bird. • The *ba* could change shape and was not as closely tied to the body as the *ka*. • The *ba* enjoyed food and other aspects of life.	• This means 'true of voice' or justified. • It appears in the Pyramid Texts on occasions where the gods communicate their approval of the king.

ka
a person's spirit, which survived after death

Royal afterlife beliefs

Three different concepts of the king's afterlife developed during the Old Kingdom: the stellar, the solar and the Osirian cults. The stellar cult originated in the 3rd Dynasty and was identified with King Djoser and his step pyramid. It was believed that the deceased king would ascend to heaven to be with the 'imperishable stars'. These are the stars visible in the northern hemisphere that never set. The solar cult became the dominant cult in the 4th and 5th dynasties. According to this belief, the deceased king travelled to heaven via the rays of the sun and joined the sun god Re in his solar **barque** making its daily journey from dawn to dusk across the heavens. The Osirian cult appeared late in the Old Kingdom. This belief has the deceased king joining Osiris in the underworld.

There is less evidence for the afterlives of royal women. Wives and mothers of the kings were the most important, and some prominent queens were given their own small pyramids near those of the kings. Other women were usually included in the burials of their male relatives.

barque
a type of small sailing boat

Afterlife beliefs of the nobles

Old Kingdom nobles depended on their association with the king for their afterlives. The presence of food and drink in some tombs, and their representations on the tomb walls, suggest a belief in an afterlife where these things would be necessary. It is thought that the dead stayed close to their tombs. Some tombs have **ka statues** that seem to be passing through the **false door** of the tomb to receive offerings, suggesting a belief that the *ka* could leave the burial chamber (see Sources 8 and 9). The beautiful, detailed scenes of daily life that decorated the walls of the nobles' tombs in the 5th and 6th dynasties suggest that an afterlife resembling the real life of the deceased, or even exceeding it, was expected. The absence of gods in these tomb scenes suggests that these gods were reserved for royalty.

ka statues
statues placed in a tomb for the *ka* (spirit) of the deceased to reside in

false door
a painted or carved imitation door to serve as a portal between the world of the living and the afterlife

SOURCE 9 The tomb of Mereruka at Saqqara, showing his *ka* statue moving from the burial chamber to the tomb **chapel** through the false door

Afterlife beliefs of the lower classes

The lack of substantial evidence makes it difficult to know about the afterlife expected by the lower classes. Their shallow graves were located near the tombs of the nobles, so it is possible that they believed or hoped their *kas* would be able to share the offerings brought to those tomb owners.

Archaeological evidence for the afterlives of women is very limited. Some wives are depicted in the tombs of the nobles, suggesting that they might be present in the afterlife as well. A very small number have tombs of their own.

Pyramid Texts

The majority of our knowledge of Old Kingdom Egyptian beliefs about death comes from a series of spells and prayers known as the Pyramid Texts. These texts were found inscribed on the burial chamber walls of the pyramids of the kings. They first appeared in the pyramid of Unas, last king of the 5th Dynasty, but are thought to have originated earlier in the Old Kingdom. The **utterances** or spells that made up the texts dealt with the protection of the deceased king's remains, the reanimation of his body after he died and his journey to heaven where he became a god. This ascent could take place via ramps, stairs and ladders, or even by flying on the smoke of burning **incense**. Source 10 contains two extracts from the Pyramid Texts.

UTTERANCE 267

Thy heart belonged to thee, Osiris; thy legs belonged to thee, Osiris; thine arm(s) belonged to thee, Osiris … A stairway to heaven shall be laid down for him, that he may ascend to heaven thereon; he ascends on the smoke (incense) of the great censing. N. [name of deceased king] flies, as a goose; he alights as a **scarab**; … upon the empty throne which is in thy boat, O Rē'. Stand up, remove thyself, thou who knowest not the reed-thicket, that N. may sit in thy place and row (around) in heaven in thy boat, O Rē'. N. pushes off from the earth in thy boat, O Rē'; so when thou goest forth from the horizon, he (N.) has his **sceptre** in his hand, as navigator of thy boat, O Rē' …

UTTERANCE 269

… N. ascends on the hips of Isis; N. climbs up on the hips of Nephthys. The father of N., Atum, lays hold of the arm of N.; he assigns N. to those gods, who are the nimble, the wise, the imperishable stars.

Samuel A.B. Mercer (trans.), *The Pyramid Texts*, New York: Longmans, Green & Co., 1952

scarab
a dung beetle, a symbol of the sun god in his form of Khepri, the rising sun

sceptre
an ornamented staff carried by rulers on ceremonial occasions as a symbol of kingship

17.3 Understanding and using the sources

Source 10

1 What evidence do the utterances give for the stellar, solar and Osirian beliefs?
2 Name the gods in these utterances. What is each god's role in the king's journey to heaven?
3 What is the deceased king's role in Re's boat?
4 Which gods will be present at the deceased king's arrival in heaven?
5 What are the 'imperishable stars'? Why would the gods be associated with them?

Pyramid Texts and queens

In the 6th dynasty, a number of queens had Pyramid Texts inscribed in their burial chambers. Queen Neith, the daughter of King Pepy I and wife of King Pepy II, was the first to have them in her tomb. Queens Iput II, Wedjebten and Ankhenespepy II, also wives of Pepy II, had Pyramid Texts that have survived on the fragmentary remains of their pyramid walls. The remains of the pyramid of Behenu, a wife of either Pepy I or II were discovered in 2007, and were found to contain a set of Pyramid Texts in the burial chamber. The tombs of these queens seem to have contained some spells that were not used by the kings.

17.3 Check your learning

1 Go online and research the Pyramid Texts of Old Kingdom Egypt. Find answers to these questions:
   a What other ways were available to the king to get to heaven?
   b How would he get across the lake?
   c What creatures would try to stop him getting to heaven? How would he overcome them?
   d What would the king do once he arrived in heaven?
2 What is the significance of the appearance of Pyramid Texts in the tombs of 6th-Dynasty queens?
3 How is social class reflected in the different afterlife beliefs of Old Kingdom Egyptians?
4 Suggest reasons why there is little evidence for the burial of women and the lower classes in Old Kingdom Egypt.

Funerary practices

Funerary practices played an important role in the lives of Old Kingdom Egyptians. From the king to the lowliest commoner, there was a concern to provide for the dead. Again, social class determined the nature and quality of the burial. Remains were often mummified, a funeral was held and the deceased was interred in a tomb. If you were the king, you would be provided with a pyramid, and another might be available for your queen, depending on the period in which you were living. Nobles built **mastaba** tombs, with varying types of chapels and accompanying features. Changes occurred in all of these from the 3rd to 6th dynasties, and it is necessary to be able to identify the changes and the possible reasons for them.

■ mastaba
a bench-shaped tomb common in the Old Kingdom

Mummification

Sources for Old Kingdom mummification include tomb inscriptions and, in some cases, actual remains. The practice differed significantly from that carried out in the New Kingdom, so we have to be careful not to make assumptions based on much later evidence. It is theorised that mummification had its origins in the observation of mummies such as 'Ginger', a naturally mummified male dating to about 3400 BC, which was excavated at Gebelein in the south of Egypt. Connections might have been made between the preservation of the dead and the possibility of an afterlife. Ironically, the hot sands of the desert did a much better job of preservation than many of the more sophisticated techniques that were subsequently developed.

SOURCE 11 The naturally mummified remains of a male dated to c. 3400 BC, excavated in Gebelein in southern Egypt. He has been nicknamed Ginger, because of his red hair.

17.4 Understanding and using the sources

Source 11

1 What evidence of afterlife beliefs is indicated by Ginger's burial?
2 What do you observe about the position of the body in this burial? Can you explain it?

Mummification techniques

Early attempts to preserve the dead focused on wrapping the body and covering it in plaster. By the 3rd Dynasty, other techniques had appeared. Source 12 summarises the techniques that we know about, the available evidence, and how these practices developed during the Old Kingdom period.

SOURCE 12 A summary of mummification techniques of the Old Kingdom

TECHNIQUE	DETAILS	EVIDENCE	DEVELOPMENT
Desiccation (drying)	After washing, the body was covered in a thick layer of dry **natron**.	• The mummy of Queen Merysankh III took 272 days to dry.	
Evisceration (removal of internal organs)	The internal organs (lungs, liver, stomach and intestines) were removed. They were dried in natron, individually wrapped and placed in a **canopic chest**.	• Lung tissue found in the canopic chest of Queen Hetepheres I • Recesses built in the walls of burial chambers are thought to be for linen-wrapped organs.	• Began in Dynasty IV. Before this, internal organs were left inside bodies. • Early canopic chests were square boxes made of stone, divided into four compartments. • Stone jars were used instead of boxes in the late Old Kingdom.
Wrapping	• Ointment was rubbed into the skin and the body was wrapped. • Variations included thick padding beneath the wrapping to simulate body shape and painting of facial features in green paint.	• A mummy from Saqqara had 14 layers of bandages. • The tomb inscription of Mery-aa (Dynasty IV): 'I embalmed him with ointment of the Residence and red-linen from the House of Life'. • Mummies found coated with **resin** or plaster	• In Dynasties II and III, bandages were soaked in resin and moulded to the features of the deceased, producing a hard, dry shell; body in **foetal position**. • From Dynasty IV onwards, body wrapped in fully extended position – starts with wealthy and extends to the poor.

natron (or natrum)
a mixture of mineral salts used in the mummification process

canopic chest
a ritual container for the mummified internal organs of the deceased, stored in the tomb

foetal position
the contracted position of the body (as before birth)

resin
a sticky, organic substance exuded by some trees and other plants; used as a glue in the mummification process

The funeral

Royal funerals were different in several respects from those of the nobles. These will be considered in the section on pyramids. All tombs, royal and non-royal, were located on the west bank of the Nile, while the living occupied the east bank. That is why the first step in the funeral journey involved travel from the east to the west bank. We can gain a good understanding of the nobles' funerals from the reliefs found in several nobles' tombs. The nobleman Qar, whose funeral is featured in Source 13, was an official of the 6th Dynasty, probably during the reign of Pepi I. His titles included 'Overseer of the Pyramid Towns of Khufu and Menkaure' and 'Tenant of the Pyramid of Pepi I'. Source 14 summarises the stages of an Old Kingdom noble's funeral.
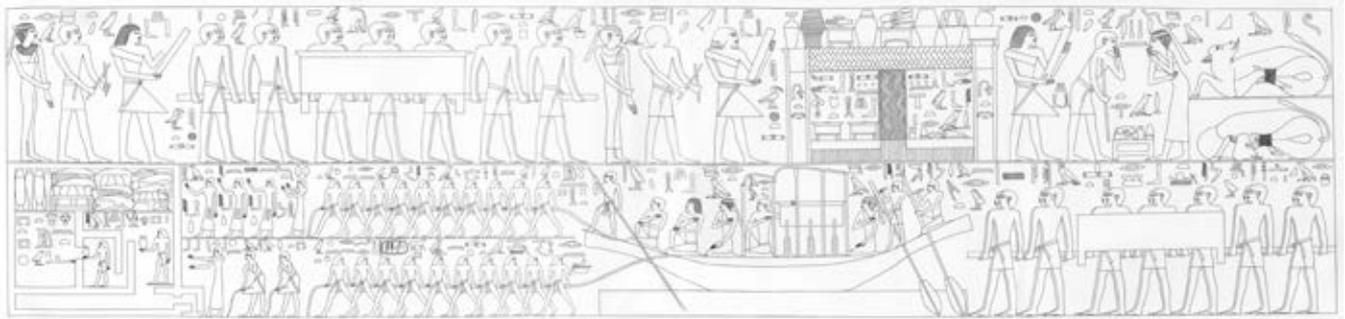
SOURCE 13 A depiction of the funeral of the 6th-Dynasty noble Qar at Giza

Journey across the river
The body was collected from the house and accompanied by grieving relatives. The coffin was ferried across to the west bank on a funerary barge. Two female mourners called *dryt* or 'kites' (hawks), representing the goddesses Isis and Nephthys, accompanied the party. One might have been the wife of the deceased.

Procession to the tomb
The coffin was carried or dragged on a sledge to the tomb, accompanied by family and mourners. The entourage included some professional mourners, the lector priest identified by his shoulder sash and scroll, and the embalmer.

Rituals at the tomb
The lector priest read prayers to make the deceased a 'blessed spirit' and purified the *ka* statue. (This was done by the embalmer until Dynasty V.) A ritual called the '**Opening of the Mouth**' was performed on the *ka* statue. This restored all senses and physical functions for use in the afterlife. Animals and birds were slaughtered and sacrificed to the deceased. Temple singers and dancers performed ritual dances.

Burial
At some stage in the proceedings the body was lowered into the tomb by men, assisted by the lector priest and the embalmer. After all rituals were complete, a priest swept away all footprints and the priests and mourners left the tomb.

SOURCE 14 The main stages in the Old Kingdom funeral of a noble

■
Opening of the Mouth ceremony
a ritual designed to restore the senses to the deceased

17.4 Check your learning

1 Why did embalmers begin to eviscerate the dead in the Old Kingdom?

2 Using the information in Source 12, suggest reasons why bodies were wrapped in a fully extended position from Dynasty IV instead of in the foetal position as was the earlier practice.

3 Study the depiction of Qar's funeral in Source 13 and identify the elements of an Old Kingdom funeral described in Source 14.

4 Imagine you were present at one of these funerals. Write a series of tweets that you would post to record what you are witnessing.

Tombs of the nobles

The mastaba tombs of Old Kingdom nobles developed from the rectangular, house-like structures built by the king's officials in the 2nd Dynasty. The typical mastaba tomb had several essential features, many of which changed and developed over the Old Kingdom period. Source 16 shows a typical mastaba from the 4th to 6th dynasties. The main features of the mastaba tomb are explained in Source 15.

SOURCE 15 The main features and development of the mastaba tomb

FEATURE	DETAIL AND DEVELOPMENT
Chapel	• *Dynasty III* – mastabas had simple, roofed chapels on the outside, which contained **offering niches** and carved wooden panels. • The number of storage rooms decreased as models of tomb goods replaced the actual goods • Some examples of tomb goods were painted on the walls (e.g. the tomb of Hesyre) • *Dynasty IV* – chapels were now deep within the **superstructure** and were cruciform (cross-shaped) • Chapel walls were sometimes decorated with painted scenes of daily life. • *Dynasty V* – multi-roomed chapels appeared • Painted scenes displayed high levels of artistic skill • *Dynasty VI* – chapel increased greatly in size and number of rooms until it occupied nearly all of the superstructure • Painted reliefs were of high artistic quality
Shaft	• *Dynasty III* – the stairway providing access to the rock-cut burial chamber was abandoned in favour of a shaft. This provided access to the burial chamber and went through the superstructure of the mastaba.
Burial chamber	• Usually positioned directly beneath the chapel • Contained the **sarcophagus** or stone box holding the body of the deceased. • Was protected by a portcullis or large stone, blocking access from the shaft.
Serdab	• This was a sealed chamber containing one or more *ka* statues of the deceased • Situated close to the chapel to be near offerings left by relatives or priests • Often had holes to enable the *ka* statue to view the chapel • *Dynasty IV* – during the reigns of Khufu and Khafre, tombs had no *ka* statues and the older **stelae** replaced the false doors • Reserve heads (i.e. sculptured heads of the tomb owner) were placed in some tombs
False door	• Used as an offering stela • Carved in stone to resemble a real door but was completely solid • Featured the **offering formula** and a scene of the tomb owner seated in front of a table piled with food (see Source 1 and Chapter conclusion) • Believed to function like a real door, allowing the *ka* to pass through to receive offerings (see Source 9)
Construction material	• *Dynasty III* – solid mudbrick with **palace façade** decoration on the exterior, or outer shell of mudbrick filled with rubble • *Dynasty IV* – use of stone increased until mastabas were built entirely of stone, but mudbrick construction continued for less wealthy officials

offering niche
a small indented area in a tomb for placing food and drink offerings

superstructure
in this context, the above-ground section of a pyramid or mastaba tomb

sarcophagus
(*pl.* sarcophagi)
a stone coffin

stela (*pl.* stelae)
an upright stone slab or pillar bearing inscriptions or designs and serving as a monument

offering formula
a prayer accompanying a list of foodstuffs brought to the deceased

palace façade
a decorative motif resembling the recessed exterior walls of early dynastic royal palaces
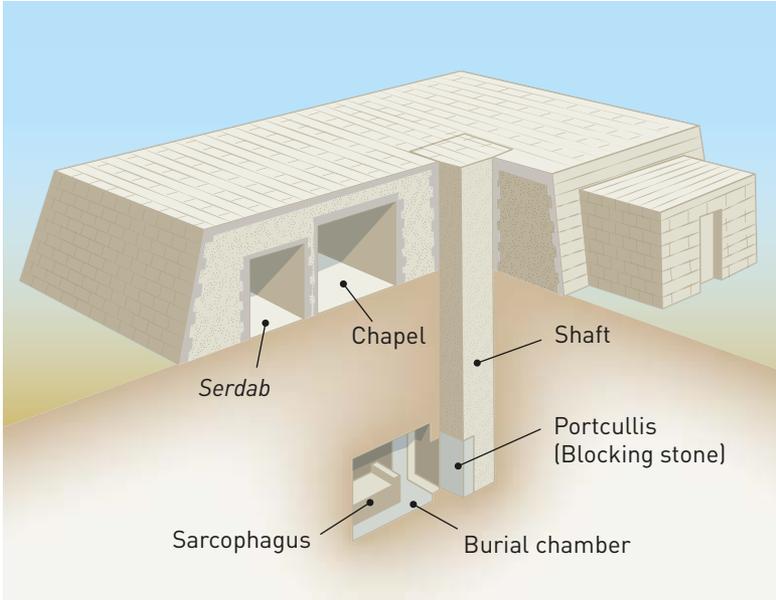
SOURCE 16 A typical Dynasty IV–VI mastaba

Rock-cut tombs

Towards the end of the 4th Dynasty, some nobles who lived in areas with cliffs and outcrops of rock built rock-cut tombs. An example from the Giza cemetery is the tomb of Queen Merysankh III, a combination of conventional mastaba and rock-cut tomb. These tombs tended to be smaller than conventional mastabas, but had the advantage of lasting much longer. They had the same components as a mastaba tomb, and were often decorated with carved and painted reliefs. Sometimes **gypsum** or mud plaster was used to provide a smooth, stable surface for carving and painting. The occurrence of rock-cut tombs increased in the 5th Dynasty when some government officials moved to the provinces.

gypsum
a soft, white mineral used to make plaster

vizier
a chief minister and king's deputy in ancient Egypt

Tomb decoration

The 5th and 6th Dynasties, times of increasing wealth for the officials of the king's bureaucracy, saw the development of tomb decoration. From simple representations of tomb goods, the range of scenes increased to include elaborate depictions of the tomb owner engaged in the activities of his profession, and overseeing the daily lives of his family and servants. Examples of the highly skilled reliefs of this period can be found in the Saqqara tomb of Ptah-hotep, a **vizier**, during the reign of Djedkare-Isesi of the 5th Dynasty.

It is thought that the tomb owners and the artists decorating their tombs were trying to ensure that their lives of privilege on their vast estates could be enjoyed forever. Denied the celestial afterlives of the kings, their *kas* could contemplate the joys of their lives on earth or even relive them through the magical coming to life of the scenes. The repetitive scenes of animals being butchered, food being brought to the deceased, and the tomb owner himself or sometimes herself seated before tables piled high with food were expected to provide for their needs for eternity.

SOURCE 17 The 'Meidum Geese' from the 4th-Dynasty tomb of Nefermaat

17.5 Check your learning

1   Search online for some of the well-known scenes from the tombs of these Old Kingdom nobles/officials:

- Dynasty V – Ptah-hotep, Nefer, Ty
- Dynasty VI – Ankhmahor, Kagemni, Mereuruka.

List the subject of the scenes (e.g. fishing, agriculture, sculpture) and what you think they reveal about life in Old Kingdom Egypt in the 5th and 6th dynasties. Use a table as shown below.

DYNASTY	TOMB OWNER	DETAILS OF SCENES

Pyramids of the kings

The age of the pyramids began in the 3rd Dynasty with the reign of Djoser. These **monumental** tomb structures were expressions of the power and status of the kings and their relationships with the gods. The experimentation and innovation carried out by Djoser's architect, Imhotep, set the pattern for the building of the famous pyramids of the 4th Dynasty at Giza. By the 5th and 6th dynasties, factors had set in that caused the decline in pyramid building and the end of not just the age of the pyramids, but the Old Kingdom itself.

Imhotep is given credit for two groundbreaking ideas. The first was to take the concept of the mastaba, developed during the 1st and 2nd dynasties, and stack several of them in decreasing sizes to form a pyramidal structure. The result was the step pyramid. This became the focus of a pyramid complex at Saqqara near Memphis that included several other structures. The second of his innovative ideas was to build in stone. This single idea enabled the eventual construction of the experimental pyramids of the 4th Dynasty, culminating in the Giza pyramid complexes (see Source 18).

SOURCE 18
The layout of the
pyramid complexes
of Khufu, Khafre
and Menkaure
at Giza

LEGEND
1 Valley temple
2 Causeway
3 Mortuary temple
4 Pyramid
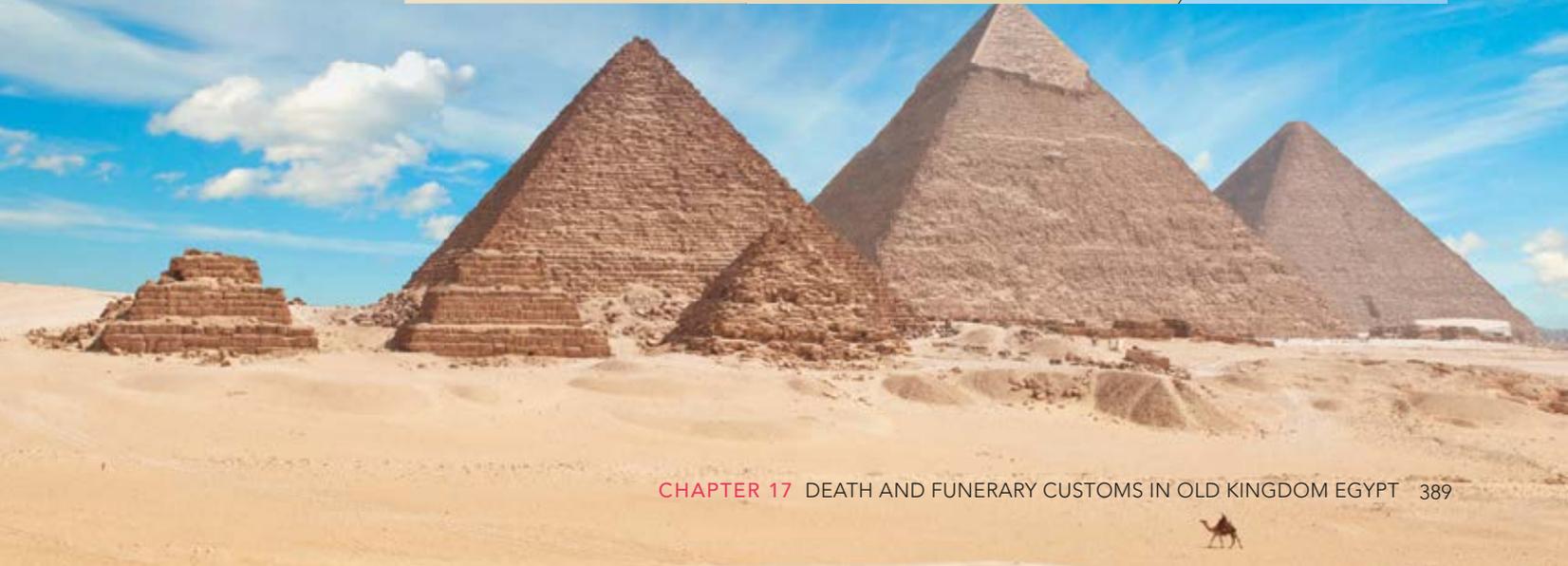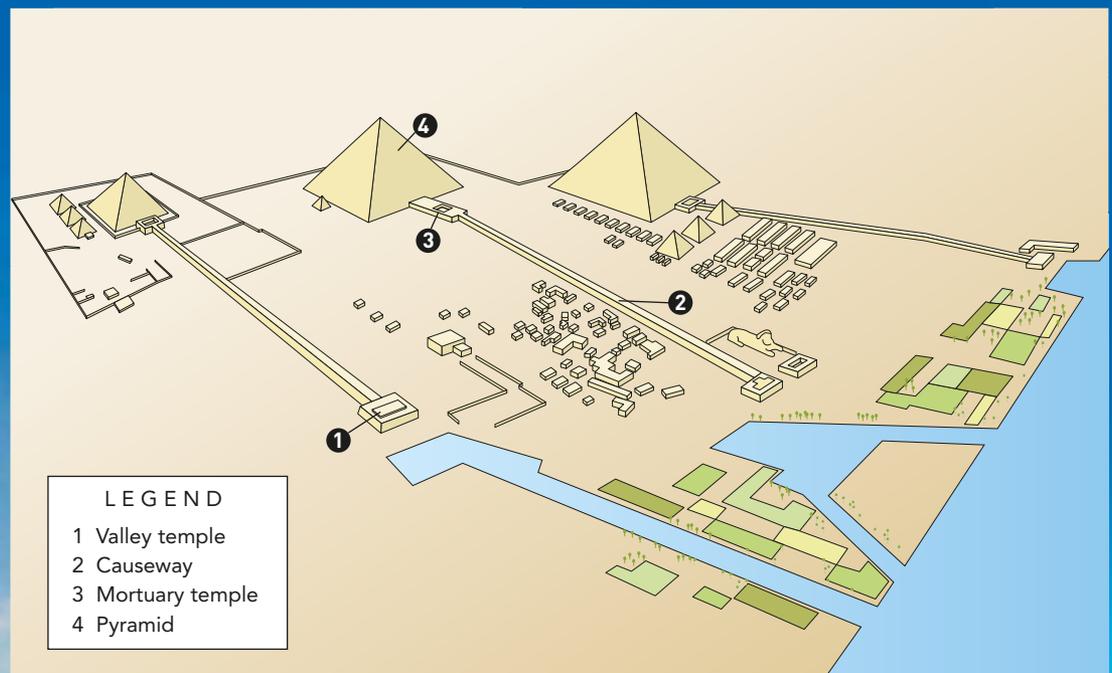
substructure
in this context, the below-ground section of a pyramid or mastaba tomb

relieving chambers
a series of compartments above the burial chamber designed to prevent the weight of the pyramid crushing the burial chamber

The mortuary complex

A standard mortuary complex included a number of buildings designed for the burial and maintenance of the king's mortuary cult. These structures included:

- a valley temple located on the banks of the Nile for the reception of the coffin from the funerary barque
- a covered causeway along which the king's coffin was dragged to the pyramid
- a mortuary temple for the performance of funerary rituals; these were originally on the northern side of the complex as in the complex of Djoser. Later they were located on the eastern side
- the pyramid containing a burial chamber for the king's sarcophagus.

SOURCE 19 Developments in pyramid building during the Old Kingdom

KING	PYRAMID	FEATURES
Djoser Dynasty III Step Pyramid Saqqara	 step pyramid · mortuary temple · enclosure wall · south tomb · entrance complex · sed-festival complex	• Six-stepped pyramid of stacked mastabas • Made of stone, brick-sized blocks • Mortuary temple and *serdab* on northern side indicate belief in stellar afterlife cult
Sneferu Dynasty IV Meidum Pyramid Meidum	 burial chamber · Stage 1: inner core · Stage 2: addition of eight steps encasing core · Stage 3: outer cladding	• Built as a true pyramid • Experimental design in three stages to make an eight-stepped structure • Outer cladding on final step collapsed due to steep angle of incline and weight of three separate outer casings of stone
Sneferu Dynasty IV Bent Pyramid Dahshur	 upper burial chamber · northern entrance and passage · western entrance and passage · causeway · satellite pyramid · offering place · antechamber · eastern chapel · lower burial chamber	• Called the 'Bent Pyramid' because shape is rhomboid rather than pyramidal • Steep angle of sides altered when cracks appeared in masonry, threatening collapse • Pyramid abandoned

KING	PYRAMID	FEATURES
Khufu Dynasty IV Giza	King's chamber with relieving chambers above — air shafts — grand gallery — air shafts — Queen's chamber — ascending passage — entrance — two southern boat pits — descending passage — subterranean chamber — mortuary temple — Queens' pyramids — causeway	• True pyramid – finest example of pyramid construction • Burial chamber originally in **substructure** then changed to superstructure • Burial chamber has **relieving chambers** and a gabled roof to disperse the weight above • Access to royal burial chamber via grand gallery • Boat pits – subterranean chambers containing funerary solar boats to take the king to the afterlife • Complex includes queens' pyramids
Userkaf Dynasty V Abu Gurob	entrance — descending passage — portcullis — burial chamber — antechamber — magazine — offering chapel	• Smaller than Dynasty IV pyramids • Inferior building techniques and materials used • Mortuary temple on southern side for full sun • Focus of building in this dynasty increasingly on sun temples rather than pyramids
Pepy I Dynasty VI Saqqara	Queens' pyramids — enclosure wall — mortuary temple — open court — causeway	• Core of locally quarried limestone and debris • Outer casing of white limestone blocks • Continuation of inferior internal construction leaving a 12-metre-high ruin today • Antechamber and burial chamber had a gabled roof of three layers of huge limestone beams • Antechamber and burial chamber contain Pyramid Texts • Little remains of the other buildings of the complex
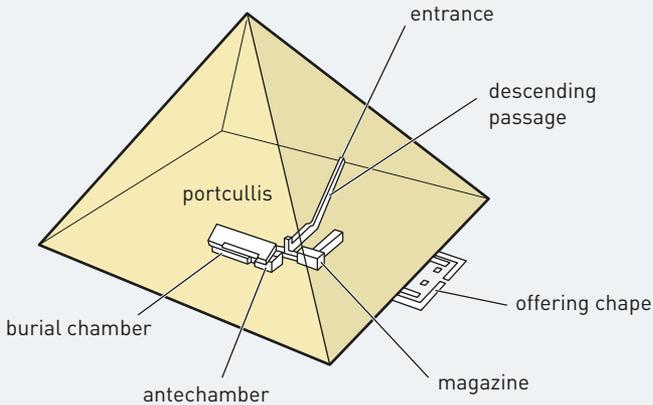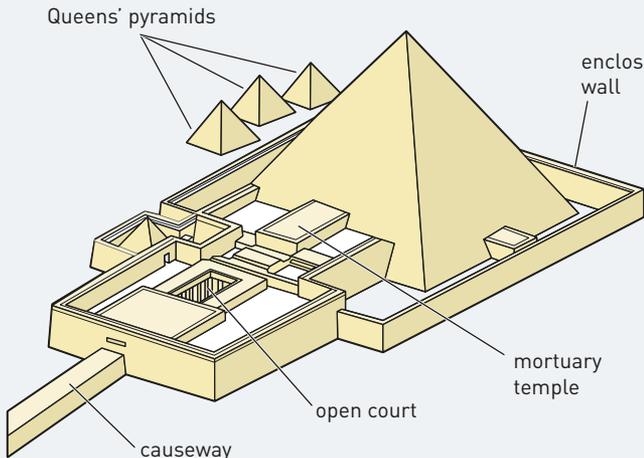
17.6 Check your learning

1 Why did the location of the mortuary temples move from the northern to the eastern side of the pyramid from Dynasties III to VI?

2 What is the major difference between the Step Pyramid of Dynasty III and the pyramids of Dynasty IV?

3 What examples are there of the experimental nature of pyramid building in Dynasties III and IV?

4 What architectural advances can be seen in pyramid construction in Dynasty IV?

5 Suggest reasons for the inferior quality of the construction of the pyramids in Dynasties V and VI.

6 Find an example of a Dynasty V sun temple complex, for example that of Niuserre at Abusir. Find out the significance of the obelisk.

7 Check your understanding of change and continuity in death and funerary customs in Old Kingdom Egypt by completing the following table.

8 Write a response to the following question: 'Explain the main features of change and continuity in Old Kingdom funerary beliefs and practices.' (Explain: Make relationships clearly evident, give cause and effect, provide why and/or how.)

FEATURE	WHAT STAYED THE SAME	WHAT CHANGED	WHY CONTINUITY? WHY CHANGE?
Religious beliefs			
Mummification			
Funerals			
Mastabas			
Pyramids			
Tomb decoration			

To help you plan your response:

- identify the main aspects of change and continuity in Old Kingdom funerary beliefs and practices
- use these aspects to structure your answer
- draw conclusions about change and continuity in the funerary beliefs and practices of the Old Kingdom
- use specific evidence to support your explanation.

Hetepheres, a queen's burial

Queen Hetepheres, wife of Sneferu first king of Dynasty IV and mother of Khufu, builder of the Great Pyramid, is one of the most prominent queens of the Old Kingdom. When she died, her remains were interred in one of the small **satellite pyramids** next to Khufu's pyramid at Giza. When her pyramid was excavated in the 1920s, the burial was found virtually intact. Its stunning burial goods included:

- a golden bed canopy and bed with headrest
- two gilded armchairs
- a gold-covered carrying chair
- a chest containing a box with alabaster ointment jars, a copper toilet-spoon, and silver bracelets or anklets with butterfly design inlaid with lapis lazuli, carnelian and malachite
- an alabaster canopic chest.

The queen's beautiful alabaster sarcophagus, however, was empty. Egyptologists have offered various explanations for the missing body. These include initial burials at other locations, grave robbers, removal of the queen's mummy, plots to keep the truth from the king and reburials. Whatever the truth, it is unlikely now to be discovered. What is important is that the range of beautiful and expensive tomb goods indicate the esteem in which Hetepheres was held by her son. It is also an indication of the influential position of the mother of the king in the Old Kingdom.

17.6 Profile

SOURCE 20 Remains of the pyramid of Queen Hetepheres in foreground with pyramids of Khufu, Khafre and Menkaure behind.

satellite pyramid
a small pyramid next to the main pyramid of a complex

SOURCE 21 A reconstruction in the Boston Museum of Fine Arts of the burial furniture from the tomb of Hetepheres, Dynasty IV

17.6 Profile tasks

1 Suggest another reason why Khufu wanted his mother buried with impressive burial goods. (Hint: there is some doubt that Hetepheres was actually Khufu's mother, but she was the wife of Sneferu, his father.)

2 Hetepheres' alabaster canopic chest still had her mummified internal organs inside. Why is this significant?

In investigating death and funerary customs in Old Kingdom Egypt, we have looked at the aspects that have remained constant throughout the period. The Egyptians believed in gods of kingship and the myths associated with their lives. They prepared their dead for the afterlife and built tombs to house their preserved remains and the goods they would need. However, many features of these practices changed during the four dynasties of the Old Kingdom for a number of reasons. Changes in belief resulted in changes in practice. Some related to the afterlife of the king, such as the introduction of Pyramid Texts. Others related to the nobles and their growing wealth and influence, particularly towards the end of the Old Kingdom. The burial practices give us important insights into not only the Egyptian afterlife, but also changes in society as a whole.

FOR THE TEACHER

Check your <u>o</u>book <u>a</u>ssess for the following additional resources for this chapter:

Answers

Answers to each *Check your learning*, *Understanding and using the sources* and *Profile task* in this chapter

Teacher notes

Useful notes and advice for teaching this chapter, including syllabus connections and relevant weblinks

Class test

Comprehensive test to review students' skills and knowledge

<u>a</u>ssess quiz

Interactive auto-correcting multiple-choice quiz to test student comprehension

18

Weapons and warfare in Assyria

FOCUS CONCEPTS & SKILLS

Change and continuity

In history we investigate aspects of life that have remained the same and those that have changed over time. We study the nature and speed of the change, the reasons for this and the impact of the change. In studying weapons and warfare in Assyria, we will look at the things that remain constant in this period, such as soldiers, warfare, weapons, strategy and tactics, but we will also look at their development and the reasons for the changes that we identify.

LEARNING OUTCOMES

1   Describe the composition and role of the Assyrian army and the lives of its soldiers.

2   Examine the significance of the military within Assyrian society.

3   Analyse and interpret the evidence for the Siege of Lachish.

4   Analyse the political, economic and social impact of warfare and conquest for Assyria.

5   Explain change and continuity in weapons and warfare in Assyria.

SOURCE 1 An Assyrian siege tower and battering ram in action against a fortified city. A relief from Nimrud, c. 865 BC

The Assyrian Empire

Semitic
relating to people of Hebrew or Arabic background

pragmatism
thinking or dealing with problems in a practical way and without emotion

vassal
a person or country in a subordinate position to another

annex
to incorporate, add territory to a country or state, often by military means

cylinder seal
a small cylinder inscribed with cuneiform text used for a wax seal

chronicle
a record of events in chronological order

annal
yearly historical record

cuneiform
a system of wedge-shaped writing on clay tablets first developed by the ancient cultures of Mesopotamia and Persia

tribute
a tax or payment made periodically by a subordinate state to a superior power, especially as a sign of dependence

The Assyrians were a **Semitic** people whose empire, at its height, reached from Mesopotamia (modern-day Iraq) through Asia Minor (modern-day Turkey) down to Egypt. The history of the Assyrian Empire spans approximately 1300 years, from c. 2000 BC to 612 BC. It has been divided into three periods: the Old Assyrian Empire, the Middle Assyrian Empire and the Neo-Assyrian Empire. The Assyrian Empire was one of the greatest empires of the ancient world.

The Assyrians established a model for military organisation and methods of warfare that would be copied in later times, particularly by the Romans, and through to the Middle Ages. Their reputation for both ruthlessness and **pragmatism** has been among the most enduring aspects of their legacy. Assyria's military superiority was based on the development of the world's first professional standing army together with the use of iron weapons and effective strategy and tactics.

A standard claim by Assyrian kings in the inscriptions recording their military conquests is: 'I destroyed, devastated and burned with fire' the cities, towns and regions that resisted Assyrian rule.

LATE NEO-ASSYRIAN EMPIRE

Source: Oxford University Press

SOURCE 2 Extent of Assyrian Empire in the Neo-Assyrian period

• Shamsi-Adid conquers Assur.
• With his two sons, he controls northern Mesopotamia.
• Empire declines after Shamsi-Adid's death; Assur is conquered by Hammurabi of Babylon.
• Assyrian kings become **vassals** of Babylon, then of the Mitanni.

• Ashurnasirpal II sets pattern for future kings; uses 'policy of frightfulness' effectively.
• Shalmaneser III extends Assyrian power to Caucasus, Israel and Syria; defeats Persia.
• Tiglath-Pileser III creates the world's first professional standing army; conquers territories to eastern Mediterranean.
• Sennacherib moves the capital to Nineveh; captures Lachish; destroys Babylon.
• Esarhaddon rebuilds Babylon; carries out mass deportations and conquers Egypt.
• Ashurbanipal rules for 42 years; Assyrian Empire ends with fall of Nineveh.

OLD ASSYRIAN EMPIRE C. 2000–1363 BC	MIDDLE ASSYRIAN EMPIRE C. 1360–1000 BC	NEO-ASSYRIAN EMPIRE C. 1000–612 BC

• Ashur-uballit I reasserts Assyrian power against the Mitanni and regains lands.
• Adad-nirari I establishes the Middle Assyrian Empire.
• Shalmaneser I conquers and **annexes** the kingdom of the Mitanni.
• Tukulti-Ninurta I conquers Babylon, demolishes its walls, massacres the people and steals the statue of Marduk (chief god of Babylon).
• Tiglath-Pileser I, one of the greatest Assyrian conquerors, extends Assyrian territory deep into Anatolia and conquers Babylon.

SOURCE 3 A timeline of key developments in the Assyrian Empire

The nature of the sources

Sources for Assyria are both archaeological and written. The archaeological excavations in the 19th and 20th centuries revealed the principal cities of Assyria: Nimrud, Khorsabad and Nineveh. These sites yielded artefacts such as **cylinder seals**, bronze sculptures, wall paintings and ivory carvings, all of which give information about Assyrian religious beliefs and military events. Most important perhaps are the wall reliefs that decorated the public rooms of the palaces. Huge panels of alabaster were carved in relief, depicting the lives of the kings and their military exploits. From these we learn much about the Assyrian army and its campaigns.

The written evidence for the Assyrian Empire includes king lists, **chronicles**, royal letters, legal and administrative texts, and literary and scholarly works. Kings such as Ashurbanipal maintained great libraries at Assur, Nimrud and Nineveh, containing hundreds of thousands of clay tablets with records of the military campaigns and other activities of the kings. These were often in the form of **annals** inscribed in **cuneiform** text. For example, the Taylor Prism from the Library of Ashurbanipal at Nineveh, dating to 691 BC, was a hexagonal clay prism listing the campaigns of Sennacherib until the start of his final war against Babylon. The prism includes details of the Siege of Lachish (see 18.4 Profile) and a record of the **tribute** received from Hezekiah, King of Jerusalem, who was defeated in the battle in 701 BC.

SOURCE 4 The Taylor or Sennacherib Prism, now located in the British Museum

Assyria in the Bible

The Old Testament of the Bible is also a source for the study of the Assyrians, particularly for their military pursuits. The kingdoms of Israel and Judah were sometimes allies and at other times **vassal states** of Assyria. These relations with Assyria are recorded in the Old Testament books of 2 Kings, Chronicles, Micah and Isaiah. These have often been found to corroborate each other (see 18.4 Profile).

Assyrian society

Assyrian society was tribal in nature, and protection of the family was of highest importance in all social groups. The king was the most powerful person, wielding political and religious power as both king and high priest of Ashur, the **state god**. In this role, he carried out **cult** rituals and provided resources for the temples of the god. The priesthood was a powerful force in Assyrian society. The **crown prince** and the governors were next in importance. Below them were the nobles and military officers and their families, as well as the leaders of the major cities. Men of higher social rank were addressed as 'my lord' by inferiors, who referred to themselves as 'your servant'.

The bulk of society were free citizens, including free foreigners who sometimes held important positions. Other foreigners were the princes and nobles of neighbouring lands who were detained at court. Below them were the slaves. While slavery was an important institution in Assyria, it was not the mainstay of the economy. There were two different groups of slaves: **debt slaves** and foreign captives. The former had rights, including marriage and property ownership, and could be **manumitted** on payment of their debts, although this was not common. The latter carried out forced labour on building projects or led hard lives of manual labour.

Women occupied a low position in Assyrian society. They were totally dependent on their male relatives and lived in separate quarters, associating only with other women. They could be divorced by their husbands with no compensation and were punished severely for committing adultery. Women of the king's harem occupied similar subordinate positions.

SOURCE 5 A relief from Sargon II's palace at Khorsabad, showing slaves or prisoners engaged in construction work

18.1 Check your learning

1 How do we know that the military were highly regarded in Assyrian society?
2 Suggest reasons why Assyria would have detained princes and nobles of neighbouring lands.
3 Why were debt slaves treated differently from foreign captives?

The Assyrian army

The Assyrian king and state were primarily occupied with warfare. Over time the Assyrian army developed a degree of military expertise that surpassed that of all of its neighbours. The army changed throughout Assyrian history, but particularly during the reign of Tiglath-Pileser III of the Neo-Assyrian period. He completely altered the nature of Assyrian warfare by creating the world's first professional **standing army**.

standing army
an army of full-time professional soldiers

Before this change during the Middle Assyrian period, all military activities were carried out by a part-time army, as was usual in Mesopotamia at this time. Military campaigns, fought by soldiers who were conscripted farmers and other agricultural workers, took place in the summer between the planting of crops and the harvest. Winter was unsuitable for campaigning due to weather conditions. The creation of a standing army under Tiglath-Pileser made the old pattern obsolete. From his time on, soldiers were hired from the provinces and sourced from vassal states as part of their obligations to the king. While the infantry could include a large number of foreigners, the cavalry and chariot divisions contained primarily Assyrians.

The army marched out on annual campaigns, frequently led by the king. Campaigns began in the spring, usually from the capital after the customary royal inspection and performance of religious **rites**. The army would head to the frontier, collecting extra troops as it went along. Supplies of food in the form of barley were carried and issued as rations. For all other supplies, the army lived off the land, and local rulers were expected to provide supplies as demanded. If the campaign went on longer than expected, the army would spend winter in some suitable, friendly territory.

rite
a traditional or religious ceremony

Composition of the army

The army was composed of several units, including infantry, archers and **slingers**, the chariotry, cavalry, the **commissariat**, war artists and scribes. Unique to this army were its engineers, who invented and constructed siege engines, dug tunnels, built bridges, and developed supply and communications systems. Source 6 shows the organisation of the basic army units and their commanders.

slingers
troops who fire stone missiles at the enemy with slingshots

commissariat
the body responsible for supply of food and equipment for an army

KING OF ASSYRIA
always represented as victorious commander of his troops

CHIEF GENERAL OR *TURTANU*
commanded several provincial divisions (100 000–250 000 men)

RAB SHAQE
commanded one provincial division of a number of *kisri* (15 000 men)

***RAB KISRI* (CAPTAIN)**
commanded one kisri of 5–20 squads

RAB ESERTI
commanded a squad of 10 men

SOURCE 6 The organisation of the Assyrian army

The infantry

The infantry was the mainstay of the army. The light and heavy **corps** were determined by the amount and type of armour worn. The Assyrian army was notable for its use of iron weapons rather than the bronze weapons used by their opponents. Source 7 gives details of the components of the Assyrian infantry, their weaponry and their armour (protection). The images show relief sculptures from Sennacherib's palace at Nineveh.

SOURCE 7 The Assyrian infantry

TYPES OF SOLDIERS	WEAPONS AND ARMOUR
Spearmen	*Weapons*: spear, dagger, sword, **mace**, battleaxe and shield *Armour*: • Light and heavy units wore body armour, conical or crested helmet, half-boots; similar to armour of lightly and heavily armoured archers. • Lower ranks wore leather armour, while higher ranks had lamellar or scale armour.
Archers	*Weapons*: • composite bow made of horn, wood and sinew laminated together • quiver carried slung across the back, likely made of wood or leather • spear and sword, carried by shield bearer *Armour*: • Lightly armed archers were bareheaded, barefooted and wore a type of kilt. • Heavily armed archers wore a hip-length coat of scale armour over a long robe or knee-length tunic, a conical helmet and half-boots. They were accompanied by shield bearers wearing the same armour and carrying a huge wickerwork shield.
Slingers	*Weapons*: slings • Slingers were used if the enemy had survived the attack of massed spearmen. They hurled stones and sometimes arrows at the enemy in tandem with chariot attacks. *Armour*: • Sometimes slingers wore armour like the archers, but were usually more lightly protected.

18.2 Check your learning

1 What were the disadvantages of fighting only in the summer months? Consider the effect on the soldiers themselves and the ability to maintain conquered lands.

2 What were the advantages of a standing army compared to a part-time one?

3 What advantage did fighting with iron weapons give the Assyrian infantry?

4 Research the Assyrian composite bow. Why did it play such an important role in Assyrian weaponry?

5 Why were the cavalry and chariot divisions reserved primarily for Assyrians?

18.3 Specialist corps

Besides the regiments of infantry, the Assyrian army had specialist corps that either supported them or were significant in their own right.

SOURCE 8 A relief of an Assyrian war chariot in action, from Sennacherib's palace at Nineveh

Chariotry

The chariotry made up the elite corps of the Assyrian army. Chariots were two-wheeled, open-backed and drawn by two or more horses. Initially the chariot was light and carried a charioteer (or driver) and an archer. A heavier, four-man version carried a driver, an archer and one or two shield bearers. The latter dated from reforms to the army carried out during the reign of Sargon II. Shooting from a moving chariot of either kind required considerable skill and sometimes the archer, protected by his shield bearer, dismounted to fire from the ground. The driver also needed protection. Horses tended to be left untouched by the enemy because they were valued as war **booty**. Heavier chariots were also used to drive through enemy formations to confuse and disperse the infantry.

booty
goods captured from the enemy during and after battle

Cavalry

Horses were not widely used until the time of Sennacherib. Their riders were mostly archers and there were even attendants to accompany them into battle to hold the horse steady so that they could shoot. Later, horsemanship skills must have improved because archers are shown riding unattended into battle. Horses were protected by fabric armour, which provided limited but useful protection in close combat and against missiles shot from slingers. Cavalry charges were employed to break through enemy lines, while mounted spearmen chased and rounded up defeated enemy troops. The cavalry's main function, though, was to protect the infantry from the enemy so that the archers and slingers could operate unhindered.

SOURCE 9 A relief of the Assyrian cavalry showing a mounted archer, from Sennacherib's palace at Nineveh

In time, the cavalry became the core of the Assyrian army. Some units were made up of hundreds of cavalrymen. Horses therefore were a vital war resource and were obtained from tribute paid by vassal states, horse-breeding programs and raids against horse-owning enemies such as the Scythians.

Engineers

This corps was responsible for carrying out a range of tasks essential for attacking or besieging an enemy city or stronghold. Engineers built the roads and camps for the army on the march. During a siege they built walls around the city, filled in moats and erected ramps for the deployment of troops and battering rams. They tunnelled under the enemy city's walls, and built scaling ladders and bridges for frontal assaults. Bridges were often pontoons or rafts tied to inflated animal skins. Troops and horses sometimes swam across rivers using inflated goatskins to stay afloat.

SOURCE 10 A relief from Nimrud showing troops crossing a river

18.3 Understanding and using the sources

1   Study the representation of troops crossing a river in Source 10 carefully. Identify:
    a   soldiers swimming across the river
    b   soldiers inflating goatskins
    c   a pontoon.
2   What is the pontoon ferrying across the river?

18.3 Check your learning

1   Explain the uses of the chariotry in the Assyrian army.
2   Explain how the use of horses in the army changed over time.
3   Why were engineers so important?

<table>
<tr><td>18.4</td><td></td></tr>
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18.4   Military strategy

Strategy is the high-level overall planning of military operations and troop movements in a time of war. Attacking their enemies and destroying their ability to counter-attack was the Assyrians' main strategy to ensure the safety of the empire. The main aims of Assyrian military strategy over a long period of time included:

- securing the borders of the empire in the north and south
- establishing control over areas that were not completely subdued
- suppressing rebellions in vassal states.

Two features of Assyrian military strategy were deportation and colonisation. At times, the Assyrians deported and relocated entire groups of the defeated enemy. Another method of consolidating control was to settle soldiers and citizens in subdued territories.

Tactics

Tactics concern the particular methods of fighting adopted in battle. Pitched battles were common, where the infantry, covered by the archers, chariotry and cavalry, engaged in hand-to-hand combat. Tactics used included midnight attacks, flooding the enemy camp by damming rivers and cutting the enemy off from their water supply. The king and his bodyguard also made lightning attacks on the enemy leader, knowing that his death would result in the flight or surrender of his remaining troops. Siege warfare and psychological warfare were two particularly effective tactics employed by the Assyrians.

Siege warfare

blockading
sealing off a location to prevent goods or people from entering or leaving

Siege warfare involved the surrounding and **blockading** of an enemy stronghold to force it to surrender. If the enemy did not surrender, then the stronghold was attacked by troops and siege engines. The Assyrian army was highly skilled in this type of warfare and made effective use of the corps of engineers to construct siege works, ramps and siege engines, including battering rams and siege towers.

Battering rams looking like four-wheeled tanks had a conical tower on the top, enabling archers to provide covering fire while the ram was moved towards the wall. A large spear on the front was used to gouge chunks out of the enemy's mudbrick walls (see Source 1 and Chapter conclusion). The crews were protected by the wickerwork covering the battering ram. If the defenders used flaming arrows and other burning objects or boiling oil, the attackers protected the ram with wet animal skins to prevent it catching fire. Some siege engines were multi-storey, wooden towers on wheels able to reach the tops of the walls, especially if pulled up by ramps. These would be filled with archers who could shoot directly at the defenders.

If a siege failed, the Assyrians would withdraw, laying waste to the surrounding countryside, burning crops, trees and houses. A relief from Ashurbanipal's palace at Nimrud depicts his soldiers cutting down date palms in Babylonia, an act that would doubtless have led to severe food shortages. Long sieges were uncommon but when they did occur, the army would settle in to starve the enemy into submission. Siege warfare often came with a high price for the Assyrians. For example, the Siege of Lachish, although an Assyrian victory, cost them approximately 1500 men. Their remains were found by archaeologists in a mass grave near the battle site (see 18.4 Profile).

Psychological warfare

Once a besieged city had fallen, a price would have to be paid by the conquered. The kind of punishment inflicted depended on the nature of the offence. Mere refusal to surrender to unprovoked attack might result in looting, imposition of a fine, payment of a yearly tribute, and submission of the leader to the Assyrians. An Assyrian **garrison** might be installed if the leader could not be trusted.

A more serious case of rebellion would result in looting and the enslavement of the population. Temples would be **sacked** and statues of the gods taken back to Assyria. The fate of the leader would depend on how badly he had upset the Assyrian king. If the city had put up a sustained resistance or had seriously rebelled, the remaining defenders, including civilians, could expect to be slaughtered. The leaders would be executed in one of several gruesome ways. For example, they might be **flayed**, burned alive, **impaled**, or have their body parts mutilated or cut off. The surrounding countryside could be destroyed or sown with salt. This use of psychological warfare has been called the 'policy of frightfulness'. Source 11 from the Annals of Ashurnasirpal provides an example of this tactic.

SOURCE 11

… the city I captured; 800 of their soldiers by my arms I destroyed; their heads I cut off; many soldiers I captured in hand alive; their populace in the flames I burned; their spoil I carried off in abundance; a trophy of the living and of heads about his great gate I built; 700 soldiers I there impaled on stakes; the city I overthrew, **razed**, and reduced to a heap of ruins all round; their boys, their maidens, I dishonored …

'Annals of Assurnasirpal', in J. M. Rodwell (trans.), *Babylonian and Assyrian Literature*,
New York: The Colonial Press, 1901
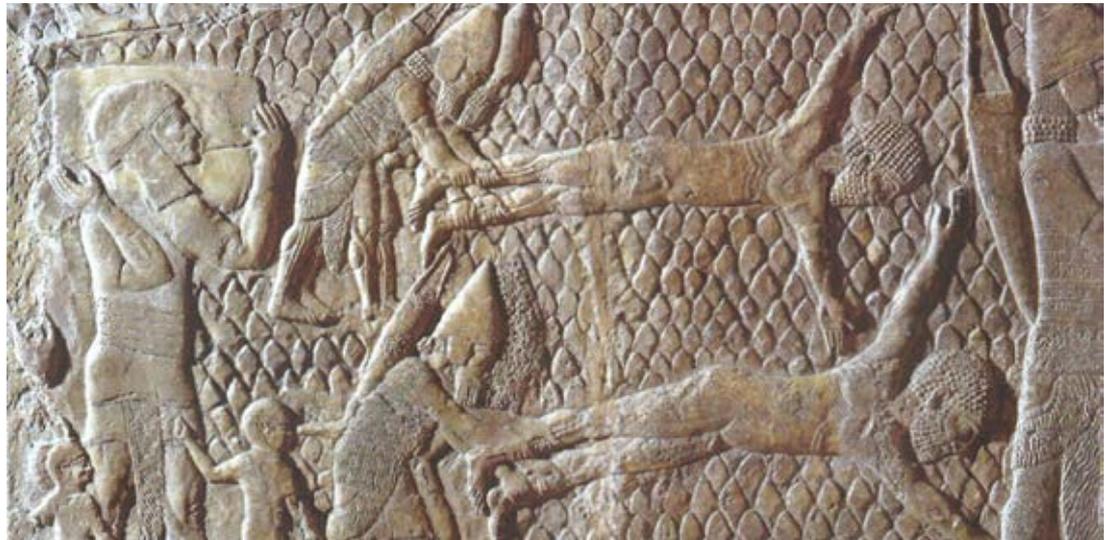
SOURCE 12 Hebrews being flayed after the Siege of Lachish, from the Palace of Sennacherib at Nineveh

The records and images in Sources 11 and 12 were placed on the walls of the public rooms of the kings' palaces where they would be visible to visiting foreign dignitaries. There are cases where simply reports of the Assyrian army coming would frighten vassal states into paying tribute without a fight.

garrison
troops stationed in a fortress or town to defend it

sacked
destroyed, plundered

flayed
have the skin stripped from the body

impale
to pierce or transfix with a sharp instrument

razed
destroyed, demolished, levelled to the ground

Deportation

A tactic of Assyria's psychological warfare was the deportation of whole populations of conquered people from their homelands and their transportation to distant parts of the empire to live and work. This policy was instituted by Adad Nirari I who, having defeated the Mitanni after an uprising, removed them from their land and replaced them with Assyrians to prevent further uprisings. Although deportation was a punishment and was designed to decrease the likelihood of further uprising, it proved to be a useful policy for the empire. Source 13 gives a modern assessment of the deportation policy.

SOURCE 13

The deportees, their labour and their abilities were extremely valuable to the Assyrian state, and their relocation was carefully planned and organised. We must not imagine treks of destitute fugitives who were easy prey for famine and disease: the deportees were meant to travel as comfortably and safely as possible in order to reach their destination in good physical shape. Whenever deportations are depicted in Assyrian imperial art, men, women and children are shown travelling in groups, often riding on vehicles or animals and never in **bonds**. There is no reason to doubt these depictions as Assyrian narrative art does not otherwise shy away from the graphic display of extreme violence.

bonds
ropes used to tie up a prisoner

> Karen Radner, 'Mass deportation: the Assyrian resettlement policy',
> *Assyrian Empire Builders*, London: University College, 2012

Colonisation

The policy of colonisation worked in conjunction with deportation. Groups of Assyrians and others from within the empire were used as colonists and were systematically moved from place to place. The aim was to have Assyrian bases throughout the conquered lands. The colonists could deal with rebellions on the spot and provide assistance to the local provincial governors in maintaining loyalty and stability in vassal states. Colonists were encouraged to intermarry with local populations in order to create an Assyrian population with a common culture and common identity.

SOURCE 14 A relief from Sennacherib's palace at Nineveh depicting Israelite captives leaving the city of Lachish after its defeat

18.4a Understanding and using the sources

Sources 13 & 14

1 Why was it in Assyria's interest to have deportees arrive 'in good physical shape'?
2 What aspects of Karen Radner's account are supported by the Lachish relief in Source 14?
3 What is Radner's argument about the truth of the artistic depictions of deportation?
4 The Assyrian policy of transporting peoples around the empire has been referred to traditionally as 'deportation'. Does Radner's use of the term 'resettlement policy' in the title change the interpretation that it was a tactic of psychological warfare? Explain your answer.

The Siege of Lachish

When King Hezekiah of Jerusalem in Judah rebelled against the Assyrian king Sennacherib, refusing to pay tribute. Sennacherib responded with a swift campaign to destroy Jerusalem, but his route to the city was blocked by Lachish. Lachish was a heavily fortified hill settlement, second only to Jerusalem in the Kingdom of Judah (see Source 2). The city was protected by two massive walls, one in the middle of the hill and one at the top separated by a sloping bank called a glacis. The lower courses of the walls were made of stone, while the upper courses and **battlements** were of mudbrick. These walls were connected by huge double gates. A palace fortress was located on top of the hill. Sennacherib had to meet the challenge of both a well-fortified stronghold and committed defenders.

battlement
a wall around the top of a fort or castle, with regular spaces through which weapons could be fired

clear the battlements. Then they built a huge ramp to reach the upper city wall. They used this to deploy five large, four-wheeled siege machines with battering rams to break down the wall. The defenders responded by building a higher counter-ramp behind the wall. Assyrian archers on the ground covered an assault by the infantry using scaling ladders. Archaeologists have found large numbers of sling stones and arrowheads, indicating the intensity of the fighting. The defenders attempted to set fire to the siege engines and to smash them with rocks tied to ropes, which they swung against the siege engines like modern demolition balls. However, the defences eventually collapsed and the Assyrians broke into Lachish.

The Nineveh reliefs depict the defenders and their leaders suffering terrible tortures as the population is marched out of the city into exile. Prisoners are shown begging for mercy at the feet of Sennacherib. Others, probably the city's leaders, have been impaled on stakes. Archaeological evidence indicated that the city was looted, and hundreds of men, women and children were killed. A mass grave containing the remains of 1500 Assyrian dead is evidence of the high cost for the Assyrian attackers. The fire unleashed on the city was so intense it left a 1-metre layer of charred debris.

SOURCE 15 An aerial view of Tell-lachish today, the site of the Siege of Lachish in 701 BC

The Siege of Lachish in 701 BC is the best documented siege of the period. Not only was it depicted in detailed reliefs on the walls of Sennacherib's palace at Nineveh, and in his written records, but it was mentioned in the Old Testament books of 2 Kings and 2 Chronicles. There is also evidence from modern archaeological excavation.

The siege and its aftermath

The Assyrians began their attack by surrounding the city and using archers to

SOURCE 16 A relief from the palace of Sennacherib at Nineveh depicting the assault on the gate tower of Lachish

The outcome

The fall of Lachish was followed swiftly by Sennacherib's defeat of the remaining cities of Judah. Jerusalem was besieged and Hezekiah avoided its destruction by submitting to the Assyrians and paying a large tribute. Source 17 gives the Assyrian version of what happened, which is recorded on the Taylor Prism (see Source 4). Source 18 gives the Old Testament version.

SOURCE 17

As for Hezekiah the Jew, who did not submit to my yoke: 46 of his strong, cities, as well as the small cities in their neighbourhood, which were without number – by levelling with battering-rams and by bringing up siege-engines, I besieged and took (those cities). 200,150 people, great and small, male and female, horses, mules, asses, camels, cattle and sheep without number, I brought away from them and counted as spoil. [Hezekiah] Himself, like a caged bird I shut up in Jerusalem, his royal city. Earthworks I threw up against him – the one coming out of the city-gate, I turned back to his misery.

… As for Hezekiah, the terrifying splendor of my majesty overcame him, and the Urbi (Arabs) and his **mercenary** troops which he had brought in to strengthen Jerusalem, his royal city, deserted him.

In addition to the 30 talents of gold and 800 talents of silver, [there were] gems, cosmetics, jewels … couches of ivory, house chairs of ivory, elephant hides, ivory … as well as his daughters, his harem, his male and female musicians, which he had them bring after me to Nineveh, my royal city.

Daniel David Luckenbill, *The Annals of Sennacherib*, Chicago: University of Chicago Press, 1924, pp. 11–12

mercenary
a professional soldier hired to serve in a foreign army

SOURCE 18

Now in the fourteenth year of king Hezekiah did Sennacherib king of Assyria come up against all the fenced cities of Judah, and took them. And Hezekiah king of Judah sent to the king of Assyria to Lachish, saying, I have offended; return from me: that which thou puttest on me will I bear. And the king of Assyria appointed unto Hezekiah king of Judah three hundred talents of silver and thirty talents of gold. And Hezekiah gave him all the silver that was found in the house of the LORD, and in the treasures of the king's house. At that time did Hezekiah cut off the gold from the doors of the temple of the LORD, and from the pillars which Hezekiah king of Judah had overlaid, and gave it to the king of Assyria.

2 Kings 18:13–16, *King James Bible*

18.4 Profile tasks

1 According to Source 17, how did Sennacherib treat Hezekiah after the Siege of Lachish?
2 What aspects of the siege do Sources 17 and 18 agree on?
3 In what ways do they differ?
4 To what extent can we rely on these sources to give an accurate account of the Siege of Lachish?

Interpretations of the Assyrian Empire

The Assyrians have been harshly judged by history. The Babylonian sources are negative, their priests explaining the eventual fall of Assyria as retribution from the gods for the kings' sins. The Bible depicts the Assyrians as merciless conquerors. They are both the deliverers and victims of God's anger, which was directed at the Hebrews. The prophets condemn the Assyrians for their pride and sinfulness. The Greek and Roman sources express their admiration for Assyria's military achievements, but also comment on their brutality and **decadence**.

In more recent times, Western historians have relied on the Bible and Greek and Roman sources for their interpretations of the Assyrians. The violence and brutality of the Assyrian king and army have been linked to Orientalism; that is, the way of seeing that exaggerates and distorts the differences of Eastern peoples and cultures compared to those of the West.

■ **decadence**
excessive indulgence in pleasure or luxury

■ **despotism**
the use of absolute power, often in a cruel manner

SOURCE 19

Ancient Assyria is here pictured as 'the Other' and as the archetypal Orient. Oriental violence, **despotism**, and decadence are three important elements of Orientalism, and the Neo-Assyrian Empire is, as well as has been, seen as a typical representative of these cultural characteristics. In marked contrast to the above, the ancient Assyrians are seen, by laymen and by some scholars alike, as the ancestors, in a positive light, to the ethnic group of present-day Assyrians.

Mattias Karlsson, *Relations of Power in Early Neo-Assyrian State Ideology*, New York: Walter de Gruyter & Co, 2016, p. 224

18.4b Understanding and using the sources

1 In your study of this chapter, what examples of 'violence, despotism and decadence' have you encountered?

2 Explain how interpretations of the Assyrians have been influenced by Orientalism.

18.4 Check your learning

1 Use the information in this chapter to complete the diagram summarising the political, economic and social impact of Assyrian warfare and conquest.

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            IMPACT OF WARFARE AND CONQUEST
          ┌──────────────┬──────────────┐
      Political       Economic        Social
```
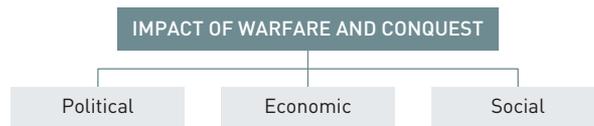
2 Writing task: 'Explain the main features of change and continuity in warfare and weapons in Assyria.' (Explain: make relationships clearly evident, give cause and effect, provide why and/or how.)

To help you plan your response:

• identify the main aspects of change and continuity in warfare and weapons in Assyria

• use these aspects to structure your answer

• draw conclusions about change and continuity in warfare and weapons in Assyria

• use specific evidence to support your explanation.

In investigating weapons and warfare in Assyria, we have looked at the Assyrian Empire and features that remained constant throughout its period of power. The Assyrian army was used by the king as a tool for conquest and for the development and maintenance of his empire. Regular campaigning enabled him to add territory to the empire as well as control his many vassal states. Several features of Assyrian weaponry and warfare changed from the Old Assyrian Empire to the end of the Neo-Assyrian Empire, making the Assyrian army the effective fighting machine it was in maintaining the empire.

However, at the end of Ashurbanipal's reign, the Assyrian Empire fell into a decline. Many years of costly warfare combined with constant rebellions had resulted in the depletion of the army. The loss of the outer regions of the empire removed that source of troops. In 612 BC, the Assyrian Empire came to an end when Nineveh was conquered by a combined force of Babylonians and Medes.

FOR THE TEACHER

Check your <u>o</u>book <u>a</u>ssess for the following additional resources for this chapter:

Answers	Teacher notes	Class test	<u>a</u>ssess quiz
Answers to each *Check your learning*, *Understanding and using the sources* and *Profile task* in this chapter	Useful notes and advice for teaching this chapter, including syllabus connections and relevant weblinks	Comprehensive test to review students' skills and knowledge	Interactive auto-correcting multiple-choice quiz to test student comprehension

#

18th Dynasty
the first dynasty of the New Kingdom in Egypt

3D laser scanning
capturing a physical object's size and shape to produce a digital 3D representation of that object

§ (section mark)
used to refer to a particular section of a document

A

abacus
a flat slab forming the uppermost part of a column's capital

accretion
a gradual accumulation

Achaean
the name that identifies the Mycenaean Greeks in Homer's *Iliad*

Achaemenid
relating to the dynasty that ruled the Persian Empire from Cyrus I to Darius III (553–330 BC)

Acropolis
an ancient citadel located on a rocky outcrop above the city of Athens

adze
a woodworking tool similar to an axe

aerial survey
the use of aircraft or satellites to create images of the land to be interpreted for archaeological information

allusion
an indirect reference, i.e. an expression that refers to something without mentioning it explicitly

amphora (*pl.* amphorae)
an ancient two-handled pottery storage jar with a narrow neck; one of the principal vessel shapes in Greek pottery

anachronism
something that is not in its correct historical or chronological time

annal
yearly historical record

annex
to incorporate, add territory to a country or state, often by military means

annotated bibliography
a list of references containing brief descriptions and evaluations of their contents

anterior superior iliac spine
a bony projection of the uppermost and largest part of the hip bone

anti-semitic pogrom
organised massacre of Jews based on discrimination against them as a religious, ethnic or racial group

antoninianus
an ancient Roman coin originally worth two denarii

APA system
an author–date referencing system using in-text citation of sources (not footnotes)

appease
pacify, placate or satisfy

appropriated
taken for one's own purpose, usually without the owner's permission

appropriation
the action of taking or using something for one's own purpose, usually without the owner's permission

aqueduct
artificial channel for conveying water

Aramaic
a Semitic language originally of the ancient Arameans, but which came to be used widely by non-Aramean peoples throughout south-west Asia

archaeometric
relating to the use of scientific techniques to date archaeological remains

Archaic period
the period of Greek history from c. 700 to 480 BC

Argive
relating to the ancient Greek city of Argos, famous for its horse rearing; the *Iliad* refers to men from Argos fighting in the Trojan War

aristocratic
a person from the upper classes

art deco
the main decorative art style of the 1920s and 1930s, featuring geometric shapes and strong colours

ascetic
characterised by extreme self-denial

ashlar
a type of masonry in which rectangular, smoothly dressed blocks of stone are laid in regular courses

assemblage
group of different artefacts found in association with one another or in the same context

atheistic
holding the belief that there is no god

atherosclerosis
a disease of the arteries in which fatty material builds up inside the arterial walls

Attic
belonging to Athens and the region immediately surrounding it

attribute
a characteristic quality or feature

audience hall
a room where a ruler receives official guests

Aunty
an Aboriginal (or Torres Strait Islander) Elder who has gained recognition as a custodian of knowledge and lore, and who has permission to disclose knowledge and beliefs; Aboriginal people traditionally refer to an Elder as 'Aunty' or 'Uncle'

B

Bakelite
an early form of brittle plastic, dark brown in colour

bard
a poet who composes and/or recites epics, often while playing the harp or lyre

bardic
relating to a person who composed and recited epic or heroic poems, often accompanied by music

barque
a type of small sailing boat

bas-relief
a type of sculpture in which the figures are raised up from a flat background to give a 3D effect

bast
the fibrous inner bark of a tree, used as fibre in matting or cord

battlement
a wall around the top of a fort or castle, with regular spaces through which weapons could be fired

baulk
a strip or wall of earth left between trenches to enable study of the complete stratigraphy of a site

benign
gentle and kind or well-intentioned

bier
a movable structure on which a body or coffin can be transported to the grave or tomb

biochemical
to do with the chemical processes that occur in living organisms

black market
illegal trading of goods

black-figure
relating to a type of Greek pottery with one or more bands of figures silhouetted against a tan or red background surface

blockading
sealing off a location to prevent goods or people from entering or leaving

Bollywood
a name for the Indian popular film industry, based in Mumbai

bonds
ropes used to tie up a prisoner

bone of contention
the subject of a disagreement or argument

booty
goods captured from the enemy during and after battle

bow stave
a wooden rod, trimmed for using as a bow

Brahmanism
relating to the cast of Brahmins, the highest caste in Hinduism

Bronze Age
a historical age characterised by the use of cast bronze to make tools and weapons

buon fresco
a technique where walls are painted in pigment mixed with water on wet, fresh lime mortar or plaster

Byzantine
relating to the ancient city of Byzantium (modern Istanbul) or the Byzantine Empire, the Eastern Roman Empire after the fall of the Western Empire in AD 476

C

calcite
a crystalline form of natural calcium carbonate that is the basic constituent of limestone, marble and chalk

calcrete
a limestone formed by the cementation of soil, sand, gravel and shells

caldera
a volcanic crater formed by the collapse of a volcano into itself

canopic chest
a ritual container for the mummified internal organs of the deceased, stored in the tomb

capital
the decorated top part of a column

cartilaginous
made of cartilage, a firm, flexible connective tissue found in various parts of the body

cartouche
an oval shape containing the hieroglyphs representing the names of the pharaoh

caste
a social group whose members are of the same rank, occupation and economic position

caste system
a Hindu system dividing society into hierarchical categories

cauldron
a large metal pot with a lid and handle, used for cooking over an open fire

cavetto cornice
a hollow moulding at the top of a wall or a window frame

cella
the inner area of an ancient temple

Celtic
relating to the Celts, pre-Roman inhabitants of Britain and Gaul

ceramicist
a pottery expert

Chalcolithic
the Copper Age

chapel
the central chamber of a mastaba tomb where offerings were brought to the deceased

Charleston
a popular dance during the 1920s

chimera
an unrealistic idea or hope

chlamys
a cloak

chopper
a large, heavy tool made from a lump of rock

chronicler
a person who wrote accounts of important events

chronicle
a record of events in chronological order

cipher
someone who has no power, or who is not important

citation
a reference or quotation from a historical source

clandestine
secret and often illegal

Classical period
the period of Greek history from c. 500 to 323 BC

cleft palate
a condition in which there is an opening into the nose from the roof of the mouth

Cleito
according to Plato, she was the daughter of Evenor and Leucippe, two of the original

inhabitants of Atlantis; Poseidon fathered her five pairs of twin sons, the eldest of whom, Atlas, became the first king of Atlantis

client king
a king who was nominally independent but, in return for Roman support, contributed financial or military resources to Rome or its army

club foot
a birth defect causing the foot to point inwards

colonia
the highest status of Roman city

colossus
someone or something gigantic

commissariat
the body responsible for supply of food and equipment for an army

computer-aided design (CAD)
the use of computer technology to design and model parts, products or structures

computer-generated imaging (CGI)
the application of computer graphics to create or contribute to images in a variety of media

concession
permission granted to archaeologists to dig at a specific location in Egypt

conciliate
to appease or placate

concord
agreement or harmony

concubine
a secondary wife or mistress

connoisseurship
a method used in art history in which experts pass critical judgements on quality and authenticity

construct
an idea or theory usually considered to be subjective rather than based on fact or evidence

consular
relating to an ancient Roman consul, who was one of two annually elected chief magistrates in the Roman government

contentious
causing disagreement

copyright
an exclusive legal right that the creator of a work has for its use and distribution

core tool
a lump of rock showing trimming or wear on its surface, indicating its use as an implement

Corinthian
referring to an order of architecture in which the columns were slender and fluted, and the capitals incorporated sculpted leaves

corps
a military unit

covetous
very much wanting to possess something that someone else has

cranium
the part of the skull enclosing the brain

crenellated
provided with gaps at regular intervals at the top of a wall to launch arrows or other weapons for defensive purposes

cringing deference
overly submissive and embarrassing behaviour displayed to a person

crown prince
the heir to the throne

crucible
a metal container in which metals or other substances may be melted

CSIRO
Commonwealth Scientific and Industrial Research Organisation

CT scan
computed tomography scan; an imaging method using digital geometry processing to produce a 3D image of the inside of an object or body

cubit
an ancient linear unit based on the length of the forearm, about 45 centimetres

cult
a system of religious worship dedicated to a particular god

cuneiform
a system of wedge-shaped writing on clay tablets first developed by the ancient cultures of Mesopotamia and Persia

currency
the quality of information being up to date or current in the scholarship

cursive
a script that has joined characters

custodianship
custody or guardianship of property

Cycladic
related to the Early Bronze Age culture of the Cycladic islands in the Aegean Sea

cylinder seal
a small cylinder inscribed with cuneiform text used for a wax seal

Cypriot
originating in Cyprus

D

Dead Sea Scrolls
a collection of ancient manuscripts discovered in the Qumran Caves in modern Israel, near the Dead Sea; the texts are of great historical, religious and linguistic significance

debt slave
a person enslaved for being unable to pay debts

de-dolomitisation
a process in which the magnesium in dolomitic rock forms new minerals and the calcium forms calcite

defection
abandonment of your own country, organisation or cause

despotism
the use of absolute power, often in a cruel manner

dhamma
the Prakrit (ancient language) form of the more widely used Sanskrit word *dharma*

diadem
a crown

dialect
a particular form of a language that is peculiar to a specific region or social group

dialogues
the form taken by Plato's writings in which several characters argue a topic by asking questions of each other

diprotodon
the first fossil mammal named from Australia and the largest known marsupial ever to have lived

discourse
the interchange of ideas

divine
gain knowledge about the will of the gods or foretell the future by supernatural means, e.g. by studying signs, flight of birds, animal entrails

DNA (deoxyribonucleic acid)
a self-replicating genetic or hereditary material present in nearly all living organisms

dolomitic marble
a crystalline variety of limestone, containing more than 40 per cent magnesium carbonate

dormant
asleep; temporarily inactive

Dreaming
in Aboriginal tradition, the time when ancestral beings travelled the country, creating the form of the landscape

Druid
a priest of the ancient Celtic religion

Druidic
relating to the ancient Druids, a pre-Christian religious order among the ancient Celts of Gaul, Britain and Ireland

dynasty
a family of hereditary rulers

E

ecology
the relationship between plants, animals and the environment in a particular area

ecstatic
feeling total elation and happiness

edict
a decree or announcement

electron microscopy
the use of an extremely high-powered microscope that uses beams of electrons focused by magnetic lenses instead of rays of light

elite
the group of people considered to be superior to others because of their social standing, wealth and gender

endoscopy
a medical procedure in which an instrument is introduced into the body to allow an inside view

Ennead
the group of nine gods of the Heliopolitan creation

epic
a long poem, usually derived from ancient oral tradition, narrating the deeds and adventures of heroic or legendary figures or the past history of a nation

epigraphic
relating to inscriptions

epigraphy
the study of inscriptions

epithet
an adjective or phrase describing a quality or attribute of a person

equanimity
mental or emotional calmness or stability

equestrian
relating to the lower of the two aristocratic classes in ancient Roman society, also known as knights or equites

ergot
a plant disease caused by a fungus

ethical scholarship
conducting research and exchanging ideas in an honest way, particularly by acknowledging sources

ethnoarchaeology
the study of contemporary cultures with a view to understanding the culture and behaviours of an older culture

ethnography
the study and description of living human societies and cultures

ethnology
a branch of anthropology that analyses cultures, especially their historical development

Etruscan
people belonging to the civilisation of ancient Etruria, a region in central Italy c. 500 BC, who influenced the Romans

ewer
a large jug used for carrying liquids

exhorted
strongly urged

F

façade
the front of a building

facsimile
exact copy

fact
a thing that is known or generally agreed to be true

false door
a painted or carved imitation door to serve as a portal between the world of the living and the afterlife

feminist history
the interpretation of history from a female perspective

findspot
the place where an artefact is found in a dig

flayed
have the skin stripped from the body

fluted
grooved or ridged

foetal position
the contracted position of the body (as before birth)

formulaic
produced in accordance with a mechanically followed rule or style

foundation tablet
tablet placed in the foundations of new buildings

franchise
a collection of related media, e.g films, in which several have been produced from an original creative work

freedwoman
a woman freed from slavery

fresco secco
a technique of painting in watercolours on dry plaster

fresco
painting on wet plaster on walls or ceilings

frieze
a wide, horizontal band of decoration, either of a painting or a sculpture, on a wall

frontality
the depiction of the front view of figures or objects in a work of art

G

garrison
troops stationed in a fortress or town to defend it

genetic lineage
a series of mutations that connect an ancestral genetic type

genome
an organism's complete set of DNA, including all of its genes

genome mapping
a method used by scientists to locate features of a genome (an organism's complete set of genetic instructions)

geographical information systems (GIS)
a computer-based tool that analyses, stores, manipulates and visualises geographical material

geological
relating to the science of geology, which is the study of the earth, the rocks of which it is composed and the changes it has undergone

geomorphologist
someone who studies the structure, origin and development of the topographical features of the earth's surface

geophysical survey
ground-based physical sensing techniques used in archaeology for imaging or mapping

gesso
a combination of chalk, gypsum and a binder to form a paint mixture used to prepare surfaces like wood panels

glacier corpse
the remains of a person who has died and been frozen in a glacier

globalisation
the worldwide trend towards integration of economy, finance, trade and communications

Gracchi
two influential brothers who served as magistrates during the Roman Republic

Graeco-Macedonian
a mixture of Greek and Macedonian as in the Hellenistic Period of Alexander the Great

Graeco-Persian Wars
a series of wars fought between the Greek states and the Persian or Achaemenid Empire in 499–449 BC

griddlecake
a thin cake made from a batter cooked on a hot griddle or frying pan

griffin
a mythical creature with the head and wings of an eagle and the body of a lion

gross national product (GNP)
an estimate of the total value of all goods and services produced within a given period

gypsum
a soft, white mineral used to make plaster

H

habitus
a person's physical characteristics, especially appearance and constitution

Hades
the name of both the ancient Greek god of the underworld and the home of the dead

haematoma
an abnormal collection of blood outside the blood vessels that has leaked into surrounding tissue, caused by injury or disease

hagiography
a biography that puts its subject in a very flattering light (e.g. the life of a saint)

haling
dragging forcibly

hallowed
holy or sacred

hammerstone
a lump of stone or river pebble used for shaping small stone tools or pounding foodstuffs

hardline
referring to an uncompromising or unyielding stand, especially in politics

Harvard system
an author–date citation system of referencing similar to APA but with minor differences in formatting the reference list

hearth
a site of a campfire, characterised by ash, charcoal and discolouration of soil

heirloom
a valuable object belonging to a family for several generations

Hellas
the Greek name for Greece

Hellenistic
relating to Greek and Mediterranean history between 323 and 31 BC

hilt
the handle of a sword or dagger

histological
referring to the study of the form of structures that can be seen under the microscope

historicity
historical quality or character, especially in relation to establishing the authenticity of people and events

historiographical
concerning the construction or writing of history based on the critical examination of sources

Homeric Age
also called the Dark Ages; the period of Greek history spanning c. 1100–800 BC

Homo sapiens
modern humans; the single surviving species of the genus *Homo*

homogeneous
consisting of people who are of the same type

horns of consecration
an architectural feature named by Sir Arthur Evans because of its resemblance to bulls' horns

Hyksos
the foreigners who ruled Egypt in the last years of the Second Intermediate Period before being expelled by the kings of the 18th Dynasty

hypostyle
having a roof supported by rows of pillars

hypothesis
a proposed explanation based on limited evidence that is used as a starting point for further investigation

I

ice core
a sample of ice drilled from polar ice, used to reveal sequences of past climatic change

icon
something regarded as a symbol or worthy of admiration

iconographic program
the symbols used in a work of art

iconography
the representation of abstract ideas in drawings, paintings or carved figures

ideological
relating to a system of ideas and ideals, particularly concerning economic or political theory and policy

idolatry
the worship of idols

Ilium
also Ilion, ancient names for Troy

impale
to pierce or transfix with a sharp instrument

impasse
a situation in which progress is impossible because no one agrees

imperial family
the family of an emperor or empress

imperial period
the period of time when Rome was ruled by emperors (27 BC – AD 284)

imperial service
Romans of rank and wealth who served in the civil and military administration of the Roman Empire

imperialism
a policy of extending a country's power and influence through military conquest, colonisation or other means

incense
an aromatic substance used in religious rituals, e.g. frankincense

indefatigable
tireless or untiring

insurgent
a person fighting against a government or invading force; a rebel or revolutionary

intertwined guises
representations so closely connected that it is difficult to separate them

Iron Age
an archaeological era following the Stone Age and Bronze Age, and characterised by the use of iron for toolmaking

ISIS
Islamic State of Iraq and Syria: a fundamentalist, jihadist terrorist group, also known as IS, ISIL and Daesh

isotope
one of the forms of a chemical element that have an equal number of protons, but differ in their number of neutrons, and therefore have a different mass

isotopic
in this context, relating to the isotopes of dental tissue, which can be analysed to reconstruct diet and geographical origin of ancient human remains

ithyphallic
a term used to describe an erect penis, especially in reference to a statue or image of a god

J

Jain
a follower of Jainism

Jainism
an ancient Indian religion with a focus on the concept of non-violence or *ahimsa*

jet
a black or dark-brown organic stone formed from fossilised wood

jihadist
a person involved in a struggle or fight against the enemies of Islam; an Islamic militant

Judaism
the religion of the ancient Israelites and modern Jews

Julio-Claudian
the family of the first five Roman emperors

Julius Caesar
a significant Roman general and statesman of the late Roman Republic

K

ka
a person's spirit, which survived after death

ka **statues**
statues placed in a tomb for the *ka* (spirit) of the deceased to reside in

Kamares style
a type of fine pottery produced in Minoan Crete, named for the cave in which many examples were found

Khmer
an ancient South-East Asian kingdom that ruled over the Mekong valley from its capital at Angkor in the 11th century AD

Knossos
the main Minoan site on Crete, often referred to as a palace

Knot of Isis
a religious symbol originating in Egypt and given this name because it resembles a knot or sash that held together the garments worn by the gods

Köhler disease II
a rare bone disorder of the foot

krater
ancient jar or vase with a large round body and wide mouth, used for mixing wine and water

KV35
Kings Valley 35, the tomb of Amenhotep II

KV62
Kings Valley 62, the tomb of Tutankhamun

L

Late Bronze Age
the final stage of an ancient historical period (c. 1600–1100 BC) characterised by the use of bronze tools and weapons

Late Minoan
a late Bronze Age period of Minoan culture ranging from 1500 BC to 1000 BC

Late Minoan 1A (LM1A)
a period of Late Minoan culture, also known as the New Palace Period Phase II, which can be dated anywhere between 1700 BC and 1500 BC

Late Republic
the period of Roman history between 133 and 31 BC

legend
an old story about famous people and events, but not necessarily true

Levant
the countries bordering on the eastern Mediterranean Sea, considered to extend from Greece to Egypt

lexicon
a dictionary, especially of Greek, Latin or Hebrew

lignite
a soft brown sedimentary rock formed from naturally compressed peat

lime rendering
a coat of lime plaster applied to the external surfaces of stone or brick buildings

liminal
relating to an intermediate stage between two states or conditions

Linear A
the main script used by the Minoans

Linear B
the main script used by the Mycenaeans

lintel
a horizontal piece of stone or timber that supports the wall above a door or window

lost wax technique
a metal-casting method in which the figure is first moulded in wax and then covered in plaster; when the plaster is set, the wax is melted out and replaced by metal

low relief
sculpted or carved elements project only slightly from the background

Lower Egypt
the political and geographic division of ancient Egypt in the north

lustral basin (or *adyton*, *pl. adyta*)
a sunken room accessed by a short flight of steps, possibly for ritual use

M

ma'at
the ancient Egyptian concept of truth, order, harmony and justice

mace
a heavy club with a metal head

manumitted
set free

mastaba
a bench-shaped tomb common in the Old Kingdom

master sequence
a record of annual tree-ring widths made by cross-linking core samples from living and dead trees

mausoleum
a stately or impressive building for burial of the dead

mead
an alcoholic drink made from fermented honey and water

megafauna
large mammals of a particular region, habitat or geological period

mercenary
a professional soldier hired to serve in a foreign army

Mesolithic
relating to the middle part of the Stone Age

Messiah
the one promised by God to free the Jewish nation as prophesied in the Hebrew Bible

metope
decorative marble panel on the outside walls of the Parthenon

Middle Minoan
a Bronze Age period of Minoan culture ranging from 2200 BC to 1550 BC

milieu
social environment

millennium
a period of 1000 years

mitochondria
structures within cells that convert the energy from food into a form that cells can use

mitochondrial DNA
the small amount of genetic material or DNA found in mitochondria that is inherited through the maternal line

monastic
living the life of a monk

monumental
relating to a monument or a large impressive structure

mortuary rites
burial rituals and customs

mortuary temple
a religious building dedicated to the funerary cult of a deceased person

mosaic
picture or design made of small pieces of coloured tile, glass or other material

motif
dominant or recurring idea or image in an artistic work that forms a pattern

multispectral imaging
a type of digital imaging using information from electromagnetic radiation and other waves passing through or bouncing off objects to create images

Mycenaean
relating to a Bronze Age civilisation in Greece

myriad
a unit or division of 10000

myth
an ancient traditional story about gods, heroes and magic

N

nationalism
the belief that one's own nation is better than other nations, marked by a devotion to the culture and interests of one's nation

natron (or natrum)
a mixture of mineral salts used in the mummification process

Near Eastern
a region of south-west Asia including Asia Minor, the Levant and Mesopotamia

necropolis
a cemetery

necropolis seal
seal used by cemetery officials in ancient Egypt

Neolithic
relating to the New Stone Age, which began about 10&&000 years ago

New Kingdom
a period of Egyptian history extending from the 16th century BC to the 11th century BC, covering the 18th, 19th and 20th dynasties

numismatic
relating to coins or medals

O

occupied territories
the territory occupied by Israel after the Six-Day War of 1967 (originally included the Syrian Golan Heights, the Egyptian Sinai Peninsula and the Jordanian-occupied West Bank)

ochre
consolidated earth made up of clay and iron oxide, used to make red or yellow pigment

offering formula
a prayer accompanying a list of foodstuffs brought to the deceased

offering niche
a small indented area in a tomb for placing food and drink offerings

Opening of the Mouth ceremony
a ritual designed to restore the senses to the deceased

opinion
a person's belief, judgement or way of thinking about something that is not necessarily substantiated by facts

***oppidum* (*pl. oppida*)**
an ancient Celtic fortified town

optically stimulated luminescence (OSL)
a scientific technique applied to geological sediments to determine when they were last exposed to light, enabling researchers to establish how long an artefact has been buried

orchestra
the large circular floor of a theatre

orthodox
of the traditional type

osteoarthritis
a joint disease resulting from a breakdown of joint cartilage and underlying bone

Ottoman Empire
a vast Turkish dominion in south-west Asia, north-east Africa and south-east Europe, lasting from AD 1200 until the end of World War I

P

pacifism
opposition to war or violence

palace façade
a decorative motif resembling the recessed exterior walls of early dynastic royal palaces

palaeoanthropologists
scientists who study human fossils

Palaeolithic
relating to the Old Stone Age, which began about 2.5 million years ago

paleoartist
an artist specialising in artworks relating to paleolithic times

paleographic
relating to the study of ancient writings and inscriptions

paleopathology
a branch of pathology concerned with ancient diseases, e.g. in fossils or human remains

Pali
a Prakrit ('unpolished') language as opposed to ('polished') Sanskrit

palisade
a wooden fence or enclosure

pan-Indian
relating to the whole of India, or to all its ethnic, religious or linguistic groups

pannier
a large container carried over the shoulder

pantheon
all the gods of a people or religion

papyri
ancient documents written on papyrus, a writing material made from thin strips of the papyrus plant

paradox
an apparently contradictory statement at first sight, but which may prove to be true when investigated

pathological
caused by disease

patina
a thin layer that forms on the surface of stone

patriarchal
relating to a social system in which men hold primary power through political leadership, moral authority, social privilege and control of property

peat
partially decayed vegetation or organic matter found in peatlands or bogs

peer review
the checking of a scholarly work by a group of experts in the same field to ensure it meets the required standards before being published

Peloponnese
a geographical region in southern Greece

perineal
to do with the part of the body in the pelvis containing the genitalia and the rectum

periodontitis
inflammation of the gums

perspectives
the points of view held by individuals or groups about the past that are based on their contexts and motivations

pervasive
widespread

philologist
a person who studies language in historical literary texts or written records, determining their authenticity, their original form and their meaning

Phrygia
an ancient kingdom in central Anatolia and a close ally of Troy in the Trojan War; Hecuba was a Phrygian princess

physical anthropologist
someone who studies the physical characteristics of the human race, especially human fossil remains

pier-and-door partition
a Minoan architectural feature dividing a large room into two smaller ones by means of partitions set between upright slabs or piers

pigment
a natural substance that gives colour to animals and plants

Pillars of Heracles (or Hercules)
an ancient name for the rocky promontories at the entrance to the Strait of Gibraltar

plagiarism
taking someone else's work or ideas and passing them off as your own (not acknowledging your sources); it is cheating

plaintiff
a person bringing a case against another in court

Plasmodium falciparum
a parasite that causes malaria

plebeian
a person of the lower social classes in ancient Rome

plinth
a square block, usually of stone, used as the base for a statue or pillar

pluralism
different groups of people or institutions having different beliefs and opinions within the same society

polyethylene glycol
the main chemical component of antifreeze

polytheistic
believing in many gods

polythyron (pl. polythyra)
large rooms that can be divided into smaller spaces by use of partitions

Poseidon
the Greek god of the sea, and the Earth shaker, whose domain was Atlantis

post mortem
literally, after death

posterity
descendants, future generations

potsherd
a pottery fragment that has archaeological significance

pragmatism
thinking or dealing with problems in a practical way and without emotion

Prakrit
relating to a group of languages between Sanskrit and its modern derivatives, which were the languages or dialects spoken by ordinary people in ancient times

precept
a general rule intended to regulate behaviour or thought

predatory forays
raids or attacks carried out to gain plunder

Predynastic period
the time in Egyptian history before the beginning of 1st Dynasty

prehistory
the period before the invention of writing in about 3500 BC

premeditated
deliberate

pretender
a person who claims a position

priest-king
a monarch or ruler with an important religious role

primary source
source that comes from the time being studied

proconsul
a governor of an ancient Roman province

provenance
the origins and published ownership history of an archaeological artefact

Ptolemaic
relating to the period of time when Egypt was ruled by the dynasty founded by Ptolemy I in 305 BC

Pyramid Texts
a collection of Egyptian religious spells and prayers carved on the walls and sarcophagi of the pyramids at Saqqara during the 5th and 6th dynasties

pyroclastic flows
dense masses of very hot ash, rock and gases that explode from a volcano and flow down its sides at immense speed

Q

quarry
a person or object being pursued

R

radiocarbon dating
a method of determining the age of organic material by analysing the amount of carbon-14 remaining in a sample

razed
destroyed, demolished, levelled to the ground

red-figure
relating to a style of Greek vase painting that was invented in Athens around 530 BC, characterised by drawn red figures and a painted black background

red-slip pottery
a type of Roman pottery produced from the mid-1st century AD into the 7th century, also known as *terra sigillata* ware

referencing
acknowledging the sources of information used to research assignments

regalia
special clothing worn at formal occasions to indicate status

regent
a person appointed to rule in the place of a monarch who is a minor

reliability
the accuracy of a source judged on its context, purpose, origin and intended audience

reliefs
wall sculptures, sometimes painted, where the sculpted or carved elements are left attached to a solid background, giving the impression that the relief has been raised above it

relieving chambers
a series of compartments above the burial chamber designed to prevent the weight of the pyramid crushing the burial chamber

remission
a cancellation of a penalty

Renaissance
a period in European history, from the 14th to the 17th century AD, regarded as the cultural bridge between the Middle Ages and modern times

repatriation
the return of someone to their own country

republican Rome
the period from the overthrow of the last Roman king in 509 BC until the beginning of the imperial period under Augustus in 27 BC

resin
a sticky, organic substance exuded by some trees and other plants; used as a glue in the mummification process

restitution
return of something lost or stolen to its original owner

retoucheur
a tool use to sharpen a flint blade

revisionists
those who reinterpret the past and challenge the traditional interpretation

rhyton
an ancient drinking or pouring vessel

riser
the vertical section between the steps of a staircase

rite
a traditional or religious ceremony

rock shelter
a naturally formed hollow or overhang in a vertical rock face; frequent location of prehistoric archaeological sites

romanise
make Roman in character; adopt Roman customs etc.

romanticised
modified to give a view of reality that is not based on fact

running spiral
a decorative motif consisting of a continuous spiral

S

sacked
destroyed, plundered

salver
a tray, usually made of silver and used on formal occasions

sanction
a threatened penalty for disobeying a law or rule

Sanskrit
a classical language of India

sarcophagus
(*pl.* sarcophagi)
a stone coffin

satellite pyramid
a small pyramid next to the main pyramid of a complex

satrap
a provincial governor in the ancient Persian Empire

satrapy system
the system used by the Persian kings to govern the empire, based on regions run by provincial governors or satraps

Saxon
Germanic people living in central and northern Germany from Roman times, many of whom conquered and settled in southern England in the 5th and 6th centuries AD

scabbard
a sheath for the blade of a sword or dagger

scarab
a dung beetle, a symbol of the sun god in his form of Khepri, the rising sun

sceptre
an ornamented staff carried by rulers on ceremonial occasions as a symbol of kingship

Schmorl's nodes
protrusions of the cartilage of the spinal discs

scoliosis
a medical condition in which a person's spine has a sideways curve

scruple
hesitation about doing something because it might be inappropriate or illegal

seal impressions
the imprints of seal devices made when pressed into clay

seal stones
small engraved stones used as seals

secondary sources
sources that have been created after the time being studied

seed-grinding
the crushing of small, hard wild grass seeds to make flour, using flat grindstones or mortars

Seleucid
relating to a dynasty that ruled over Syria and a great part of western Asia from 312 to 64 BC

Semitic
relating to people of Hebrew or Arabic background

senator
a member of the senate, an advisory body for the emperor

senatorial
relating to an aristocratic class whose ancestors had served in the Roman Senate

sepulchre
a small room or monument, cut into rock or built of stone, in which a dead person is buried

serf
a member of the class above slaves, owned by the Spartan state

Severan
a Roman imperial dynasty founded by the Roman general Septimius Severus, in power over the Roman Empire between 193 and 235 AD

shaft grave
a deep rectangular burial structure containing a floor of pebbles, walls of rubble masonry and a roof constructed of wooden planks

signatory
a person or organisation that has signed an official agreement

Silk Road
an ancient network of trade routes connecting the East and the West

Similaun
a mountain in the Ötztal Alps on the Austrian-Italian border

siren
a seductively beautiful or charming woman, especially one who beguiles men (in Homer's *Odyssey*, a sea nymph, part woman and part bird, who lured sailors to destruction by seductive singing)

slingers
troops who fire stone missiles at the enemy with slingshots

sloe berry
the small, sour, purple fruit of the blackthorn shrub

smoking ceremony
an ancient custom among Indigenous Australians involving the burning of native plants to produce smoke, believed to have cleansing properties and the ability to ward off evil spirits

social hierarchies
the ranking of groups of people in society based on status, wealth or power

sovereign state
a state or country that administers its own government and is not dependent on, or subject to, another power

speculative
based on guesswork

sphagnan
a polysaccharide (carbohydrate) in sphagnum moss that contributes to the tanning process

sphinx
a mythical creature with the head of a human and the body of a lion

spin doctors
people who are skilled in public relations who advise political parties on the positive presentation of their policies and actions

splinter group
part of an organisation that breaks away from the main body, usually owing to a disagreement

stade (pl. stadia)
a Greek unit of measurement equal to 180 metres

stakeholder
someone who has a particular interest in an issue, project or organisation

stalemate
a situation in which no action can be taken or progress made

standing army
an army of full-time professional soldiers

state god
the principal god of a people or nation

state religion
the principal religion of a people or nation

stela (pl. stelae)
an upright stone slab or pillar bearing inscriptions or designs and serving as a monument

stola
a long, draped robe that was the traditional garment of Roman women

stratum (pl. strata)
layers in an archaeological site revealed by excavation

stratagem
a plan, scheme or trick for surprising or deceiving an enemy

stratigraphic
relating to stratigraphy, the order and position of strata or layers of rock or sediment

stratigraphy
the study of the strata in an excavation site to reveal the natural and cultural deposits

strontium isotope tracing technology
a technique by which strontium isotopes in human hair and skin can indicate regions where people have lived

stylised
depicted in a non-realistic style

stylus
a tool for writing on clay or wax tablets

subclavian artery
one of two arteries located below the clavicle (collarbone) that supply our arms with blood

subject peoples
the people of various nations who are subject to or controlled by an invading nation

substructure
in this context, the below-ground section of a pyramid or mastaba tomb

Suez Canal
a sea-level canal linking the Mediterranean Sea with the Red Sea

sun temple
a religious building of the late Old Kingdom dedicated to the worship of the sun god, Re

superstructure
in this context, the above-ground section of a pyramid or mastaba tomb

sway
control or influence

synchronised
occurring at the same time or rate

synthesis
a process of combining different points of view and sources to develop a logically reasoned argument

T

tells
artificial mounds formed by accumulated remains of ancient settlements

template
a shaped piece of rigid material used as a pattern

tenets
principles or beliefs

tentative
not certain or definite

tephra
pieces or rock and other particles ejected from a volcano

terebinth
a tree of the cashew family

thermoluminescence
an archaeological dating method that measures the radiation given off by ceramic materials as they are heated

thesis
a statement, theory or argument presented in an essay that has to be supported by evidence

tone
the general character or attitude of a piece of writing

topic sentence
the first sentence of a paragraph that identifies its main idea

topography
the physical appearance of the natural features of an area of land

torc
a collar or neck ring of twisted metal, worn especially by the ancient Celtic tribes of Gaul and Britain

tracer
a person who traces the reliefs made on tomb walls

tread
the top surface of steps

tribunician power
the authority possessed by a tribune, a Roman official chosen by the lower classes to protect their interests

tributary
a state that pays tribute to another state or ruler

tribute
a tax or payment made periodically by a subordinate state to a superior power, especially as a sign of dependence

tripod
a three-legged structure given as a gift exchanged between hosts and guests, or as a prize to those successful in games

triumph
a Roman general's ride into ancient Rome after a victory

triumviral
a period when Rome was ruled by a triumvirate or group of three powerful men

Troad
an ancient region of north-western Anatolia (Asia Minor) in which Troy was situated

tumulus
a mound of earth and stones erected over a grave

tyranny
an absolute form of rule in which one individual exercises power without any legal restraint

U

uncompromising
unwilling to negotiate or make concessions to others

UNESCO
United Nations Educational, Scientific and Cultural Organisation

unguent
a thick, sweet-smelling ointment

unprovenanced
without provenance

unsustainable
unable to be maintained

Upper Egypt
the political and geographic division of ancient Egypt in the south

usefulness
a judgement about the value of sources for researching particular people, events and developments of the past

U-series dating
uranium-series dating, a scientific dating technique used to determine the age of calcium carbonate materials

usurpation
taking a position that belongs to someone else

utterance
a statement

V

vassal
a person or country in a subordinate position to another

vassal state
a state in a subordinate position to a superior power

viscera
the internal organs (lungs, liver, stomach and intestines)

vizier
a chief minister and king's deputy in ancient Egypt

votive objects
objects offered to gods as an appeal for divine favour

vulcanology
the scientific study of volcanoes

W

wadi
a river valley that is dry except when it rains

warrior pharaoh iconography
images of a pharaoh showing him dressed as a soldier and killing enemies or driving a chariot, for example

wet nurse
a woman who is paid to feed another woman's baby with her own breast milk

wings
the troops deployed in the outermost positions of an army's line-up facing the enemy

X

xeste
a name given to houses in Akrotiri based on their construction using ashlar masonry

Y

y-chromosomal haplogroup
a genetic population group of people who share a common ancestor along the patrilineal (male) line

Z

Zionist movement
a Jewish nationalist movement that supports the creation and development of a Jewish homeland

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Tutankhamun Wearing the Blue Crown
The Metropolitan Museum of Art, New York, USA

This statue head (circa 1336–1327 BC) is of the young Egyptian king Tutankhamun. Made of limestone, it is a fragment from a group of statues that depicted the god Amun seated on a throne, with the young king standing or kneeling in front of him. The king's figure was significantly smaller than that of the god, indicating his subordinate status in the presence of the deity. All that remains of Amun is his right hand, which touches the back of the king's crown in a gesture that signifies Tutankhamun's inauguration as king. During coronation rituals, various types of crowns were placed on the king's head. The type of crown present here – probably a leather helmet with metal discs sewn onto it – was generally painted blue and is commonly called the 'blue crown'.