



## 4 The Neolithic period

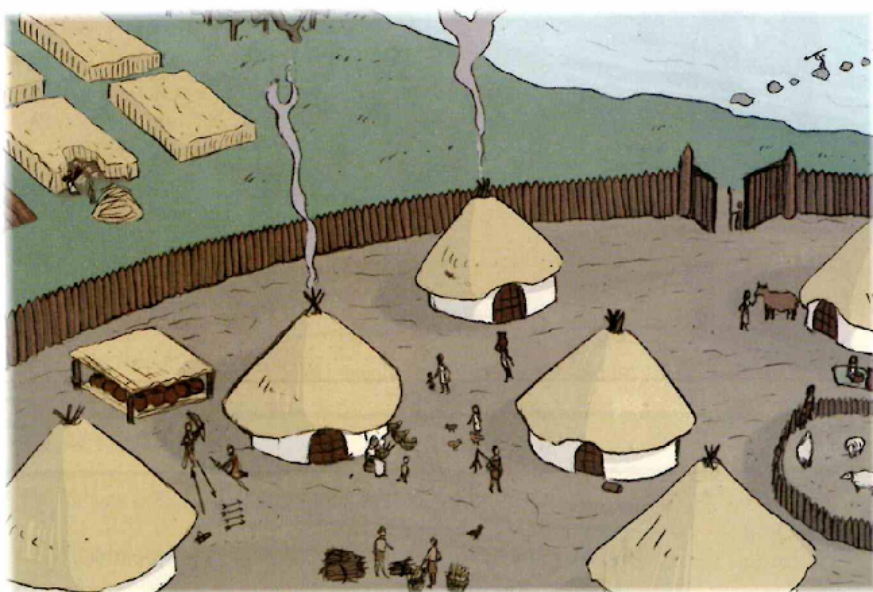
➤ What does the word **Neolithic** mean?

The Neolithic period began about 9000 years ago, following a short transition period called the Mesolithic period. During the Neolithic period, humans went from being nomadic hunter-gatherers to **sedentary producers**. This change is also known as the **Neolithic Revolution**.

### 4.1 How life changed

During the Neolithic period, humans learned to produce their own food by farming the land and domesticating animals. **Agriculture** allowed humans to settle in one place and to abandon nomadic life. The result was the appearance of the first **villages**. These settlements were usually composed of huts and were located near rivers.

- **Societies became more complex and hierarchical.** Some settlements had leaders and other important people who managed resources.
- **New types of tools meant new types of jobs** came into existence. There was a **division of labour**, as different people performed different tasks.
- They **planted crops**, such as wheat and barley, and **domesticated animals**, such as goats, sheep and pigs. Food was more abundant and varied, so the **population grew**.
- People began to store and exchange **surplus** food, so **trade developed**.
- Archaeologists believe that **tasks were probably divided up between men and women**. Women were responsible for arable farming and making cloth and pottery. Men were responsible for livestock farming and manufacturing tools.
- Neolithic people had two main **religious practices**. They worshipped **the dead** and buried them with their possessions. They also worshipped **the forces of nature** in order to improve their harvests.



### ➤ NEW STONE AXES

During the Neolithic period, stone was not only carved, but also polished. Stone tools were made smooth by rubbing them with another softer stone, such as sandstone.



⚠ A polished hand axe from the Neolithic period

### ➤ ACTIVITIES

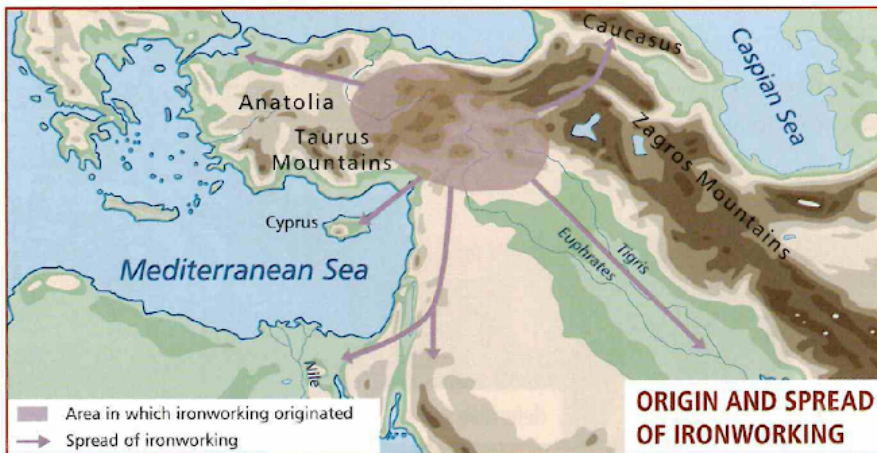
10. If *Palaeolithic* means 'old stone', what do you think *Neolithic* means?
11. List at least three differences between life during the Palaeolithic period and the Neolithic period.
12. Which period would you have preferred to live in: the Palaeolithic or the Neolithic? Discuss with your classmates.

## 5 The Metal Ages

➤ What was the first metal used to make tools?

The Metal Ages is the name we give to the periods during which people began to **make objects and tools from metal**.

This brought about many **technological advances** which, in turn, brought about many **social and economic changes**. Copper was the first metal to be **mined**. It was used to make objects in the Fertile Crescent, in the modern-day Caucasus region.



### DID YOU KNOW?

The Fertile Crescent region got its name for two reasons: in prehistoric times, the land there was fertile and good for growing crops, and when you see it on a map, it has the shape of a crescent moon. Where is the Fertile Crescent located?



### 5.1 Stages of the Metal Ages

The Metal Ages are divided into **three stages**:

#### THE COPPER AGE

- It began around 5000 BC in the Fertile Crescent area.
- Copper is a soft metal, which is easy to work into shape.



#### THE BRONZE AGE

- It began around 3000 BC in the Near East.
- Bronze is an **alloy** of copper and tin. This alloy is harder than copper. It was used to make stronger weapons and tools.



#### THE IRON AGE

- It began around 1200 BC in Anatolia.
- Iron is a harder metal than copper and bronze. It was used to make stronger and longer-lasting weapons and tools.



### DID YOU KNOW?



In 1950, the mummified corpse of an Iron-Age man was discovered, preserved in a **peat bog**, in northern Denmark. The body was so well preserved that the people who discovered him thought that he had been killed recently! The mummy is known as the Tollund Man. Can you name an ancient civilisation that mummified its dead?

### ACTIVITIES

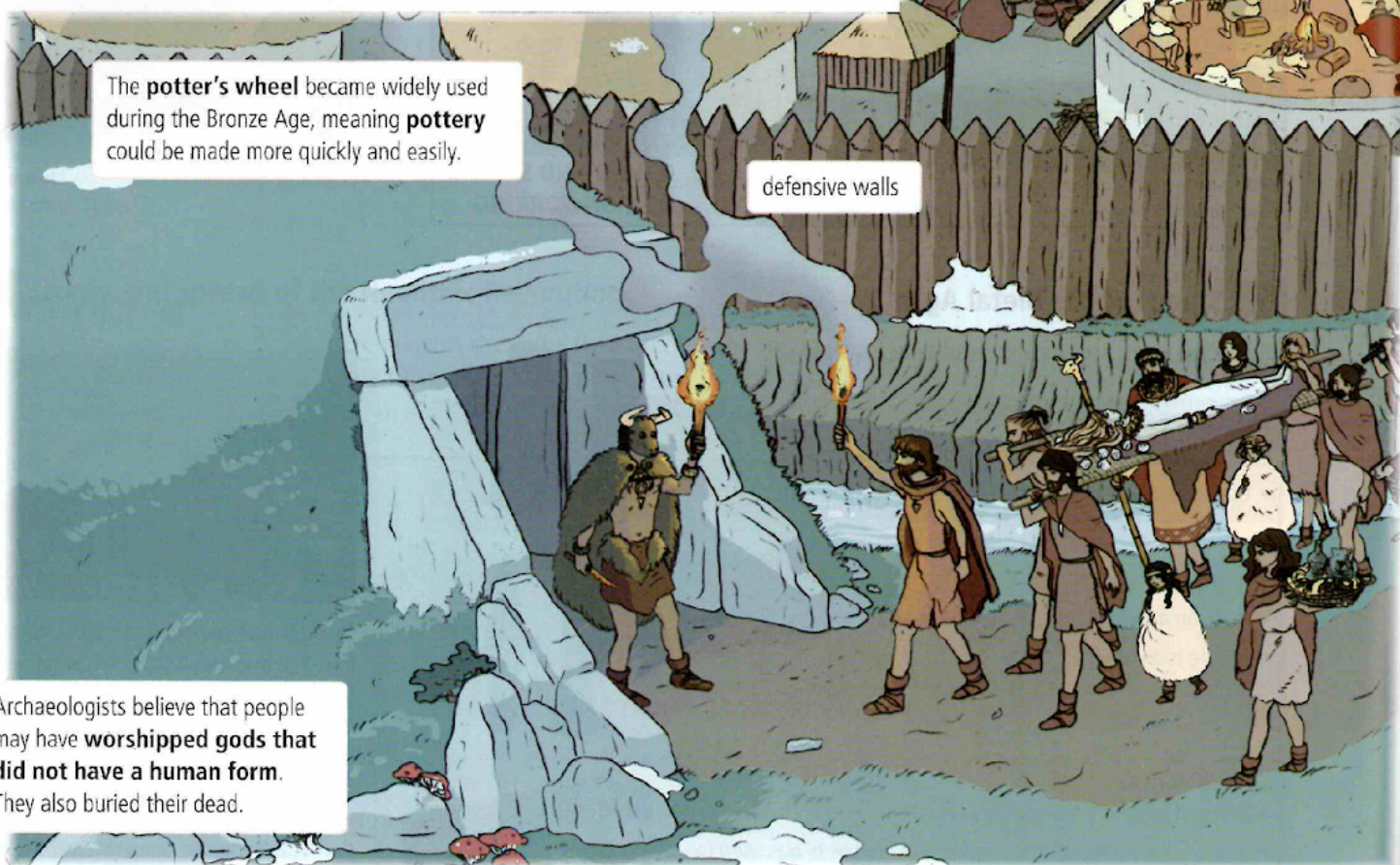
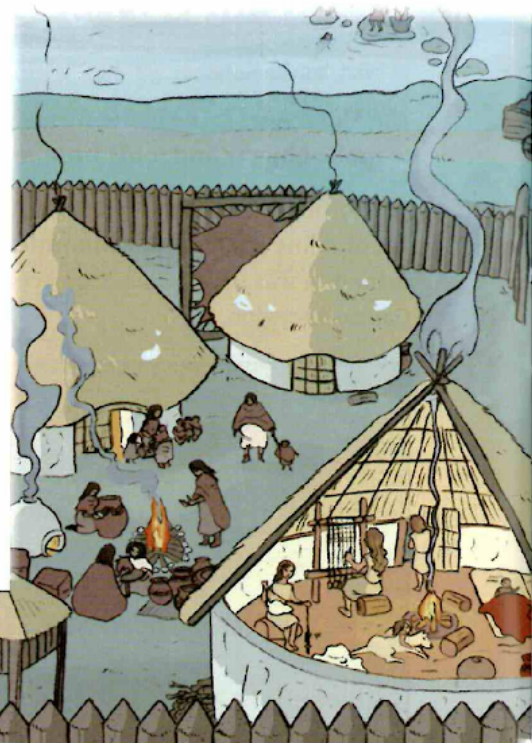
15. Where was copper first used to make objects?

16. How do you think bronze was discovered? Compare your answer with your partner's.

17. What and where is the Near East? Find out which modern-day countries are in this region. Share your answers with your classmates.

## 5.2 Economic and social changes

- **New trade routes** were created as people travelled to find new sources of metal to make tools. This travelling helped spread different cultures.
- Trade produced **wealth** and **villages** grew significantly, giving rise to the first **cities**, which were often protected by defensive walls.
- There was a **specialisation of labour**. This meant that new types of professions, such as merchants and warriors, began to appear.
- Metal became a **symbol of wealth**, as people who owned metal weapons and tools were more powerful than those who had stone weapons. **War** became a means of expanding and controlling territory.
- **Private property** and **economic inequality** between people became more common. This meant that the structure of society became even more **hierarchical**.



The **potter's wheel** became widely used during the Bronze Age, meaning **pottery** could be made more quickly and easily.

defensive walls

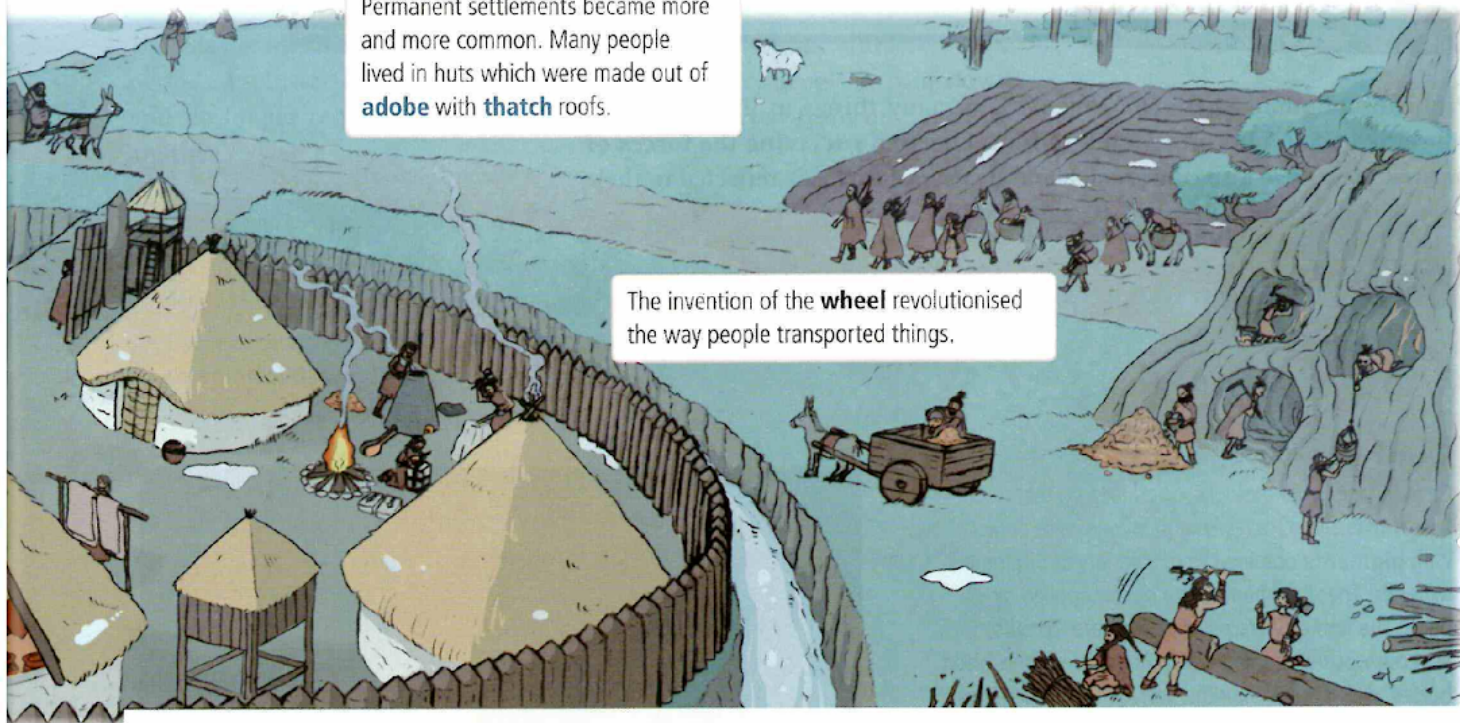
Archaeologists believe that people may have **worshipped gods that did not have a human form**. They also buried their dead.

### ACTIVITIES

18. Which materials were used to make huts during the Metal Ages?
19. Explain why metal was a symbol of wealth during the Metal Ages.
20. What was the main reason that society became more hierarchical during the Metal Ages?
21. Name two professions that appeared during the Metal Ages.

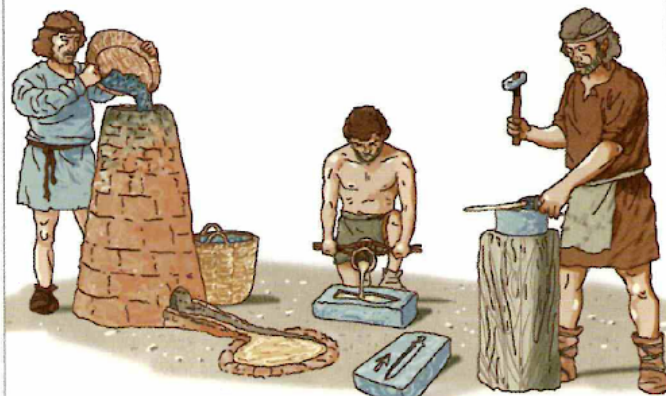
Permanent settlements became more and more common. Many people lived in huts which were made out of **adobe** with **thatch** roofs.

The invention of the **wheel** revolutionised the way people transported things.



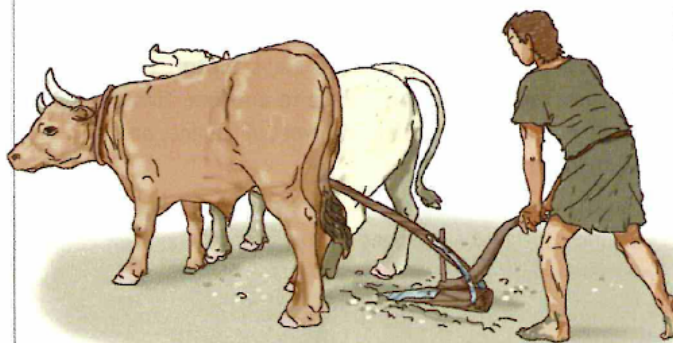
### 5.3 Technological advances

#### METALWORK



Most metals are extracted from an **ore**. People from the Metal Ages began to heat ore to separate the metal from it. This was called smelting. While the metal was still hot, it was put into a **mould**, then hammered into shape and finally polished.

#### NEW AGRICULTURAL TECHNOLOGY



In agriculture, wooden **ploughs** were replaced by metal ones, making it easier to turn and break up soil. The **sickle** was also improved, with metal blades replacing the stone ones which had previously been used.

22. Apart from making it easier to turn and break up soil, what other advantages would metal tools have over stone tools?
23. How do you think the invention of the wheel changed people's daily lives during the Metal Ages?

## 6 Prehistoric art

➤ Why did prehistoric people paint animals in caves?

Prehistoric humans were concerned about many things in life: they were concerned about **obtaining food**, **reproducing** and **surviving the forces of nature**. They were also concerned about **death**. All of this is reflected in their art, religious practices and the way they buried their dead.

### 6.1 Palaeolithic art

We have found the remains of two types of artistic expression from this period: **cave paintings** and **portable art**.

#### CAVE PAINTINGS

Cave paintings were pictures produced on the **interior walls** of caves. The paintings were done with **pigments** obtained from a variety of different minerals. These pigments were mainly applied by hand. The figures were painted in several colours, especially ochre, red and black. Animals, such as bison, horses, deer and mammoths, were the most common **subjects** in these paintings. Many prehistorians believe the paintings had a religious meaning for the artists. For example, by painting the animals, the artists may have believed they would be easier to hunt.



▲ The Altamira cave paintings (Cantabria, Spain)

#### PORTABLE ART

- Portable art consisted of **carvings** and **sculptures** that could be **moved from one place to another**. They were made of stone, bone or clay. Two types of figurines have been found:
  - **Animal figurines**, such as horses and bison. These figurines were carved in bone or ivory and were primarily used as **amulets**.
  - **Female figurines** which depicted the attributes of women. These figurines were carved in stone and are known as Venus figurines. They symbolised fertility.



▲ The Venus of Willendorf (Austria)



▲ A carved bison made of reindeer antler (La Madeleine, France)

#### ACTIVITIES

- Are the following statements true or false? Correct the false statements.
  - Prehistoric art depicted subjects which were of great importance to people.
  - Only one colour was used in cave paintings.
  - Venus figurines were portable pieces of art.
- Explain the differences between portable art and cave paintings.
- Find out more information about Venus figurines. Write a brief report about them. You can use the internet to help you.

## 6.2 Neolithic and Mesolithic art

There is not much evidence of portable art during the Mesolithic and Neolithic periods. Prehistorians believe that this was the result of people settling down and no longer requiring art that could be transported from one place to another.

Mesolithic and Neolithic art had the following characteristics:

- Paintings were done on stone surfaces in **shelters** or in shallow caves, but not inside deep caves. This is known as **rock painting**.
- The most common subjects of rock paintings were **hunting, gathering food** and **ceremonial dancing**.
- The figures were painted in a **schematic style**. They depicted essential features.
- The largest concentration of Mesolithic and Neolithic rock paintings in the world are found in the **east of the Iberian Peninsula**. They were usually painted in only one colour – normally black.



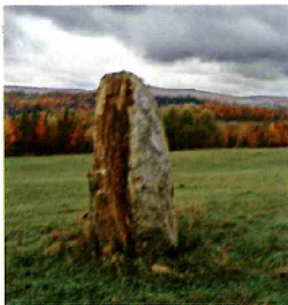
▲ A hunting scene from La Valltorta caves in Castellón

## 6.3 Megalithic art

Megaliths are **monuments built using large stones**. They are the first known examples of architecture. They were created during the **Neolithic period** and the **Metal Ages**. Building these monuments required a lot of workers and a high level of organisation. Megalithic monuments can be classified as:

### MENHIRS

- Large vertical stones **embedded** in the ground.
- They could stand alone or in a line with others.
- They were used for ceremonies.



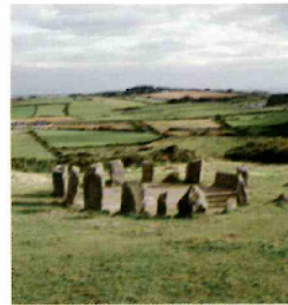
### DOLMENS

- A large, flat, horizontal stone laid on vertical stones.
- They were used as burial places.



### STONE CIRCLES

- Several menhirs placed in a circle.
- They were used for ceremonies.



### PASSAGE TOMBS

- Similar to a dolmen, but with one or more chambers and a passage at the entrance.
- They were used for burials.



## ACTIVITIES

27. What were the most common subjects in rock paintings? How were these subjects depicted?
28. Find out information about the megalithic site at Stonehenge, England. What type of monument was built there? During which period was it built?

29. Work in groups. Discuss how you think megalithic monuments were built.

- How were the workers organised?
- Where did they get the stone from?
- What tools did they use to put the stones in place?

## 7 Prehistory on the Iberian Peninsula

➤ Where did the prehistoric inhabitants of the Islas Baleares bury their dead?

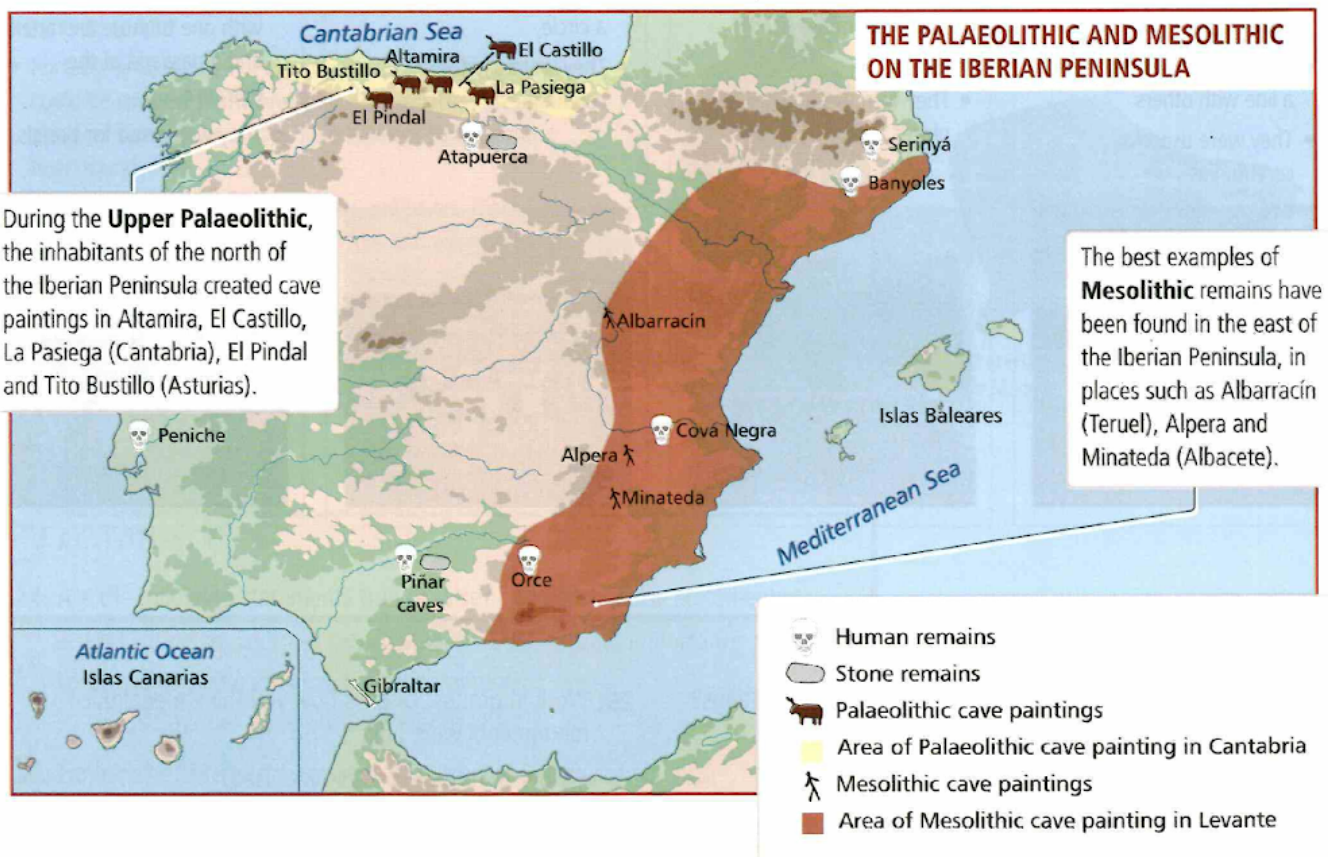
### 7.1 The first inhabitants

Much of what we know about the first inhabitants on the Iberian Peninsula comes from remains and artefacts found in the Sierra de **Atapuerca**, Burgos. The finds from Gran Dolina site at Atapuerca (see page 20) include human fossils and stone tools. These fossils have certain characteristics which are different from what we previously knew about the first inhabitants on the Iberian Peninsula. They belong to an 800 000-year-old hominid known as *Homo antecessor*.

*Homo antecessor* is believed by many scientists to be an ancestor of both Neanderthals and modern-day humans (although this is still being debated). Its height and proportions were similar to ours, although it was more heavily built and had a smaller brain.

### 7.2 The Palaeolithic and Mesolithic periods

Archaeologists have discovered many human and stone remains in different areas of the Iberian Peninsula, mostly in the north and east of the Peninsula. Some of the most well preserved prehistoric cave paintings in Europe are found on the Iberian Peninsula. These cave paintings are so well preserved because the caves are very deep and sheltered from climatic influences.



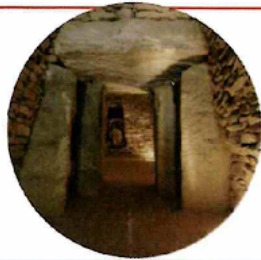


### 7.3 The Neolithic period and the Metal Ages

The technological advances of the Neolithic period reached the Iberian Peninsula via the Mediterranean more than 7 000 years ago. Metalwork began to spread on the Iberian Peninsula around 2500 BC. This technique **flourished** due to large deposits of copper and tin on the Peninsula. The main cultures which developed during these periods are shown below:

#### DOLMEN CULTURE

- It spread through the south of the Peninsula during the Copper Age.
- It was characterised by large megalithic monuments used for burying the dead.

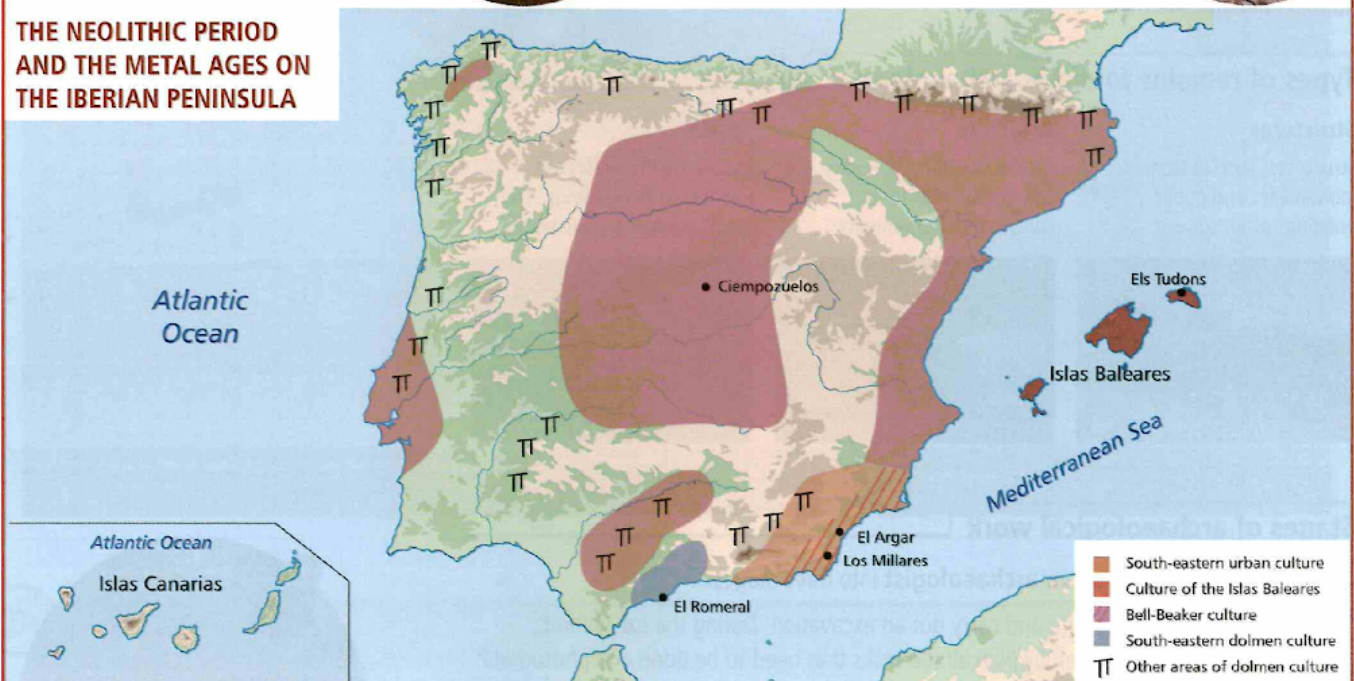


#### CULTURE OF THE ISLAS BALEARES

- It began to spread during the Bronze Age.
- It was characterised by unique megalithic monuments, such as *taulas* (stone tables), *talayots* (watchtowers) and *navetas* (mass graves).



#### THE NEOLITHIC PERIOD AND THE METAL AGES ON THE IBERIAN PENINSULA



#### BELL-BEAKER CULTURE

- It originated in the south-eastern region of the Peninsula during the Copper Age.
- A bell beaker is a pottery container in the shape of an inverted bell.



#### SOUTH-EASTERN URBAN CULTURE

- It originated in the south during the Copper and Bronze ages.
- The walled settlement of Los Millares and the urban settlement of El Argar are notable examples of this culture.



#### ACTIVITIES

30. Correct these statements:

- Human fossils and the remains of stone tools from the Palaeolithic period have been found at Atapuerca.
- The Cave of Altamira contains remains of Neolithic cave paintings.
- A bell beaker is a copper container in the shape of an inverted bell.

31. Look at the two maps of the Iberian Peninsula. The majority of the sites are located on or near the coast. Why do you think this is?

## Discovery techniques

### ARCHAEOLOGISTS AT WORK

In order to study the past, historians use lots of different historical sources to get the information they need, such as written, oral and visual sources. These historical sources are sometimes unavailable, as is the case in Prehistory. Therefore, historians must study material remains, such as artefacts and fossils, to try to piece together the past.

**Archaeology** is a branch of historical investigation which investigates material remains from the past. Thanks to the discovery of human fossils and everyday objects, such as tools and pottery, we can begin to understand how groups of humans lived in the past.

#### ➤ ARCHAEOLOGY AND PREHISTORY

Archaeologists study physical remains from the past. Their work is particularly important to the study of Prehistory, as there are no written records from that period. Therefore, all the information we have on prehistoric life comes from archaeology.

### Types of remains found in archaeological digs

#### Structures

Structures, such as homes, monuments and public buildings often survive.



#### Artefacts

Artefacts can be everyday objects, such as tools, containers or ornaments.



#### Fossils

Fossils are the preserved remains of living things. The most common type is bones.



### Stages of archaeological work

We can divide **the work of an archaeologist** into three stages:

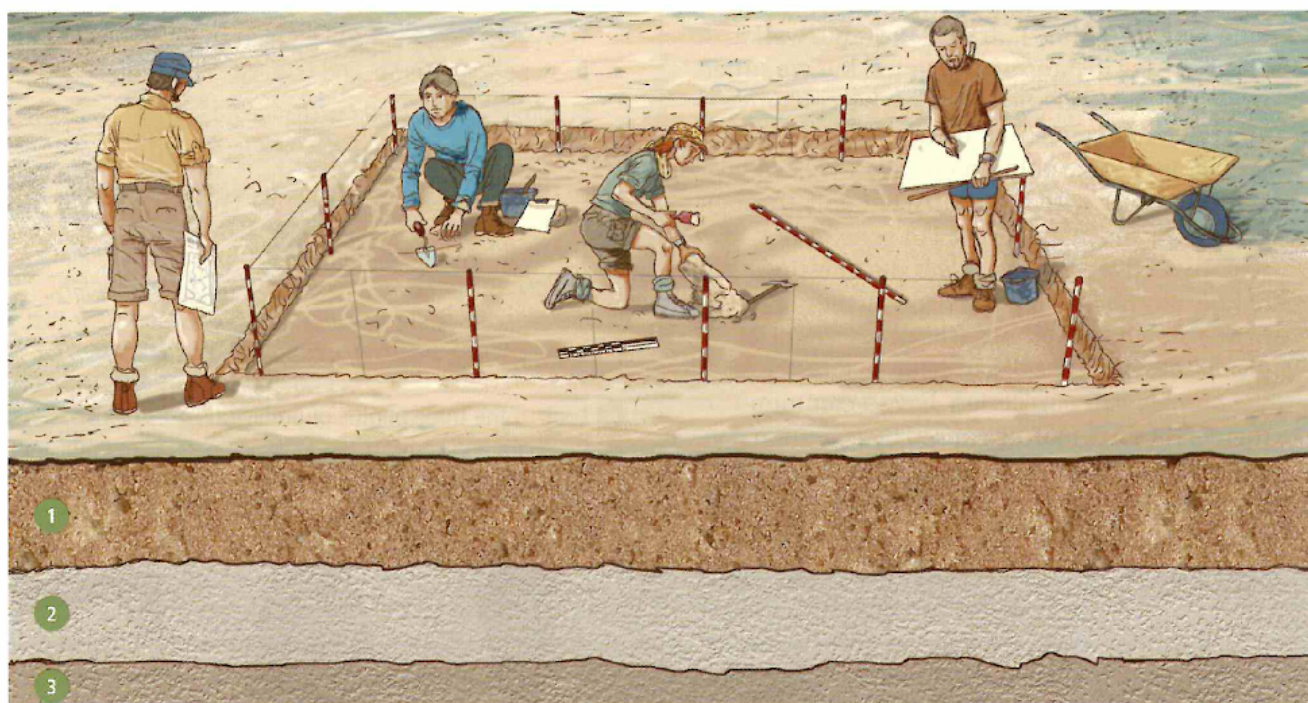
1. Locate an archaeological site and carry out an excavation. During the excavation, archaeologists have to carefully plan all the tasks that need to be done and photograph everything they find in the exact place it was first discovered.
2. Carry out research on the site and examine the artefacts, fossils and other objects found within it. This research helps archaeologists to date the site and the objects, and to find out which historical period they belong to.
3. Make the information public by writing publications and reports on it, participating in conferences and presenting work at exhibitions and in museums.



➤ What types of remains are found in archaeological digs?

## The layers of an archaeological dig

Over time, sediment is deposited on top of the archaeological remains. Therefore, in archaeological digs, the deeper down the objects are found, the older they are, and the closer the objects are to the surface, the more recent they are.



## ACTIVITIES

1. Imagine that you are part of a team of archaeologists and that you are excavating the site in the picture above. Apply each step of the archaeological process to carry out the activities below.
  - a. Look at the images of the artefacts found at the site. Each one was found in a different layer of sediment in the dig. According to the periods of Prehistory you have studied, which layer would you find each one in?
  - b. Once each object has been excavated from the site, each one is researched and dated. Organise the information you have about each object. Use the table of the periods of Prehistory on page 9 to help you. Make a fact file for each object, stating the material used to make it and the period of Prehistory that it comes from.
  - c. Write a short report explaining how evolution allowed humans to make tools. Mention the physical changes that early humans underwent and explain how they helped them to make tools.



ⓐ A carved stone tool



ⓑ A polished stone tool



ⓒ A bronze sword

## Revision activities

- 1 Read the following text and answer the questions.

“We humans are unusual creatures: we have no tail, we are bipeds and we have sinuous spines, long limbs, arched feet, agile hands and enormous brains. Our bodies are a mosaic of features shaped by human evolution over very long periods of time [...]. We can stand, walk, and run long distances with grace, but we suffer from sore feet and knee injuries. We can move and twist our spines, but most of us have back problems at some point in our lives. We can give birth to babies with big brains, but only through great pain and at great risk. For generations, scientists have tried to answer the question of how our bodies became the way they are. Now, using new methods from a variety of disciplines, they are discovering that many of the problems in our ‘design’ have a common theme: they are mainly caused by evolutionary changes that occurred when our ancestors stood upright – the first step in the long path to becoming human.”

ACKERMANN, J.  
*The Downside of Upright* (adapted)  
National Geographic, July 2006

- Use a dictionary to find out what the words *sinuous*, *arched* and *agile* mean.
  - According to the text, what are the disadvantages of an upright posture?
  - What advantages does an upright posture offer humans? List other advantages you know of that are not mentioned.
  - Which physical features distinguish humans from other primates?
  - Find out who wrote the book *On the Origin of Species* and what the book is about.
- 2 Imagine you are an archaeologist who has just discovered the skull of an early hominid. Firstly, identify the hominid (use pages 6 and 7 to help you). Then, write a fact file about the hominid, including its name, when it lived and other information about it.



- Put the following human advances in chronological order: *nomadism*, *permanent settlements*, *hunter-gatherers*, *stone tools*, *metalwork*, *the Neolithic Revolution*, *cave paintings*.
- Use these sets of words to make full sentences about Prehistory:
  - sickles / cut / crops / turn / hoes / earth
  - stone / Neolithic period / carved / polished
  - surplus / store food / exchange / ability
  - mine / copper / metal / first
  - the Fertile Crescent / land / fertile / growing crops
- Define the following terms: *History*, *Prehistory*, *human evolution*, *Stone Age*, *Metal Ages*, *nomad*, *sedentary*, *hierarchical society*, *worship*, *Fertile Crescent*, *Near East*, *loom*, *pottery*, *smelting*, *portable art*, *megalith*.
- Look at the three photos of prehistoric axes below. Compare and contrast them. Which periods of Prehistory do you think they belong to?



- 7 Copy and complete the table in your notebook with the following terms (you may need to use some terms twice): *agriculture*, *carved stone tools*, *caves and huts*, *fire*, *first cities*, *first villages*, *hunter-gatherers*, *metal tools*, *nomads*, *polished stone tools*, *sedentary*, *the wheel*.

	Palaeolithic	Neolithic	Metal Ages
How they obtained food			
Lifestyle			
Where they lived			
Main inventions			

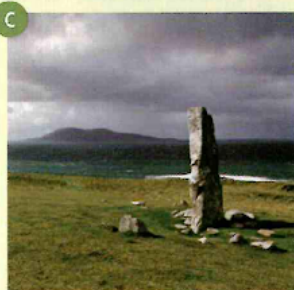
- Answer the following questions:
  - Why did prehistoric people carve Venus figurines?
  - What is portable art? What period of Prehistory do you associate it with?
  - What are cave paintings? How are they different from rock paintings?

- 9 Put the following artistic artefacts in chronological order and state which period of Prehistory they belong to: *the stone circles at Stonehenge; the Venus of Willendorf; the cave paintings of Altamira; the cave paintings of La Valltorta.*

- 10 Look at the picture and answer the following questions.



- What surface was this work of art painted on?
  - What does it depict?
  - What is its purpose?
  - Is it realistic or schematic? Is there movement?
  - Are the figures monochrome or polychrome?
  - During what period of Prehistory was it painted?
- 11 Identify the following megalithic structures. Then, in your notebook, write a description of each one and explain what each one was used for.



- 12 Vere Gordon Childe was an Australian archaeologist best known for his theories about the development of prehistoric societies. He wrote the following text about the origin of hierarchical societies. Read it and then answer the questions.

“The Neolithic Revolution had other consequences apart from increasing the population [...]. The new economy allowed the farmer to produce more food than was needed every year to keep him and his family alive. In other words, it made possible the regular production of a surplus. [...] The surplus produced was insignificant at first, but it gradually increased until it demanded a reorganisation of society.”

Vere Gordon CHILDE  
Excerpt from *The Urban Revolution* (adapted)

- a. Explain one consequence of the Neolithic Revolution.
  - b. Explain the meaning of the word *surplus*.
  - c. In your opinion, what is the link between a surplus and the reorganisation of society? Think about: moving around, storage, diet, communities, division of labour, social hierarchy.
  - d. Imagine you are a Neolithic farmer. What crops would you grow? Would you keep any animals? How would you organise the division of labour in your Neolithic farm? Would you do the same activities all year round? Discuss with your partner.
- 13 Create a tourist information leaflet for a megalithic monument, providing information about its location, date of construction, type, use, etc. You can illustrate it with pictures, maps or drawings. You can choose one of the following megalithic sites or choose one yourself:
- Dolmen of Menga
  - the Carnac Stones
  - Stonehenge
  - Naveta des Tudons
  - the Moai on Easter Island
- 14 Imagine you are an archaeologist working on the archaeological dig at Atapuerca. Write a letter to your best friend. Include information about:
- the location of the dig
  - any artefacts, fossils or other remains found
  - the historical period these objects belong to
  - what the artefacts were used for in the past
  - what you enjoy most about being an archaeologist
- You can use the internet or reference books to find out further information about Atapuerca and what has been found there.

## Read and think

### FOOD IN PREHISTORIC TIMES

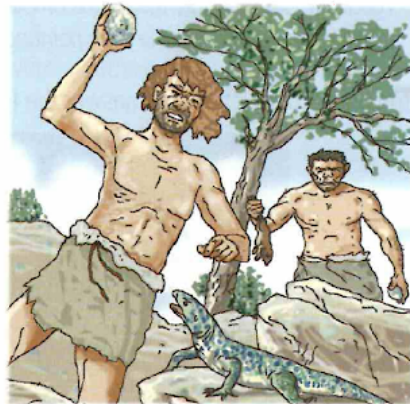
The nomadic tribes of the Palaeolithic period were hunter-gatherers. The men of the tribe went out hunting while the women gathered **edible** roots, leaves, nuts, berries and small animals.

In the earliest 'hunts', about 2.5 million years ago, Palaeolithic men were only able to catch small **prey**, such as lizards, porcupines, tortoises, moles and insects. Over the next two million years, humans developed new hunting techniques. First, they killed larger animals by throwing rocks at them. Later, they made stone weapons, such as spears and arrows.

However, when hunters managed to kill larger animals, such as mammoths, two problems **arose** for the hunters. Firstly, how could they transport the meat back to their tribes and, secondly, how could they stop the meat from rotting? As Palaeolithic people had not yet learned to use salt to preserve food, the only solution was to live near the places where they hunted and collected food. Then, they ate as much of the food as they could as quickly as possible. They ate it raw because they had not yet discovered fire.

People who lived on the coast or near rivers and streams used to catch shellfish with their hands or make dams to trap small fish. They used wooden clubs or spears to catch larger fish, which also had to be eaten quickly because fish rots very quickly.

Then, about half a million years ago, people mastered fire. This meant that they were able to heat their caves, drive wild animals away and finally cook food. Experts believe that **roasting** was probably the first method of cooking and was probably discovered by accident – somebody probably dropped a piece of meat into the fire and waited until the fire died down before they could rescue the meat and eat it.



### ACTIVITIES

- Answer the questions:
  - How was work divided up between men and women in the Palaeolithic period?
  - How did the early hunters catch their prey?
  - What problems did the hunters have when they killed larger animals? What was the solution?
  - How did fire make prehistoric people's lives easier?
- Find words in the text that mean the following: *collected*; *animals hunted for food*; *going bad*; *not cooked*; *big heavy sticks*.
- How did stone tools make people's lives easier? What could they use them for?
- Work in small groups. Imagine you are members of a Palaeolithic tribe. You and other tribespeople have come back to your cave after a long day of hunting and gathering, and you meet around the fire. Explain what you have hunted or gathered and decide what you are going to have for supper. You can use your dictionaries or the internet to find the names of any plants or animals that you do not know in English.

