

Origins of Civilization

(Prehistory–4000 BCE)

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ETEXT



INTERACTIVE



WRITING



GAMES



WORKSHEET



ASSESSMENT


Think about a time

when the first direct human ancestors appeared on Earth. You might be very surprised at how harsh their lives were. However, they, and the peoples who followed, had something in common with the way modern humans live. Like we do, these early human ancestors used the environment to improve their lives.

Explore The Essential Question

How much does
geography shape
people's lives?

Early humans used the natural environment to adapt to a harsh world. How did early people discover ways to make life easier?

Unlock the Essential Question in
your  Active Journal.

Read

about early people and the ways they lived.

Lesson 1	The Distant Past
Primary Sources	<i>Epic of Gilgamesh</i>
Lesson 2	Humans Spread Out
Lesson 3	Developing Complex Cultures
Lesson 4	New Ways of Life
Lesson 5	The Rise of Civilizations

Watch

 **NBC LEARN**



 **BOUNCE**
TO ACTIVATE  **VIDEO**

Çatalhöyük: Life in an Ancient Settlement

Find out about how scientists work to uncover the secrets of the distant past.

◀ Ruins of ancient baths, Mohenjo-Daro, Indus Valley, Pakistan


Origins of Civilization

(Prehistory–4000 BCE)



INTERACTIVE

Topic Map

Learn more about human beginnings and the world's first civilizations by making your own map and timeline in your  Active Journal.

Where did the first human ancestors live?

Scientists believe that the first human ancestors, or hominins, lived in Africa. Locate Hadar, where bones of a hominin named Lucy were found in 1974.



INTERACTIVE

Topic Timeline

What happened and when?

Basic stone tools...hunting and gathering for food...farming...the birth of villages and cities. Explore the timeline to see what was happening during our earliest history.

2.5 million years ago Hominins in Africa make stone tools.

230,000 years ago Neanderthals appear in Europe.

70,000 years ago Last ice age begins.

TOPIC EVENTS

2 million years ago

1.9 million years ago hominins migrate to Eurasia.

300,000 years ago

200,000 years ago

200,000 years ago *Homo sapiens* appear in Africa.

100,000 years ago



Who will you meet?



Mary Leakey, an archaeologist who made an important discovery



Child from a Stone Age burial



The people of Uruk, the world's first city



6,000-7,000 years ago
Uruk, the world's first city, in Southwest Asia, is established.

8,500 years ago
Oldest known farming village in Turkey appears.

12,000 years ago
Last ice age ends.

20,000 years ago

15,000 years ago

10,000 years ago

5,000 years ago

10,000 years ago
People begin to grow food; Neolithic agricultural revolution begins.

Quest

Project-Based Learning Inquiry

Design a Village


Quest KICK OFF

About 8,000 years ago, people were living in a time of great change. Humans were beginning to farm and were settling in the first villages.


What was it like to live in an ancient village?

How did early humans and the Neolithic people who followed them live? Explore the Essential Question "How much does geography shape people's lives?" in this Quest.


1 Ask Questions

Thousands of years ago, human societies were very different from those that followed. Get started on your Quest by making a list of questions you want to ask about how people lived in the distant past. Write the questions in your  Active Journal.

2 Investigate


As you read the lessons in this topic, look for **Quest CONNECTIONS** that provide information about the way people lived long ago. Capture notes in your  Active Journal.

3 Conduct Research

Next, find valid primary sources of information about life during the Neolithic Era on your own. Capture notes in your  Active Journal.

Quest FINDINGS

4 Design Your Village

As society became more complex, Neolithic people formed villages. At the end of the topic you'll design a Neolithic village and create a drawing of how your village will look. When you complete your drawing, you will present it to the class in an oral presentation. Get help for creating your village in your  Active Journal.



▲ Remains of Skara Brae, a Neolithic village in Scotland

LESSON 1

The Distant Past



BOUNCE
TO ACTIVATE



VIDEO

GET READY TO READ

START UP


What does this photo tell you about how people gather information from the distant past?

GUIDING QUESTIONS


- How do scientists use fossils and artifacts to draw conclusions about early humans?
- How does archaeological evidence indicate that human life began in Africa?
- How did people live by the gathering and hunting way of life?

TAKE NOTES

Literacy Skills: Identify Main Ideas

Use the graphic organizer in your  Active Journal to take notes as you read the lesson.

PRACTICE VOCABULARY

Use the vocabulary activity in your  Active Journal to practice the vocabulary words.

Vocabulary

anthropology artifact
archaeologist hunter-
prehistory gatherer
fossil culture
geologist

Academic Vocabulary

evidence
conclude

We are all interested in people. But certain people, called anthropologists, have made a science out of studying people.

Anthropology is the study of how human beings behave, how they act together, where they came from, and what makes one group of people different from another.

In this lesson, we will look at the work of a particular group of anthropologists known as archaeologists. **Archaeologists** study human life in the past by examining the things that people left behind.

Studying Early Humans

Until about 5,000 years ago, people had no way to write things down. To study **prehistory**, or the time before written records, archaeologists look for the places where people may have lived.

What Are Fossils? To learn about the earliest humans, archaeologists depend mainly on fossils. **Fossils** are hardened remains or imprints of living things that existed long ago. These remains may include plants, feathers, bones, and even footprints.



INTERACTIVE

Piecing the Past Together

Fossils form in several ways. For example, after a living thing dies, it may quickly become covered by sand or mud. Once covered, the soft parts of the plant or animal rot away. The harder parts, such as bones, teeth, or woody stems, last much longer. Over many years, minerals from the soil slowly replace this once-living material. What remains is a rocklike copy of the original.

How Are Ancient Remains Dated? Archaeologists use several methods for determining the ages of fossils and other prehistoric objects. In this work, they get valuable information from **geologists**, scientists who study the physical materials of Earth itself, such as soil and rocks.

One dating method is to compare objects found in similar layers of rock or soil. Objects found in lower layers are generally older than those found in upper layers. Archaeologists may also compare an object with a similar fossil or artifact whose age is already known.

Radioactive dating is another method for determining the age of objects up to about 50,000 years old. Living things contain radioactive elements that decay, or break down, over time. By measuring the radioactive material in bones and other materials that were once alive, scientists can tell when an object was formed.

In recent years, scientists have developed other methods to study fossils. They use DNA to compare human remains from the past with people living today. Genetic evidence has uncovered new information about how people changed and how they moved from place to place.

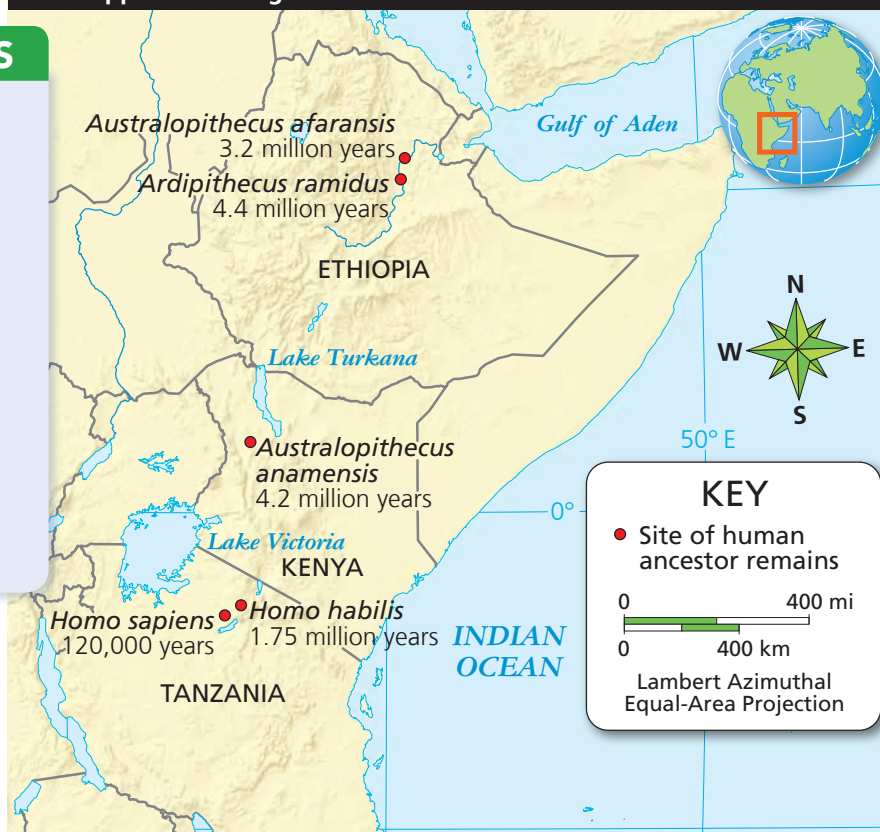
Why Do Scientists Look for Artifacts? Human ancestors, called hominins, lived millions of years ago. To study prehistoric people who lived more recently, archaeologists look for old settlements, such as villages or campsites. Such sites often lie buried beneath layers of soil.

GEOGRAPHY SKILLS

Archaeologists have made major archaeological discoveries in Africa.


1. **Region** In what part of Africa did most fossil finds occur?
2. **Human-Environment Interaction** What environmental factors may have led to the development of early humans in East Africa?

Approximate Ages of Human Ancestor Remains in East Africa



Archaeologists must carefully excavate, or uncover, these sites to learn about the people who once lived there.

As archaeologists dig up a site, they look for artifacts such as tools, pottery, or weapons. **Artifacts** are anything made and used by humans. These scientists then try to identify patterns, examining what artifacts are found together in the same spot. Artifacts found in an ancient campsite can help archaeologists understand how the people who once camped there hunted for food or what they ate.

 **READING CHECK** **Use Evidence** What types of objects do archaeologists study to learn about the past?

Where Did Human Ancestors Live?

Where did human ancestors first appear on Earth? For a long time, scientists could not agree on an answer.

Then, in 1960, British archaeologists Mary and Louis Leakey discovered a piece of a human-like skull at Olduvai Gorge in East Africa. The Leakeys called their find *Homo habilis* (“handy man”) because **evidence** showed that these early human ancestors made and used tools. Tests showed that the *Homo habilis* fossils were at least 1.75 million years old. From that point on, the search for the origins of humankind has largely focused on Africa.

African Beginnings On November 30, 1974, American anthropologist Donald Johanson made a discovery that helped shape how scientists view early human history. For three years, Johanson had been searching for evidence of human ancestors in Ethiopia, a country in East Africa. Johanson later recalled,

Primary Source

On this November morning, it was about noon, I was heading back to my Land Rover to drive back to camp. And I happened to look over my right shoulder. And as I did so, I saw a fragment of a bone which I recognized as coming from the elbow region in a skeleton. . . . There was a piece of a leg, there was a piece of a pelvis, there was a piece of a jaw, there was a piece of a skull. And I realized almost instantaneously that we had part of a skeleton.

—Donald C. Johanson, *Academy of Achievement* interview, 1991



▲ Mary Leakey at work in Tanzania, Africa

Academic Vocabulary

evidence • *n.*, something that can be used as proof

After two weeks of careful searching, Johanson and his team had uncovered hundreds of pieces of bone. They decided that all the bones belonged to one individual because they did not find two examples of any one type of bone. They determined that she was a 3.5-foot-tall female. Johanson named her “Lucy” after a song by the Beatles.

Johanson’s team found some 40 percent of Lucy’s skeleton. The bones of her legs, pelvis, ankle, and spine suggest that, like us, she walked upright on two legs. However, she lived 3.2 million years ago.

Since then, even older fossils have been found in Africa. In 1992, American anthropologist Tim White found remains of hominins who lived in Ethiopia at least 4.4 million years ago. Beginning with a single tooth, White’s team uncovered more fragments. Finally, in 2009, White unveiled a nearly complete skeleton of a female that he named “Ardi.” More than a million years older than Lucy, Ardi was taller and heavier. She probably walked upright, but slowly and awkwardly.

What Is the “Oldest One”?

Many scientists believe that the oldest humans began to develop, or evolve, from their great ape cousins about 5-7 million years ago. This process is what’s known as evolution. Discoveries such as Lucy and Ardi have also led most scientists to **conclude** that humankind began in East Africa about 4.5 million years ago.

Academic Vocabulary

conclude • v., to decide as a result of thinking or reasoning



Analyze Images A scientist cleans the rib of a long extinct elephant. **Infer** Why is it easier to find ancient animal bones than the bones of human ancestors?

French scientist Michel Brunet is one of a group of scientists that believes that human life started elsewhere in Africa. In 2001, Brunet found a humanlike skull in the country of Chad. Tests showed the skull to be nearly 7 million years old. That makes it, says Brunet, “the oldest one.”

Brunet’s discovery has raised questions. Chad is in central Africa. Did humankind begin there rather than in East Africa? The skull Brunet found is older than other human fossils discovered so far. Is humankind older than scientists once thought?

Scientists will continue to look for answers to questions like these. Meanwhile, the search continues. “This is the beginning of the story,” says Brunet of his work in Chad, “just the beginning.”

READING CHECK Identify Main Ideas

Why do most scientists believe that human life began in Africa?



How Did Hunter-Gatherers Live?

Early humans were **hunter-gatherers**, which means that they lived by hunting small animals and gathering plants. They also probably scavenged for food left by predators. They formed societies and developed ways to improve their chances for survival.

Archaeologists know very little about how early hunter-gatherers such as Lucy lived. But they do know that their lives were often harsh. Many groups appeared for a time and died out. To survive and grow, early humans developed technology, tools, and skills to meet their needs.

How Were the First Tools Made? About 2.5 million years ago, early humans learned how to make tools out of stone. This technology was so important to human survival that archaeologists call this period the Paleolithic Era, or the Old Stone Age. The Paleolithic Era ended about 2,500 to 10,000 years ago.

Over time, toolmakers became more skillful, making thinner and sharper stone blades. Some blades were used to tip spears and arrows. Toolmakers also began making weapons from bones and antlers. As their skills and weapons improved, Paleolithic hunters were able to turn from hunting small animals to hunting larger animals such as deer.

How Did Fire Affect Human Development? Around 800,000 years ago, people also learned how to use fire. With fire, people could have light on dark nights, cook meat and plants, and use flames to aid in hunting and to scare off dangerous animals. Making fire also had important long-term effects such as enabling people to live in places where it otherwise would have been too cold for people to survive.

Analyze Images This painting of a bull was found in a cave in Lascaux, France, and dates from the Paleolithic Era. **Draw Conclusions** How do you think ancient artists chose which subjects to paint?

Did you know?

Many of the artifacts found in North America are cutting tools and arrowheads made of flint.



Did you know?

Hunter-gathers still live in regions of the world where it is hard to grow food. They live in South America, Africa, Asia, and Australia.



Here, a British archaeologist explains why learning to control fire was an important step in human development.

Primary Source

The control of fire was presumably the first great step in man's [freedom] from the bondage of his environment . . . [Mankind] is no longer restricted in his movement to a limited range of climates, and his activities need not be entirely determined by the sun's light. But in mastery of fire man was controlling a mighty physical force.

—V. Gordon Childe, *Man Makes Himself*

What Was Life Like for Hunter-Gatherers? **Culture** includes the many different elements that make up the way of life of a people. These include social and family organization, beliefs and values, technology, shelter and clothing, common activities, storytelling, rituals, and art.

Stone age hunter-gatherers lived in small groups, or bands. After gathering as much food as they could in one area, they moved on. They built temporary huts out of branches or made tents of animal skins. Bands stayed small so they could move easily. A typical band included ten or twelve adults and their children.

Men generally did the hunting, but they also gathered other food. Women usually gathered fruit, grains, seeds, nuts, eggs, and honey. They caught small animals and may have picked herbs for medicine.


 **READING CHECK Identify Cause and Effect** How did people survive during the Paleolithic Era?

Lesson Check

Practice Vocabulary

1. How do scientists date **fossils** and **artifacts**?
2. What **technology** was used during the Paleolithic Era?

Critical Thinking and Writing

3. **Summarize** How do archaeologists look for evidence about early people?
4. **Infer** Why do you think scientists are trying to find out more about how and where early humans lived?
5. **Identify Cause and Effect** Why was the ability to control fire a significant advancement for humans?
6. **Writing Workshop: Introduce Characters** Imagine you are traveling through different periods of human history. Your first stop is the Paleolithic Era. Write a few sentences in your  Active Journal about how a member of a hunter-gatherer group lived and the person's role in the wandering band.

The Epic of Gilgamesh

Nearly 3,000 years ago, a writer inscribed clay tablets like the one shown here with a legend about Gilgamesh, the legendary king of Uruk—here called *Erech*. As you’ve learned, Uruk was the world’s first city. The Epic of Gilgamesh tells the story of Gilgamesh—Gish, in this reading—and his friend Enkidu, who work together to defeat a monster named Huwawa. Here Gish announces his daring plan.

► text on a clay tablet



I will lure him to the cedar forest,
Like a strong offspring of Erech.
I will let the land hear [that]
I am determined to lure (him) in the cedar [forest].
A name I will establish. ①

The elders ② of Erech of the plazas brought word to Gish:
“Though art young, O Gish, and thy heart carries thee away. ③
Thou dost not know what thou proposes to do.
We hear that Huwawa is enraged.

* * *

“Huwawa, whose roar is a deluge, ④
whose mouth is fire, whose breath is death.
Why does thou desire to do this?”

* * *

Gish heard the report of his counselors. ⑤
He saw and cried out to [his] friend:
“Now, my friend, thus [I speak]
I fear him, but [I will go to the cedar forest].”

—The Epic of Gilgamesh, translated by Morris Jastrow, Jr. and Albert T. Clay

Reading and Vocabulary Support

- ① What do you think it means when Gilgamesh says “A name I will establish”?
- ② An *elder* is an older and wiser person.
- ③ What do you think the elders mean when they say to Gilgamesh “your heart carries you away”?
- ④ A *deluge* in this sense means something that overwhelms and overpowers a person.
- ⑤ A *counselor* is a person who provides advice.

Analyzing Primary Sources

Cite specific evidence from the document to support your answers.

1. **Draw Conclusions** What kind of name do you think Gilgamesh believes he will establish for himself by carrying out his plan?
2. **Generate Explanations** Gilgamesh says that he fears Huwawa. Why do you think he admits this fact?
3. **Summarize** Write a brief summary that explores the central ideas of this excerpt.

Distinguish Essential from Incidental Information



INTERACTIVE

Categorize

Use the secondary source and these steps to distinguish essential from incidental information.

1 Identify a focus or topic. Set a purpose for your research.

- a. What exactly are you trying to find out?
- b. What key question are you trying to answer?
- c. What idea or event are you trying to understand?

2 Locate your sources. The sources you choose will depend on your focus and topic. What sources might you use if you were researching the domestication of grains during the Neolithic Age?

3 Identify information that is essential to your topic. Based on your focus:

- a. What information will help you achieve your goal?
- b. What kinds of data will answer questions or increase your understanding?

4 Identify information that is incidental to your topic. Remember the focus you have set for your research. Information that is not related to this focus is incidental. Take a look at the excerpt from the text below. If you were conducting research on only the plants that were domesticated by early humans, what information in the excerpt would be incidental to your focus?

Secondary Source

Domesticated crops, such as wheat, rice, or maize, became a nutritious and reliable source of food. These grains were chief food sources for entire societies. Animals were a source of food. People ate their meat, but also the eggs, milk, and honey they produced. Horses and oxen helped them work the fields. The fur of sheep and llamas was used to make clothing.

Domesticated animals, such as horses, sheep, and cattle, were easier to control than their wild counterparts. Some people lived in places where growing food was difficult. They traveled to different places with their animals so that they would have grasslands to eat from. The people

herding the animals would use them for food and clothing. This way of life was called pastoral nomadism.

At first, wild and domesticated breeds were similar. But over time, people selected the seeds of the plants that produced the best crops. Domesticated plants began to produce more abundant food that was larger, easier to cook, and tastier. A domesticated tomato is the size of an orange, but a wild tomato is the size of a cherry. By contrast, some breeds of domesticated goats, pigs, and cattle are smaller than their wild ancestors. Smaller animals may have been easier to manage.

LESSON 2

Humans Spread Out



BOUNCE
TO ACTIVATE



VIDEO

GET READY TO READ

START UP


What questions would you ask the people who once lived in this settlement located on the French coast?

GUIDING QUESTIONS


- How and why did modern humans succeed and populate most regions of the world?
- How did the environment influence the migrations of early humans?
- How did early humans adapt to new environments and climate changes?

TAKE NOTES

Literacy Skills: Analyze Cause and Effect

Use the graphic organizer in your  Active Journal to take notes as you read the lesson.

PRACTICE VOCABULARY

Use the vocabulary activity in your  Active Journal to practice the vocabulary words.

Vocabulary

migration
environment
adapt

Academic Vocabulary

complex
network

Over time, new species of hominins arose. In this lesson, you will read about these human ancestors and the ways they were different from those who came before them.

What Were Later Stone Age Peoples Like?

Toward the end of the Paleolithic Era, two groups of larger-brained hominins appeared. Both groups had more developed technologies than earlier peoples. However, only one of these groups would survive past the Stone Age.

Who Were the Neanderthals? A group known as Neanderthals appeared in Europe and parts of Asia about 230,000 years ago. Their name comes from the Neander Valley in present-day Germany, where their fossil remains were first found. Fossils of a close relative of the Neanderthals, called the Denisovans, have been found in Asia.

Some archaeologists believe that the Neanderthals were the first hominins to bury their dead. Remains of flowers and other objects in burial sites may be evidence

that Neanderthals carefully buried bodies and may have believed in life after death. Other archaeologists, however, disagree. Even if Neanderthals did bury their dead, their burial practices were much simpler than those of later people.

When Did Modern Humans Appear? About 200,000 years ago, the last new group of humans appeared. The scientific name of this group is *Homo sapiens*, which means “wise people.” *Homo sapiens* were the first modern humans—or people like us.

These people were like Neanderthals in some ways. Both groups made tools, used fire, and hunted animals. But modern humans were taller, lighter, and less muscular.

Although at one time it was thought that Neanderthals could only make noises resembling a frog’s croak, we know from fossil finds that Neanderthals could speak and form words. About 70,000 years ago, however, *Homo sapiens* developed a powerful new skill—**complex** language. Having a shared language gave *Homo sapiens* a great advantage in the struggle to survive. They could organize a hunt, warn of danger, and pass knowledge and skills on to their young.

The ability to use complex language, think, and cooperate with other people helped *Homo sapiens* develop new skills and teach them to each other. As a result, they could survive harsh conditions and live in new places. These traits also made it possible for them to defend against threats.

For thousands of years, Neanderthals and modern humans lived near each other, but the Neanderthals eventually disappeared. Although the two groups intermingled, some archaeologists believe they fought with the newcomers and lost. Whatever the cause, there is no fossil evidence of Neanderthals in Europe after about 28,000 years ago.

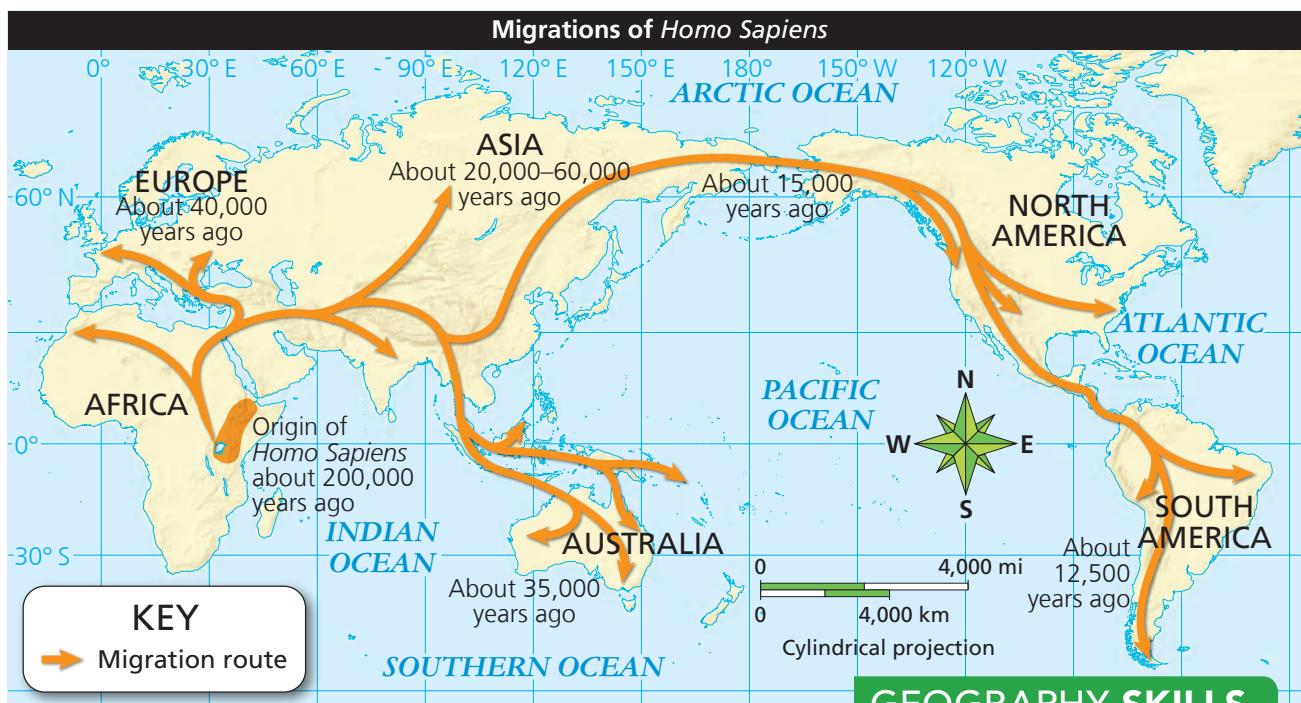
 **READING CHECK Identify Supporting Details** What skill gave modern humans an advantage over Neanderthals?

Academic Vocabulary

complex • *adj.*, having many related parts; not simple

Analyze Visuals This photograph shows a Neanderthal skull on the left and a *Homo sapiens* skull on the right. **Compare** What differences do you notice between the two skulls?





GEOGRAPHY SKILLS

Early humans are thought to have migrated throughout the world roughly according to the routes shown on this map.

- Region** At what point on this map did human migration begin?
- Movement** Based on this map, describe the movement of early people from their starting point in Africa.

What Do We Know About Early Human Migration?

Most archaeologists agree that *Homo sapiens* have walked on Earth for only about 200,000 years. But they do not agree on where modern humans came from or how they spread. Scientists have studied both fossils and genetic information, or the physical qualities that living things pass from one generation to the next. They have developed two main theories, or possible explanations, about the movement of early humans.

Migration from Africa Most scientists think that *Homo sapiens*, like other early humans, originated in Africa. From there, *Homo sapiens* began a long **migration** to other regions of the world. A migration occurs when people leave their homeland to live somewhere else. Scientists who support the “out of Africa” theory suggest that as modern humans migrated from Africa to new places, they gradually replaced the older groups who were already living there.

Some scientists argue that large-brained humans developed separately in many different parts of the world and they eventually mixed together. However, most scientists disagree with this theory.

New Evidence For years, there was little fossil evidence to support either theory. Then in 2007, scientists analyzed a fossil skull that had been found in South Africa. Tests showed that it was about 36,000 years old, the same as skulls found in Europe from the same period. This similarity suggests that humans were already in their modern form when they migrated from Africa.



INTERACTIVE


Migrations of
Homo sapiens

Did you know?

Humans used both a land bridge and boats to reach Australia.

In 2008, scientists completed a genetic study of nearly a thousand people around the globe. Scientists found the greatest genetic variety in communities closest to Africa. This finding supports the idea that, as people migrated away from Africa, groups branched off to populate new areas. The new evidence gives a boost to the “out of Africa” theory. Still, many questions about human migration remain unanswered.

Wherever *Homo sapiens* first appeared, they eventually spread across Earth. By about 30,000 years ago, these modern humans were living in Africa, Asia, Europe, and Australia. About 15,000-18,000 years ago, humans entered North America by crossing a land bridge from Asia. Evidence suggests that modern humans were living as far south as central Chile in South America by about 12,500 years ago.

 **READING CHECK** **Ask Questions** What questions do you think still remain about human migration?

How Did Humans Adapt to Varied Environments?

As modern humans migrated, they settled in a variety of **environments**, or surroundings. With each move, people had to **adapt**, or change their way of life, to suit their new environment. They had to find out which plants could be eaten, hunt different animals and find new materials for tools and shelters.

How Did the Climate Change? Over time, people also had to adapt to changes in the world’s climate. During the past two million years the Earth has experienced four long ice ages. The last great Ice Age began about 70,000 years ago, soon after modern humans appeared.

Analyze Diagrams Many factors helped early humans to survive. **Demonstrate Reasoned Judgment** Which of the key factors for human survival shown do you think was the most important? Choose one and explain your reasoning.

EARLY HUMAN SURVIVAL

EARLY HUMANS LIVED IN A HARSH ENVIRONMENT. THEY DEVELOPED DIFFERENT WAYS TO **SURVIVE**.

They **hunted** for meat and **gathered** plants and nuts to eat.



They **avoided** dangerous predators.



They were **social**, working together to survive.



They made stone **tools** such as hand axes.



They used **fire** for heat, cooking, and protection.



They found **shelter** to protect themselves from the weather.



During the last Ice Age, thick sheets of ice, called glaciers, spread across large regions of Earth. Glaciers covered the northern parts of Europe, Asia, and North America. Parts of the Southern Hemisphere were also under ice. Moving glaciers created many of the world's mountains, lakes, and rivers.

With so much of Earth's water frozen in the glaciers, rainfall decreased. Areas that had once been grasslands became deserts. Sea levels dropped, exposing "land bridges" where ocean waters had once been. Because of these changes, many animals had to migrate to find food. The people who depended on those animals had to follow the herds.

How Did Humans Stay Warm? As winters grew longer, people learned to use whatever materials they could find to build warm shelters. In Eastern Europe, for example, people built huts out of mammoth bones. Mammoths were huge furry animals, related to elephants, that lived during the Ice Age. Hunters covered these huts with animal skins and kept fires burning in their hearths day and night.

Why Did People Form Larger Communities? Some groups adapted to change by forming larger communities. In larger groups, hunters could work together to kill animals such as mammoths. They could also better defend their communities from attack by other nomadic groups.

Growing communities might be organized into groups of families with a common ancestor. A group would be made up of perhaps 25 to 50 people. Group leaders took on decision-making roles, such as organizing hunts. Everywhere human society developed, **networks** of groups or families played a vital role in creating strong communities.

In time, Stone Age communities began to trade with one another for special stones or shells. They likely also traded information about finding food during hard times.

 **READING CHECK** **Identify Supporting Details** What did humans do to survive in different environments?



▲ Woolly mammoth skull

Academic Vocabulary

network • *n.* a closely interconnected group of people or things


Lesson Check

Practice Vocabulary

1. What are some of the things that make up a person's **environment**?
2. What did humans do to **adapt** after moving to new environments?

Critical Thinking and Writing

3. **Compare and Contrast** How did Neanderthals and *Homo sapiens* differ from earlier people?

4. **Understand Effects** How did the development of language help humans survive harsh conditions and live in new places?
5. **Draw Conclusions** Why did early humans migrate?
6. **Understand Effects** How did forming larger communities help people survive?
7. **Writing Workshop: Establish Setting** In your  Active Journal, explain how the hunter-gatherer in your story is adapting to a changing climate.

Relate Events in Time

Use the sources and these steps to relate events in time.



INTERACTIVE

Sequence

1 Identify key events and topics. Set a purpose for your research by listing the time period, people, or events you are focusing on. For example, the excerpt from the text covers a time period that stretches from two million years ago to 70,000 years ago. What period does the timeline cover?

2 Look for clues about time. Important clues include information about dates and times of key events. For example, the excerpt uses the phrase “over time,” which suggests that a long period of time is going to be discussed. What other words or phrases indicate that events are happening in sequence?

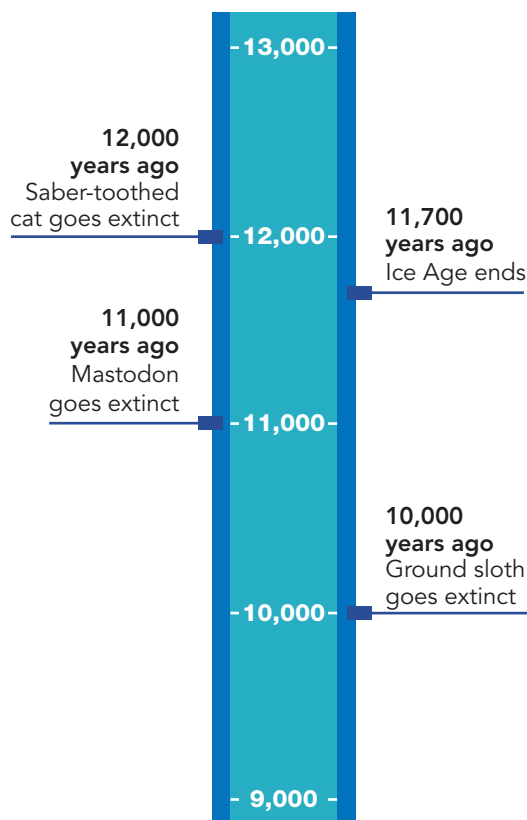
3 Look for clues about relationships. Besides dates and times, a variety of words can signal how key events are related in time. Examples include words such as *before*, *after*, *during*, or *while*. The excerpt says many creatures that lived *during* the last Ice Age have gone extinct.

- What are two other words that suggest how events are related in time?
- Use those words to summarize the information in the timeline.

Secondary Source

Many of the creatures who roamed the planet during the Ice Age have become extinct. Large mammals, such as mastodons, ground sloths, and sabercats, died off and disappeared from the earth. Some animals, however, managed to adapt over time. For example, the first jaguars hunted and ate very large prey. As time passed and the number of large prey animals dwindled, jaguars began to eat smaller animals. Making this change enabled jaguars to survive as a species when the large prey animals they had once depended on went extinct. As a result, jaguars are still found in the wild today.

Ice Age Events in Years Ago



LESSON 3

Developing Complex Cultures



BOUNCE
TO ACTIVATE



VIDEO

GET READY TO READ

START UP


This image shows a reproduction of a cave painting from about 20,000 years ago. Why are people today interested in these ancient paintings?

GUIDING QUESTIONS


- What evidence reveals how human societies became more complex?
- How did humans learn to modify their environment?
- Why did some people develop agriculture while others lived as herders?

TAKE NOTES

Literacy Skills: Sequence

Use the graphic organizer in your  Active Journal to take notes as you read the lesson.

PRACTICE VOCABULARY

Use the vocabulary activity in your  Active Journal to practice the vocabulary words.

Vocabulary

populate
animism
domesticate
revolution
nomad

Academic Vocabulary

potential
reliable

Over millions of years, many groups of early humans appeared and then died out. *Homo sapiens*, or modern humans, were the last of these groups to appear. As you will read, scientists still have much to learn about the development of the first modern humans. But one fact is clear: These large-brained “wise people” were often on the move. Over many thousands of years, they spread out to **populate**, or become inhabitants of, almost every land area of the world.

When Did People Start to Create Art?

Over the course of the Ice Age, the culture of Paleolithic communities became more and more complex. One of the most important signs of a complex culture is the existence of artwork such as paintings and statues.

What Can We Learn from Ancient Cave Paintings? In 1940, four French teenagers and their dog made a remarkable discovery. The boys were exploring a cave near Lascaux in southern France. By the dim light of their lamps, they were amazed



to see that the walls were covered with paintings of horses, bison, bulls, and other prehistoric animals. Other paintings in the cave showed human figures or abstract designs.

Scientists later determined that the Lascaux cave paintings dated back about 16,000 years, to the time of the last Ice Age. Some images were carved into the stone, but most were painted. The artists made pigments by grinding up minerals of various colors.

Even older cave paintings have been found elsewhere in France, as well as in Spain. Examples of cave and rock art have also been discovered in many other parts of the world where early people lived. For example, the rock paintings shown at the beginning of this chapter are from the Sahara, a vast desert in North Africa.

Stone Age artists also carved small statues. Like the cave paintings, many of these carvings represent animals. Others depict pregnant women.

Analyze Images This Neolithic cave painting of animals was found in Laas Geel, Somalia. **Draw Conclusions** What can you conclude about the skill of early artists from this painting?

Academic Vocabulary
potential • *n.*, possibility to grow and change in the future

What Does Stone Age Art Tell Us? Early works of art such as these show that Stone Age people were capable of complex thoughts and actions. After visiting one French cave, an archaeologist commented,

Primary Source

The mark of human genius is here, full-blown, with its immense and eternal mystery, and with all its **potential** for hope in the success of the adventure of modern man. We become modest in these surroundings; a great feeling of timelessness [comes] from them. When we return to the surface, we can't help but question the motivations that lie behind the creation of all those frescoes. To imagine the unimaginable. In any case, in contemplating them we feel the presence ... of an intense, enormous will to create.

—Robert Begouën, *The Cave of Chauvet-Pont-d'Arc*

We do not know the exact reasons Stone Age people created these works of art. Perhaps hunter-gatherers believed that creating an image of an animal would give them power over that animal during the hunt. Statues of pregnant women may have been intended to bring good luck to women about to give birth.



INTERACTIVE

Paleolithic
Cave Art



READING CHECK **Draw Inferences** What subjects did Stone Age people show in their art? Why might Stone Age artists have chosen to show animals, human figures, and abstract designs?

What Do We Know About Stone Age Religion?

Cave paintings and other art provide strong evidence that the cultures of Stone Age people became more complex over time. Another sign of a more complex culture is the development of religious beliefs and practices. Many of these practices involve death and burial.

How Did Early People Bury Their Dead? Scientists have found much evidence to show that Ice Age people buried their dead. One grave found in present-day Russia contained the bodies of two children, a boy about 13 years old and a girl about 8 years old. Both children were covered with thousands of ivory beads. On his chest, the boy wore an ivory pendant carved in the shape of an animal. The girl wore a bead cap and an ivory pin at her throat.

What Were Some Early Religious Practices?

Discoveries such as cave paintings, statues, and burial sites may suggest how early humans reacted to what they thought were mysterious and powerful forces. These rituals and symbols were an important part of early culture. They go beyond survival, and express deeper meanings of the natural and social world.


The evidence suggests that these early people believed that the natural world was filled with spirits, a belief known as **animism**. To early humans, there were spirits in the animals they hunted. There were also spirits in the trees, rocks, water, and weather around them. Prehistoric people may have painted pictures of animals, such as bison or deer, to honor the spirits of those animals and to ask forgiveness for having to kill them.



READING CHECK Identify Implied Main Ideas

What did the development of religious practices suggest about the relationship early humans had with the natural and social world?

Quick Activity

Explore ancient cave paintings in your  Active Journal.



Analyze Images This child was carefully buried with jewelry made of bones and precious stones. **Infer** What does this burial suggest about the culture of the people who buried him?

When Did People Start to Farm?


By the end of the Paleolithic Era, human beings occupied many regions of the world. They had developed complex spoken language, learned to make a variety of tools and weapons, and adapted to different environments. Yet, in many important ways, their lives had not changed. They still lived in relatively small groups as hunter-gatherers, following the herds of animals that they depended on for survival.

Then, beginning as much as 18,000 years ago, humans gradually began to learn a new skill that over time changed how they would live. By around 10,000-9,000 years ago, some communities were relying on farming for food. This development marked the end of the Paleolithic Era and the beginning of what we call the Neolithic Era, or New Stone Age. (The prefix neo- means “new”.) Around this time, temperatures increased and rainfall patterns changed. Glaciers that had covered so much of Earth began to shrink. As the ice from the glaciers melted, ocean levels rose.

Most plants and animals adapted to these changes. Fir trees, which could survive cold weather, spread north into once-icy regions.

Some large Ice Age animals, however, did not adapt to a warmer world, and many species died out. People who had hunted some of these animals for food had to find something else to eat. Some people adapted to these changes by searching for new sources of food. They found smaller animals to hunt. People living near rivers or lakes began to depend more on fishing.

Quest CONNECTIONS

Study the photo. What does it suggest about what makes a good location for a village? Record your answer in your  Active Journal.



▲ Céide Fields, Ireland, is the site of a Neolithic settlement. It is about six and a half thousand years old and one of the oldest known system of fields used for farming in the world.



How Did People First Modify the Environment? Others learned to modify or change their environment so that it would provide more food. For example, people cleared trees and bushes by setting them on fire. The grasses that grew back attracted grazing animals such as deer. People may also have noticed that, if seeds were scattered on the ground, new plants grew there the next year. This discovery led them to find ways to encourage the growth of wild food plants.

How Did Domesticated Plants and Animals Change People's Lives? Over time, people learned to domesticate plants and animals, especially those that they used for food. To **domesticate** means to change the growth of plants or behavior of animals in ways that are useful for humans. Widespread domestication marked the birth of farming. The shift from hunting to farming was so important that historians call it the Neolithic Agricultural Revolution. A **revolution** is a complete change in ways of thinking, working, or living.

Even before the Agricultural Revolution, wild wolves developed into dogs, which humans then domesticated. Dogs provided help in the hunt, as well as companionship and protection.

Domesticated plants, or crops, became a **reliable** source of food. Grains such as wheat, rice, or maize became chief food sources for entire societies. Many animals also provided food—not only meat, but eggs, milk, and even honey. Horses and oxen became work animals. Sheep and llamas had coats of hair that were used to make clothing.

Domesticated animals, such as horses, sheep, and cattle, were easier to control. People who lived in places where growing food was difficult traveled to different places with their animals. By moving to new areas, the animals would find new grasslands to eat from. The people herding, or guiding, the animals would use them for food and clothing. This way of life was called pastoral nomadism. **Nomads** are people who move from place to place with their herds.

Analyze Images

Ancient people learned to domesticate wolves 20,000 to 15,000 years ago. **Compare** How does the wolf on the left differ from the herding dog on the right?

Academic Vocabulary

reliable • *adj.*, dependable, steady, not risky




▲ These Neolithic stone farm tools are about 10,000 years old. On the left is a hoe. On the right is a plow blade.

At first, there was little difference between wild and domesticated breeds. But over time, people selected the seeds of the plants that produced the best crops to sow again. As a result, domesticated plants began to produce more abundant food that tasted better, were larger, and easier to cook. A wild tomato, for example, is the size of a cherry, but a domesticated tomato is the size of an orange. By contrast, some breeds of domesticated goats, pigs, and cattle are smaller than their wild ancestors. Smaller animals may have been easier to manage.

What New Tools Did People Make? Farmers invented new tools. They used axes to cut down trees for farmland and sickles to harvest grain. The grain was then ground into flour with grinding stones or hand mills.

All of these tools were at first made out of stone. Later people mined for bronze and iron and learned how to smelt, or use heat, to remove metals from a mineral. They used these metals to create more efficient tools. That is why historians refer to different stages of early history as the Stone Age, the Bronze Age, and the Iron Age.


 **READING CHECK** **Analyze Cause and Effect** Why might learning to farm have led early farmers to create new tools?

Lesson Check

Practice Vocabulary

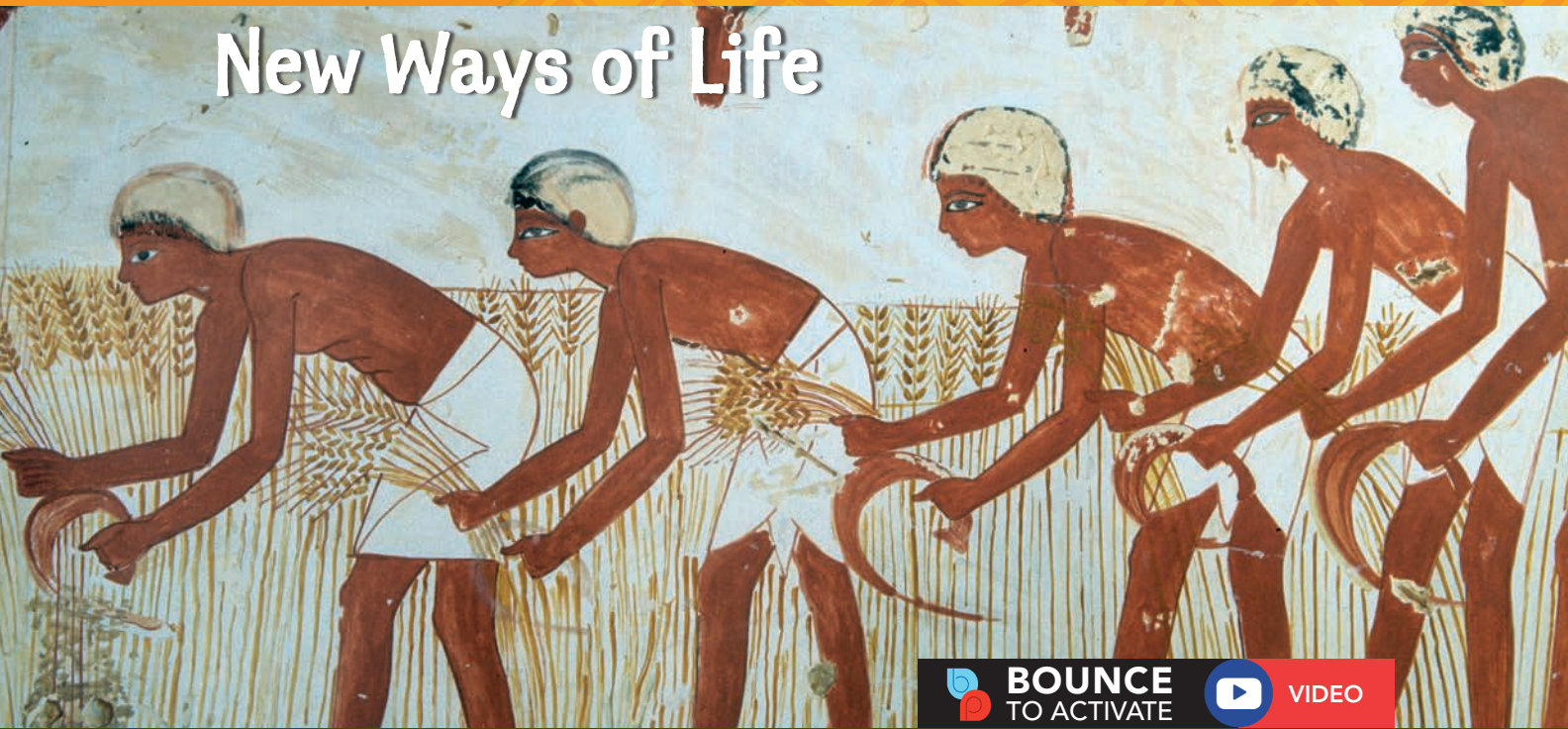
1. What is a belief in **animism**?
2. Why do historians say the ability to **domesticate** plants and animals was a **revolution**?

Critical Thinking and Writing

3. **Understand Effects** What are two signs that people who lived during the Ice Age developed more complex cultures?
4. **Draw Inferences** What skills and tools would be needed to make cave paintings? What does this suggest about the people who created them?
5. **Identify Supporting Details** What did animals do to improve life for humans?
6. **Identify Cause and Effect** Why did some people choose pastoral nomadism as a way of life?
7. **Writing Workshop: Introduce Characters** You're now visiting the Neolithic Era. Write one or two sentences in your  **Active Journal** about an early man or woman who worked with domesticated plants and animals. Write another sentence or two about a herder (pastoral nomad).

LESSON 4

New Ways of Life



GET READY TO READ

START UP


What are these ancient Egyptians doing? What does this activity suggest about their way of life?

GUIDING QUESTIONS


- How did farming enable people to settle in one place and develop specialized skills?
- How did farming villages develop into cities?
- What were the effects of these new ways of life?

TAKE NOTES

Literacy Skills: Analyze Cause and Effect

Use the graphic organizer in your  Active Journal to take notes as you read the lesson.

PRACTICE VOCABULARY

Use the vocabulary activity in your  Active Journal to take practice the vocabulary.

Vocabulary

surplus
specialization
economy

Academic Vocabulary

benefit
accumulate

People of the Paleolithic Era, or Old Stone Age, lived as hunter-gatherers. They could not have imagined many of the things that we now take for granted. People often had to follow herds of animals, so they were unable to settle for long in one place. People could own few possessions—only what they could easily carry. Food supplies were uncertain. Life for many was short and dangerous.

In time, most hunter-gatherers stopped wandering in search of food and settled in one place. Life was still difficult, and survival was still the main concern. But with people staying in one place, the world began to take on many features we recognize today.

Where Did Farming Begin and How Did It Spread?

No one knows for sure where people first began to plant seeds for food. Still, archaeologists have found evidence to suggest where farming began and how it spread. They have also learned something about the way people lived in early farming communities.

Academic Vocabulary

benefit • *n.*, gain; favorable result

Where Were the First Centers of Agriculture? Most historians believe that about 10,000 years ago southwestern Asia became the first center of agriculture. There, scientists have unearthed seeds from domesticated wheat plants that were buried long ago. The seeds are similar to wild varieties of wheat that still grow in the area.

Farming may then have spread from southwestern Asia westward into Africa. It may also have spread northward into Europe and eastward into the Indus River valley of South Asia.

Other centers of agriculture appeared independently in different areas of the world. In southwestern Asia, for example, farming began when people started to plant wheat and barley. In the southern part of present-day China, farming began with the domestication of rice. Farther to the north, a grain called millet was the first crop to be domesticated.

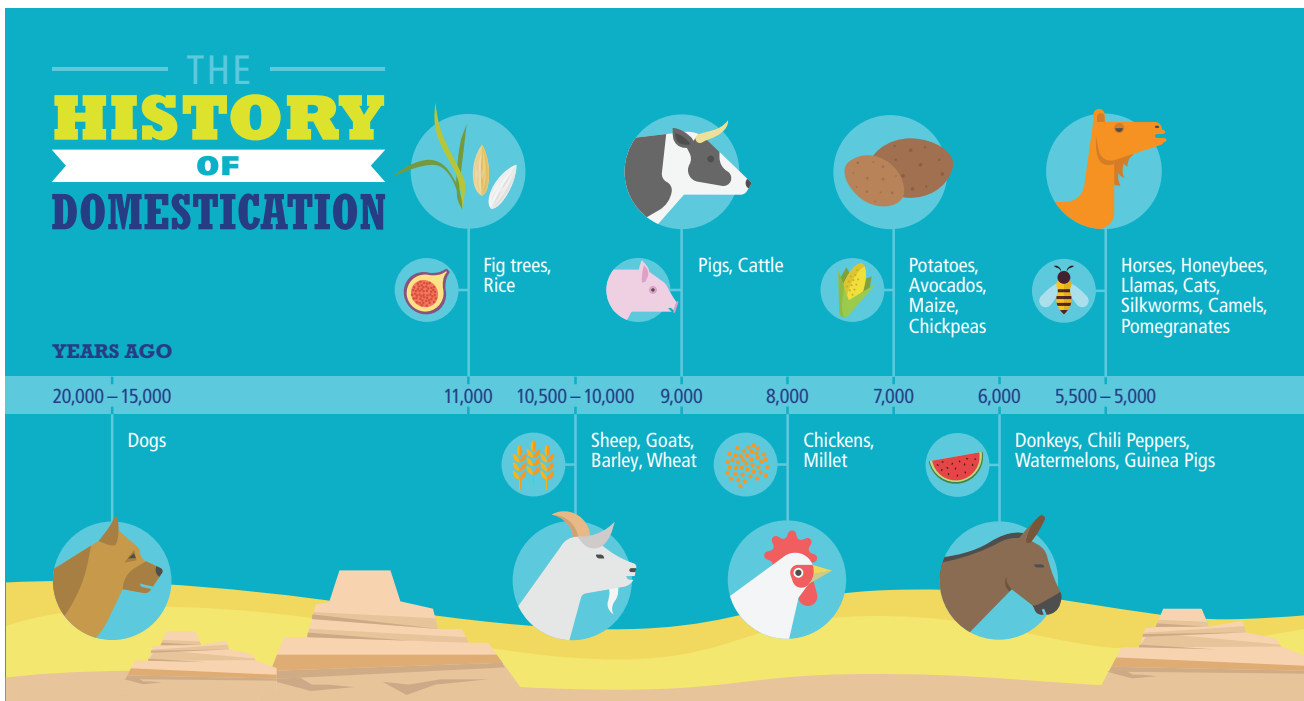
In Central and South America, people learned to grow potatoes, beans, and squash. In Africa, farming began with crops such as sorghum and yams.

What Were the Costs and Benefits of Farming? In every place that agriculture developed, the transition from hunting and gathering to farming took place gradually, over a long period of time. Each way of life had costs as well as **benefits**.

Some of the costs of shifting to agriculture were clear. First, planting crops and herding, or bringing together, animals took a great deal of time and energy. Second, farming was uncertain. If a year's crop failed due to bad weather or disease, a family might starve. Third, farming could be dangerous. Evidence suggests that bands of nomads sometimes attacked farmers and stole their food.

Analyze Diagrams

Domestication started with dogs. Other animals and fruits, vegetables, and grains followed. **Sequence** How many years did it take before horses and cats were domesticated?





Agriculture also offered many benefits. Farming produced more food and required less land than hunting and gathering. An early farm family might need only six to seven acres of land to raise enough wheat or maize to feed themselves for a year. In contrast, a hunter-gatherer family needed about 20,000 acres on which to find enough food for a year.

As a result of agriculture, more people were able to build permanent homes and farming villages. Farming also provided new sources of material for clothing. (Later in this section, you will read more about the new types of shelter and clothing that were invented during the Neolithic Era.)

Some groups tried farming for a time and then returned to hunting and gathering. But in the end, most people chose to remain farmers.

READING CHECK **Summarize** Where did farming begin and how did it spread?

How Did Farming Change Human Culture?

The first effect of farming was on people's food supply. But over time, the Neolithic Agricultural Revolution transformed every part of human culture.

What New Kinds of Shelter Did People Build? Farmers found ways to build permanent shelters. People used a mixture of mud and straw to form walls. The sun baked and hardened the mixture. People made roofs by placing poles and branches across the tops of walls and covering them with mud.

Agriculture most likely originated in many regions.


1. **Interaction** What were some early crops grown in South America? In West Africa?
2. **Region** Identify a crop that was grown in more than one part of the world.




INTERACTIVE

Otzi the Neolithic Ice Man

Quick Activity

Explore ancient innovations, including farming, in your  Active Journal.

Quest CONNECTIONS

Based on the primary source, what was life like in a Neolithic village? Record your findings in your  Active Journal.

One of the oldest known farming settlements in the world is a village called Çatalhöyük (chah tahl hyoo yook). It stood in present-day Turkey more than 8,000 years ago.

At its height, up to six thousand people may have lived in Çatalhöyük. The environment provided sources of water and building materials. A British archaeologist described the two-story homes that made up the settlement:

Primary Source

The houses of Çatalhöyük were so tightly packed together that there were few or no streets. Access to interior spaces was across roofs—which had been made of wood and reeds plastered with mud—and down stairs. People buried their dead beneath the floors. Above all, the interiors were rich with artwork—mural paintings, reliefs, and sculptures, including images of women that some interpreted as evidence for a cult of a mother goddess.

—Ian Hodder, “This Old House”

Each home had its own kitchen and food storage area. The people grew grains and raised flocks of sheep and goats.

How Did Farming Change

Clothing? Agriculture also changed the way that people dressed. For hunter-gatherers, the most important materials for clothing were animal hides and furs. Farming provided new materials that were lighter and easier to work with. From Egypt and India to the Americas, farmers domesticated the cotton plant. They learned to weave cloth from the plant fibers. Another plant, flax, became a source of linen.

Domesticated animals such as sheep and yaks also provided clothing materials. People used wool and other animal hair to form yarn or thread. In China, people later learned to breed silkworms.

What Were the Effects of Food

Surpluses? As crops and herds improved, the amount of food that farmers could produce each year increased. Some families were able to raise a **surplus**, or more than they needed to feed themselves. Surplus food could support a growing population. The size of farming villages thus increased.



▲ Spinning yarn from wool the way it would have been done in ancient times

When there was a surplus of food, not everyone in a village needed to farm. Some people could specialize. **Specialization** occurs when people spend most of their time working at a single job or craft. They could then trade the goods they made for the surplus food grown by farmers. Skilled toolmakers turned stone into polished axes and knives. Potters shaped clay into bowls. Weavers wove sheep's wool into cloth. A few people also became skilled at metalworking. Early metalworkers heated ore to extract, or remove, such metals as copper and tin.

How Did Farming Change Social Organization?

Early farming communities remained small. Like hunting, farming required close cooperation among members of the community. Heads of families consulted to make important decisions. They might discuss when to plant and harvest crops, what to do with food surpluses, or how to protect the community from outside dangers.

Archaeologists have uncovered the remains of several Neolithic villages, such as Skara Brae in Scotland. In these villages, all homes were more or less the same size. Some historians believe this means that great differences in social standing did not yet exist.

Still, having a permanent place to live meant that people could own more possessions. Early farmers filled their homes with furniture, tools, clay pots, and other goods. These items would have been too heavy to move from one campsite to another. Over time, some families **accumulated** more food and possessions than others. Food surplus sometimes led to conflict, however, as some groups wanted to expand their supplies at the expense of others. Some people hired guards to protect their wealth.

As surpluses increased and people began to specialize, greater social differences emerged. As evidence of this inequality, scientists have unearthed graves with jewelry and other fine materials while other graves have none of these things.

 **READING CHECK** **Identify Cause and Effect** How did farming lead to specialization?

How Did the First Cities Begin?

The world's first cities began as farming villages in the Middle East. As the villages grew, they began to trade with one another. Trade, like farming, became an important source of wealth.

The City of Uruk Many historians consider Uruk to be the world's first city. It is thought to have been founded 6,000 to 7,000 years ago. Uruk was different from Çatalhöyük and older farming villages. One difference was Uruk's size. Çatalhöyük covered about 32 acres and was home to no more than 6,000 people. When Uruk was at its height, more than 40,000 people lived there. Uruk covered an area of nearly 1,000 acres and had houses, gardens, and large public buildings such as temples.



Analyze Images This gold stag was crafted by an artist in Çatalhöyük. **Infer** What does it suggest about the skills of ancient craftspeople?


Academic Vocabulary

accumulate • *v.*, collect or attain a large amount of something



▲ A reconstructed Neolithic settlement in the eastern Mediterranean

Quest CONNECTIONS

Based on the photo, what conclusions can you draw about life in a Neolithic village? Record your findings in your  Active Journal.

Another difference was Uruk's form of government. Villages such as Çatalhöyük had little need for complex government. People acted and made decisions according to ancient village customs. A village council settled most disputes. A city such as Uruk was too large to manage that way. Uruk had a strong, well-organized government. The city's first rulers were probably temple priests. Later, powerful military leaders ruled Uruk as kings. These rulers had far more power than a village council did.

How Did Cities Become Centers of Wealth? A city such as Uruk also had a more complex economy than did early farming villages. An **economy** is the system that a community uses to produce and distribute goods and services.

In the earliest human communities, each group produced those goods and services that were necessary for its survival. The group produced these goods and services by hunting and gathering. The goods and services were then shared by the members of the community.

Çatalhöyük's economy was based mainly on farming. By contrast, Uruk's more complex economy was based on both farming and trade. Workshops that produced all kinds of goods lined the city's streets. Traders from Uruk traveled widely. Archaeologists have found pottery and other trade goods from Uruk in many places in the Middle East.

The wealth of Uruk and other early cities attracted many newcomers. People began to move from the countryside into the cities. Many early cities built walls to protect themselves from raiders. Uruk, for example, was surrounded by a thick wall that stretched for 6 miles around the city. This wall was a sign that Uruk was a wealthy city worth protecting.

 **READING CHECK Compare and Contrast** How did the government of Uruk differ from that in villages such as Çatalhöyük?

Lesson Check

Practice Vocabulary

1. How did a **surplus** of food affect the size of the population?
2. How was Uruk's **economy** different from the economy of Çatalhöyük?

Critical Thinking and Writing

3. **Identify Implied Main Ideas** How did farming change the kinds of communities people lived in?
4. **Draw Conclusions** What are some of the benefits and drawbacks of job specialization?
5. **Infer** Why do you think people in early cities began to trade with other cities?
6. **Writing Workshop: Organize Sequence of Events** Make an ordered list in your  Active Journal to show what happens to your characters in your narrative essay. You will use this sequence of events when you write your narrative essay at the end of the Topic.

LESSON 5

The Rise of Civilizations



BOUNCE
TO ACTIVATE



VIDEO

GET READY TO READ

START UP


Examine the photo of the ruins of the ancient city of Uruk. What does it tell you about the society that was centered there?

GUIDING QUESTIONS


- What environmental factors helped civilizations grow?
- What impact did civilizations and complex urban societies have on the surrounding environment?
- How and why did cities give rise to the world's first civilizations?
- What features did all early civilizations have in common?

TAKE NOTES

Literacy Skills: Summarize

Use the graphic organizer in your  Active Journal to take notes as you read the lesson.

PRACTICE VOCABULARY

Use the vocabulary activity in your  Active Journal to practice the vocabulary words.

Vocabulary

civilization religion
resource social class

Academic Vocabulary

manage
specialization

As farming spread, many small settlements appeared. In time, some villages grew into cities. In this lesson, you will read about the rise of early civilizations.

How Did Cities Lead to Civilizations?

As early cities grew in size and power, some of them became centers of civilizations. A **civilization** is a complex society that has cities, a well-organized government, and workers with specialized job skills. The word *civilization* comes from the Latin word *civis*, meaning “resident of a city.”

What Resources Were Important? The rise of early civilizations depended on the creation of a food surplus. Creating that surplus, in turn, depended on the ability of people to manage their resources well. A **resource** is a supply of something that can be used as needed.

The most important resources that people needed were fertile soil, fresh water, and seeds. However, these resources were worth



▲ Statue of a man from about 3500-3300 BCE found in Uruk, Iraq


little if people could not provide the labor and tools needed to produce enough food. Managing these resources well required a level of planning and organization that marked a new stage in human society.

Where Were Early Civilizations? Like the earliest villages, the earliest civilization also appeared in southwestern Asia, in the city-state of Sumer. In time, other civilizations appeared in different parts of the world.

Four of these early civilizations developed in the fertile valleys surrounding major rivers: the Nile in northeastern Africa; the Tigris and Euphrates in the southwest Asian area of Mesopotamia; the Indus in South Asia; and the Huang River in China.

River valleys provided a good setting for permanent settlements. Each year, the rivers rose and flooded the nearby land. When the floodwaters went down, a fresh layer of fertile soil remained that farmers could use to grow crops.

Not all early civilizations began in river valleys. Greek civilization, for example, emerged on a rocky peninsula in southeastern Europe and a series of islands in the eastern Mediterranean Sea. Civilizations also changed their surrounding environment. Farmers near rivers built irrigation systems. Civilizations in the Americas cut down trees and burned them to create farmland. People cleared land to build houses, temples, and markets.

 **READING CHECK Understand Effects** Why did many early civilizations arise in river valleys?

What Are the Features of Civilizations?

The civilizations that arose in different parts of the world differed in many ways. Still, all of them had certain things in common. Most early civilizations shared eight basic features: cities; organized governments; established religion; job specialization; social classes; public works; arts and architecture; and a system of writing.

Cities The first of these features was cities. Early cities emerged near farming centers. As food surpluses led to rapid population growth, villages grew into cities and cities grew into civilizations. They served as centers of religion, government, and culture. A few ancient population centers, such as Damascus, Syria, are still major cities today.



INTERACTIVE

River Valley
Civilizations

Organized Government The second feature of early civilizations was a well-organized government. One role of government is **managing** society's resources so that people get those things they need to survive. A strong government can also form and train an army to defend a society from attack or to expand its borders.

As populations grew, government became more difficult. Powerful rulers called warlords took control of tribes in larger areas and formed governments headed by kings or queens. They relied on large numbers of public officials who handled different duties.

Established Religion A third common feature of a civilization was an established **religion**, or a set of shared spiritual beliefs. Everyone generally followed the same beliefs and practices. Religion was often linked to government. Rulers of early civilizations usually claimed that their right to rule came from the gods. In China, for example, emperors were called "Sons of Heaven."

In most early civilizations, people believed in many gods and goddesses that controlled most events in their lives. People feared their gods, but also hoped that the gods would protect them from harm.

Academic Vocabulary

manage • v., to direct; have control over



Analyze Diagrams Although civilizations arose in different parts of the world, they shared these eight characteristics. **Demonstrate Reasoned Judgment** What feature do you think was the most important to a successful civilization? Why?

Academic Vocabulary

specialization • *n.*, act of concentrating on a limited number of goods or activities

Analyze Images In this painting from about 1425 BCE, Egyptians are shaping metal storage vessels. **Identify Main Ideas** How does this painting show job specialization?



To keep their gods and goddesses happy, priests offered sacrifices and led prayers. This prayer is from the civilization of ancient Sumer:

Primary Source

May the known and unknown god be pacified!

May the known and unknown goddess be pacified!

The sin which I have committed I know not. . . .

My god, my sins are seven times seven; forgive my sins!

My goddess, my sins are seven times seven; forgive my sins!

—“Penitential Psalms,” translated by Robert F. Harper

From earliest times, religion included beliefs about life after death. People also looked to their religion for rules about how to treat one another and how to live moral lives.

Job Specialization Job specialization was a fourth feature that was common to civilizations. Most people in early civilizations were farmers. They produced enough food to support many kinds of specialized workers. Skilled craftworkers specialized in producing goods. Traders and merchants specialized in buying and selling goods. Job **specialization** allowed people to develop the many skills and talents needed to create and maintain a civilization.

Social Classes A fifth feature of early civilizations was a system of social classes. **Social classes** are groups of people that occupy different ranks or levels in society. Class structures resembled pyramids, with the smallest number of people at the top and the largest number at the bottom.

The highest social class in most early societies was made up of priests and rulers. The people at these ranks had the most power and wealth.

The social classes in the middle included farmers, merchants, and skilled workers. Members of these classes varied in wealth and status from one society to another. In many societies, slaves made up the lowest class. Slaves were often prisoners captured in war or poor people who sold themselves to pay their debts.

Public Works Public works were a sixth feature of civilizations. Governments organized workers to build large-scale projects such as roads, water systems, city walls, and granaries where food was stored after harvesting. Building these public works was costly,

time-consuming, and often dangerous. Often, workers were injured or killed. Still, public works benefited the society as a whole.

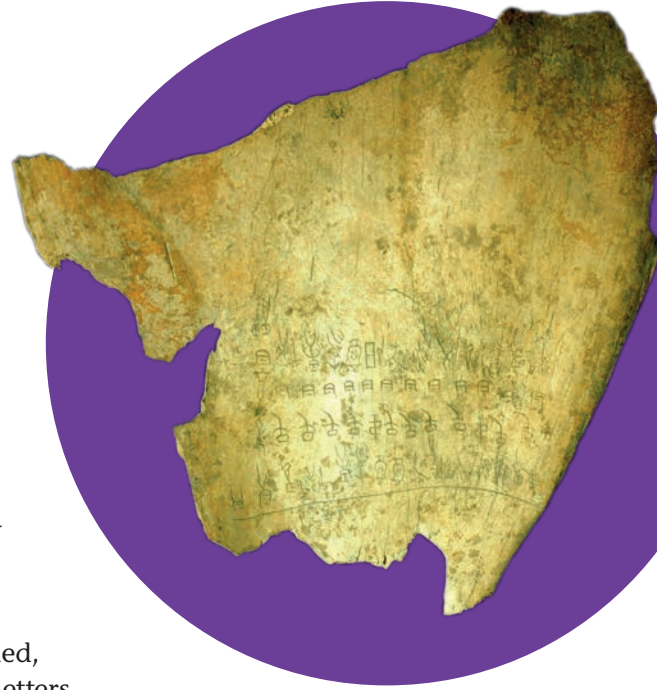
Arts and Architecture Architecture was closely related to public works. Early people built and decorated magnificent temples, tombs, and palaces. Many of these buildings served a public function, but they were also objects of beauty.

Early civilizations developed other forms of art as well. In this chapter, you can see a number of examples of statues and paintings that date back thousands of years. Skilled craftworkers also produced fine luxury items for the upper classes, such as gold jewelry and perfume boxes. Music and literature, too, enriched the lives of early people and became a mark of advanced civilization.

System of Writing The final common feature of many civilizations was a system of writing. Forms of writing varied, from picture writing to symbols representing sounds and letters.

In some early societies, writing was first developed mainly to record numbers, such as the amount of grain harvested. Eventually, however, people used writing to preserve all kinds of information. They recorded laws, wrote down prayers to the gods, and described the mighty deeds of rulers.

Historians have learned much about the early civilizations that left behind written records. With the development of writing, we pass from prehistory to recorded history.



▲ Ancient Chinese writing, etched into bone

 **READING CHECK Identify Main Ideas** What are the eight basic features of civilization?


Lesson Check

Practice Vocabulary

1. Choose one of the eight features of **civilization** and explain how it still exists in our civilization today.
2. What social classes were common in most early civilizations?

Critical Thinking and Writing

3. **Infer** What would happen to a civilization if it ran out of resources?

4. **Identify Supporting Details** What are public works? Give two examples.
5. **Synthesize** How was job specialization linked to the emergence of social classes?
6. **Writing Workshop: Use Descriptive Details and Sensory Language** Write notes in your  Active Journal about descriptive details and sensory language that you can use in the narrative essay you will write at the end of the Topic.

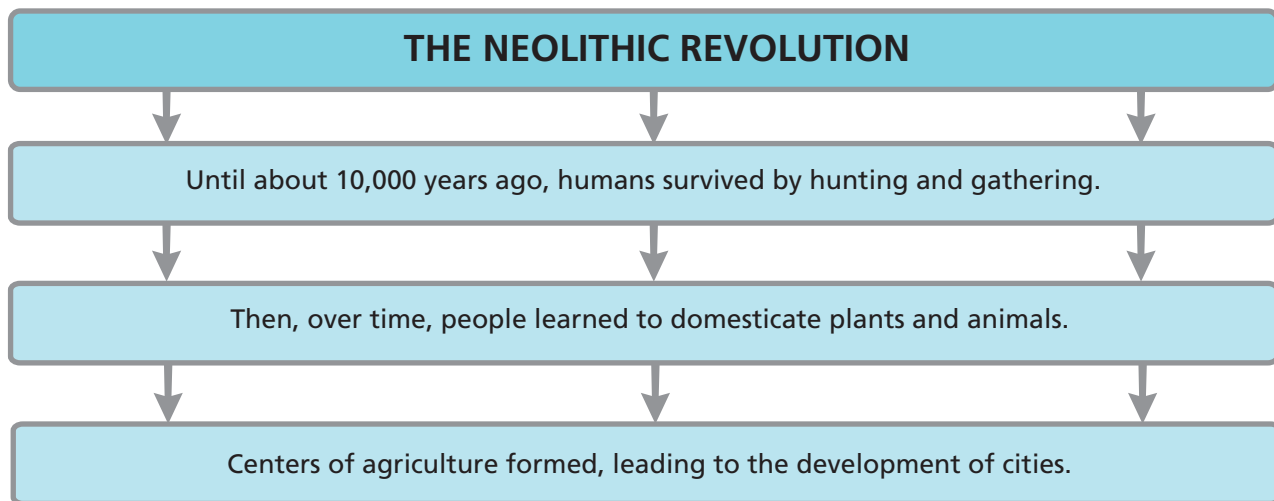
✓ Review and Assessment

VISUAL REVIEW

Neanderthals and Early Humans

Neanderthals	Homo Sapiens
<ul style="list-style-type: none"> • Were first to bury their dead • May have believed in life after death • Hunted animals • Could form language • Used tools and fire 	<ul style="list-style-type: none"> • Had larger brains than predecessors • Could form complex language • Cooperated with each other • Hunted animals • Used tools and fire

Hunting, Gathering, and Farming



READING REVIEW

Use the Take Notes and Practice Vocabulary activities in your Active Journal to review the topic.



INTERACTIVE

Practice vocabulary using the Topic Mini-Games.

Quest FINDINGS

Design Your Village


Get help for designing your Neolithic village in your Active Journal.

ASSESSMENT

Vocabulary and Key Ideas

1. **Explain** How do **archaeologists** and **geologists** help us learn about the past?
2. **Describe** How did **hunter-gatherers** of the Paleolithic Era survive?
3. **Describe** How did people **adapt** to changing climate conditions during the last Ice Age?
4. **Summarize** What was the Neolithic Agricultural **Revolution**?
5. **Explain** How did farming lead to food **surpluses**?
6. **Explain** In early civilizations, how was government connected to religion?
7. **Define** What is a **hieroglyphic**?

Critical Thinking and Writing

8. **Compare and Contrast** How were Stone Age people different and similar to us?
9. **Infer** What do you think happens to species that fail to adapt?
10. **Analyze Cause and Effect** How did farming lead to the development of social classes?
11. **Analyze Cause and Effect** Do you think there could have been civilization without the development of agriculture? Explain.
12. **Revisit the Essential Question** Does geography really shape people's lives? Explain.
13. **Writing Workshop: Write a Narrative Essay**
Use the notes you made in your  Active Journal to write a narrative essay in which you travel through time to see how hunter-gatherers, early farmers, and pastoral nomads lived.

Analyze Primary Sources

14. According to the primary source, animals were domesticated in certain ways in order to
 - A. be larger.
 - B. have keener senses.
 - C. be more useful to people.
 - D. survive better in the wild.

"Chickens were selected to be larger, wild cattle (aurochs) to be smaller. . . . Most domestic animals . . . have smaller brains and less acute sense organs than do their wild ancestors. Good brains and keen eyes are essential to survival in the wild, but represent a . . . waste of energy in the barnyard, as far as humans are concerned."

—Jared Diamond, *Nature*, August 8, 2002

Analyze Maps

Use the map at right to answer the following questions.

15. Which letter represents Mesopotamia? Which rivers was it settled near?
16. Which letter represents the Indus Valley? Which continent is it on?
17. Which letter represents Egypt? Which body of water does the Nile River flow into?

