Human Origins in Africa

BEFORE YOU READ
In this section, you will read about the earliest humans.

AS YOU READ
Use the time line below to take notes on the earliest humans.

Scientists Search for Human Origins (pages 5–7)

How do scientists learn about early humans?

People can learn about the past by using written records. But these records cover only the last 5,000 years or so of human life. To learn about the time before written records, scientists called archaeologists use special skills and tools.

Archaeologists work at places called digs. They uncover artifacts: tools, jewelry, or other things made by people. 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, scientists learn about the culture, or way of life, of early humans.

In the early 1970s, archaeologists in East Africa found the footprints of humanlike beings, called australopithecines. Humans and other creatures that walk upright, such as australopithecines, are called hominids. These footprints were made about 3.5 million years ago.

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. They also had an opposable thumb that could move across the palms of their hands and touch their other fingers. The opposable thumb allowed them to pick up and hold objects.

Analyzing Key Concepts: Culture
Culture is the way of life of a group of people.

1. What were the first humanlike beings, and where were they found?
The Old Stone Age Begins (pages 7–8)

What advances did hominids make during the Stone Age?

Humans made important advances during a period called the Stone Age, when people used tools made of stone. At this time, they also began to use fire and learned to speak.

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 Age, 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. Huge sheets of ice—glaciers—covered much of the land. About 10,000 years ago, the earth’s temperature increased. The ice sheets grew smaller. People began to roam wider stretches of land.

In East Africa, archaeologists found a hominid fossil they named Homo habilis. It means “man of skill.” The fossil was given this name because the site also held tools made of lava rock. Homo habilis lived about 2.5 million years ago.

About 1.6 million years ago, another kind of hominid lived. This one was Homo erectus. Homo erectus began to use tools for special purposes. That is when technology began. Homo erectus dug for food in the ground, cut meat from animal bones, and scraped animal skins. Homo erectus also used fire and may have had spoken language.

2. Who were Homo habilis and Homo erectus?

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The Dawn of Modern Humans; New Findings Add to Knowledge (pages 8–13)

Who were the Neanderthals and Cro-Magnons?

Many scientists believe that Homo erectus eventually developed into humans, or Homo sapiens.

Scientists once thought that Neanderthals were ancestors of modern humans but no longer do. These hominids appeared 200,000 years ago. They lived in caves or built shelters of wood or animal skins. At one time, they were thought to be rough and wild people. Now scientists think that they may have held religious beliefs. These people found ways to survive the freezing cold of the Ice Age. About 30,000 years ago, though, the Neanderthals strangely disappeared.

About 10,000 years before these people vanished, the Cro-Magnons appeared. 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 are continuing to work on many sites in Africa. New discoveries continually add to what we know about human origins.

3. How is the species Homo sapiens different from earlier hominids?

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6 Chapter 1 Section 1
Humans Try to Control Nature

BEFORE YOU READ
In the last section, you read about the earliest humans. In this section, you will read about the development of agriculture and a settled way of life.

AS YOU READ
Use the web below to take notes on changes in human culture.

Early Advances in Technology and Art (pages 14–15)

What advances occurred in technology and art?

The first humans had faced a struggle for survival. For thousands and thousands of years, they had two concerns: finding food and protecting themselves. They used fire, built shelters, made clothes, and developed spoken language. These areas of life are all part of culture. 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. They were hunter-gatherers.

They found food by hunting and gathering nuts, berries, and roots. The Cro-Magnon people, who came later, made tools to help them in their search.

These early modern humans used many tools—more than 100 different ones. They used stone, bone, and wood. They made knives, hooks, and bone needles.

Cro-Magnon people also created works of art, including paintings. Thousands of years ago, Stone Age artists mixed charcoal, mud, and animal blood to make paint. They used this paint to draw pictures of animals on cave walls and rocks.

1. In what ways did Cro-Magnon people change human culture?
**Civilization Case Study: Ur in Sumer**

**BEFORE YOU READ**

In the last section, you read about the development of agriculture and a settled way of life. In this section, you will read about factors leading to the rise of civilizations.

**AS YOU READ**

Use the chart below to take notes on how civilizations develop.

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<thead>
<tr>
<th>FEATURES OF CIVILIZATION</th>
<th>EXAMPLES FROM UR</th>
</tr>
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<tbody>
<tr>
<td>1. Advanced Cities</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
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<td></td>
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<td>5.</td>
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</tr>
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**Villages Grow into Cities** (pages 19–20)

**What changed as villages grew into cities?**

Over time, farmers developed new tools—hoes, sickles, and plow sticks. These 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 people had more wealth and power than others. People began to worship gods and
goddesses that they felt would protect their crops and make their harvests large.

1. How did life become more complex?

How Civilization Develops (pages 20–21)

What makes a civilization?

One of the first civilizations arose in Sumer. It was in Mesopotamia, between the Tigris and Euphrates rivers of modern Iraq. A civilization has five features.

First, a civilization has advanced cities that contain many people and serve as centers for trade.

Second, civilizations have specialized workers. Specialization is the development of skills needed for one specific kind of work. Skilled workers who make goods by hand are called artisans.

Third, civilizations have complex institutions. Government, organized religion, and an economy are examples of complex institutions.

A fourth feature of civilizations is record keeping, which is needed to keep track of laws, debts, and payments. It also creates the need for writing. Scribes were people who used writing to keep records. Cuneiform, which means “wedge shaped,” was a form of writing invented in Sumer.

Fifth, civilizations have improved technology that can provide new tools and methods to solve problems.

Sumer had all the features of a civilization. One of the new technologies in Sumer was making a metal called bronze. The term Bronze Age refers to the time when people began using bronze to make tools and weapons.

2. Name the five features of a civilization.

Civilization Emerges in Ur (pages 22–23)

What was civilization like in Ur?

One of the early cities of Sumer was named Ur. The city was surrounded by walls built of mud dried into bricks. Ur held about 30,000 people. Social classes included rulers and priests, traders, craft workers, and artists.

Farmers outside the city walls raised the food for them all. Some workers dug ditches to carry water to the fields. Officials of the city government planned all this activity.

Inside the city, metalworkers made bronze points for spears. Potters made clay pots. Traders met people from other areas. They traded the spear points and pots for goods that Ur could not produce. This way of trading goods and services without money is called barter. Sometimes their deals were written down by scribes.

Ur’s most important building was the temple. Part of the temple was a ziggurat, a pyramid-shaped structure. Priests there led the city’s religious life.

3. What social classes existed in Ur?

Analyzing Key Concepts: Civilization

Civilization is defined as a complex culture with five characteristics—advanced cities, specialized workers, complex institutions, record keeping, and improved technology.
The Beginnings of Agriculture
(pages 15–16)

What was the Neolithic Revolution?

For centuries, humans lived by hunting and gathering. Humans lived in small groups of 25 to 70 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 the Neolithic Revolution—the agricultural revolution that occurred during the Neolithic period.

Instead of relying on gathering food, people began to produce food. One early farming method was slash-and-burn farming. That meant cutting trees and burning them to clear a field. The ashes were used to fertilize the soil.

Along with growing food, they also began to raise animals. They tamed horses, dogs, goats, and pigs. Domestication is the taming of animals.

Archaeologists have studied a site in the northeastern part of modern Iraq. It is called Jarmo. The people who lived in this region began farming and raising animals about 9,000 years ago.

Villages Grow and Prosper
(pages 16–18)

How did the growth of farming villages change life?

People began to farm in many spots all over the world. The study of one village in modern-day Turkey shows what early farming communities were like.

The village called Catal Huyuk 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. 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.

Early farming villagers had problems, too. If the farm crop failed or the lack of rain caused a drought, people starved. Floods and fires caused damage and death. With more people living near each other than before, diseases spread easily. Still, some of these early villages grew into great cities.

2. What problems did early farming villages face?

Skillbuilder

1. When did the Agricultural Revolution begin?

2. When was population growth the greatest?