

Theme—Evolution of Mankind

EVOLUTION OF HUMAN BEINGS

Lesson Objectives

Students will be able to

- ▶ know the process of human evolution
- ▶ understand that fossils, tools and bones provide evidence of ancient life forms
- ▶ identify, compare and contrast the features of the four stone ages

Taking Off

Discuss the following:

- Do you enjoy learning about the past?
- When you go on holidays, do you collect shells, pebbles or any other things that will later remind you of your visit to the place?

You have learnt in Class 3 that the invention of the wheel brought about great changes in transportation. Have you ever wondered who invented the wheel?

Wheel was invented by the early humans. The people who lived on the Earth thousands of years ago are called the **early humans**.

The early humans lived in **prehistoric** times. It was the time when no one knew how to read or write, and therefore we do not have any written material or record on how people lived in those times.

SOURCES THAT TELL US ABOUT THE EARLY HUMANS

Ans' (Scientists and archaeologists rely upon fossils, tools and weapons left behind by the early human beings to study the past. Bones and skeletons of human beings and

animals belonging to that period also give us a good insight into their lives. We also get some information about the early human beings from their shelters and cave paintings on the walls of the caves in which they lived.)

THE HUMAN EVOLUTION

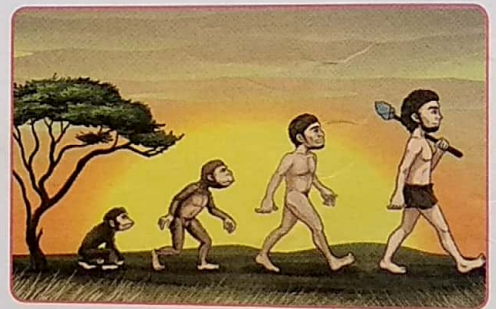
The story of evolution helps us to understand that human beings evolved from the ape family.

Around 60 million years ago, the apes appeared on the Earth. These apes slowly developed into human beings. This slow development of human beings from apes to the modern people is called **evolution**.

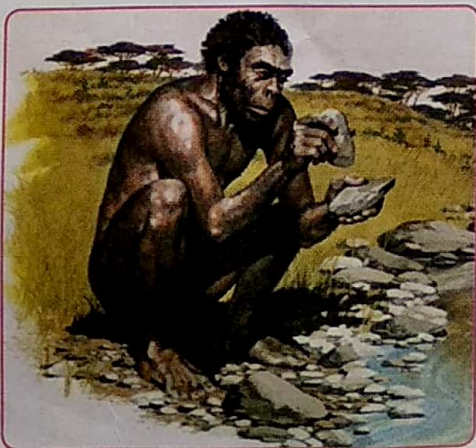
Human beings first appeared on this Earth around three million years ago. Scientists believe that we, the human beings, evolved from hominids that lived on this Earth thousands of years ago.

Scientists have classified hominids into three distinct categories:

- *Homo habilis* (the first to make tools of stone)
- *Homo erectus* (the first to stand upright and use fire)
- *Homo sapiens* (the thinking people)



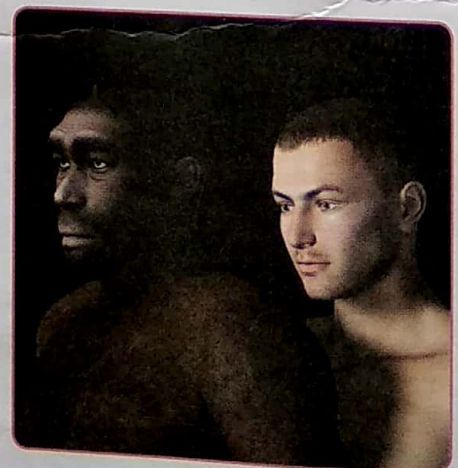
Evolution of human beings



Homo habilis



Homo erectus



Homo sapiens

Did you know?

It is generally believed, from a study of fossils, that hominids were from Africa.

THE STONE AGE

The Stone Age is the period in history when human beings used various kinds of tools made of stone.

The period can be divided into:

- The Paleolithic Age or the Old Stone Age
- The Mesolithic Age or the Middle Stone Age
- The Neolithic Age or the New Stone Age
- The Chalcolithic Age or the Stone-Copper Age

The Paleolithic Age or the Old Stone Age

Early human beings who lived during this period ate fruits and roots. They killed animals with their stone weapons and ate their flesh. They were known as **hunter-gatherers** because they lived by hunting animals and gathering plants and fruits to eat. However, they faced two major problems.

- Many animals ran faster than the early humans.
- It was dangerous to get too close to the animals as they attacked the early human beings, often killing or injuring them.

Tools

To overcome the problems faced during hunting, the early human beings made tools of stone which had sharp edges and could be thrown from a distance. They did this by chipping away small pieces of stone from a big piece. Gradually they learnt that some stones could be chipped and made sharper more easily than others.



Stone tools used by early humans

The hunter-gatherers discovered a stone called **flint**. Flint stone could be easily shaped and was used to make sharp objects. They made knives, spears, arrowheads, axes and harpoons with flint and other stones. These tools were used for hunting animals, cutting meat, fish, digging and even sewing.

During excavations, the archaeologists have found many such tools which still retain their sharpness.

Shelters

People living in the Stone Age did not have houses as we have now. So, they lived on trees to protect themselves from wild animals. Sometimes they made houses with animal skins. To protect themselves from the sun, cold and rain, the early humans took shelter in rock caves.

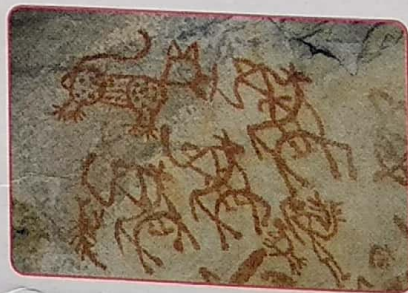
Cave paintings

Early human beings made paintings and drawings on the walls of the caves they lived in, possibly as a form of recreation. Most of these show images of hunting. Archaeologists believe that these paintings may have had some religious significance.

What is significant is that the colours used in these paintings are still quite vivid!

Did you know?

India has one of the largest collections of rock paintings in the world. The most famous of the rock paintings are in Bhimbetka in Madhya Pradesh. This means that prehistoric humans existed here in India also. The recent discovery of a large collection of tools in Jharkhand also points out to the same.



Rock paintings in Bhimbetka

Fossils

We can also study the bones and skeletons of these early people to know them better. The traces of prehistoric bones, skeletons, animal and plant remains preserved in rocks are called **fossils**.



A fossil from the prehistoric times

Do and Learn

Use reference history books, newspapers or the Internet to collect pictures of cave paintings made by the early human beings. Paste the pictures in your scrapbook and write two lines about each picture.

The life of the hunter-gatherer



Ans 2 The life of the hunter-gatherer was difficult. They led a nomadic life moving from one place to another in search of food and water. They hunted animals and ate berries, nuts and fruits. They wore clothes made of leaves and animal skins.)

Ans 3 The discovery and use of fire changed the lives of people in many ways.) However, it is not known how fire was discovered. Many theories abound; some of which are listed below:

- Lightning set dry woods on fire
- Occurrence of a forest fire
- Sparks from stone tools that were being made

Fire helped the early humans in many ways.

- Ans 3
- Fire could keep people warm.
 - Fire protected them from wild animals.
 - Food cooked on fire was softer and tastier.
 - Fire lit up the dark caves at night.)



Early humans discover spark while making stone tools

Did you know?

There are groups of people in the Andaman Islands who live the life of a hunter-gatherer even today.

DISCUSS



Think and discuss.

- What are the uses of fire in our day-to-day lives?

The Mesolithic Age or the Middle Stone Age

This was the period after the Paleolithic Age. The period saw the beginning of agriculture in some areas. Canoes and bows have been found at some sites which indicate a certain degree of advancement from the Old Stone Age. However, tools made of flint continued to be used for hunting and gathering food.

The Neolithic Age or the New Stone Age

This period witnessed the beginning of a settled life, the practice of agriculture and domestication of animals. Some of the earliest crops grown were wheat and millet. Settled life and agriculture provided the early humans with a regular supply of food.

Ans 4 (The early humans also started keeping dogs, sheep, goats, cattle, pigs and poultry. Domestication of animals had several advantages, some of which are discussed below.

- It provided them a regular supply of meat.
- They could use the skin of animals for covering themselves.
- Animal skin was also used for making huts.
- Later, cattle were used for ploughing the land.
- Animals were used by early humans to protect themselves from the attack of other tribes.)

The settled life led to the early human beings making huts using twigs, grass, sticks, clay and the skin of animals. Gradually, more people started living together in one area. This is how **villages** came about.

Ans 5 (Another important development of the Neolithic Age was the invention of the wheel. This invention made the life of the people much easier. Now they could transport goods on wheeled carts, make pottery on the potter's wheel and also use the wheel for spinning and weaving clothes.)



Think and Answer

Which period do the following belong to?

- | | | |
|----------------|-----------------------------|-----------------|
| 1. Fire | 2. Domestication of animals | 3. Settled life |
| 4. Stone tools | 5. Nomadic life | |

The Chalcolithic Age or the Stone-Copper Age

The next period witnessed a gradual transition from the use of stone tools to the use of metals. The first metal used was copper. This period is called **Chalcolithic Age** or the **Stone-Copper Age**. During this period, there was a widespread use of stone tools alongside copper tools. Chalcolithic people were good coppersmiths and stone workers. Bangles made of copper and tools made of stone have been found in many sites. They used a different kind of pottery known as black and red pottery.

The Bronze Age

The Bronze Age began when people learnt to mix copper and tin to make bronze. Tools made of bronze were stronger than stone tools. The discovery of copper and tin had far-reaching effects, some of which are discussed below.

- People needed to mine tin and copper.
- This meant that some people had to shift from farming to mining.
- This, in turn, meant that farmers had to produce more food.
- More occupations emerged to sustain each other. For example, the potter had to create more pots for storing surplus grains.

Therefore, we see major changes during this period.



Some objects of the Bronze Age

Do and Learn

Visit a museum or an archaeological site. Record your observations there and conduct a discussion in the class with your teacher's permission.

Gradually, the discovery of metals gave way to the end of the Stone Age.

Vocabulary

archaeologist: a person who studies the past by digging out and examining the remains of old cities, objects and buildings that have been buried in the ground over the ages

excavation: digging out old buried objects to learn more about the past

hominids: prehistoric apes

significance: importance

vivid: clear and detailed images

RECAP

EVOLUTION OF HUMAN BEINGS

categories

- *Homo habilis*
- *Homo erectus*
- *Homo sapiens*

sources

- tools
- shelters
- cave paintings

the stone ages

- The Paleolithic Age
- The Mesolithic Age
- The Neolithic Age
- The Chalcolithic Age



Evaluation

A. Answer the following questions.

1. What are our sources of information about life during prehistoric times?
2. Describe the nomadic life of early human beings.
3. How did fire affect the lives of early human beings?
4. State some advantages of the domestication of animals.
5. What were some of the major changes in the Neolithic Age?
6. Name the first metal used by the early human beings.

Copper

B. Write true (T) or false (F).

1. The Stone Age can be divided into Old, Middle and New Stone Ages. ☐
2. The scientists have classified hominids into four categories. ☐
3. Bhimbetka paintings are on the walls of caves in Madhya Pradesh. ☐
4. Hunter-gatherers were so called because they hunted animals and gathered plants and fruits to eat. ☐
5. People during ancient times lived far away from each other and that is how villages came about. ☐
6. The Stone Age gave way to the Iron Age. ☐

C. Tick (✓) the correct answer.

1. The early humans of prehistoric times
 - ☐ knew how to write.
 - ☐ did not know how to write.
 - ☐ could print books.
2. *Homo erectus* were the first early humans
 - ☐ who could use stone tools.
 - ☐ who could use guns.
 - ☐ who could stand upright.
3. The hunter-gatherers spent their time
 - ☐ working on farms.
 - ☐ hunting and gathering food.
 - ☐ working in mines.
4. The Mesolithic Age was between
 - ☐ the Old Stone Age and the Iron Age.
 - ☐ the Old Stone Age and the New Stone Age.
 - ☐ the Old Stone Age and the Bronze Age.

5. The Stone Age was followed by the

☐ Industrial Age.

☐ Metal Age.

☐ Computer Age.



LIFE SKILLS (Working in groups)

Work in groups. Put up a play on the life of early human beings. Dress as early human beings did. Imagine how they lived their lives and communicated with each other, what food they ate and so on. Use appropriate props to make the play interesting.

INTEGRATION (with Arts Education)

Given alongside in the picture are some bones which constitute 40% of the remains of the most famous early human ancestor.

It was discovered in Ethiopia in 1974. It is named 'Lucy' after a famous Beatles song. Refer books or the Internet and read more about 'Lucy'. Present some interesting facts about 'Lucy' along with a detailed drawing of the figure given alongside.

