

## KEY INQUIRY QUESTIONS

How do we know early humans migrated 'out of Africa' across the Earth?

How did early humans live?

What challenges faced early humans and how did they deal with them?

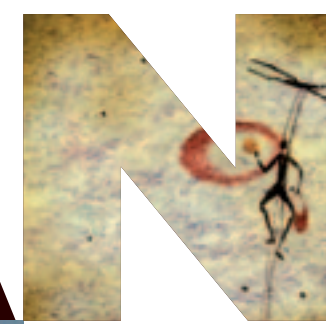
What evidence tells us about the development of ancient societies?

Over the millennia, in what ways have humans changed and in what ways have they stayed the same?



Throughout human history, people have felt the urge to move outwards from their homelands to improve their lives. This pattern of migration can be traced back through **the millennia to the Stone Ages.**

# HUMAN



# MIGRATION & SETTLEMENT

Sample pages



SOURCE  
0.1

The first migration: our ancestors left Africa to settle across the globe between 100 000 and 60 000 years ago. By 10 000 BCE they had colonised all of the continents except Antarctica. How did they survive and thrive in such very different physical environments?



# SNAPSHOT

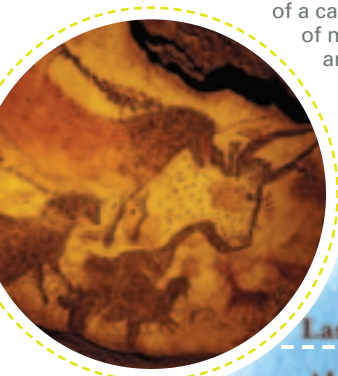
## OUT OF AFRICA

Fossils and DNA provide strong evidence that modern human beings (*Homo sapiens*) originated in Africa in about 150 000 BCE, 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 BCE onwards, small family groups drifted northwards to south-western Asia, but this migration ceased in about 70 000 BCE. 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 BCE, 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 BCE, during the final cold period of the last Ice Age, the most important human migration out of Africa began.

**SOURCE 1.2** Lascaux, France, c. 17 000 BCE  
These paintings on the walls of a cave show an abundance of mammoth, bison, oxen and deer.



**SOURCE 1.3** Venus of Dolni Věstonice, 28 000–22 000 BCE

This small 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.

**SOURCE 1.4** Zhoukoudian, China, c. 25 000 BCE

A tooth from an early human was found in this cave alongside stone tools, a layer of ash, burnt stones, charred bones, berry seeds and more than 40 species of mammal fossils.

**SOURCE 1.6** Clovis people, c. 9500 BCE

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.



**SOURCE 1.5** Lake Mungo, 60 000–40 000 BCE

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 fossils are more than 60 000 years old, while others place him at about 42 000 BCE.



**SOURCE 1.1** This map shows key sites for early *Homo sapiens*. It also shows the routes that the first human migrants might have taken from Africa to the rest of the world.



**LEGEND**

- Site of early modern human remains
- Migration of early modern humans
- 160 000 BCE Approximate date of first evidence of modern humans

**SOURCE 1.7** Monte Verde, c. 11 000 BCE  
There is evidence of human settlement in Chile, South America, as early as 11 000 BCE. 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 of the Ice Age.

**100 000 BCE** *Homo sapiens* begin to migrate from Africa

**50 000 BCE** Humans have settled Australia and Central Asia; estimated world population is one million

**45 000** Humans have moved into Central and Western Europe

**40 000 BCE** First stone tools are developed in South-East Asia

**38 000** Estimated world population is 1.5 million; what is now Great Britain is settled; earliest evidence of cremation, Lake Mungo, Australia

**30 000 BCE** First bone and ivory needles are developed

**25 000** Northward migration of *Homo sapiens* through Asia; estimated world population is three million

**20 000 BCE** First spear-throwers

**17 000** Cave paintings, Lascaux, France

**15 000** Crossing of the Beringia land bridge from Asia to the Americas

**10 000 BCE** Glacial retreat begins

**9000** First pottery is made

**8000** Estimated world population is six million

**5000** Beginnings of metalwork; farming spreads to Western Europe

**3500** First pictorial evidence of wheeled vehicles in Sumer

**SOURCE 1.8** Timeline of prehistory

**200 000–40 000 BCE**  
Middle Palaeolithic period (Old Stone Age)

**40 000–12 000 BCE**  
Upper Palaeolithic period (Old Stone Age)

**12 000–2000 BCE**  
Neolithic period (New Stone Age)



**SOURCE 2.1** Jomon shell midden from a site near Kawasaki, Japan. The Jomon people lived in Japan from about 13 680 BCE to 410 BCE. In this midden archaeologists have found fish bones, clams, oyster shells and other shellfish remains.



# MIGRATION

**Q 1** What sort of dishes do you think the Jomon people might have cooked with these foods?

**2** Conduct further research on the internet to find out what archaeologists have uncovered about the Jomon people's cooking from their research of middens such as this one. Present your findings in a short paragraph.

## MIGRATION BEGINS

It is not known for certain why the movement out of Africa began. The hunter-gatherer lifestyle could be a precarious one, dependent on climatic conditions and the abundance of game and edible plants. When conditions changed, the early humans reacted by moving on to other areas. They were able to adapt successfully to just about any climate in which they found themselves, from the harshness of nine-month winters and sub-zero temperatures to the searing heat of arid desert regions and the energy-sapping humidity of steamy tropical rainforests. By the end of the Ice Age, in approximately 15 000 BCE, this vast migration was complete. Ice Age hunting bands and family groups had settled all of Africa, Europe and Asia. They had crossed to the Americas via the Beringia land bridge and had traversed tropical waters in canoes and on rafts to settle New Guinea and Australia. The only continent untouched by humans was Antarctica.

### DID YOU KNOW

#### HOW MANY PEOPLE THERE WERE IN 50 000 BCE?

The answer is 'not many'. It is estimated that the human population of Earth in 50 000 BCE was just one million. When you consider that the world's population today is nearly 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.

## EVIDENCE OF HUMAN MIGRATION

Proof of the migration of early humans can be found at numerous archaeological sites across the world (see Source 1.1). 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 areas where they are found.

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 or splits in the population occurred.

### DID YOU KNOW

#### THAT NEANDERTHALS WERE NEARLY CALLED 'STUPID PEOPLE'?

The scientific conventions governing the naming of species say that the name published first is the one that sticks—luckily for the Neanderthals! In 1866 CE, the German biologist Ernst Haeckel proposed that they be named *Homo stupidus*, but the name *Homo neanderthalensis* had been accepted two years earlier and so that is how we now know them.

## NEANDERTHALS VERSUS EARLY HUMANS

When the first groups of *Homo sapiens* migrated out of Africa, they were not alone. Populations of *Homo neanderthalensis* or Neanderthals (named after the Neander valley in Germany, where their fossils were first discovered in 1856) were already living in Europe and parts of Asia and had been there since about 350 000 BCE. We know a lot about Neanderthals since they tended to live in areas rich with limestone caves, which preserved their bones well and have proved to be an abundant source of prehistoric fossils and artefacts for archaeologists.

*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. There is much debate about *Homo neanderthalensis* among archaeologists. One source of disagreement has been whether it is a subspecies of *Homo sapiens* or not. Should it really be classified as *Homo sapiens neanderthalensis*?

**SOURCE 2.2** The skulls of *Homo neanderthalensis* (left) and an early *Homo sapiens* (right)

- Q 1** Trace the two skulls and label the distinctive features of both skulls.
- 2** What conclusions can you draw about the two skulls?







**SOURCE 2.3** A Neanderthal burial in Israel, from about 60 000 BCE. Neanderthals often buried their dead with items for the afterlife such as parcels of meat and rings of animal horn.

- Q** 1 **What does this tell you concerning Neanderthal beliefs about life and death?**  
 2 **Does this make them human? Explain your answer.**

Most recently, archaeologists have agreed that *Homo neanderthalensis*, although closely related to *Homo sapiens*, is a distinct species. 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.

Another debatable point has been whether Neanderthals and the newcomers from Africa interbred. There was fossil evidence that suggested this, and recent analysis of DNA from Neanderthal fossil bones now appears to confirm that Neanderthals and early modern humans produced offspring.

Lastly, it is not known why, despite their greater strength and their ability to cope with living in areas of extreme cold, Neanderthals were not able to survive the onslaught of early humans and died out as a species by about 24 000 BCE. 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.

### remembering & understanding

- #1** In your workbook or in a Microsoft® Word document or Excel® file on your computer, create a 'Human migration and settlement' glossary. Begin your glossary by listing these key words and phrases and explaining their meanings:
- *Homo neanderthalensis*
  - *Homo sapiens*
  - middens
  - migration
  - Palaeolithic period
  - physiology
- #2** Read Units 1 and 2 of this chapter carefully and answer the following questions.
- a Why is it thought that *Homo sapiens* originated in Africa?
  - b Over what time frame is the migration of *Homo sapiens* from Africa thought to have occurred? When did the biggest migration occur? By what date was this migration largely completed?
  - c What is the probable reason for this migration?
  - d Why was *Homo sapiens* so successful at colonising the Earth?

### understanding, evaluating & creating

- #3** Read the section 'Evidence of human migration' carefully and answer the following questions.
- a What are the two ways in which archaeologists can prove this human migration took place?
  - b With a partner and using the internet, conduct further research into the two ways of proving prehistoric human migration. Which way do you think is the more accurate?
  - c Create an A3 poster or a webpage to demonstrate your findings. Divide your poster or webpage in half. On the left side place your information about the first way, and on the right side place your information about the second way. Across the bottom of the page, write two or three sentences that explain your conclusions.

### understanding & analysing

- #4** Examine Source 1.2 carefully, and use the library or the internet to find other images of the Lascaux cave paintings.
- a What do these cave paintings tell us of the lifestyle of *Homo sapiens* during the Ice Age?
  - b Which animal do you think is depicted here?
  - c Why? Explain your choice.
- #5** Examine Source 1.4 carefully.
- a Create a two-column table. In column one write down each piece of evidence about the *Homo sapiens* fossil site at Zhoukoudian and in column two write down what you think it shows about how these early humans lived.
  - b From this evidence, what overall hypothesis can you formulate about the lifestyle and diet of these early humans?

### understanding, analysing & creating

- #6** Examine Source 1.6 carefully.
- a 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 time period?
  - b Conduct further research on the internet to find out more about the Clovis people.
  - c You are a prehistoric environmentalist protesting against the extinction of mammoths, mastodons and giant sloths. Either on poster paper or using publishing software on a computer, create a flyer outlining your protest.

### analysing, evaluating & creating

- #7** Read 'Neanderthals versus early humans' carefully and then use the library and the internet to conduct further research into *Homo neanderthalensis* and early *Homo sapiens*.
- a Create a Venn diagram that compares and contrasts *Homo neanderthalensis* and *Homo sapiens*.
  - b Using your Venn diagram to help you, answer the following question: Why do you think *Homo neanderthalensis* became extinct? Explain your answer.

**LEARNING ACTIVITIES**



# HUNTERS & GATHERERS



**SOURCE 3.1** A cave painting from Spain, dating from about 13 000 BCE, showing a human figure harvesting honey from a hive of wild bees on a cliff face. The hunter-gatherer is using ropes to reach the hive and smoke from a burning brand to subdue the bees.

- Q 1** What do you think the black specks around the figure might represent?
- 2** Even though it only shows one figure, how does this painting suggest that gathering honey involved cooperation between people?

Until about 10 000 BCE 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, to a greater or lesser degree, among societies in the Amazon basin, Africa, Australia, New Guinea and the Arctic.

## HOW DID THEY LIVE?

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. There is evidence that 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.

A hunting and gathering lifestyle requires an extensive geographical area and, once the food supply in that area is exhausted, forces the group to move on to the next area. So hunter-gatherers were **nomadic**. Most groups would follow a seasonal pattern, returning to the same hunting grounds from one year to the next—that is, unless climatic changes required them to move further afield. 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.

## A VERY 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 BCE the average height was only 160 centimetres, and there is evidence of malnutrition and disease. There is also some archaeological 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 tended to have a more limited diet based on cereal and root vegetables. Lastly, overcrowding in their villages made them susceptible to epidemics and disease in general.

### DID YOU KNOW

#### THAT THE !KUNG SAN MIGHT BE OUR ANCESTORS?

The results of a study of African genetics, undertaken by the University of Pennsylvania in 2009, has suggested that the home of the !Kung San of Southern Africa—the Kalahari desert—could be where modern humanity originated.

**SOURCE 3.2** !Kung San gather around a fire at the end of the day.





**SOURCE 3.3** Map of adaptations by early humans to different environments in about 10 000 BCE

**North America**

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

**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.

**Middle East**

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

**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.

**Japan**

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

**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 utilise root crops.

**West and Central Africa**

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

**The 'Green Sahara'**

From 10 000 BCE to about 4000 BCE, 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.

**Kalahari**

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

**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.

**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.

**CASE STUDY: THE LOST LAND UNDER THE NORTH SEA**

Today, the North Sea is bounded by the British Isles to the west, northern Europe to the south and Scandinavia to the east and north (see Source 3.5). More than 12 000 years ago, this was a vast landscape that provided a rich abundance of life for hunter-gatherers. It was not just a land bridge between Europe and the British Isles.

“People think this was a land bridge across which people roamed to get to Britain, but the truth is very different. The places you wanted to live were the big plains next to the water and the coastline was way beyond where it is now. This was probably a heartland of population at the time ... Some of this land would have made the perfect environment for hunter-gatherers. There is higher land where they could have built their homes and hills they could see their prey from ... This completely transforms how we understand the early history of north-western Europe.”

**SOURCE 3.4** Professor Vince Gaffney, Director of the Institute of Archaeology and Antiquity and Chair in Landscape Archaeology and Geomatics at Birmingham University, UK, writing on the lost land under the North Sea in the *Guardian* online, 24 April 2007

The lost land under the North Sea has been discovered by geologists and archaeologists from the University of Birmingham, who used 3-D seismic images from exploration of the seabed for oil to ‘map the best-preserved prehistoric landscape in Europe’. They named this land ‘Doggerland’.

**CLIMATE CHANGE CATASTROPHE!**

As the world warmed and the last great Ice Age came to an end, the hunter-gatherers of the great North Sea plain would have lost their hunting grounds. Rising water levels due to increasing temperatures and the retreat of glaciers to the north would have flooded the low-lying plains, and the people would have been forced to move to higher ground in all directions. By 6000 BCE the North Sea was formed and Britain was an island.

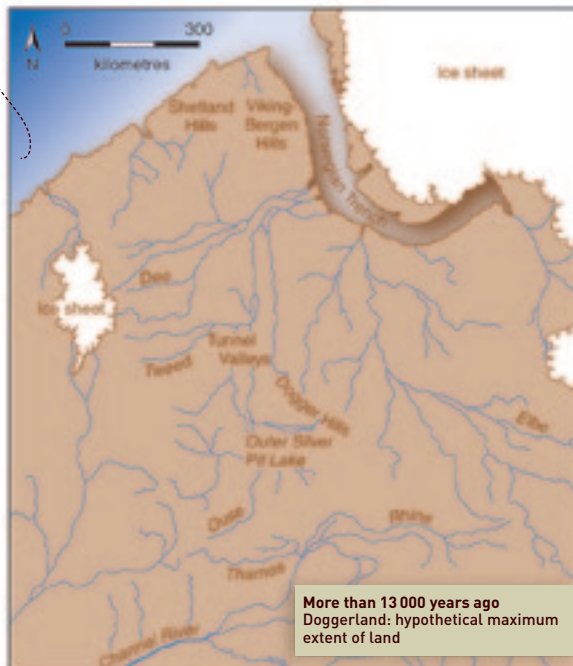
The fertile prehistoric plain was lost under the sea in the space of 4000 years. At certain times and at



specific locations, however, the flooding may have been far quicker than that, with significant areas disappearing within the memory of a single generation.

Professor Vince Gaffney, the author of Sources 3.4 and 3.6, believes these historical events to be of great importance to us today as the current predicted rate of climate change mirrors the rate of change between 10 000 and 6000 BCE.

**SOURCE 3.5** As water levels began to rise in about 10 000 BCE, the coastline of Britain and Europe began to alter.



*At a time when global warming and sea level rise are now accepted as amongst the greatest threats to our lifestyles, the fate of the landscapes and peoples of the North Sea may yet be interpreted not as an academic curiosity but as a significant warning.*

**SOURCE 3.6** Professor Vince Gaffney, Director of the Institute of Archaeology and Antiquity and Chair in Landscape Archaeology and Geomatics at Birmingham University, UK, writing on the Birmingham University website

### remembering & understanding

- #1** In your 'Human migration and settlement' glossary, list these words or phrases and explain their meanings:
- climatic changes
  - hunter-gatherers
  - foraged
  - nomadic
  - Green Sahara
- #2** Read the section 'How did they live?' carefully and answer the following questions.
- a What is a hunter-gatherer lifestyle?
  - b In either a short paragraph or in a table, outline the different types of environments to which early humans had to adapt and in what ways they made some of those adaptations.

### understanding & analysing

- #3** What do the remaining geographic areas where hunter-gatherer societies still exist have in common?

### understanding, analysing & creating

- #4** Using your answer to Question 2, above, 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.

**SOURCE 3.7** A reconstruction of a mammoth bone house that would have been built by Ice Age mammoth hunters in Ukraine.

- Q**
- 1 What materials do you think the mammoth hunters would have used to cover the bones?
  - 2 Why would they have had to do this?



### evaluating

- #5** At home, choose ten to twenty packaged food items randomly from your pantry or refrigerator and then complete the following tasks.
- a Trace the outline of a world map from this chapter or an atlas, or download a world outline map onto your computer and print it.
  - b Label your map with relevant features such as continents, oceans, countries and major cities. Don't forget your BOLTSS.
  - c Look at the packaging on your food items to find where in the world they came from. Mark these places on your map and trace a route from there to your home town.
  - d How many kilometres did your food have to travel? How does this compare with the distance travelled by food of the hunter-gatherers?

- #6** With a partner, carefully read 'Case study: The lost land under the North Sea' and answer the following questions.
- a Why is the discovery of the prehistoric landscape so important? In your answer consider Professor Gaffney's statement that this 'completely transforms how we understand the early history of north-western Europe'.
  - b What sorts of experts were required to conduct this study? Why? You may have to undertake some further research to answer these questions fully.
  - c What significance do the effects of global warming and the end of the last Ice Age have for us today when we consider our changing environment?

### evaluating & creating

- #7** In a group of three, carefully read the section 'A very successful way of life'. Conduct further research in the library and on the internet to find out more facts and arguments about this historical hypothesis. Using the information that you have found, prepare a five-minute debate in the style of a television talk show on the topic: *Should modern humans return to the hunter-gatherer way of life?*
- The first member of the group should take the affirmative side of the argument, the second member the negative side, and the third member of the group is the host of the television show and adjudicates the discussion.

LEARNING ACTIVITIES



**SOURCE 4.1** A modern-day Tuareg village in Mali, Africa, viewed from the air. The first villages would have looked very much like this one.

- Q** 1 What materials do you think have been used to make these houses?
- 2 What purposes do you think the little round structures might serve?



# THE NEOLITHIC REVOLUTION

In about 10 000 BCE the last Ice Age came to an end: with **global warming**, the great ice glaciers of the Northern Hemisphere had receded and a warmer, more hospitable climate and terrain replaced them. 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 the great civilisations discussed in this book—and thus to our own, modern world.

## THE FERTILE CRESCENT

The earliest evidence of the new farming and herding way of life was found in what is known as the 'Fertile Crescent'. This was an area of the Middle East that includes modern-day Turkey, Syria and Iraq. In 1906 CE, an archaeologist named James Henry Breasted from the University of Chicago in the United States of America 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 BCE animals such as sheep and goats, and later pigs, were first tamed when early Neolithic farmers, living close by 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 gather. It is in the Fertile Crescent that archaeologists have found the earliest evidence of settlement, dating from about 9600 BCE 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 BCE. It is thought that farming spread to Europe and Africa from the Middle East in the same period.

## THEORIES ABOUT THE BEGINNINGS OF AGRICULTURE

Theory 1	<b>Climatic changes</b>	As the global climate changed with the ending of the last Ice Age, weather and climate became erratic, with cold snaps or droughts that could last for decades or even centuries. This meant that, to survive, Palaeolithic humans had to take control of their food sources.
Theory 2	<b>Ecological theory</b>	As some food sources, such as wild wheat or goats, became more attractive to early humans, people used them more and more often. Eventually, they cultivated or domesticated these food sources for themselves so that they would always have an established supply.
Theory 3	<b>Social competition</b>	In some hunter-gatherer groups or societies, socially ambitious people would gain status by giving elaborate feasts. Others in the group would feel the need to respond with a great feast of their own. Thus agriculture became necessary to ensure a steady supply of prized foods and drink.
Theory 4	<b>Social and economic factors</b>	Another theory is also related to the fact that some hunter-gatherer bands had become increasingly complex as societies. The archaeological evidence for this is that in the late Palaeolithic period there was an increase in trading of objects between different groups. There is also evidence of the use of richly decorated objects at burials. This would have put pressure on the various Palaeolithic groups to create more surplus goods for trade with their neighbours.
Theory 5	<b>Population pressure</b>	Some experts think that there was a worldwide increase in population and that, as a result, the bands of hunter-gatherers were depleting their food resources too quickly. One way for early humans to respond to this was to start controlling their own food production.



### DID YOU KNOW

#### THAT WE ARE 99 PER CENT HUNTER-GATHERER?

It is hard to imagine, as we buy our food from supermarkets or online, that for all but the most recent 1 per cent of humankind's history we lived a nomadic life. Where we lived and how we survived was dependent on the seasons, the growth cycles of plants, the movements of big and small game and the ebb and flow of marine life. This all changed with the Neolithic Revolution.



**SOURCE 4.2** This map shows the spread of farming. Starting in about 10 000 BCE, 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.

**SOURCE 4.3** It is thought that the flooding of the **Euxine Lake** sometime between 6000 BCE and 5000 BCE caused Neolithic farmers to move northwards into the forested areas of Europe, taking the idea of farming and herding with them.



**SOURCE 4.8** In about 10 000 BCE, the wild wheat varieties einkorn and emmer were the first cereals to be domesticated by Neolithic people in south-eastern Turkey.



**SOURCE 4.9** Goats were among the first wild animals to be tamed by humans. This took place in about 10 000 BCE in the **Middle East**. Goats are sociable creatures, and it would have been straightforward for early humans to pen entire wild herds. Goats are very hardy and provided their owners with meat, skins, milk and other products.



**SOURCE 4.10** Rice was first cultivated in the **Yangzi valley**, China, and in South Asia in about 8500 BCE, and quickly spread throughout the surrounding regions.



**SOURCE 4.4** The sheep was a wild animal that was domesticated quite early by Neolithic humans, in about 10 000 BCE. Sheep were highly valued for their wool, which was much thicker on the domesticated sheep than on its wild forebears.



**SOURCE 4.5** The earliest evidence of cultivation in the Americas has been found in Panama and dates from about 7000 BCE, but it is certain that by 5000 BCE corn or maize was being farmed in **Central America**. It developed from a wild grass called teosinte, which is still found in Mexico. The growing of this crop soon spread throughout the Americas, and Stone Age farmers in both arid and cooler environments developed strains that could flourish in local conditions.



**SOURCE 4.6** In the **Andes** of South America, traders domesticated llamas for use as pack animals to carry textiles and other goods for trade between the highlands and the lowlands.



**SOURCE 4.7** Sometime before 5000 BCE, potatoes were first domesticated by farmers in the **Andes**. Different varieties were developed that were able to adapt to differing climates throughout the continent.

**SOURCE 4.11** Before 6000 BCE, the wild ox or aurochs, *Bos primigenius*, was domesticated in several parts of the world, including the **Green Sahara** and south-western **Asia**.



**SOURCE 4.12** By 6000 BCE, probably because of drought, agriculture and the domestication of cattle began along the Nile. As the **Green Sahara** became more arid in about 5000 BCE, farmers of cereal crops moved south towards the East African highlands. However, it was not until about 1000 BCE that farming became prevalent in the rest of **Africa**.



**LEGEND**

- Site of early agriculture
- Area where farming originated
- Spread of agriculture
- Approximate date when agriculture began





## THE 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.

**THAT JERICHO MAY BE THE LONGEST CONTINUOUSLY INHABITED SETTLEMENT IN THE WORLD?**

Jericho, in the Fertile Crescent—now the West Bank area of the Palestinian Administered Territories—was first settled in about 9600 BCE. Its people lived in houses shaped like beehives. They were built around courtyards with stone foundations, plastered floors and ovens. Archaeological excavations have revealed that Jericho was several times destroyed, then rebuilt in the same place. It gives us a link to the earliest development of village life and is therefore a significant example of the first steps towards developing a civilisation, where people live together in large groups and complex arrangements develop.

**SOURCE 4.13** Archaeological excavation of Tell Al-Sultan, Jericho, West Bank, showing a preserved wall two metres thick

**DID YOU KNOW**

## 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 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 (see Source 5.14).

**DID YOU KNOW**

**THAT THE PEOPLE OF JERICHO BEHEADED THEIR DEAD?**

The headless body was buried beneath the floor of the family's home. Relatives then used the skull as the base for a clay model of the dead person's face and buried this in a separate pit.

**SOURCE 4.14** This is a shrine figure excavated at 'Ain Ghazal in Jordan. It is a human-sized, robed ancestral figure, which was placed on a platform in the home. It dates from about 7250 BCE and is now in the National Museum of Jordan in Amman.

**Q 1** Why do you think the ancestral figure was kept in the home?

**2** Why do you think it was so large and wore robes?





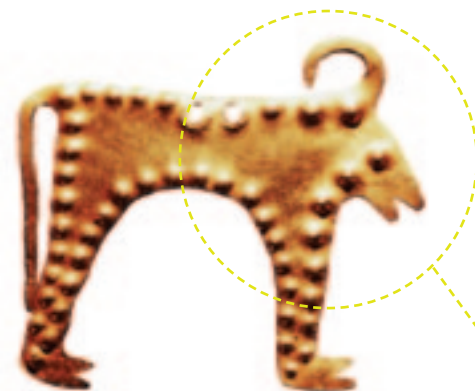
## THE DEVELOPMENT OF TRADE

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 BCE. Most early trade was in grain, building materials and stone for the making of tools.

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 which they themselves lacked. This took place, for example, in Çatalhöyük, a Neolithic village in Turkey of about 7500 BCE, which specialised in trading obsidian, a volcanic glass that was highly valued for making knives and other tools.

**SOURCE 4.16** Two of the oldest examples of gold artefacts. These grave ornaments were found in a Neolithic cemetery of more than 200 graves at Varna, Bulgaria. They date from about 5000 BCE and are now in the Varna Museum of Archaeology. One grave contained more than 1000 gold objects.

- Q** 1 Do you think that the people of Varna imported gold or was it one of their own resources?
- 2 Why do you think this?



**SOURCE 4.15** An obsidian blade from Çatalhöyük, Turkey, from about 7000 BCE

- Q** 1 How can you tell that the people of Çatalhöyük were adept toolmakers?
- 2 Why do you think Neolithic people would have found obsidian to be such a valuable material for toolmaking?

In about 5000 BCE, 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.



### remembering & understanding

- #1** In your 'Human migration and settlement' glossary, list these words or phrases and explain their meanings:
- civilisation
  - Neolithic Revolution
  - domesticated
  - temperate
  - global warming
- #2** a What is the 'Fertile Crescent'?  
b Who first called it that, and why?
- #3** Read 'The Neolithic Revolution' and 'The Fertile Crescent' and examine Source 4.2 carefully, then answer the following questions.
- a What happened to the Earth at the end of the last Ice Age?  
b How did early humans adapt to these changes?  
c Why did Neolithic humans begin to control their food sources?
- #4** Read 'The first villages' and 'Consequences of village life' carefully and answer the following question: What were the benefits and pitfalls of this new type of community living?
- #5** Read 'Early religious beliefs' and examine Sources 4.14, 4.16 and 5.14. What were the early religious beliefs of Neolithic humans?

### remembering, understanding & analysing

- #6** Create a three-column table to write your answers to the following question: When and where were the first plants and animals domesticated by humans, and what were they?

### analysing & evaluating

- #7** Examine the table 'Theories about the beginnings of agriculture' carefully and then rank the theories in order of validity, from the one you think is the most valid to the least valid. Give reasons for your ranking.
- #8** Read 'The development of trade' carefully and answer the following questions.
- a How did trade develop?  
b What benefits were there for communities that engaged in barter and trade?  
c What would our society be like if barter and trade had never been developed?

### evaluating

- #9** Overall, do you think that living in villages was a good or a bad development? Give reasons for your answer.
- #10** What do you think were the consequences of the development of a widespread trading system?

### analysing & creating

- #11** Conduct further research in the library or on the internet to find out more of the sorts of specialist jobs that people in Neolithic societies undertook. Then, either on a piece of A3 paper or using a software program such as Inspiration®, create a concept map to demonstrate the information that you have found.
- Place 'Early village life' at the centre of your concept map and give your concept map a suitable title.
- You may also include appropriate illustrations. Include a bibliography on the back of your concept map.

### creating

- #12** Imagine that you are a hunter-gatherer who has just been 'converted' to the new way of living in one place. You think that this is such a great idea that you want the rest of your tribe to join you in a new village.
- a Write a speech to persuade your tribe to join you.  
b Deliver your speech to your class. You may wish to use some props to help you be more convincing.

LEARNING ACTIVITIES



# TOOLS & ARTEFACTS OF EARLY SOCIETIES

## WE LIVE IN AN AGE OF RAPID CHANGE AND UNPRECEDENTED TECHNOLOGICAL INNOVATION.

IN OUR MODERN WORLD, the people who make breakthroughs in their field are often praised and well rewarded. Yet some of the greatest inventions ever developed occurred in prehistoric 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 5.1** A Bronze Age fire-starting kit, from about 1750 BCE. 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 this flint stone.

### THE NEEDLE

The invention of the needle in about 30 000 BCE 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.

**SOURCE 5.2** Bone needles from about 12 500 BCE, found in the cave of Courbet, Penne-Tarn, France, currently in the British Museum.

**SOURCE 5.3** A modern sewing needle

## A RANGE OF TOOLS AND ARTEFACTS

Early humans were skilful 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 tools for harvesting to help them survive better, and musical instruments and works of art to enrich their lives.

**SOURCE 5.4** A flint axe for harvesting cereal crops, from between 4000 and 2300 BCE. The original flint blade has been attached to a modern handle.

**SOURCE 5.5** A flute made from the thigh bone of a young cave bear, from about 45 000 BCE, found in a cave in Divje Babe, western Slovenia, and now in the National Museum of Slovenia in Ljubljana. This is one of the earliest musical instruments known to have been made.

**SOURCE 5.6** A spear-thrower carved from a deer antler, in the shape of a mammoth, from about 10 500 BCE, found in a rock shelter at Tarn-et-Garonne, France, and currently in the British Museum.

**SOURCE 5.7** A stone sculpture with human-like features as well as characteristics, from Lepenski Vir, Serbia, from about 6000 BCE, in the National Museum in Belgrade, Serbia

**SOURCE 5.8** Ice Age weapons: a serrated flint, a harpoon made from an antler and a flint point lashed to a wooden handle, from between 18 000 and 10 000 BCE





SOURCE 5.10 Jomon pot, from between 2500 and 1500 BCE

SOURCE 5.9 Jomon pot, from between 10 000 and 8000 BCE

## POTTERY

By 10 000 BCE, 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. This made the new way of life, as farmers settled in villages, much easier. People were now able to stockpile their grains and foods for times of scarcity. It meant that the population 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 for other commodities with neighbouring settlements and, eventually, with more widespread communities.

## THE WHEEL

The wheel is thought to have been used first in the Middle Eastern region of Mesopotamia between about 5000 and 4000 BCE. Historians suggest that it developed from the potter's wheel. 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 BCE wheeled carts were being used in south-western Asia, and this soon spread to Europe and India. It was not long—about 500 years—before the chariot became a popular mode of transport, especially for armies on the move.

SOURCE 5.11 A terracotta model of a two-wheeled bullock cart from Mohenjo-Daro in the Indus Valley, from about 2500 BCE, in the National Museum of Pakistan, in Karachi

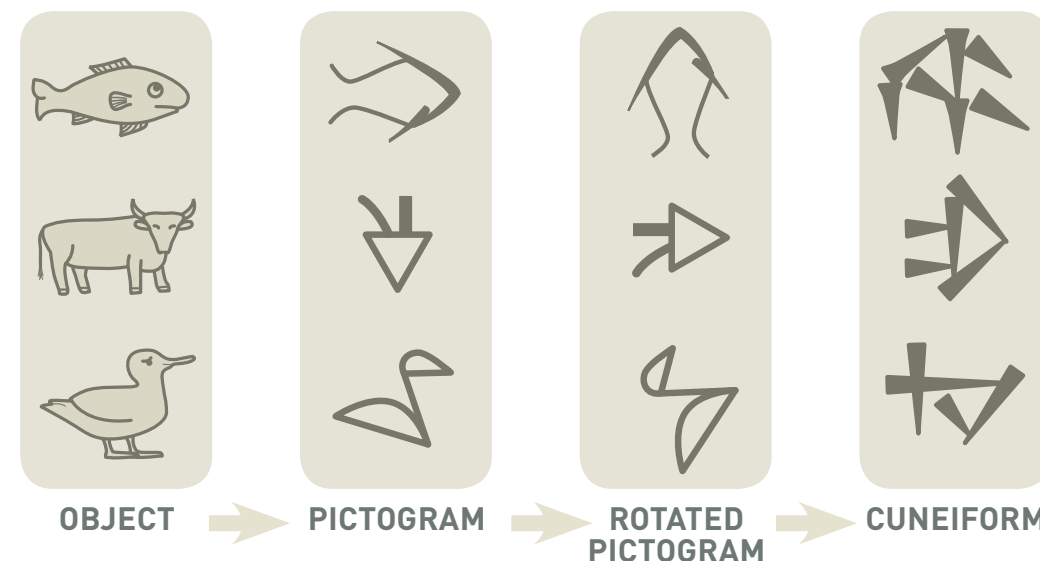


## THE FIRST WRITTEN COMMUNICATION

The first cities in Mesopotamia developed from farming villages into city-states that were administered by the priests of the great temples or ziggurats. The priests were responsible for storing grain and other produce and keeping the records of harvests. Initially this was done by using picture writing or pictograms, which represented actual things. Pictograms were the basis for cuneiform writing, which was in use as early as 3250 BCE.

Cuneiform writing eventually became a system of wedge-shaped marks pushed into clay tablets using a stylus made from a reed. Important tablets were then baked and kept in huge libraries in the cities of Mesopotamia, including Nippur and Uruk. Cuneiform represented not only actual objects and words, but also syllables and abstract ideas. Cuneiform writing spread to other ancient societies and was in use for more than 3000 years.

SOURCE 5.12 An example of cuneiform writing on a clay tablet



SOURCE 5.13 Development of cuneiform writing



SOURCE STUDY QUESTIONS

## NEOLITHIC MONUMENTS

As part of the early Neolithic people's desire to worship their ancestors and also to celebrate the seasons and the Sun, Moon and stars, huge monuments were built. The most well known of these are the henge monuments. These first appeared in about 3200 BCE across France, England and Scotland, probably because stone was more readily available for construction in these areas. Stonehenge, in the south-west of England, is the most famous of all the Neolithic henge monuments. It was an amazing feat of engineering for these early humans. The original eighty-two bluestone megaliths, which weighed around 4 tonnes each, were transported nearly 400 kilometres from Wales. It has been estimated that it took more than thirty million hours of labour to build Stonehenge. It is thought that it was built to worship the Sun and the Moon.

**SOURCE 5.14** Stonehenge, on Salisbury Plain in the United Kingdom, was built between 3000 and 1500 BCE.



1 UNDERSTANDING & APPLYING

Examine Source 5.1 carefully. What do you think are the four components required for making fire?

To find out more, you can do more research in the library or on the internet.

2 APPLYING, ANALYSING & CREATING

Read 'The needle' carefully and examine Sources 5.2 and 5.3, then answer the following questions.

- What is significant about these examples of needles?
- Think about a modern electric sewing machine. Is its needle any different? Explain.
- In what ways has our clothing changed since the Ice Ages? Create a Venn diagram to illustrate the differences and similarities between clothing in the Ice Ages and clothing today.

SOURCE 5.15

A scene from the Sumerian Royal Standard of Ur, from about 2600 BCE, showing a wagon with solid wheels. The standard is held in the British Museum.



3 APPLYING & ANALYSING

Read 'A range of tools and artefacts' and examine Sources 5.4 to 5.8 carefully, then answer the following questions.

- The flute is made from the bone of a cave bear. What other materials did early humans have from which to make musical instruments? Conduct further research to find out what other musical instruments Stone Age humans made.
- Do you think that the three Ice Age weapons show a progression in toolmaking? Explain your answer.
- What reasons could the maker of this spear-thrower have for carving it in the shape of a mammoth?
- What does the stone sculpture suggest to you about the lives of the people of Lepenski Vir?
- To what later implement for harvesting grain, which is still in use in some parts of the world today, is this flint axe a forerunner?

4 APPLYING & CREATING

Read 'Neolithic monuments' and examine Source 5.14 carefully. Then use the internet to conduct more research on Stonehenge and create a tourist brochure on this Neolithic site. You can do this by entering 'Stonehenge' into a search engine such as Google or Yahoo, and you could create the brochure either on paper or on a computer using a software program such as Microsoft® Publisher.

5 ANALYSING & EVALUATING

Read 'The wheel' and examine Sources 5.11 and 5.15 carefully, then answer the following questions.

- Why do you think the wheels in Sources 5.11 and 5.15 were solid?
- What improvements have been made to the design of the wheel in the past 2500 years?

6

Read 'The first written communication' and examine Sources 5.12 and 5.13 carefully, then answer the following questions.

- Why do you think pictograms evolved into cuneiform writing?
- What were the drawbacks of this ancient form of writing? What improvements have been made to writing, and writing implements, over the millennia?

7

Read 'Pottery' and examine Sources 5.9 and 5.10 carefully, then answer the following questions.

- Why do you think the pot in Source 5.9 has a pointed bottom?
- Examine the differences in design between the two pots. What might be some reasons for these differences?



# LEGACIES AND CONNECTIONS TO...

UNIT  
6

## WE ARE ALL RELATED

SOURCE 6.1  
Glacial landscape, Qinghai-Tibet Plateau, China

According to the most recent genetic studies of mitochondrial DNA (which has been passed down from mother to child since the first *Homo sapiens*), all people are descended from an 'African Eve' who lived in approximately 150 000 BCE. Later, between 100 000 and 60 000 BCE, about 1000 people migrated out of Africa and their descendants populated the rest of the world.

This means that everyone outside the African continent can trace their genes back to these 1000 or so people, and all humans can trace their genes back to the 'African Eve'. It also means that the genetic code of all humans throughout the entire world is 99.9 per cent identical. The differences in the way people look, such as their facial features, their eye, hair and skin colouring and their height, are due to minor genetic alterations that have taken place over the past 150 000 years.

SOURCE 6.2  
These four people can all trace their ancestry back to one of the 1000 or so first migrants from Africa.

Q Which continent might now be home to each person?



### THE SPREAD OF IDEAS

Similarities and connections between the societies of the Stone Age world were strengthened by the development of trade and trading routes. As goods were traded from one community to another, new ideas and inventions went with them—concepts such as written communication, when cuneiform writing spread from Sumer in Mesopotamia from about 3000 BCE via its trading partners of Babylonia and Assyria; and inventions such as the wheel, which also originated in Mesopotamia, between about 5000 and 4000 BCE.

### FROM VILLAGE TO CITY

By 9600 BCE, village life was well established in the Middle East and, as the centuries passed, in many other agricultural communities across the globe. Farming communities became larger and grew into villages, then towns and, eventually, cities. It was no longer necessary for everyone to be involved in the production of food. Community members began to specialise in certain jobs, such as toolmaking or being the village leader or religious leader. So different classes in society began to form, and eventually there came to be a social divide between those who led the village and those who were ruled by them. Thus a hierarchical society developed, with a smaller, elite ruling class and a far larger working class. The basis for modern societies was formed.

### MAJOR CIVILISATIONS GROW

In ancient times, several quite advanced societies developed in different parts of the world. These ancient civilisations made great achievements in areas such as learning and culture, art and architecture, engineering, technological invention, government, agriculture and trade. Much of our modern way of life can be traced all the way back to the achievements of these ancient civilisations.

- Within Mesopotamia, the region we know today as Iraq and some of its neighbours, distinct civilisations arose in Sumer (3800–1750 BCE), Assyria (2000–609 BCE) and Babylonia (1696–639 BCE).
- Based around the Nile River, the civilisation of Ancient Egypt (3000–30 BCE) was made up of many different social classes and governed by the wealthy, supremely powerful pharaoh.
- In Persia, today's Iran, two ancient cultural groups, the Medes and the Persians, were brought under the control of the Achaemenid dynasty that ruled the Persian Empire (550–331 BCE).
- The Minoan and Mycenaean civilisations were the early societies of Ancient Greece (2000–146 BCE), where the rival city-states of Athens and Sparta later fought wars against each other.
- Building one of the mightiest empires in history was a major feature of Ancient Rome (753 BCE – 476 CE), whose official language, Latin, greatly influenced later languages, including English.
- Because of its geography, Ancient China (2205 BCE – 220 CE) was more isolated from other parts of the world, but it became one of the most advanced civilisations in ancient times.
- Ancient India (2600 BCE – 415 CE), in parts of today's India, Pakistan and Bangladesh, combined the Indus Valley and Aryan civilisations and over the centuries developed complex spiritual ideas.
- In parts of what is known as Mesoamerica (Mexico, Guatemala, Belize, El Salvador and Honduras) the highly developed Ancient Maya civilisation (300 BCE – 900 CE) was made up of several city-states.

DID YOU KNOW

THAT SEA LEVELS FELL 90 METRES DURING THE LAST ICE AGE?

The big chill of the last Ice Age, which is thought to have been due to minute shifts in the Earth's axis, caused some of the water in Earth's vast oceans to freeze, forming the Arctic and Antarctic ice caps. Underwater landmasses were exposed, linking existing landmasses. Siberia was connected to Alaska, Britain to mainland Europe, and only short expanses of open water separated South-East Asia from New Guinea and Australia. The scene was set for the global movement of *Homo sapiens*.



## MAJOR RELIGIONS AND PHILOSOPHIES EMERGE

The ancient world was also where the major religions and philosophies emerged and developed as people sought to further understand the world around them.

- Judaism traces its origins to the Hebrews, who lived in Mesopotamia before migrating west into present-day Israel in about 2000 BCE. According to Jewish tradition the prophet Moses, with God's help, led the Jewish people out of slavery in Egypt in about the thirteenth century BCE. In gratitude, these people agreed to serve God and each other. Moses received from God a set of commandments that became the foundation of Jewish law, known as the Torah.
- Hinduism developed from the religious practices of Ancient Indians during the early Vedic period around 1400 BCE. It was based on the sacred books called the Vedas, which were written down in about 600 BCE. The Indo-Aryans worshipped many gods, and ordinary people worshipped in their homes. Holy men or Brahmans became a very important and powerful social class.
- In about 700 BCE, many Indian wise men began to question the authority of the Brahmans. Their ideas were written down in the Vedanta Upanishads. Buddhism was founded during the time of the Vedanta Upanishads, in about 530 BCE, by an Indian prince called Siddhartha Gautama. Siddhartha left his family and wealth to seek enlightenment or nirvana. Once he had achieved this, he became known as Buddha. At the heart of Buddha's philosophy were the Four Noble Truths:
  - Suffering is inevitable.
  - Ignorance is the basic cause of suffering.
  - Any ailment, when understood, can be cured.
  - There is an eightfold path to the elimination of suffering.
- Confucius (551–479 BCE) was a Chinese scholar. The philosophical questions that most interested him were how a person could live a better life and how to create a good society ruled by a good government. Confucianism was the most influential philosophy in China from the time of the Han dynasty (202 BCE – 220 CE) until the Communist era began in modern China in 1949 CE.
- Christianity began as a Jewish movement; its key figure is a man named Jesus, who lived in what is now Israel between 4 BCE and 33 CE. Christians believe that any person can enter heaven if they are prepared to turn away from sin and that God forgives those who seek forgiveness from him.
- In a part of the Middle East then known as Arabia, in about 610 CE, the religion of Islam was born. Islam consists of a set of basic beliefs, a set of basic duties and a body of principles—for example, that there is one God, who is unique, and that it is important to achieve social justice. These principles are derived from the Qur'an, which Muslims believe is the word of God as it was revealed to the prophet Muhammad.

## TIME TO THINK ...

- | 1 EVIDENCE   | 2 MOVEMENT OF PEOPLES   | 3 PROBLEM SOLVING AND TRANSFORMATION OF THE ENVIRONMENT  | 4 CONTINUITY AND CHANGE   |
|--|---|--|---|
| <p><b>a</b> The time period we are examining in this chapter is tens of thousands years ago. Yet we seem to have a lot of information about our early ancestors which allows us to hypothesise about their way of life. Do you think that all of this information is accurate? Why or why not?</p> <p><b>b</b> How could we find out more?</p> | <p>Why is it important to know how and why our ancestors migrated across the globe?</p> | <p><b>a</b> What do you think was the greatest achievement of early humans in adapting to their environment?</p> <p><b>b</b> To ensure survival, what changes did they have to make to themselves? To their environment?</p> | <p><b>a</b> What do you think we still have in common with our early human ancestors?</p> <p><b>b</b> What differences are there?</p> |

# INQUIRY

THESE INQUIRY TASKS WILL HELP YOU ANSWER THE INQUIRY QUESTIONS FROM THE START OF THE CHAPTER.

## TASKS

### #1 homicide detective

**In 1991 the preserved body of a Neolithic man was found frozen in a glacier**

(see Source 7.1). It has been dated to around 3350 BCE. 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:

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

### #2 town planner

**The year is 9000 BCE and you are a town planner from Mesopotamia.** You have travelled to Jericho to find out how its people live. This is so that you can take ideas back to the people of your community, who are thinking of shifting to this new way of living: farming.

You plan to take back a well-illustrated and labelled poster with diagrams, maps and tables.

Information on your poster should include:

- the layout of Jericho
- how its people live
- what crops they farm
- what sort of livestock they breed
- interviews with people who live in Jericho
- how successful an enterprise this has been for the people.

### #3 trace your ancestors

**You and a friend have been asked to trace the migration of ten members of your class back to their origins in Africa.**

Using an atlas, Source 1.1 and your own research, mark on a map of the world the route that your ten subjects' ancestors took in getting from Africa in prehistoric times to Australia today. Use a different colour for each person.

What conclusions can you come to about how each person's family arrived here?

Write your answer in a short paragraph, either below your map or on the back of the map.

### #4 environmental genius

**You are an environmental engineer**

who has made major breakthroughs in changing environments to improve them for humans. The people of the Sahara have finally had enough of living in a desert. They want to return it to its state as the Green Sahara, as it was from about 10 000 BCE until about 4000 BCE. Before they commit to this very expensive project and ask you to effect this change, they would like an understanding of what the Green Sahara was actually like.

Prepare a report that outlines the pros and cons of such a project.

Remember, however, that you have a vested interest in persuading the people of the Sahara that this project would be a good thing to do. (This means that you are biased because you want your company to get the job!) You should therefore complete your report with a persuasive summary that will encourage them to commit to the project.



### #5 Guinness World Records

You are an official adjudicator for **Guinness World Records** and you have been asked to write a page for the 'Science and technology' section of the latest edition. Your page is to be titled 'The greatest inventions and artefacts of the Stone Age'.

Using the sources in the source study as a starting point, decide which inventions or artefacts you will include on your page.

For each one you need to include:

- a heading
- an illustration
- a description and history
- an explanation of why it is included on the page, including what importance it has for us today.

### #6 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.

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 map of either of the following:
  - the nomadic route your Palaeolithic community took to its hunting and gathering sites
  - your Neolithic village
- 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
- a journal consisting of at least five entries recording your experiences
- a Venn diagram that compares and contrasts Stone Age life with modern life
- a speech five to ten minutes long that outlines:
  - your experiences
  - what you have learnt about Stone Age life
  - comparisons and contrasts with life today.

**SOURCE 7.1** 'Ötzi the Iceman', a Neolithic man whose frozen body was found in 1991 in the Ötztal Alps, near the border between Italy and Austria. His body and numerous fragments of his clothing and equipment were recovered from a deep gully which had lain beneath a glacier for more than 5000 years. Ötzi now rests in a refrigerated room in the South Tyrol Museum of Archaeology in Bolzano, Italy.

