

1



Overview: the ancient world

Source 1.1 Aboriginal rock art at Ubirr, Kakadu National Park, Northern Territory, Australia

Before you start

Main focus

Originating in Africa hundreds of thousands of years ago, the first humans eventually spread into other parts of the world and established the first civilisations.

Why it's relevant today

The evolution of our shared ancestors in Africa, and how and where early civilisations developed, are key parts of a long and fascinating history from which we can learn about managing our environment.

Inquiry questions

- Where did *Homo sapiens* originate and in which directions did the species migrate around the Earth?
- Why did the first civilisations develop in the places they did?
- Why was the development of agriculture important?
- How were the first civilisations in widely scattered places similar or different?
- How do we know about the ancient past?

Key terms

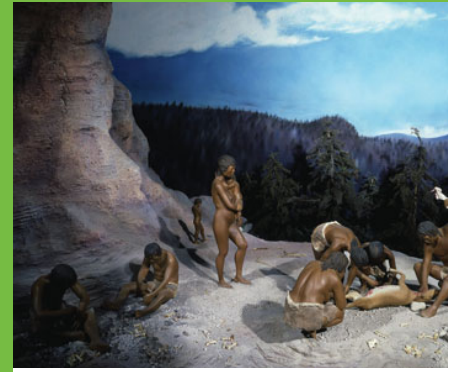
- Bronze Age
- cuneiform
- hominids
- *Homo sapiens*
- hunter-gatherers
- Neolithic period
- Palaeolithic period

Significant individuals

- Charles Darwin
- Mary and Louis Leakey

Let's begin

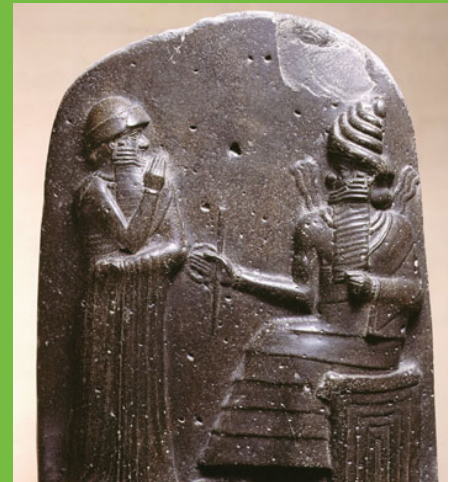
Around 100 000 BCE, our ancestors, *Homo sapiens*, began to migrate from Africa to Europe and Asia. Gradually, humans spread around the world, arriving in Australia by at least 60 000 BCE. Hominids – from whom *Homo sapiens* evolved – used tools and fire, and early humans were hunter-gatherers. The development of agriculture began around 10 000 BCE. We know about early human cultures from art such as rock carvings, sculpture and pottery, as well as buildings like the pyramids of ancient Egypt.



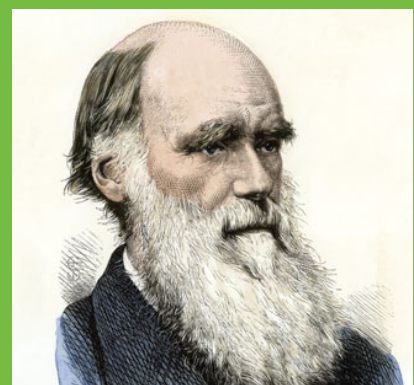
Source 1.2 Reconstruction of hunter-gatherers skinning game and fashioning tools in the Paleolithic era



Source 1.3 A Phoenician coin depicting a large merchant ship



Source 1.4 A sculpture of King Hammurabi and the Babylonian Sun God, Shamash



Source 1.5 Charles Darwin

Timeline

CHAPTER EVENTS



Source 1.6 Model of a Neanderthal man, a precursor to *Homo sapiens*



Source 1.7 The Venus of Dolní Věstonice



Source 1.8 Stonehenge, England

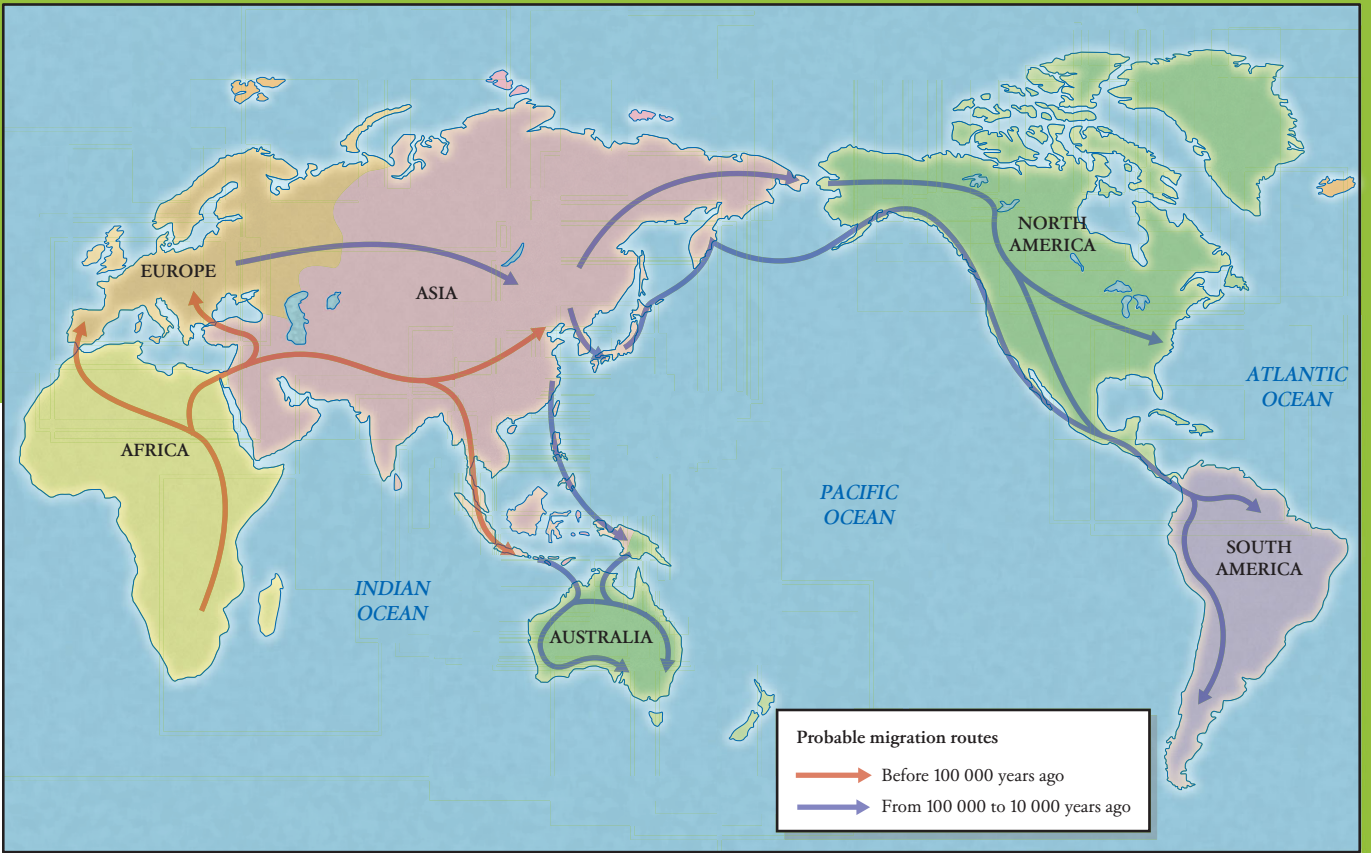


Figure 1.9 Map of the world showing the early human migrations
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Out of Africa: migrations of the early humans

primates a group of related mammals that includes humans, apes and monkeys

hominids a family of primates who date back about seven million years

archaeologists researchers who study cultures, especially ancient civilisations, by excavating and describing their remains

Homo sapiens ('wise man') our species of modern humans

Humans have descended from a family of **primates** known as **hominids**. Unlike other primates, such as apes, humans walk upright on two legs. They also have larger brains and the physical capacity for speech. Fossil evidence discovered by **archaeologists** Mary and Louis Leakey and others shows that the earliest humans lived in tropical areas of Africa. *Homo erectus* was a species of hominid that existed prior to the emergence of the human species. The first human species (**Homo sapiens**) lived and evolved between 400 000 BCE and 130 000 BCE. What is regarded

as the modern human species of *Homo sapiens* evolved around 150 000 BCE.

Early humans gradually expanded their range across Africa, starting in eastern and southern Africa. Some time after 100 000 BCE, humans migrated from Africa to Europe and Asia. Around 60 000 years ago, humans reached Australia. They crossed from Asia to the Americas via a land bridge to what is now Alaska, but it is thought that their spreading down through the Americas around 40 000 BCE to 20 000 BCE may have occurred partly by boat. The South Pacific was reached somewhere between 1100 BCE and 1300 CE.

Evidence of the first humans

The use of tools has distinguished humans from other species, even though some primates and birds are known to use tools as well. Evidence shows the earliest stone tools to have been used by hominids from around 2 500 000 BCE. The use of fire for cooking dates back to 500 000 BCE. Art gives us further important evidence of hominids, with cave art being found that dates from as early as 70 000 BCE.

For millions of years, tools were made from stone as well as bones. The **Palaeolithic period** extended until around 10 000 years ago and was followed by the **Neolithic period**, which accompanied the development of **agriculture**. Early humans shaped weapons for hunting animals and tools for cutting, scraping, digging and grinding. Humans learnt to use metals to make better tools, at first from bronze and later from iron.

During the Palaeolithic period, people were **hunter-gatherers**. They **foraged** for wild fruits, nuts, roots and grains, and hunted animals. They lived as **nomads**, and followed food from place to place as the seasons changed.

We are slowly learning about the early human use of fire, for hunting animals and managing the landscape, in places ranging from Africa to Australia. Early humans wore animal skins for warmth, and there is evidence of weaving fibres into cloth as early as 26 000 years ago.

Palaeolithic period (or Old Stone Age period) an era of hunting and gathering societies and the use of stone tools

Neolithic period (or New Stone Age period) an era marked by the development of farming and the domestication of animals

agriculture cultivating the land, producing crops and raising livestock

hunter-gatherers humans who foraged and hunted for their food

forage to search for food

nomads people who move from place to place without settling

HISTORICAL FACT

Modern humans are remarkably physically alike, despite cultural diversity.



Times gone by ...

In his 1871 book *The Descent of Man*, evolutionary theorist Charles Darwin speculated that humankind had evolved in Africa, because humans and African apes shared similar features. But at the time there was no archaeological evidence to support his argument. Starting in the 1930s, archaeologists Mary and Louis

Leakey began looking for human **fossils** in East Africa. At first they found stone tools, but it was not until 1959 that they found the first hominid fossil remains in the Great Rift Valley, which would provide evidence to support Darwin's **theory of evolution**. They also found footprints dating back around 3.5 million years, showing that hominids had walked upright. Two years later, they discovered a second hominid with a larger brain, which they called *Homo habilis* ('handy man') because this hominid had made the tools by chipping flakes from volcanic stones. Such tools could have very sharp edges.

Further key archaeological research would be conducted in Africa. In 1974, a team of archaeologists, including Mary Leakey, discovered much of a skeleton of an **Australopithecus** hominid in the Afar Depression in Ethiopia. They nicknamed the female skeleton 'Lucy' (see Source 1.10). It was an exciting discovery because they found 40 per cent of the whole skeleton – much more than was usually possible. From this skeleton, they worked out that this hominid had a small brain but walked upright. In 1990–92, James Aronson and Robert Walter used **radiometric technology** to analyse volcanic ash that had surrounded Lucy to date her as around 3.2 million years old. Aronson would later joke with university colleagues about having 'dated Lucy'.

- 1 Identify where and how Lucy was discovered.
- 2 Why is Lucy so important to our knowledge about human evolution?

Look up the University of Texas's 'Lucy' website (www.cambridge.edu.au/history7weblinks) to find out more about human origins and evolution.

fossils remains or traces of a plant, animal or human from a former geological time

theory of evolution a theory in biology that species adapt to their environments through a process of selection over time

Australopithecus an extinct kind of primate whose jaws were like those of a human and whose skull was like that of an ape

radiometric technology tools that allow a scientist to work out the age of a rock or mineral by analysing radioactive particles



Source 1.10 A replica of the skeleton 'Lucy', the *Australopithecus* hominid discovered in the Afar Depression in Ethiopia in 1974 and dated to 3.2 million years ago

Note this down

Using the graphic organiser below, compare the Palaeolithic and Neolithic periods.

| Palaeolithic period | Neolithic period |
|--|---|
| <ul style="list-style-type: none"> • Hunter-gatherers | <ul style="list-style-type: none"> • Farming |

Activity 1.1

- 1 Using the information here and online resources, identify the four main types of hominid.
- 2 What advantages did later groups of hominids have over earlier groups in relation to physical and anatomical developments?

HISTORICAL FACT

The female skeleton was nicknamed 'Lucy' because the team members played a tape of The Beatles' song 'Lucy in the Sky with Diamonds' repeatedly at their camp.

Theories and questions of early human life

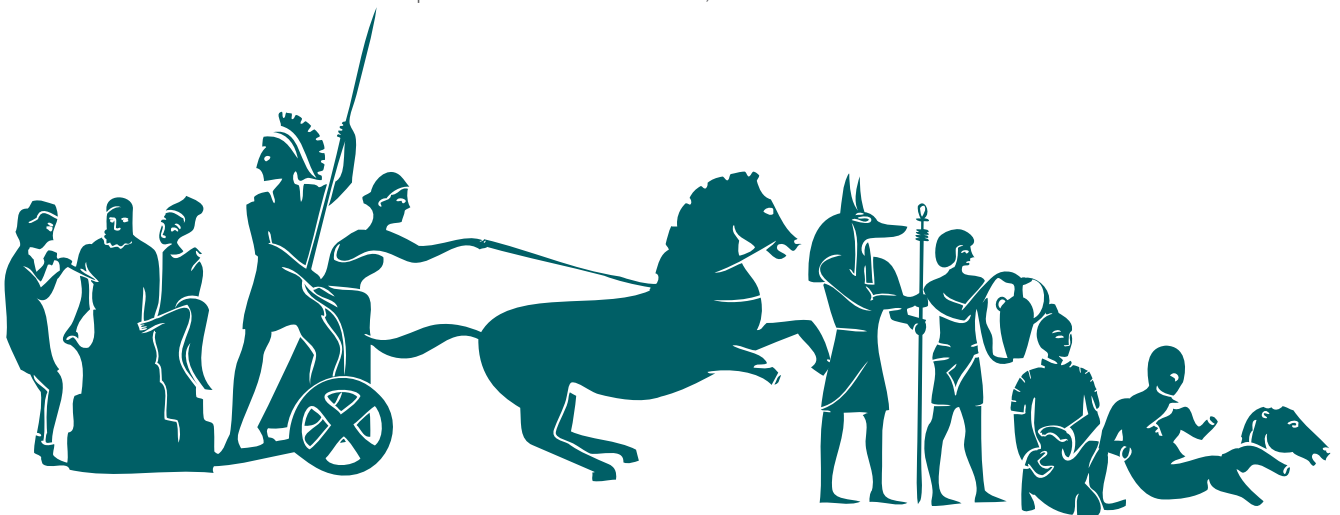
What defines our humanity? How do we express it? Scholars have identified language and tool-making as key attributes of humanity, but which came first or might be more important is a matter for debate. Other attributes such as larger brain size and erect posture pose similar questions: which came first, and did one lead to the other? One important question has been settled, though. When Darwin suggested that early human life was the result of an evolutionary process, the

main competing theory was that each 'race' of people had been created separately, and in the very places on the globe where they are found today. Scientists have well and truly decided in Darwin's favour.

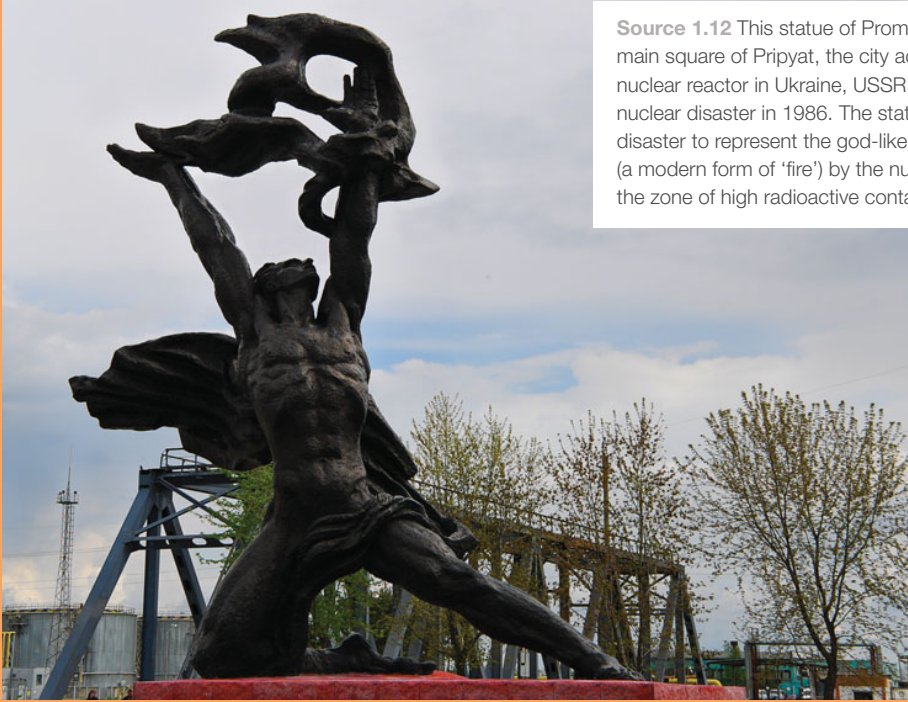
Scientists have used archaeological evidence to draw the line between animals such as primates and humans based on brain size, ways of moving around, methods of communication and tool-making capacity, but these distinctions continue to be subject to debate. Animals, too, are capable of intelligence and emotional complexity. We share much more than just DNA.



Source 1.11 Husband and wife team Louis and Mary Leakey dig for bones and tools of prehistoric humans in East Africa, 1962



Research 1.1



Source 1.12 This statue of Prometheus was built in the main square of Pripyat, the city adjacent to the Chernobyl nuclear reactor in Ukraine, USSR that suffered a major nuclear disaster in 1986. The statue was built before the disaster to represent the god-like supply of electricity (a modern form of 'fire') by the nuclear plant. It is now in the zone of high radioactive contamination.

Prometheus is one of the gods in ancient Greek mythology. Aeschylus (525–455 BCE) was a Greek playwright known especially for his tragedies. In Aeschylus's play *Prometheus Bound*, Prometheus is punished by the other gods – especially Zeus – because he has stolen fire from the heavens and given it to mortal humans. Lines from the play include:

Prometheus: ... I gave them fire.

Chorus: What? Men, whose life is but a day, possess already the hot radiance of fire?

Prometheus: They do; and with it they shall master many crafts.

Source 1.13 Aeschylus, *Prometheus Bound, The Suppliants, Seven Against Thebes, The Persians* (Penguin, 1961), p. 28.

Investigate the ways in which early humans used fire for cooking, hunting, making tools and managing the landscape. What did fire make possible that people had not been able to do before? Then, using Sources 1.12 and 1.13 as well, complete some research on the nuclear power station accident at Chernobyl, USSR in 1986.

- Why do you think the Soviet authorities erected a statue to Prometheus near Chernobyl when the nuclear power station was first built?
- In Aeschylus's play, why do you think the Chorus was shocked that humans had fire?
- In today's debates over nuclear power, who is Prometheus and who are the Chorus?

Explain your findings to the class, either in a PowerPoint presentation or on a poster with visual images.

Debate continues on the timing and patterns of the migration of early humans around the world, such as when humans crossed from Asia to the Americas (now generally thought to be about 25 000 years ago) and how they moved from North to South America. Researchers continue to find evidence that raises questions about the social patterns of early human life. For example, recent research used lasers to measure **strontium**

strontium a metallic element that can resemble calcium

in the teeth of human ancestors who lived in South Africa between 2.7 and 1.7 million years ago. The strontium that forms in human molars around the age of eight gives clues to geological location. The results suggest that males of the species stayed at home while females travelled further afield. While the spreading out of females may have prevented inbreeding, we do not know whether the males participated in caring for the children.

Establishment of ancient societies



Source 1.14 An ancient Assyrian wall carving of a hand with cuneiform writing

Art and iconography

iconography images and symbols used to represent ideas

cuneiform Sumerian writing that used sharp tools to create wedge-shaped symbols on clay tablets

Art and **iconography** provide us with invaluable evidence of early human cultures. From around 4000 BCE, farming communities in the valleys of the Tigris and Euphrates rivers in Mesopotamia (now Iraq) invented the wheel for transportation, made pottery and developed art forms. From around 3500 BCE, the Sumerians who invaded this region developed an early form of writing, called **cuneiform**, which was based on pictures.

Sumerian art included **frescoes** and statues in the temples of their gods, and Sumerian architecture included towers. As you will read in Chapter 3, ancient Egypt was rich in forms of art that showed Egyptians' life and the natural environment, including paintings in tombs, on papyrus, statues – especially of pharaohs and gods – and amazingly large stone pyramids and statues such as the sphinxes. Ancient China also developed forms of art, such as the remarkable terracotta warriors of Xian, which date from the third century BCE, elaborate pottery and

fresco interior type of pictorial wall painting where the pigment or paint to create the picture is applied to the wet plaster surface of the wall then allowed to dry

carved jade. In Central America, Mayan civilisation developed and, from before 150 BCE, began to build remarkable pyramids, temples and palaces with much sculpture and many decorations. From such

art forms we can learn about the dress, religion, gender practices, food habits, warfare, hunting, pets, sport, and even cosmetics and jewellery of ancient cultures.

HISTORICAL FACT

The name cuneiform means 'wedge-shaped', from the Latin *cuneus*, meaning 'wedge'.

Technology and daily life

We have some knowledge of technological developments, such as that metal tools were used from around 4000 BCE. The first tools were made of copper, but soon a stronger alloy of copper and tin came to be used, thus beginning

the **Bronze Age**, from around 3000 BCE. Iron was first used from around 1500 BCE. It should be remembered that stone and metal have lasted through the **millennia** better than wood or fibre, so that when tools were first made from these materials, and what they might have looked like, are largely

unknown. It is also worth remembering that we still use tools made of wood and fibre as well as of metal, and find them just as useful as did our ancient ancestors.

The word *technology* has evolved in meaning, and was not much used before the twentieth century. Contemporary usage has limited it to little more than electronics, while most of the

Bronze Age the period when humans began to make items out of bronze

millennium (plural millennia) a period of a thousand years



Source 1.15 Bronze axe blades from ancient Egypt

modern era has applied it to machines. For ancient times, before electronics and machines, we should think of technology in a different way: as a broad category of things including clothing, shelter, tools, weapons, ornaments, containers and so forth. From this standpoint, it is clear that ancient lives were filled with technology, as are ours today.

Today, archaeologists are using sophisticated new tools to investigate subjects we thought we knew about, showing how much we still do not

HISTORICAL FACT

Stonehenge, the prehistoric **megalith** just north of Salisbury in England, was constructed around 2500 BCE. It is a series of concentric circles of massive bluestones that were transported and assembled very carefully. Its design marks the movement of the sun.

megalith a monument made of stone

know. For example, satellites with infrared cameras that can highlight different materials underground recently have identified many pyramids and unexcavated tombs lying buried in parts of Egypt, covered with silt from the Nile. This research shows that we are still learning about the extent and

nature of ancient settlements and their buildings. Just who built the massive pyramids in Egypt is still a matter of debate among researchers, with recent discoveries of workers' tombs suggesting that at least some were free workers and not slaves, as had long been thought.

Key features of ancient societies



Farming

domesticate to tame or to make part of home life

cultivate to raise crops by working the land

In the Neolithic age, from around 7000 BCE, some people developed more settled societies, **domesticated** animals for food and **cultivated** crops. Once agriculture developed and reliable food supplies

increased, communities expanded in population quite dramatically. Some communities combined hunting and gathering with crop cultivation. In Chapter 3, you will learn about the first farmers in ancient Egypt along the valley of the River Nile, who domesticated animals from around

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

millet a grain crop with small seeds used for food

yam starchy root plant widely cultivated for food in warm climates

taro the root of a herb cultivated for food in tropical areas

7000 years ago. The land along the Nile was especially fertile because of the **silt** from the river. Ancient China had several Neolithic cultures from around 6000 BCE, with the cultivation of **millet** in the north and rice in the lower Yangtze valley, and the cultivation of **yams, taro** and fruit in southern areas. The first farming communities developed in north-western India between 4000 and 2500 BCE, followed by the civilisation in the Indus Valley. Various forms of farming developed in different places. In Central America by the early Common Era, Mayan farmers were draining swamps, using irrigation and learning to manage the forests around their villages to produce their own food.

patriarchal a social system in which fathers are heads of households, descent is through the male line and men hold more power and authority than women

A common feature of agricultural societies was a gendered division of labour and a **patriarchal** system in which

men held more power and authority. Hunter-gatherer societies valued the contributions of both women and men to the collection of food relatively equally, even where there were divisions of labour. With the growth of settled farming communities, men became more associated with the production of crops and the ownership of land, and women were seen as less important. While there was considerable variation in women's rights, legal, religious and cultural systems developed in which men and boys were valued more than women and girls.

Trade

A common feature of the earliest civilisations was the development of trade with other groups. The location of ancient Greece on the Mediterranean coast, for example, and its island geography, led to the use of boats and the development of **maritime trade**. As you will see in Chapter 4,

Phoenician society, which developed from around 1500 BCE, traded across distances as far as the British Isles (for tin). By around 600 BCE, the ancient Greeks were importing **commodities** including grain and timber from around the Mediterranean. The **Harappan** culture of the Indus Valley in ancient India engaged in trade from around 2600 BCE, including commodities such as cotton, precious stones and metals. Early trade was facilitated by proximity to rivers and seas. The oldest written records, found on cuneiform tablets, often dealt with trade, as well as the taxation that often followed as rulers sought to

maritime trade trade conducted across the sea

Phoenicians seafaring and trading civilisation from the eastern Mediterranean that was active between 1500 and 300 BCE

commodity an item that is bought and sold, especially a raw material or something that is manufactured, for which there is a commercial demand

Harappan name given by archaeologists to the civilisation that occupied the Indus Valley of ancient India

HISTORICAL FACT

The Hittite people in Anatolia (Turkey) first made iron tools around 1500 BCE. Iron was better than bronze because it is harder and sharper. Bronze is made from both copper and tin.

make money from it. Trade was also helped by roads and communication systems. The ancient Persian empire, under the rule of Darius I from 522–486 BCE, built a highly developed communications system, including a postal service and a large network of roads that enabled the movement of armies and emissaries as well as traders and their caravans.

Social classes

Another aspect of early civilisations was the division of society by rank, occupation, wealth and power. The wealth produced by agriculture and trade enabled societies to support members specialising in jobs such as priests, artists and **scribes**, unlike hunter-

scribe an official who copied documents or did clerical duties

gatherer societies where every able-bodied member was required to find food. Leaders emerged, such as the pharaohs of ancient Egypt who enjoyed great wealth and power. In ancient Rome, as you will learn in Chapter 5, patricians were the wealthy ruling elite; plebeians were a broadly ranged rank of free citizens beneath the patricians – including some rich merchants as well as humbler tradespeople – and at the bottom of the heap were slaves, a large, oppressed class of servants who inherited their status or were prisoners of war or convicted criminals. The specific forms of social hierarchy or rankings varied between civilisations. In ancient India, social differences became a caste system, in which people inherit their status and different social ranks have particular occupations, rights and duties.



Source 1.16 This scene from the Tomb of Menna in Egypt shows officials counting wheat while scribes record the quantities, probably for tax purposes

Religion

Ancient human cultures developed rituals, often associated with burying the dead and with **fertility** and crop production.

fertile able to produce a large number of quality crops; the ability to produce offspring or reproduce

pantheon all the deities of a religion considered collectively

Early civilisations also developed detailed systems of beliefs. The ancient Greeks worshipped many gods, each responsible for a particular aspect of life. Zeus ruled over the **pantheon** of gods who were believed to live on Mount Olympus, about whom many stories were told. They included Aphrodite, the goddess of love and beauty; Athena, the goddess of wisdom and the arts; Hermes, the god of trade; and Poseidon, the god of the seas. Religion in ancient Rome was based partly on the worship of the Greek gods. In India from about 1500 BCE, the invading Aryan people developed systems of knowledge called the 'Vedas', which became the basis of the religion of Hinduism and spread across the subcontinent.

reincarnation living again in a new body or form after death

enlightenment a spiritually enlightened state of being

monotheism a religion that believes in only one god

Much later, around 500 BCE, the Buddhist religion emerged, based on a belief in **reincarnation** and the possibility of attaining **enlightenment**. Buddhism would spread from India to China and elsewhere. Judaism is based on scriptures called the Tanakh, codified between about 400 and 150 BCE, as a **monotheistic** religion of the Hebrew people in ancient Israel. Christianity emerged, initially as a reform movement within Judaism, in the Roman Empire in the first centuries of the Common Era, particularly taking off in the fourth century. Islam, based on the teachings of the Prophet Muhammad, began in the Arabian peninsula in the seventh century and spread quickly across western Asia and northern Africa.

Rule of law

Early civilisations were marked by the development of language and writing. Some of the first written records relate to codes of social practice and the emergence of laws. The code of **Hammurabi**, c. 1700 BCE, contains 282 laws covering such topics as work, commerce, marriage, family and sexual relations. Pertaining to the Babylonian rule of Mesopotamia, it is the oldest surviving comprehensive legal code.

Hammurabi a Babylonian king who introduced his famous early code of law for the welfare of his people

The success of the vast Roman Empire lay partly in the uniformity of the legal system across its length and breadth. Rome's first legal code, introduced around 450 BCE, helped to establish the privileges and rights of all Roman citizens but also set out some privileges of the patrician class over the plebeians. In ancient China, the Qin dynasty, established in the third century BCE, asserted its rule not only by military means but also through a common system of laws, written script, taxation, administration, weights, measures and currency.

The ancient early civilisations that developed in fertile areas – often river valleys – shared some common features. Settled villages emerged, and farming and the domestication of animals began around 10 000 BCE. People gradually learnt to make better tools from metals. Civilisations traded with other groups and developed gendered divisions of labour and authority, as well as social classes, religious rituals, legal systems, art and technology, language and writing.

Chapter summary

- Our species *Homo sapiens* descended from hominids in eastern Africa around 150 000 BCE.
- Some time after 100 000 BCE, *Homo sapiens* spread slowly from Africa to Europe and Asia, and from there down to Australia, across to North America, down through the Americas and to the South Pacific.
- The Palaeolithic period began around 2 500 000 BCE and was a long era of hunting and gathering societies and the use of stone tools.
- The Neolithic period from around 10 000 BCE marks the development of farming and the domestication of animals, though stone tools were still used, with bronze not being used until around 2500 BCE.
- The development of agriculture – both crops and animals – enabled the first settlements, and the increased production of food, which meant a great expansion of population.
- Early civilisations developed social hierarchies, political organisation, language, laws, religion, art, architecture and varying cultural practices.

End-of-chapter questions

Multiple choice

- The hominid family of primates:
 - had large brains
 - had small feet
 - walked on all fours
 - walked upright
- The first tools used by hominids and early humans for millions of years were made of:
 - wood
 - bronze
 - stone and bones
 - none of the above
- Which statement about the development of farming is not true?
 - The development of agriculture caused population expansion.
 - Some communities combined hunting and gathering with growing crops.
 - Farming communities settled in the mountains and not in river valleys.
 - Men and boys were valued more than women and girls.
- Trade developed between early civilisations because:
 - people wanted commodities like grain, timber, cotton and metals
 - rulers wanted to be able to impose taxation
 - language differences made communication difficult
 - all of the above

- 5 Language and the rule of law emerged in early civilisations:
- A to govern matters like commerce, work, marriage and family
 - B to help unify large empires
 - C to establish the rights of one class over another
 - D all of the above
- 3 How was the Neolithic period different from the Paleolithic period?
- 4 List the common characteristics of agricultural societies.
- 5 What are significant shared features of early civilisations?

Source analysis

Study Source 1.17 and answer the following questions:

- 1 Explain how researchers study prehistory without the aid of written records from that time.
- 2 Outline three ways in which early humans fed themselves during the Paleolithic period.
- 1 Why did early humans make rock carvings such as these?
- 2 Reflect on what we can learn today from studying such carvings.

Short answer



Source 1.17 Prehistoric rock engraving of giraffes, Wadi Mathendous archaeological site, Sahara Desert, Libya, UNESCO World Heritage site

Extended response

Imagine that you are an archaeologist about to set out on a research expedition. Choose a particular site where archaeologists have made discoveries and conduct some online research. In a short essay, do the following:

- Identify two or three artefacts you might uncover at this site.
- Explain the work that it would take to find them.
- Describe daily life on the site.
- Evaluate what these artefacts can tell us about the civilisation.

