

Summary

TELESCOPING THE TIMES

*The Peopling of the World,
Prehistory–2500 B.C.* 38

CHAPTER OVERVIEW Scientists study stones and bones to learn about the life of the earliest humans. Humans developed first in Africa and spread to other parts of the world. After hundreds of thousands of years of a wandering existence, people started settling in one place. They got food by farming and by raising animals. This success and their new technologies soon led to the first civilizations.

1 Human Origins in Africa

KEY IDEA Fossil evidence shows that the earliest humans first appeared in Africa.

People can learn about the past by using written records. However, these records cover only the last 5,000 years or so of human life on Earth. To learn about the more distant time before the first written records, scientists need to use special skills and tools. They are like detectives trying to solve a mystery. That mystery is the puzzle of the prehistoric human past—the story of humans before history.

The scientists concerned with this mystery are called archaeologists. They work at places called digs, pits dug into the ground to find objects buried for thousands of years. They uncover tools, jewelry, or other things made by people. Such objects are called artifacts. Archaeologists also dig up bones—the bones of ancient humans and of the animals that lived with them. Some of these bones have become fossils, meaning they have survived over time because they were preserved in stone. By studying bones and artifacts, they can find clues about how the earliest humans lived.

In the early 1970s, archaeologists made some important finds in Africa. In East Africa they found the footprints of humanlike beings, called humanoids, who had lived about 3.6 million years ago. In Ethiopia another team uncovered a rare, complete skeleton of one of these humanlike beings—a female that they nicknamed Lucy.

Because these early beings walked upright, they could travel long distances more easily than four-footed ones. They could also use their free arms to carry food, tools, and children. These creatures also developed one other major human trait. They could move their thumbs across the palms of their hands and touch their other fingers. Because of this opposable thumb, they could pick up and hold objects.

Humans made important advances during a period called the Stone Age, when people used tools

made of stone. In this time, they also began to use fire and developed speech. Scientists divide the Stone Age into two parts. The Paleolithic Age, or Old Stone Age, began about 2.5 million years ago and lasted until about 8000 B.C. The Neolithic, or New Stone, Age went from about 8000 B.C. to around 3000 B.C.

Much of the Old Stone Age overlapped the Ice Age, when the earth was colder than it is now. Vast sheets of ice—glaciers—covered much of the land. About 10,000 years ago, the temperature warmed and the ice melted. The ice sheets grew smaller and people began to roam wider stretches of land.

In East Africa, archaeologists have found a humanoid fossil that they named *Homo habilis*. The name means “man of skill.” It was given because the site also held tools made of lava rock by these humanoids. *Homo habilis* lived about 2.5 million years ago. About 1.6 million years ago, another kind of humanoid lived. This one, called *Homo erectus*, began to use tools for special purposes. They dug for food in the ground, cut meat from animal bones, and scraped animal skins. *Homo erectus* also began using fire and may have had the first spoken language.

By about 200,000 years ago, many scientists think, *Homo erectus* developed into humans. One group of early humans, the Neanderthals, was powerful. In the past, they were thought to be rough and wild people. Now scientists think that they may have held religious beliefs. One site suggests that they buried their dead. These people found ways to survive the freezing cold of the Ice Age. They lived in caves or built shelters of wood or animal skins. About 30,000 years ago, though, the Neanderthals strangely disappeared.

About 10,000 years before these people vanished, a new group of prehistoric people appeared. They are called the Cro-Magnons. Their bodies were just like those of modern people. Scientists

think that these people worked with one another in planning large-scale hunts of animals. They may have also had more skill at speaking than did the Neanderthals. Because they had these skills, the Cro-Magnons were better at finding food. That may explain why Cro-Magnons survived and Neanderthals did not.

Scientists have only a vague picture of the origin of humans. The fossil record is sketchy. However, more discoveries may lead to new ideas about early humans. What is clear now is that humans had skills that helped them adapt and survive in different lands and climates.

2 Humans Try to Control Nature

KEY IDEA *Humans began to grow food and raise animals. Their population increased, and they began to live in settled communities.*

The first humans had faced a struggle for survival. For thousands and thousands of years, they were concerned first with finding food and protecting themselves from the dangers of life in the wild. They used fire, built shelters, made clothes, and developed spoken language. These areas of life are all part of culture, the special way of life followed by a group of people. Human culture changed over time as new tools replaced old and people tested new ideas. Later some modern humans increased the pace of change.

The people who had lived in the early part of the Old Stone Age were nomads. They moved from place to place, never staying in one spot for long. They were always looking for new sources of food. They found that food by hunting and gathering nuts, berries, leaves, and roots. The Cro-Magnon people, who came later, made tools to help them in their search. With spears, hunters could kill animals at greater distances. With sticks, those who gathered plant food could dig plants out of the earth.

These modern humans had a large kit of tools—more than 100 different ones. They used stone, bone, and wood. They made knives to cut meat, hooks to catch fish, and even a tool to make other tools. With bone needles, they sewed animal hides into clothes.

Cro-Magnon people also created works of art. This art gives us a fascinating glimpse into their world. These early humans made necklaces out of seashells, the teeth of lions, or the claws of bears.

They took the tusks of mammoths—hairy elephant-like animals—and ground them down to make beads. The most remarkable art from the Stone Age, though, is paintings. Thousands of years ago, artists mixed charcoal, mud, and animal blood to make paint. They used this paint to draw pictures of animals on the walls of caves or on rocks.

Humans lived by hunting animals and gathering plants for thousands of years. They lived in small groups of only 20 or 30 people. They often returned to a certain area in the same season each year because they knew it would be rich in food at that time. Over the years, some humans realized that they could leave plant seeds in an area one year and find plants growing there the next year. This was the beginning of a new part of human life: farming.

Scientists think that the climate became warmer all around the world at about the same time.

Humans' new knowledge about planting seeds combined with this warmer climate to create what is called the Neolithic Revolution. Instead of relying on gathering food, people began to produce food. Along with growing food, they also began to raise animals. They raised horses, dogs, goats, and pigs. Archaeologists have studied a site in the northeastern part of the modern country of Iraq. It is called Jarmo. The people who lived in this region began farming and raising animals about 7000 B.C. People were entering a new age.

People began to farm in many spots all over the world. Each group developed farming on its own. Many of the places where farming worked best were in the valleys of major rivers. In Africa, people began growing wheat, barley, and other crops along the Nile River. In China, farmers began to grow rice and a grain called millet. In Mexico and Central America, people grew corn, beans, and squash. In the high Andes Mountains of South America, they grew tomatoes, sweet potatoes and white potatoes.

The study of one village in what is now Turkey reveals what early farming communities were like. The village grew on the good land near a river. Some workers grew wheat, barley, and peas. Others raised sheep and cattle. Because these workers produced enough food for all the people, others could begin developing other kinds of skills. Some made pots out of clay that they baked—the first pottery—while others worked as weavers. Some artists decorated the village. Archaeologists have found wall paintings that show animals and hunting scenes. They have found evidence that the people had a religion, too.

Some people in the village worked as traders. Near the village was a rich source of obsidian, a stone made from volcanic rock. Pieces of this rock could be made into a very sharp cutting tool or polished to be used as mirrors. People in the village traded the rock to those who lived far away.

Life in the early farming villages had problems, too. If the farm crop failed or the lack of rain caused a drought, people would starve. Floods and fires could damage the village and kill its people. With more people living near each other than before, diseases spread easily. Still, some of these early villages grew into great cities.

3 Patterns of Change: Civilization

KEY IDEA Farming villages produced extra food and developed new technologies. The result is the rise of civilizations.

Over time, farmers developed new tools—hoes and plow sticks—that helped them grow even more food. They decided to plant larger areas of land. The people in some villages began to irrigate the land, bringing water to new areas. People invented the wheel for carts and the sail for boats. These new inventions made it easier to travel between distant villages and to trade.

Life became more complex as the villages began to grow. People were divided into social classes, some with more wealth and power than others. People began to worship gods and goddesses that they felt would make their crops safe and their harvests large.

The first civilization arose in a region of Southwest Asia known as Sumer—between the Tigris and Euphrates rivers of modern Iraq. Historians consider a civilization to have these five features:

1. advanced cities, which can hold many people and served as centers of trade;
2. specialized workers, who can focus on different kinds of work;
3. complex institutions, which can give the people a government, an organized religion, and an economy;
4. record-keeping, which can lead to other purposes for writing; and
5. advanced technology, which can produce new tools and techniques for solving problems.

Sumer had all the features of a civilization. One of the new technologies that the people of Sumer created was the ability to make a metal called bronze. Workers used it to make points for spears.

One of the early cities of Sumer was named Ur. It was surrounded by walls built of mud dried into bricks. It held about 30,000 people, divided into such social classes as rulers and priests, traders, craft workers, and artists. They were all supported by the food raised by farmers outside the city walls, where they watched the animals and tended the fields. Some workers dug ditches to carry water to the fields. Officials of the city government planned all of this activity.

Inside the city, people hurried about their busy lives. Metal workers made bronze points for spears, while potters made clay pots. Traders met people from other areas. They traded the spear points and pots for goods that Ur could not produce. Sometimes their deals were written down by people called scribes. They were educated in the new form of writing that Sumer had developed. Ur's most important building was the temple. There the priests led the city's religious life. Temples also served as storage for grains, fabrics, and gems as offerings to the city's gods.

Review

1. **Recognizing Facts and Details** What evidence do scientists use to study the life of humans before written history?
2. **Perceiving Relationships** How did the Cro-Magnon people differ from *Homo erectus*?
3. **Drawing Conclusions** What great change came in the Neolithic period? Explain why it was so important.

Recognizing Facts and Details

4. What are the five features of a civilization?
5. What different kinds of activity went on in Sumer?