

# Overview: the ancient world

Evidence shows that modern human beings originated in Africa in about 150 000 BC, during the Stone Age. From about 100 000 BC onwards, small family groups drifted northwards to Asia. In about 60 000 BC, during the last **ice age**, began the most important human migration out of Africa. By 10 000 BC, our hunter-gatherer ancestors were becoming farmers and herders. The new farming way of life led to growth of permanent settlements and the rise of the earliest **civilisations**. Sumer, in present-day Iraq, was settled in about 4000 BC. It is believed to be the first of these civilisations.

**Source 1.0.1** A Palaeolithic cave painting at Lascaux, France

200 000–12 000 BC  
Old Stone Age  
(Paleolithic period)

100 000 BC

*Homo sapiens* begin to migrate from Africa

60 000 BC

Start of ice age and important period of human migration

50 000 BC

Humans reach Australia and Central Asia

45 000 BC

Humans move into Europe

40 000 BC

First stone tools developed in South-East Asia

38 000 BC

Existence of Mungo Lady and Mungo Man in Australia

17 000 BC

Cave paintings of Lascaux, France

15 000 BC

Land bridge connects Asia to the Americas

12 000–2 000 BC  
New Stone Age  
(Neolithic period)

5 000 BC

Start of metalwork and farming

3 800 BC

First evidence of Sumer civilisation

3 800 BC

City-states emerge in Sumer

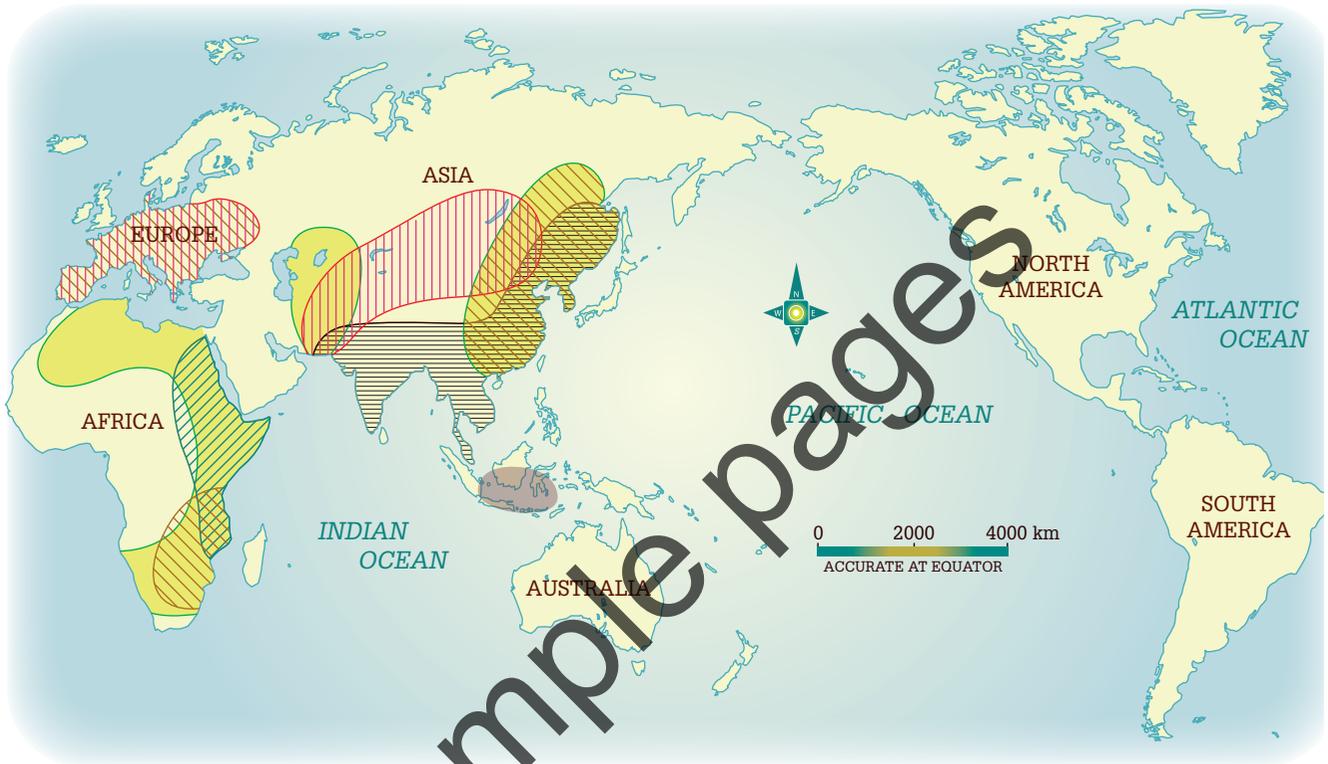
**Source 1.0.2** Timeline from prehistory to the first civilisation



# UNIT 1.1

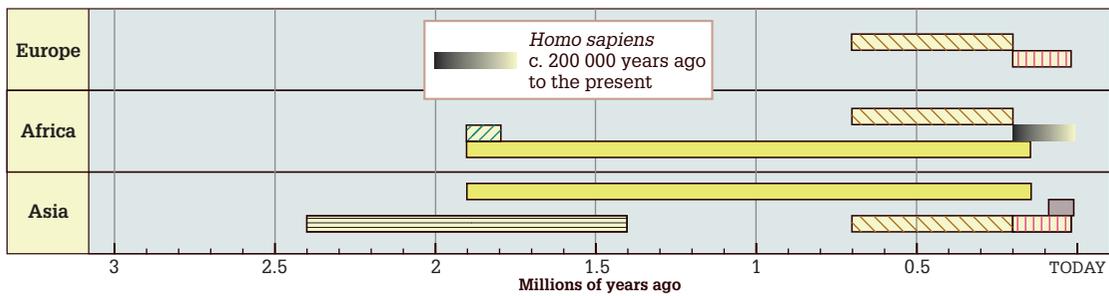
## Origins of humans

### The emergence of the *Homo* species



**KEY**  
Human species with dates of existence

<i>Homo habilis</i> c. 2.4–1.4 million years ago	<i>Homo erectus</i> c. 1.89 million – 143 000 years ago	<i>Homo neanderthalensis</i> c. 200 000–28 000 years ago
<i>Homo rudolfensis</i> c. 1.9–1.8 million years ago	<i>Homo heidelbergensis</i> c. 700 000–200 000 years ago	<i>Homo floresiensis</i> c. 95 000–17 000 years ago



**Source 1.1.1** This map and timeline show the locations of the *Homo* species and dates of their existence.

## Early humans

Human evolution was a long process spanning over six million years. Scientific evidence shows that humans originated from ape-like ancestors. Compared with apes, humans had larger brains, walked on two not four feet, and used language to communicate. Early humans were not all the same. Most scientists recognise between fifteen and twenty different species of humans. All these species belong to the *Homo* genus or classification of great apes, which includes modern humans. The *Homo* genus emerged about two million years ago.

### Homo species

To date, a number of species in the *Homo* genus have been discovered. Of these, the largest amount of fossil evidence and the largest number of **archaeological** sites belong to *Homo erectus*, *Homo habilis*, *Homo heidelbergensis* and *Homo neanderthalensis*. These species lived in parts of Africa, Asia and Europe.

The last two species to evolve were *Homo neanderthalensis* or Neanderthals (named after the Neander valley in Germany, where their fossils were first discovered in 1856) and *Homo sapiens* (humans). These two groups existed at about the same time. *Homo sapiens* originated in Africa. *Homo neanderthalensis* lived in Asia and Europe. While *Homo neanderthalensis* became extinct, *Homo sapiens* migrated out of Africa to **colonise** the Earth.

## Neanderthal humans

*Homo neanderthalensis* was physically distinct from *Homo sapiens*, with a low, sloping forehead, a prominent brow ridge, a heavy, jutting jaw and little or no chin. Neanderthals were also broader shouldered than modern humans, were extremely muscular in the upper body and in their short, strong legs, and had very broad, strong feet.

It is known that the Neanderthal way of life was very similar to that of early humans. Neanderthals, too, were expert hunters and gatherers.

Archaeological evidence shows, however, that they tended to use the same campsites season after season, whether there was abundant food there or not, which suggests that perhaps they did not adapt so well to the varying yearly conditions. It is also known from archaeological evidence that they buried their dead and looked after their sick and elderly. Neanderthals were the first known people to do so.

It is not known why, despite their greater strength and their ability to cope with living in areas of extreme cold, Neanderthals died out as a species by about 28 000 BC. It has been suggested that *Homo neanderthalensis* became extinct because it could not compete with the superior *Homo sapiens*. Early humans were more adaptable to any environment, smarter and more technologically able than their Neanderthal rivals.



Source 1.1.2

The skulls of *Homo neanderthalensis* (left) and an early *Homo sapiens* (right)

## ACTIVITIES

### Remembering and understanding

- 1 List the features that separated humans and apes.
- 2 Where did *Homo sapiens* originate?
- 3 Which species inhabited the Earth half a million years ago and where did they live?
- 4 Name the continents that have no evidence of early humans.

### Applying and analysing

- 5 Create a Venn diagram that compares and contrasts *Homo neanderthalensis* and *Homo sapiens*.



# UNIT 1.2

## Out of Africa

**1 Lascaux, France, c. 17 000 BC:** the Lascaux cave paintings show an abundance of mammoth, bison, oxen and deer.

**2 Venus of Dolni Vestonice, 28 000–22 000 BC:** this figurine of a woman is one of the earliest examples of ceramic sculpture created by humans. It was found at the site of two early kilns along with more than 700 other fired pottery fragments.



**5 Clovis people, c. 9500 BC:** first artefacts of the Clovis people, discovered in Clovis, New Mexico, USA. These people were skilled big game hunters who made use of a distinctive spearhead known as the Clovis point.



**3 Zhoukoudian, China, c. 25 000 BC:** a tooth from an early human was found in a cave alongside stone tools, a layer of ash, burnt stones, charred bones, berry seeds and more than 40 species of mammal fossils.

**4 Lake Mungo, 60 000–40 000 BC:** the earliest finds of *Homo sapiens* fossils in Australia have been at Lake Mungo in New South Wales. Two fossil skeletons, those of 'Mungo Man' and 'Mungo Lady', have been found. There has been some controversy over the dating of Mungo Man: some experts believe his remains are more than 60 000 years old, while others place him at about 42 000 BC.



**6 Monte Verde, c. 11 000 BC:** there is evidence of human settlement in Chile, South America, as early as 11 000 BC. This date is at least 1300 years earlier than scientists had at first thought. No-one knows how these migrating early humans found a way through the vast ice glaciers of North America during the last ice age.

**Source 1.2.1** This map shows key sites for early *Homo sapiens*. It also shows the routes that the first human migrants may have taken from Africa to the rest of the world.

## Migration begins

Fossils and DNA provide strong evidence that modern human beings (*Homo sapiens*) originated in Africa in about 150 000 BC, during the Palaeolithic period or Old Stone Age. This period is so called because early people used very basic stone tools to help them survive.

From about 100 000 BC onwards, small family groups drifted northwards to south-western Asia, but this migration ceased in about 70 000 BC. Some experts think that this was because of the volcanic eruption of Toba on the island of Sumatra, a catastrophic event that lowered global temperatures for more than 1000 years. Thus, in 60 000 BC, most people were still living in Africa. Apart from their hunter-gatherer lifestyle, these early modern humans were just like us. They had the same physical and mental capacities as modern humans, along with the ability to adapt to any environment on Earth. Then, in about 60 000 BC, during an ice age, a very important human migration out of Africa began. The result was the human colonisation of Australia.

The last and most severe ice age, between 30 000 BC and 10 000 BC, enabled the first humans to migrate to the Americas. From north-eastern Asia, humans walked over the Beringia land bridge into what is now Alaska. The colonisation of America that began in 15 000 BC was rapid. Within 5000 years, humans had migrated well into South America. By about 10 000 BC the migration was complete.

## Evidence of human migration

Proof of the migration of early humans can be found at numerous archaeological sites across the world (see Source 1.2.1). These comprise caves, rock and cliff shelters, open campsites, and middens or rubbish heaps filled with the litter of early human life: bones, shells, seeds and broken tool and arrow points. They allow archaeologists to estimate when humans arrived in the region.

The recent remarkable advances in the understanding of human physiology, which is the study of the working of the human body, through molecular biology are another way in which we can learn about the migration patterns of early humans. By comparing DNA from fossils with DNA from modern humans, scientists can work out how *Homo sapiens* settled the Earth and when changes in the population occurred.

### DID YOU KNOW?

How many people were there in 50 000 BC? The answer is 'not many'. It is estimated that the human population of Earth in 50 000 BC was just one million. When you consider that the world's population today is seven billion people, the world at that time was a rather empty place. Historians hypothesise that most people at this time probably met only a few dozen fellow humans during their entire lives.

### ACTIVITIES

#### Remembering and understanding

- 1 On which continent was most of the Earth's population located in 60 000 BC?
- 2 When did human migration into Australia occur?
- 3 What are two ways archaeologists can prove human migration took place?
- 4 Over what time frame is the migration of *Homo sapiens* across the Earth thought to have occurred?

#### Analysing and applying

- 5 Draw a flow chart to show the order in which the continents were colonised by humans. Include an approximate date for the colonisation of each continent.
- 6 Examine Source 1.2.1 carefully. What could be the link between the presence of the Clovis people in the Americas and the disappearance of mammoths, mastodons and the giant sloth in the same period of time?
- 7 Why do you think experts do not agree on the age of Mungo Man?



## UNIT 1.3

# The world in 60 000 BC

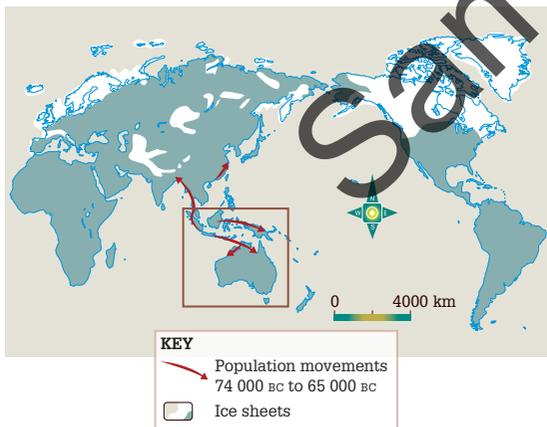
### Geography

The Earth looked very different 60 000 years ago than it looks today. At that time, much of the Earth was in the middle of an ice age. That period was one of a number of ice ages that occurred over tens of thousands of years. As temperatures decreased during each ice age, vast ice sheets formed on mountains and over northern Asia and America. Our ancestors had to adapt to much colder and harsher conditions because ice covered large areas of the Earth. The large quantities of water held frozen in those ice sheets resulted in lower sea levels. During the ice age of 60 000 BC, sea level was estimated to be 86 metres lower than today. During the last ice age, between 20 000 BC and 10 000 BC, sea level dropped by about 135 metres below the present level. Not only was the Earth generally much colder, but the continents as we know them were larger and very different shapes.

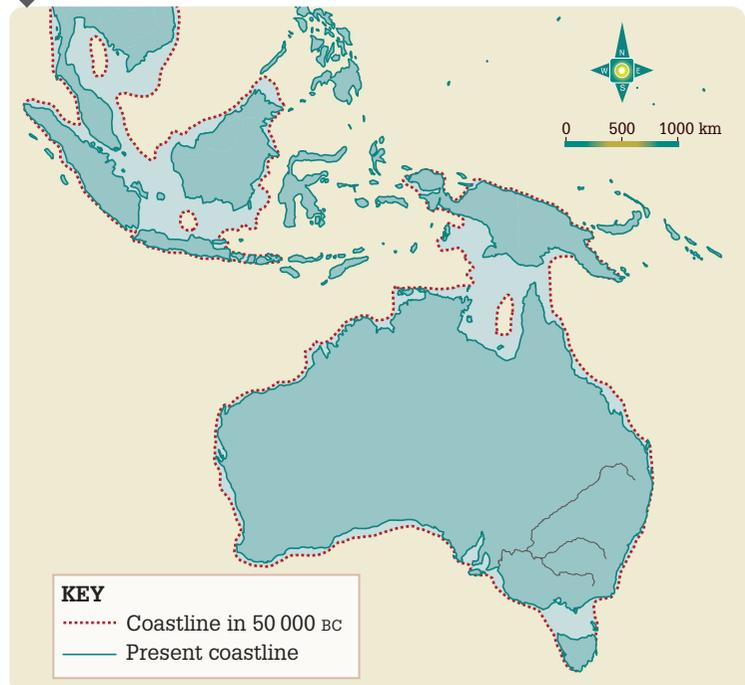
### Land bridges

The various ice ages that occurred over thousands of years played an important part in the migration and colonisation of humans across the planet. *Homo sapiens*, the ancestors of modern humans, were simple hunters and gatherers during the Paleolithic period (200 000–12 000 BC). Their nomadic way of life, as well as the lower sea levels during ice ages, made it possible for migration to continents that they would otherwise not have been able to reach.

Lower sea levels, such as during the ice age in about 60 000 BC, created land bridges between landmasses. These land bridges are below sea level today. Shallower areas, particularly between groups of islands, became dry land at lower sea level. The continuous stretch of land that formed is called a land bridge.



Source 1.3.1 The world in about 60 000 BC



Source 1.3.2 Australia and surrounding areas in about 60 000 BC

The emergence of a land bridge about 600 000 BC enabled humans to cross from South-East Asia to the Philippines, New Guinea and Australia. Where there were shallow seas along the route such as the Timor Sea, water crossings were made. Early rock art provides archaeologists with evidence suggesting that small canoes or rafts may have been used to settle New Guinea and Australia.

## The First Australians

The ancestors of Aboriginal People reached the northern coast of Australia about 60 000 BC. Ten to twelve thousand years later, people had migrated so far south, they had reached Lake Mungo in south-west New South Wales and Devil's Lair in south-west Western Australia. The human remains of a woman and a man, found at Lake Mungo in 1968 and 1974 respectively, provide archaeologists with valuable evidence of the culture and burial customs of early Australians in this region.

The remains of Mungo Lady and Mungo Man are the oldest human remains found to date in Australia.

Archaeological evidence shows that humans had reached Kow Swamp in northern Victoria by 13 000 BC. The colonisation of Tasmania occurred about 12 000 years ago during the last ice age, when a land bridge connected Tasmania to the mainland.

## The evidence

There are thousands of Aboriginal sites that provide evidence of past human occupation. These sites provide evidence like rock paintings, rock shelters, shell middens (piles of waste), fireplaces, human burial sites, tools, boomerangs and rock carvings.

### ACTIVITIES

#### Remembering and understanding

- 1 What is a land bridge?
- 2 When did humans first settle in Australia?
- 3 List four types of evidence historians might examine to learn about the Paleolithic period.
- 4 When was the Paleolithic period?

#### Applying and analysing

- 5
  - a Draw a Venn diagram to show the similarities and differences between the geography of the Earth in the present compared with 60 000 BC.
  - b Explain the link between the geography of 60 000 BC and human migration in the South-East Asia region.



**Source 1.3.3** Bone points found at Devil's Lair, Western Australia, and now in the Western Australian Museum. The two thinner bone points are at least 20 000 years old.



## UNIT 1.4

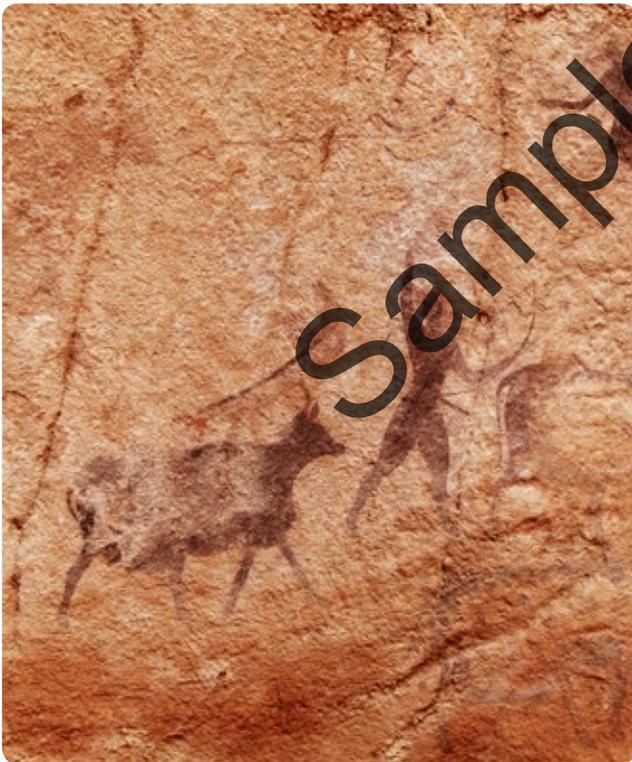
# The Paleolithic period

### Prehistoric periods

The prehistoric era lasted about 3.5 million years, and ended between 4500 BC and 2000 BC with the emergence of the earliest civilisations. It is divided into two main periods: **Palaeolithic** or Old Stone Age and **Neolithic** or New Stone Age.

### Hunters and gatherers

Our knowledge of the way of life and culture of Palaeolithic humans comes from archaeological evidence in the form of cave paintings, tools and human remains.



**Source 1.4.1** Rock painting from Tassili n'Ajjer in southern Algeria, on the northern edge of the Sahara in Africa. The archaeological site had a wetter climate about 10 000 years ago when early humans painted this scene. The hunters are using bows and arrows and spears to kill their prey.

Our ancestors were all hunter-gatherers. This meant that they hunted animals for food and foraged for nuts and berries in order to survive. Hunter-gatherers usually lived in small groups. As the food supply in one area became scarce, the group would move on to the next hunting and foraging ground. It was a generally successful lifestyle that existed for more than 100 000 years. Today, elements of the hunter-gatherer lifestyle survive among societies in the Amazon basin, Africa, Australia, New Guinea and the Arctic.

### Way of life

It is thought that hunter-gatherers lived in relatively small extended-family groups of between ten and thirty people. Men would hunt for small and large game while women and children foraged for fruit, berries, nuts and other foods, such as eggs and honey. Different groups would band together for the hunting of large game. They would form hunting parties of around 100 people and would work cooperatively to bring down huge animals such as mammoths and mastodons.

### Nomads

A hunting and gathering lifestyle required an extensive geographical area and, once the food supply in that area was exhausted, the group moved on to the next area. Hunter-gatherers were nomadic. Most groups would follow a seasonal pattern, returning to the same hunting grounds from one year to the next. When this happened, they would move into a new area. Once there, early humans would quickly adjust to their new conditions: a different climate, new game to hunt, new types of food for which to forage and new shelters to find or build. It was this ability to adapt to any conditions, no matter how different or how harsh, that enabled prehistoric humans to colonise the Earth.

### 1 Europe

As early humans moved northwards into Europe, they encountered large tracts of forest that were rich in animals such as deer, aurochs and wild boar.

### 2 Middle East

Early humans adapted to this environment by learning to use and harvest wild cereals.

### 3 Northern Eurasia

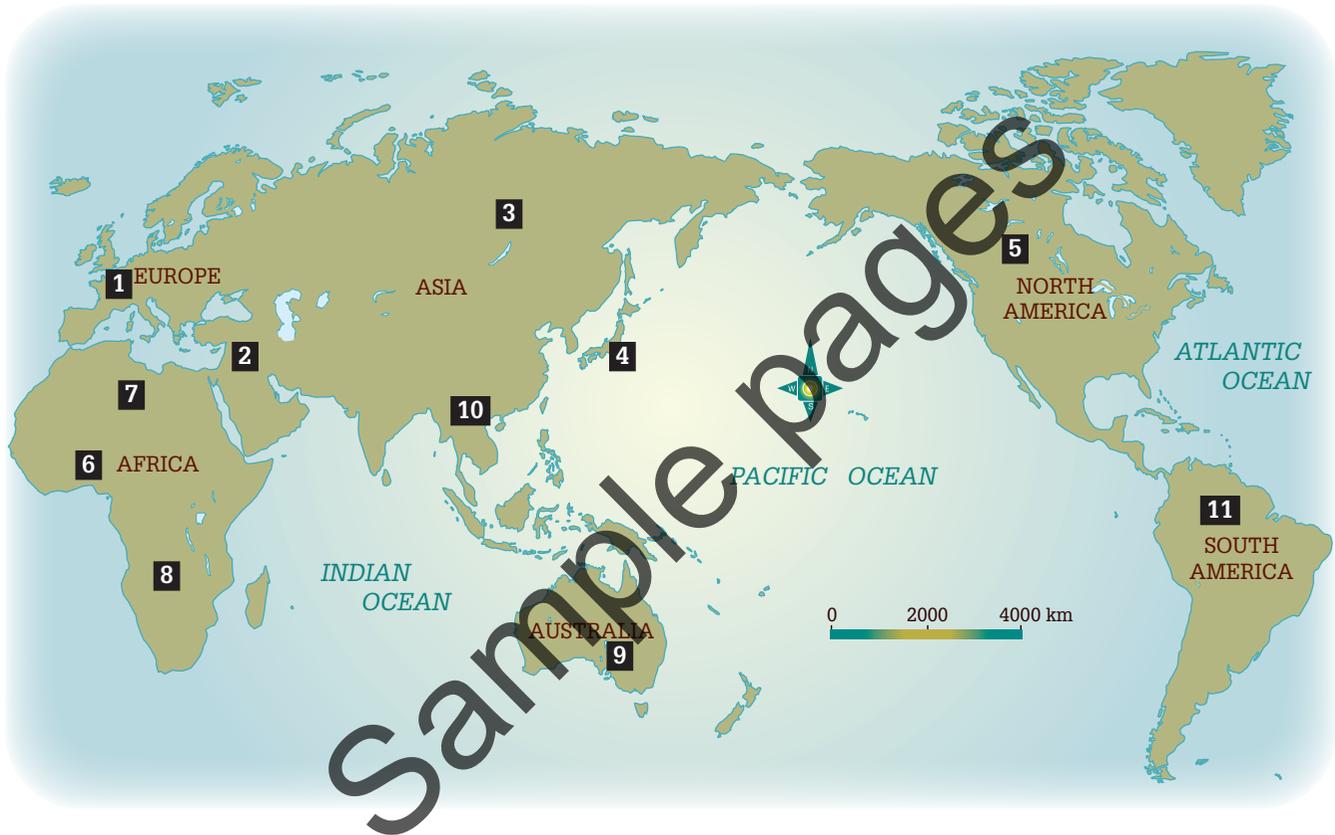
As the ice shelf receded due to climatic changes, woolly mammoth and rhinoceros became extinct and were replaced by forest-dwelling game such as deer, wild boar and aurochs. Early hunters rapidly learnt to take advantage of this new, far easier source of food.

### 4 Japan

Early humans who migrated here quickly adapted to a marine diet. Shell middens reflect the importance of shellfish in their diet.

### 5 North America

After crossing the Beringia land bridge, early humans learnt to survive by hunting herds of big game, such as mammoth, bison and mastodon, which roamed the Great Plains of North America.



### 6 West and Central Africa

In the forests of this region, hunter-gatherers hunted smaller, tree-dwelling game such as monkeys.

### 8 Kalahari

Hunter-gatherers in this arid region relied, as they do today, on moving regularly from place to place and foraging for seasonal plants.

### 7 The 'Green Sahara'

From 10 000 BC to about 4000 BC, due to the wetter conditions as the last Ice Age was drawing to a close, the Sahara was grassland, rather than desert. This far kinder environment attracted plenty of game such as lions, elephants, rhinoceros, hippopotamus—and, of course, early humans.

### 9 Australia

Initially, early humans lived along the coast and in the river valleys of Australia. However, as time passed they adapted to the harsh, arid environment of the interior and settled in all parts of the continent.

### 10 South-East Asia

There is evidence of early *Homo sapiens* both on the mainland and on the islands of South-East Asia. People adapted to hunting either the small game found on the mainland or the marine life that was abundant on the islands.

### 11 Amazonia

In the fertile Amazon basin, early humans quickly learnt to adapt to a diet rich in fish and other marine animals such as turtles and manatees. They also learnt to use root crops.

Source 1.4.2 Adaptations by early humans to different environments in about 10 000 BC

## A successful way of life

Some historians speculate that the shift from the hunter-gatherer way of life to the settled life of farming was one of the worst mistakes humankind ever made. Studies by anthropologists of the few existing hunter-gatherer societies, such as the !Kung San of the Kalahari in Africa, show that they work far less hard than neighbouring farmers and have a better and more varied diet.

Archaeological evidence provided by ice age fossils from Greece and Turkey also shows that early humans were better off as hunter-gatherers. In these places men had an average height of 175 centimetres and were strong and healthy. Studies of later fossils show that by 3000 BC the average height was only 160 centimetres, and there is evidence of malnutrition and disease. There is also some evidence that average life expectancy fell in the new farming societies.

Groups of ancient farmers, with their settled villages and higher populations, faced a variety of problems that their hunter-gatherer predecessors did not. They were more dependent on the weather and more vulnerable to famine due to climatic changes. Early farmers had a more limited diet based on cereal and root vegetables. Lastly, overcrowding in their villages made them susceptible to epidemics and disease in general.

## Inventions of early societies

Some of the greatest inventions ever developed occurred in Palaeolithic times. Nobody knows who first came up with the ideas for the following inventions, but they set humankind on the path to where we are now.

### Fire

Fire was the first great innovation of humankind. It is known that early forms of humans had mastered fire, perhaps as early as 1.8 million years ago and certainly by 500 000 years ago. The ability to create fire at will meant that humans could live in cold environments, protect themselves against predators and cook new foods.

Later, people used fire to create clay vessels and work metal, to make tools and **artefacts** that they could use to improve their lives. There is archaeological evidence that early humans carried toolkits for making fire.



**Source 1.4.3** A fire-starting kit from about 1750 BC. At first, humans probably started to use fire by taking the branches of a tree struck by lightning, but they soon learnt to create fire at will by using tools such as these flint stones.

### The needle

The invention of the needle in about 30 000 BC was another important technological breakthrough. It allowed the ice age people of Europe and Asia to sew 'tailor-made' clothing from cured and softened animal skins. Despite having mastered fire, *Homo sapiens* would never have been able to migrate to the colder regions of the world without this warm clothing. The needles were made from slivers of polished bone or ivory. The hole or eye of the needle was bored with a sharp-pointed flint.

### Tools and artefacts

Early humans were skillful at adapting to the changing environment around them. They were equally adept at using the objects available to them to invent tools and artefacts to improve the quality of their lives. These included weapons for hunting and musical instruments and works of art to enrich their lives.

## ACTIVITIES

### Remembering and understanding

- 1 What is a hunter-gatherer lifestyle?
- 2 What were the roles of men, women and children in a hunter-gatherer group?
- 3 Why did small groups of hunter-gatherers band together at different times?
- 4 How did the ability to make fire improve the lives of Palaeolithic humans?
- 5 What materials are the tools and artefacts of the Old Stone Age made from?

### Applying and analysing

- 6 Refer to Source 1.4.2 to construct a concept map showing the parts of the world occupied by hunter-gatherers and the foods they ate to survive. In the centre, write 'Hunter-gatherers about 10 000 BC'. Arrange the information by continents.
- 7 Create a Venn diagram that compares and contrasts the hunter-gatherer lifestyle and our modern lifestyle. Make sure that you include, among other things, food and diet, shelter, making of artefacts, and family.
- 8 Assume that Palaeolithic humans had not invented the needle. Explain how this would have hindered early humans.



**Source 1.4.4** Bone needles from about 12500 BC, found in the cave of Courbat, Penne-Tarn, France. Currently in the British Museum.



**Source 1.4.5** A flint point lashed to a wooden handle and a serrated flint from between 18000 and 10000 BC.



**Source 1.4.6** A spear-thrower carved from a deer antler, in the shape of a mammoth, from about 10&&500 BC, found in a rock shelter at Tarn-et-Garonne, France, and currently in the British Museum



## UNIT 1.5

# The Neolithic Revolution



**1** It is thought that the flooding of the Euxine Lake sometime between 6000 BC and 5000 BC caused Neolithic farmers to move northwards into the forested areas of Europe.



**2** In the Andes of South America, traders domesticated llamas for use as pack animals.



**3** Goats were among the first wild animals to be tamed by humans. This took place in about 10000 BC in the Middle East.



**4** Rice was first cultivated in the Yangzi valley, China, and in South Asia in about 8500 BC.



**5** The sheep was a wild animal that was domesticated quite early by Neolithic humans, in about 10000 BC.



**6** Before 6000 BC, the wild ox or aurochs, *Bos primigenius*, was domesticated in several parts of the world, including the Green Sahara and south-western Asia.



**7** Sometime before 5000 BC, potatoes were first domesticated by farmers in the Andes.



**8** The earliest evidence of cultivation in the Americas has been found in Panama and dates from about 7000 BC, but it is certain that by 5000 BC corn or maize was being farmed in Central America.



**9** In about 10000 BC, wild wheat was first domesticated in south-eastern Turkey.



**10** By 6000 BC, agriculture and the domestication of cattle began along the Nile. As the Green Sahara became more arid in about 5000 BC, farmers of cereal crops moved south towards the East African highlands. However, it was not until about 1000 BC that farming became prevalent in the rest of Africa.

**Source 1.5.2** Source 1.5.2 This map shows the spread of farming. Starting in about 10000 BC, many hunter-gatherers gave up their nomadic lifestyle and began to live by farming. The earliest evidence of this trend is found in the Middle East. Archaeological evidence also shows that farming and herding developed independently in other parts of the world from that time onwards.

## A new environment

The last ice age came to an end in about 10 000 BC. It was replaced by a warmer, more hospitable climate and terrain. Modern humans (*Homo sapiens*) were able to adapt rapidly to this more temperate environment. The most significant way they did this was by altering the way they obtained food. This has become known as the Neolithic Revolution. The hunter-gatherers of the Palaeolithic period adapted to their new environment by becoming farmers and herders. Neolithic humans domesticated animals and plants for their own use. This radically changed the way most people lived, and eventually led to the development of great civilisations, such as Sumer, ancient Egypt and ancient India, and thus to our own, modern world.

## Beginnings of agriculture

### The Fertile Crescent

The earliest evidence of the new farming and herding way of life was found in an area of the Middle East that includes modern-day Turkey, Syria and Iraq. In 1906 AD, an American archaeologist named James Henry Breasted first used the phrase 'Fertile Crescent' to describe this region. He called it this because of its curved shape on the map and its rich, fertile soil. It is thought that in about 10 000 BC animals such as sheep and goats, and later pigs, were first tamed when early Neolithic farmers, living near wild herds of these animals, learnt to control their movements for the benefit of humans.

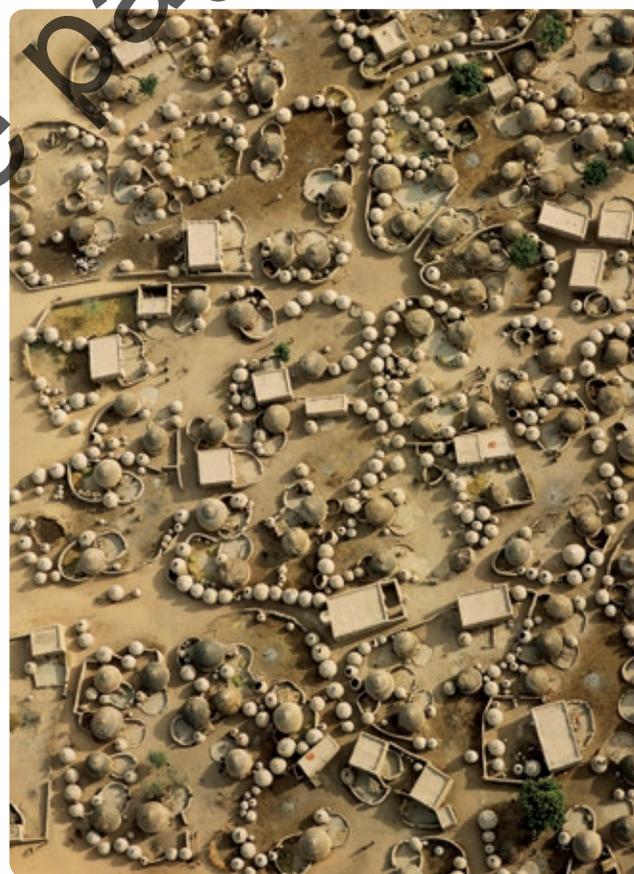
In a similar way, it is thought that people may have first planted the seeds of grains and cereals, such as einkorn and emmer, in an attempt to maintain their seasonal supply of plants to harvest. It is in the Fertile Crescent that archaeologists have found the earliest evidence of settlement, dating from about 9600 BC onwards. Jericho, Abu Hureya and Göbekli Tepe were all early farming villages in the region.

Archaeological evidence further suggests that the idea for farming developed independently in several places in Asia and the Americas in the period after 10 000 BC. It is thought that farming spread to Europe and Africa from the Middle East in the same period.

## First villages

The most obvious consequence of the new farming way of life was the advent of permanent settlements, which quickly developed into villages. Early villages usually consisted of huts, of mud brick or other simple construction, crowded together not far from the villagers' fields. Over time, as the community stayed in one place, these huts became sturdier shelters, built using better techniques and making full use of the natural resources available in the area.

The basic diet of people in these early villages comprised grains, such as wheat or rice, and the meat and other produce from their domesticated herds of goats, cattle or sheep. The villagers would sometimes supplement or add to their diet by hunting for wild game and foraging for berries and nuts. As the community now stayed in one place, people were able to store their grain, the foods they collected, and even smoked and cured meat.



**Source 1.5.2** A modern-day Tuareg village in Mali, Africa, viewed from the air. The first villages would have looked very much like this one.

## Consequences of village life

One of the outcomes of farming was that it enabled a given geographic area to support more people. This meant that the population of these new settlements grew rapidly. As a result there was less leisure time for most of the new farmers and there was also overcrowding, which led to the easy spread of disease. However, it also made it possible to produce food surpluses, which could be stored for later use or traded for other items.

Not everyone was needed to find or produce food, so some people were able to become specialists at jobs that were not necessarily related to the production of food for the community. In this category were shamans, or early doctors, priests and medicine men, hut and canoe builders, toolmakers and potters.

## Early religious beliefs

Alongside this sense of community came the beginnings of religion. New life was seen as coming from the fertile soil in which crops grew. Ancestor worship came into being: people believed their dead ancestors had the ability to bless the land, ensuring its fertility. There is much archaeological evidence of increasingly elaborate burial rituals, which included objects for the dead person's existence in the afterlife. Neolithic people also celebrated the change of seasons and marked the movements of the Sun, Moon and stars. They did this by conducting ceremonies and festivals at significant times, such as harvest, and the summer and winter solstices (respectively, the longest and shortest days of the year). Across Europe, Neolithic people also built monuments using enormous stones called megaliths. The most famous of these monuments is Stonehenge, in England.

## The development of trade

Trade and the **bartering** of goods began long before the beginning of farming and the development of permanent settlements. Even nomadic bands of hunter-gatherers were not completely self-sufficient as the areas they commonly visited could not supply all the resources they needed.

So communities would set up bartering systems and exchange goods with neighbouring groups. Over time these practices became more complex and widespread. Archaeological evidence for this includes shells from the Black Sea that appear in Ukraine, hundreds of kilometres to the north, dated as early as 18 000 BC. Most early trade was in grain, building materials and stone for the making of tools.

## Control of trade

The development of permanent villages, and then cities, meant that communities were closely tied to their land and the resources it supplied. Thus, certain societies were able to control those resources and trade them for other resources that they themselves lacked. This took place, for example, in Çatalhöyük, a Neolithic village in Turkey of about 7500 BC, which specialised in trading obsidian, a volcanic glass that was highly valued for making knives and other tools (see Source 1.5.3).



**Source 1.5.3** An obsidian blade from Çatalhöyük, Turkey, from about 7000 BC

In about 5000 BC, metalworking in copper, gold and silver began in the Middle East, then spread west and north to other parts of the world. As ore outcrops of these metals are unevenly distributed in different geographic areas, items made from them became valuable trade goods. An example of this is what happened in **Mesopotamia**, or modern-day Iraq and Iran. The people of the Mesopotamian region lacked any metal ore deposits, so they developed a trade in copper and gold from Turkey and the Iranian Plateau in exchange for grain and other goods.

As there were further advances in metalworking—from copper tools to bronze and then iron tools and weapons—trade continued to flourish throughout the Neolithic and ancient world. There was always a society that would trade for the commodities of another, thereby improving the lives of members of both societies.

## Tools and artefacts

### Pottery

By 10 000 bc, the Jomon people of Japan and, independently, people in Mali, West Africa, were using a potter's wheel to make pots for storing and carrying food and water. People were now able to stockpile their grains and foods for times of scarcity. Populations of these villages increased, as there was often plenty of food for all. It also meant that these communities now had a means of transporting food, and thus could trade their surplus foods.

### The wheel

The wheel is thought to have been used first in the Middle Eastern region of Mesopotamia between about 5000 and 4000 bc. The invention of the wheel soon led to a transport revolution. It allowed humans to travel greater distances more quickly, and transport goods more easily, than ever before.

By 3500 bc, wheeled carts were being used in south-western Asia, and this soon spread to Europe and India (see Source 1.5.4).

## ACTIVITIES

### Remembering and understanding

- 1 Outline the Neolithic Revolution.
- 2 List the advantages and disadvantages of village life.
- 3 Why did trade develop?
- 4 Create a three-column table to write your answers to this question. When and where were the first plants and animals domesticated by humans and what were they?

### Applying and analysing

- 5 Explain the connection between the growth of an agricultural-based society and religious beliefs.
- 6 What do you think were the consequences of a widespread trading system?



**Source 1.5.14** A terracotta model of a two-wheeled bullock cart from Mohenjo-Daro in the Indus Valley, from about 2500 bc, in the National Museum of Pakistan, in Karachi



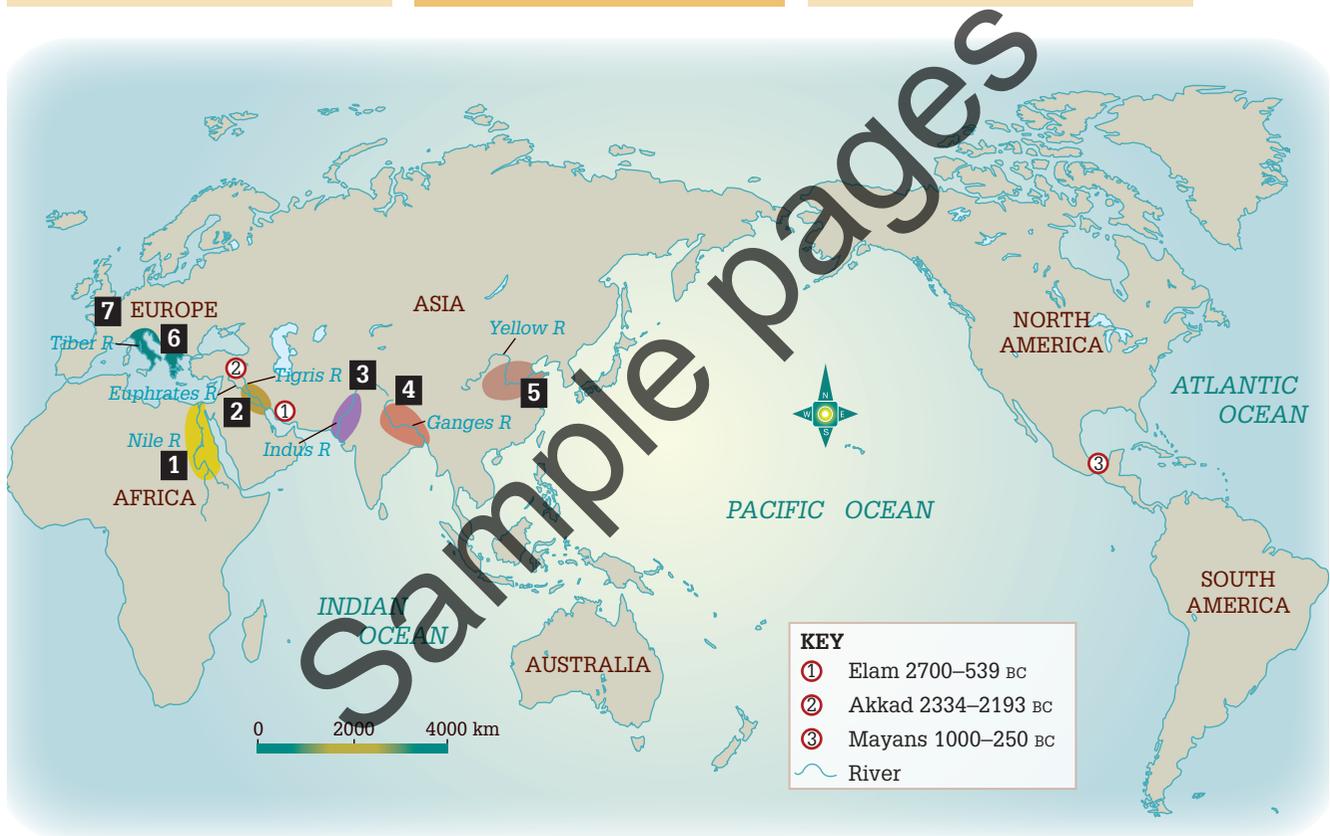
## UNIT 1.6

# Civilisations and empires

**1** The ancient Egyptian civilisation was located in the Nile valley where there was a reliable and abundant water supply and fertile soil from silt deposited by the river's annual floodwaters. The success of this civilisation stemmed from its ability to adapt to the conditions of the Nile. Ancient Egyptians irrigated their farmland and organised their yearly farming calendar around the river's annual flooding.

**2** Sumer was located between two large rivers, the Tigris and Euphrates. Like Egypt, the land was fertile and water from the rivers was used to irrigate crops. Sumerians were the first to have kings as rulers, to invent the wheel and plough and oars for their ships.

**3** The Indus River in north-west India was the site of two ancient cities, Mohenjo-Daro nearer the coast and Harappa further inland. The river valley had fertile soil from the silt deposited by floodwaters. The people here were the first to make cotton cloth and to sell it.



**4** The Vedic period of Indian history saw the settlement of the Ganges River valley by Aryans from the north. They developed cities based on a farming economy. Their religious beliefs and practices were the foundation of Hinduism.

**5** China's earliest civilisations developed in the north, around the Yellow River. The Chinese are believed to be one of the earliest civilisations to develop agriculture. Farmers were a respected social class because they supplied the food for people to survive.

**6** The earliest Greek civilisation, the Minoans, developed on the island of Crete. On mainland Greece a number of city-states grew, including Athens and Sparta. These city-states did not unite but were rivals throughout ancient times. The democratic system of government developed in ancient Greece.

**7** The ancient Romans developed one of the largest empires of the ancient world. At its peak, Rome had a population about three times that of modern Australia and ruled over an area about 80 per cent the size of Australia. Romans were excellent engineers. They built aqueducts, toilets and central heating systems, and invented cement.

**Source 1.7.1** Early civilisations of the ancient world

## Ancient history

The period referred to as ‘ancient history’ spanned almost 5000 years, beginning with the rise of the Sumer civilisation in about 3800 BC. Compared with the period that preceded it, this was a time of rapid progress and change in political, social and economic ways of life. Before 3800 BC, the prehistoric period dated back to about 200 000 BC. In those hundreds of thousands of years, *Homo sapiens* evolved, migrated out of Africa to colonise the world, developed hunter-gatherer lifestyles in Paleolithic times and gradually began adopting a farming and herding lifestyle in the Neolithic period.

The feature that marks the beginning of ancient history is written records. The Sumerians were the first civilisation to develop a system of writing to record their beliefs and daily life. Such written records provide valuable evidence for historians. To learn about prehistoric times, historians must rely on artefacts and human remains.

## Civilisations

Sumer was the earliest of the ancient civilisations. It developed on a fertile river plain between the Tigris and Euphrates rivers in southern Mesopotamia. Other civilisations developed in Mesopotamia and in Africa, Europe, Asia and Central America. Where these civilisations grew, humans had developed the most advanced and organised social and cultural way of life.

## Empires

Some of the ancient civilisations went on to develop **empires**. This meant that the political leaders of a civilisation expanded their territory by taking control of other countries. For example, the Roman civilisation was established on the Tiber River in the Italian peninsula. The Romans extended their power and control to create an empire that included southern Europe and northern Africa.

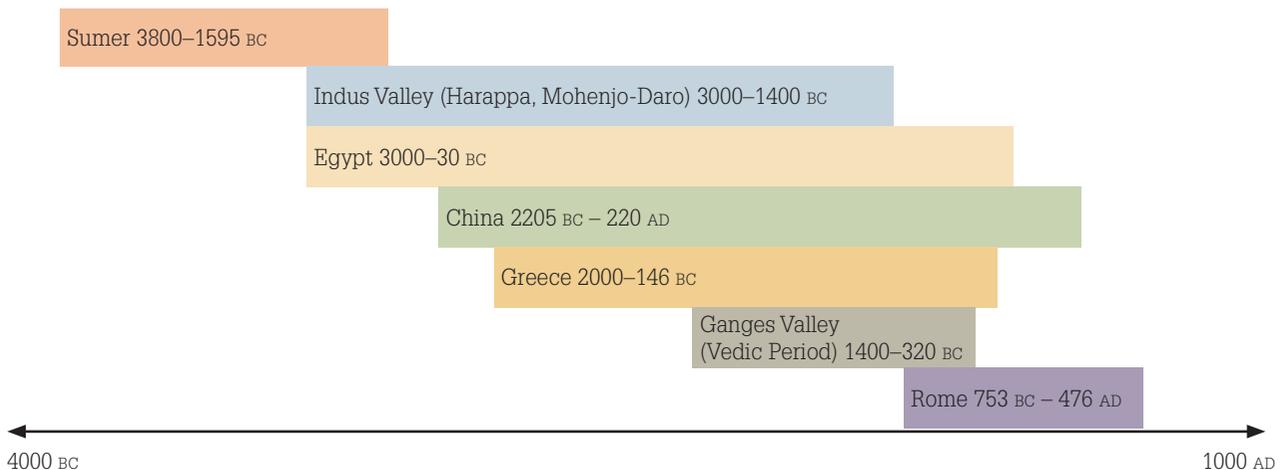
### ACTIVITIES

#### Remembering and understanding

- 1 How many years after the fall of the Sumerian civilisation did the Roman civilisation begin?
- 2 Name the civilisations that grew in Mesopotamia.
- 3 Which ancient civilisation was powerful for the longest period of time?
- 4 Which civilisation was the shortest and how many years did it last?

#### Analysing and applying

- 5 Construct a Venn diagram to show the similarities between a civilisation and an empire.
- 6 What conclusion can you reach by looking at Source 1.6.1 about the factors that influenced where early civilisations developed?



Source 1.6.2 Timeline of ancient civilisations



## UNIT 1.7

# First civilisation: Sumer

### First civilisation

Sumer, one of the world's earliest known civilisations, developed in Mesopotamia, or 'the land between the rivers'. Between 3800 BC and 1595 BC, farming flourished on the fertile floodplains between the Tigris and Euphrates rivers in what is now Iraq.

Sumerians were not only successful farmers but also developed technology—they devised ways to irrigate farmland and to prevent it from flooding. They became traders, too, using their location along newly emerging trade routes to develop their cities as centres for trade. These events led to the growth of twelve city-states. These city-states and their surrounding land were independently ruled states.

### Sumerian society

The development of farming and trade and the growth of cities led to a division of people into classes.

#### Kings and priests

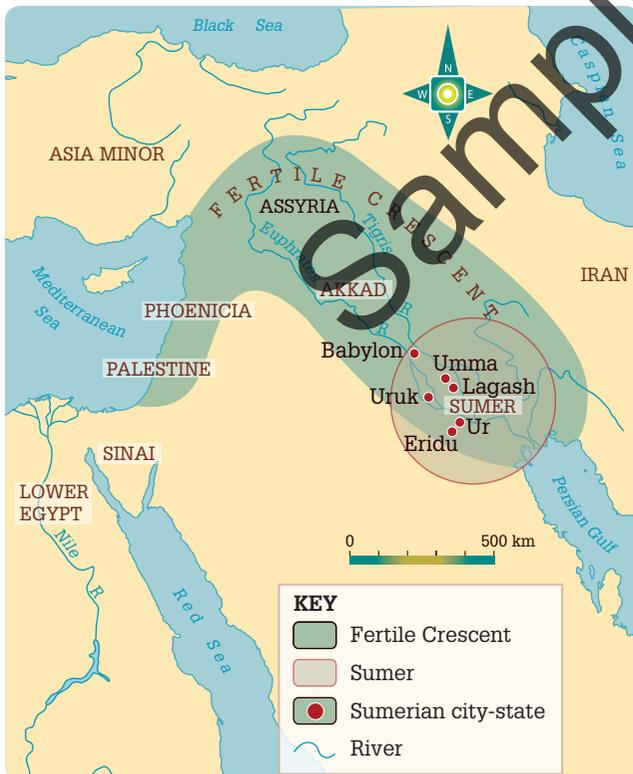
In the early years, priests held political and economic power. At the centre of each city-state was a temple or *ziggurat*, where the gods were housed. Priests surveyed and distributed land and crops. As the agricultural society became more complex with the development of trade and manufacturing, kings emerged as the rulers. Kings were seen as representatives of the gods. They were the chief priests and rulers as well as military leaders in conflicts against other city-states.

#### Merchants and craftsmen

These formed the middle class of people. Traders or merchants travelled in all directions to obtain raw materials that Sumer lacked. Craftsmen worked with metals such as gold, silver, tin, copper and bronze. They made farming equipment (ploughs), military weapons (swords and arrowheads) and luxury items (jewellery). Other craftsmen made pottery, wove cloth, worked in leather or were carpenters. Merchants travelled by land and sea to exchange Sumer's goods for timber and precious metals. Their journeys took them as far as the western Mediterranean and to the Indus Valley in the east.

#### Farmers

Unlike the rulers, traders and craftsmen who lived in the centre of the cities, farmers, being less important, lived in small mud houses on the edges. They adapted to the dry climate by building irrigation systems to divert river water to their land in dry months.



Source 1.7.1 Sumer and its location in the Fertile Crescent



#### Source 1.7.2

The ziggurat of Ur, one of the important Sumerian cities–states. King Ur-Namma built the ziggurat or temple in about 2100 BC. The facade of the ziggurat was rebuilt in the 1980s.

To prevent flooding of crops, they constructed levees and canals. Farmers grew wheat, barley, dates, onions, lettuces, leeks, mustard chickpeas and lentils. They also kept sheep, goats, cattle and pigs.

#### Slaves

Slaves were the property of their owners and performed all sorts of work in Sumerian society. They were often prisoners of war but sometimes parents would sell their children to pay off a debt. While slaves could be beaten and punished for trying to escape, it was in the best interests of the owner to have healthy slaves so they were generally treated well.

#### Daily life

#### Religion

Religious beliefs were a very important part of life. Sumerian temples were called ziggurats. They were imposing, large buildings that were cultural and religious centres. Before the leadership by kings in 2500 BC, ziggurats were also political centres. Priests lived in the ziggurats. When kings took over the power to rule, priests continued administration duties such as supervising irrigation works.

Sumerians worshipped many gods and each city-state had its own gods. For example, the main god of Ur was Nanna, god of the Moon, and his wife was Ningal. While Enlil, god of the air, was the patron god of Nippur.



#### Source 1.7.3

Statuette of a Sumerian priest from the Temple of Ishtar at Mari in northern Sumer. The statuette was made in about 2500 BC of gypsum, and the eyes were inlaid with lapis lazuli, a blue gemstone. Held in the Louvre Museum, Paris.

#### Education and writing

The earliest education was linked with the temples. Later, upper classes in society were educated. Boys from wealthy families attended school. Children of the poor worked with their parents from a young age. Few girls received an education.

Students worked from sunrise to sunset at their studies. The subjects were mainly grammar and writing. The Sumerian writing script, called **cuneiform**, was very difficult to learn. It was a wedge-shaped writing made by pressing the pointer of a blunt reed into clay tablets (see Source 1.7.4). Cuneiform was not like alphabetic writing but originated as **pictograms** that were simple picture drawings of objects. With time, pictograms became simpler and more abstract. There were hundreds of these symbols in cuneiform.



**Source 1.7.4**

A Sumerian clay tablet of a contract to sell a field and a house, written in about 2600 BC. Held in the Louvre Museum, Paris.

## Homes

Houses were generally built close together in the cities. Often they were attached to neighbouring houses. In order to keep out the hot summer sun and keep in warmth in winter, windows and doors were small. The poor lived in simple mud houses. On hot nights the flat rooftop was used for cooking and sleeping. Wealthier Sumerians had houses with several rooms, including reception rooms, a kitchen and an oven for baking bread. The design was normally U-shaped with a central garden. The poor had little furniture. Timber was rare and very expensive but the rich did have some wooden furniture. Items owned by the rich included wall-hangings, floor rugs, clay and copper bowls and cups.

## Families

Men had the power in Sumerian society and in families. Husbands could take a second wife if the first could not bear a child. Husbands could divorce their wives easily. Women did have some rights. They could own property, buy and sell goods, and run their own businesses. Such businesses did have to be related to home chores, such as making and selling bread or beer.

## Lifestyle

Sumerians enjoyed many recreational activities. They hunted, fished, boxed and wrestled. They played board games. Musical instruments have been found at burial sites such as the Royal Tombs of Ur. Music was made using harps, reed pipes, drums and lyres.

A wide variety of locally grown foods were eaten. The poor ate barley and bread, and drank beer. The diets of wealthy Sumerians included wine, sheep and goat meat, fruit, vegetables, dates, butter and cheese.

Clothes were made of woven wool or from animal skins such as goat fur. In the hot climate of Sumer, few clothes were needed. Men wore a short skirt and went bare-chested. Womens' skirts were longer and they wore tops. Men were clean-shaven. Both men and women wore jewellery.

## Achievements

The Sumerian civilisation was very advanced. Its achievements were copied and adopted by other later civilisations of the Fertile Crescent. Some of our modern way of life can be traced back to the Sumerians, such as the wheel, city-life and the use of writing. For this reason some historians refer to Sumer as 'the cradle of civilisation'.

## ACTIVITIES

### Remembering and understanding

- 1 Where was Sumer located?
- 2 What foods were produced by Sumerian farmers?
- 3 What was a ziggurat and where would you expect to see a ziggurat?
- 4 What was cuneiform and how did it evolve?

### Applying and analysing

- 5 Construct a Venn diagram to show similarities and differences between the wealthy and poor in Sumerian society. Refer to foods, houses and education.
- 6 Draw a pyramid that represents the different social levels in society. At the top of the pyramid place the most important Sumerians, and at the bottom place the least important people of society. Include the types of jobs done by people at each level of society.
- 7 Comment on the statement: 'Sumer was the cradle of civilisation.' Explain whether you agree or disagree with the statement.

## Design note: Afraid the brief was missing. I hope this layout works?

### The arch

Some houses have been found with pointed arched roofs made of stone. The arch was a great architectural achievement. It added strength to buildings.

### The plough

Sumerians were the first to invent and use ploughs to prepare the soil for cultivation of crops. Early ploughs were made of wood. As technology advanced they were made of metal.

### Cuneiform writing

The Sumerians developed the first written language. The wedge-shaped symbols were used to record business transactions, write laws and record harvests. The scribes who wrote in cuneiform were among the few literate people in society. They came from wealthy and powerful families.

### Metalwork

Sumerians worked in gold, silver, tin, lead, copper and bronze. They traded to get metals as they were scarce in Mesopotamia. They then exchanged the metal tools and weapons they made.

### Organised armies

Armies were formed to fight other city-states in disputes over water and territory. Sumerians were the first to use chariots to transport soldiers and made metal weapons.



**Source 1.7.5** A gold dagger and sheath from the Royal Tombs of Ur

### Written laws

The Sumerians were the first to have a set of written laws. These were written in cuneiform in about 2050 BC. They were intended to maintain law and order. Punishments and fines for breaking laws differed depending on the crime.



**Source 1.7.6** A gold chalice with stem from the Tomb of Queen Puabi in the Royal Tombs of Ur

### Medicine

Although spiritual doctors were consulted to heal people by getting rid of demons, Sumerians also used herbs as natural medicines and performed surgery.

### Board games

Sumerian board games looked similar to those of modern times. They played with dice and moved markers around a board.

### Sailboats

Boats were made using bundled reeds, timber masts and sails. Boats enabled Sumerians to travel long distances to trade.

### The wheel

Sumerians were the first to make and use the wheel. Originally used for making pottery, when flipped on its side and attached to carts, it made a useful object to haul heavy goods.



**Source 1.7.7** A bas-relief sculpture showing the wheel on a chariot. This is one of the earliest known representations of the wheel. The bas-relief was discovered in 1928 in the Royal Tombs of Ur.

### Ziggurats

They were the centre of political and religious life in city-states. Ziggurats were like step-pyramids, and could be 24 metres high and 60 metres wide.

### Irrigation

Sumerians devised ways to carry water from the Tigris and Euphrates rivers onto their farms. They did this to guarantee the water supply when it was needed to water their crops. This involved digging a complex system of canals and constantly maintaining them.

### Mathematics

Sumerian mathematicians used geometry to calculate the areas of fields, and fractions and multiplication to measure sizes of fields. They even worked out positions of the Sun and Moon.

### Kings and city-states

The first city-states to ever develop were in Sumer. Kings, who made and enforced laws, collected taxes and maintained the cities, and ruled the city-states. As Sumerian city-states often went to war against each other, the cities had high protective walls and moats around them.

### The calendar

The Sumerian calendar was divided into 12 months and each month was either 29 or 30 days. A new month began with a new moon.

### Musical instruments

Sumerians made drums, reed pipes and lyres.

**Source 1.7.8** Sumerian achievements



## UNIT 1.8

## Overview: the ancient world

**Homicide detective**

In 1991 the preserved body of a Neolithic man was found frozen in a glacier (see Source 1.8.1). It has been dated to about 3350 BC. The man was given the nickname 'Ötzi the Iceman' because he was found in the Ötztal Alps, near the border between Italy and Austria. Archaeologists and scientists have discovered that Ötzi was murdered!

You are a homicide detective with Interpol and it is your job to investigate Ötzi's life and death. Conduct thorough research in the library and on the internet to prepare a report for your superior, which details:

- a how Ötzi lived
- b how he died
- c who might have murdered him.

**Social anthropologist**

Social anthropology is the study of human societies. Some social anthropologists do this by living as a member of that society.

You are a social anthropologist who has been asked to investigate how people lived in either the Old Stone Age (Palaeolithic) or the New Stone Age (Neolithic). To do this, you and your colleagues have 're-created' either a nomadic Palaeolithic community or a Neolithic village. (You will do this through research in the library and on the internet.) You have lived as Stone Age people for several months.

**Source 1.8.1**

Ötzi the Iceman was a Neolithic man discovered in 1991 in the Ötztal Alps near the Italian and Austrian border. The body was found frozen in a melting glacier. Near the body, there were pieces of clothing, and tools. The body is estimated to be 5000 years old. Ötzi now lies in a refrigerated room in the South Tyrol Museum of Archaeology in Bolzano, Italy.

Now, you and your partners have been asked to give an oral presentation between five and ten minutes long to your class. For your oral presentation you need to prepare:

- a** a map of either of the following:
  - the nomadic route your Palaeolithic community took to its hunting and gathering sites
  - your Neolithic village
- b** illustrations or images of your hunting and gathering sites or your village, and of the tools and artefacts that you used in your daily life
- c** a journal consisting of at least five entries recording your experiences
- d** a Venn diagram that compares and contrasts Stone Age life with modern life
- e** a speech of five to ten minutes long that outlines:
  - your experiences
  - what you have learnt about Stone Age life
  - comparisons and contrasts with life today.

## Discovering Sumer

Research the work of archaeologists by looking into the life and discoveries of archaeologist Leonard Woolley. Your presentation should be titled 'The life and achievements of Sir Leonard Woolley'. The presentation should include:

- a** a brief biography of Woolley that may be presented as a timeline, table or paragraph
- b** why Woolley decided to excavate the site at Ur
- c** who else was involved with Woolley in the dig at Ur
- d** the difficulties faced in the excavation of Ur
- e** a description of what was found at the site
- f** an explanation why Woolley decided some tombs belonged to royalty
- g** an assessment of how recent war in Iraq affected the ancient sites and artefacts
- h** an assessment of the contribution that Woolley made to our knowledge about the Sumerian civilisation.

## Glossary

**agriculture** the practice of farming that includes growing crops and keeping animals for their meat, wool and milk

**archaeology** the study of human history by investigating the artefacts and human remains at sites of early settlement

**artefacts** objects made by humans like pottery and flint spears that are used by historians as evidence to learn about the past

**barter** a system of trade by exchange of goods and resources rather than by the use of money

**civilisation** an advanced social, political and cultural way of life

**colonise** to settle and take control of an area

**cuneiform** a system of writing developed by the Sumerians of Mesopotamia

**empire** a country or civilisation that has conquered neighbouring civilisations or countries and taken political control of them

**Homo sapiens** the species to which modern humans belong, which in prehistoric times developed tools, language and social structures that laid the foundation of the modern world

**ice age** a period of time in geological history when the Earth was cooler and ice sheets covered vast areas of land

**Mesopotamia** an area between the Tigris and Euphrates rivers in modern Iraq

**Neolithic** the period when the hunter-gatherer lifestyle of the Old Stone Age was replaced by farming and herding communities; also called the New Stone Age

**Paleolithic** a period in history also known as the Stone Age when humans hunted and gathered for survival; also called the Old Stone Age

**pictograms** early writing that resembled pictures of the items it represented