

# Early Humans and the Agricultural Revolution

#### **ASKING ESSENTIAL QUESTIONS**

How do people adapt to their environment?

What Will I Learn? I will learn how technology allowed early peoples to change and, ultimately, survive.

Why Does This Matter To Me? By learning to adapt, the Paleolithic people were able to survive and thrive during the Ice Age. For example, building advanced tools helped them to feed themselves. Building adequate shelter kept them protected. Societies all over the world continue to learn and adapt today, which makes our lives easier. Think about how many advancements, such as medicine, safer cars, and computers, allow us to thrive.

How Will I Know That I Learned It? I will be able to describe how the Paleolithic people changed over time and explain how this affected them.



Using Your Inquiry Journal As you read in this chapter and examine the primary sources, use your Inquiry Journal to help you make notes and expand your list of questions. As you gather information, think about how you will answer the Essential Question(s) above.

## CHAPTER 1

#### **LESSON 1**

**Hunter-Gatherers** 

#### **LESSON 2**

The Agricultural Revolution



GO DIGITAL It's All Online!



Go to the Foldables® library in the back of your book to make a Foldable® that will help you take notes while reading this chapter.

# PLACE & TIME Early Humans 8000 B.C.E. to 2000 B.C.E.

HUMAN SETTLEMENTS 8000 B.C.E. TO 2000 B.C.E.

During the Paleolithic Age, people began to develop technology, or knowledge that is applied to help people. They created tools that helped them survive in different locations.

#### STEP INTO THE PLACE



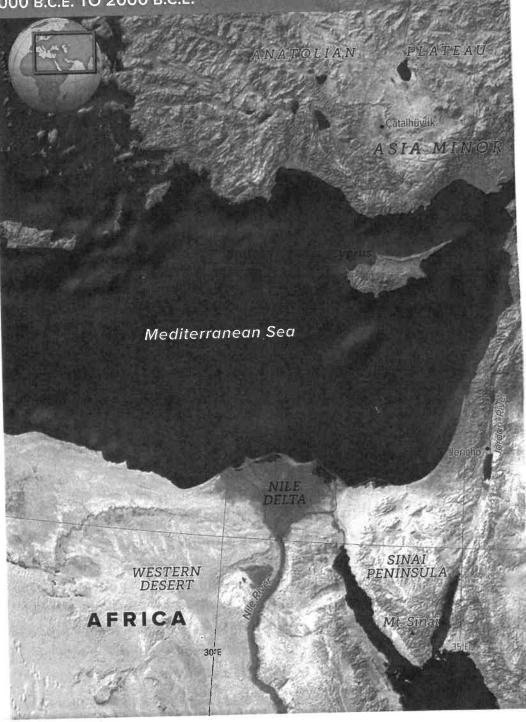
## GEOGRAPHIC REASONING

By about 8000 B.C.E., people in Southwest Asia began to stay in one place and grow crops. They also raised animals for food and clothing.

- SPATIAL THINKING Look at the map. Near what major body of water are Çatalhüyük and Jericho located?
- 2. HUMAN-ENVIRONMENT INTERACTION Why do you think the earliest settlements developed along rivers?

## STEP INTO THE TIME

CHRONOLOGICAL THINKING How might the end of the Ice Age have affected the development of farming?



EARLY SETTLEMENTS

2.5 MILLION B.C.E.

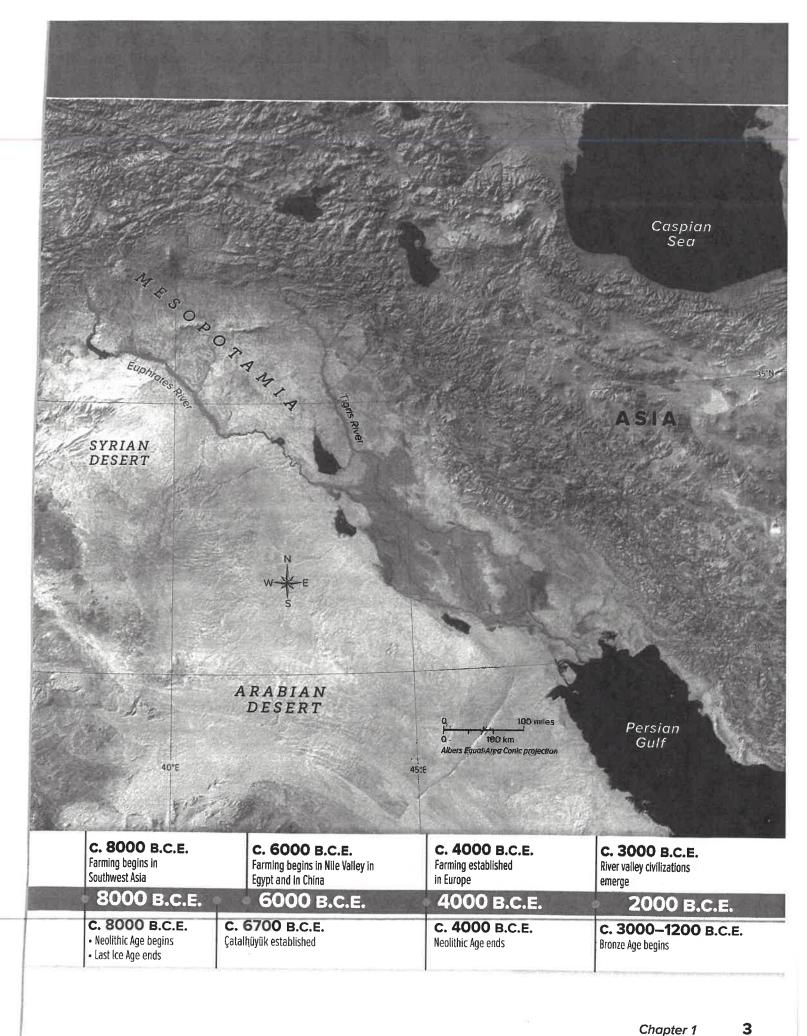
100,000 B.C.E.

THE WORLD

c. 2.5 million B.C.E.

Paleolithic Age begins

C. 100,000 B.C.E. Last Ice Age begins



#### ESSENTIAL QUESTION

 How do people adapt to their environment?

#### LESSON 1

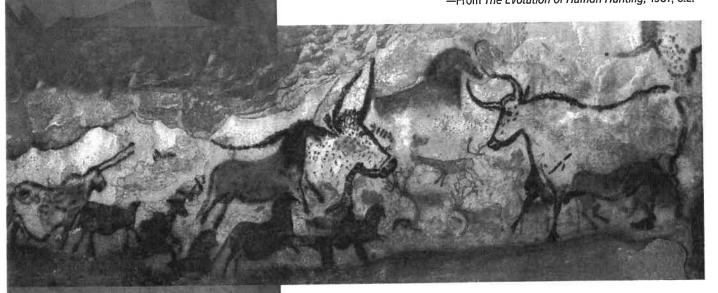
## **Hunter-Gatherers**

THE STORY BEGINS...

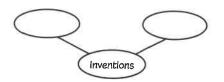
This is my first time hunting with the men. Though it is cold, my hand is sweaty as I grip my spear, trying to listen to every sound in every direction. It is a reindeer, I think, or maybe a horse. I have heard these sounds before. We move slowly, quietly. We do not want to scare it. We need the food. We need the skins for warmer clothes. We need to make our shelters warmer and sturdier as the days grow shorter and the nights grow colder. We must be successful. We must. The survival of the group depends on us.

**66**[It] is clear that reindeer, red deer, horse, ibex [a wild goat] and bison were the mainstays of Late Upper Paleolithic subsistence, and that these species were taken in numbers, and with tactics and weapons which were unprecedented in the history of hominid adaptations. Besides using the meat, marrow [soft tissue in bones] and brains of mammals for food, hunters also employed bone for fuel, skins for clothing and shelters, antler for tools and art objects, teeth for ornaments, sinews [body tendons] for cordage [ropes], etc. **??** 

-From The Evolution of Human Hunting, 1987, C.E.



Cave art, such as the Panel of the Unicorn in Lascaux, France, provides some information about the animals likely hunted by Paleolithic peoples.
[c. 17,000–15,000 B.C.E.]



#### **ANALYZING KEY IDEAS AND DETAILS**

Read closely to identify two important inventions of Paleolithic people. Use a chart like this one to record the details. Then explain why these inventions were important.

## THE PALEOLITHIC AGE

GUIDING QUESTION What was life like during the Paleolithic Age?

Historians call the early period of human history the Stone Age. They do this because it was the time when people used stone to make tools and weapons. The earliest part of this period was the **Paleolithic** (pay-lee-uh-LIH-thick) Age. In Greek, *paleolithic* means "old stone." Therefore, the Paleolithic Age is also called the Old Stone Age. The Paleolithic Age began about 2.5 million years ago and lasted until around 8000 B.C.E. Remember, that is about 4,500 years earlier than recorded time, which starts about 5,500 years ago.

## ANALYZING KEY IDEAS AND DETAILS

- DESCRIBING How did tools change the lives of Paleolithic people?
- 2. **EXPLAINING EFFECTS** How did building structures help the Paleolithic people survive?

#### SURVIVING IN THE PALEOLITHIC AGE

Try to imagine what life was like during the Paleolithic Age. Think about living in a time long before any roads, farms, or villages existed. Paleolithic people often moved around in search of food. They were **nomads** (NOH•mads), or people who regularly move from place to place to survive. They traveled in groups, or bands, of about 20 or 30 members.

Paleolithic people survived by hunting and gathering. The search for food was their main activity, and it was often difficult.

#### **DETERMINING MEANING**

Nomad is a noun. Nomadic is a related adjective. What do you think nomadic means?



Paleolithic people traveled in bands to hunt and gather food. Bands lived together in the open, under overhangs such as the one pictured here, or in caves. [Modern illustration]

**IDENTIFYING CAUSES** Why did these people move together as a group?

5

#### CIVIC PARTICIPATION

Like people today, Paleolithic people worked together to keep their group safe and productive. Finding food to keep the group well-fed was the most important aspect of survival, so men hunted and women gathered (though there is some evidence that women may have hunted as well). Women also took care of the children. Through teamwork, Paleolithic people survived generation after generation. In the modern world, people work in many industriesmilitary, health care, banking, food services, plumbing, teaching, music, and more—to keep society moving.

Paleolithic peoples used tools like this for many purposes. Look at this ax and decide what materials it was made of.

DRAWING CONCLUSIONS What do you think this tool was used for? Why?

They had to learn which animals to hunt and which plants to eat. Paleolithic people hunted buffalo, bison, wild goats, reindeer, and other animals, depending on where they lived. Along coastal areas, they fished. These early people also gathered wild nuts, berries, fruits, wild grains, and plants.

#### FINDING FOOD

Paleolithic men and women performed different tasks within the group. Men—not women—hunted large animals. They often had to search far from their camp. Men had to learn how animals behaved and how to hunt them. They had to develop tracking methods. At first, men used clubs or drove the animals off cliffs to kill them. Over time, however, Paleolithic people developed tools and weapons to help them hunt. The traps and spears they made increased their chances of killing their prey.

Women stayed close to the camp, which was often located near a stream or other body of water. They looked after the children and searched nearby woods and meadows for berries, nuts, and grains. Women taught the children which foods were edible. They trapped small animals and kept the camp safe. Everyone worked to find food because it was the key to the group's survival.

Some scientists believe that an equal relationship existed between Paleolithic men and women. It is likely that both made decisions that affected the band or group. Some evidence suggests that some men and women may have hunted in monogamous pairs. This means that a man and a woman worked together to find food for themselves and their children. Such groupings became the first families.

## THE INVENTION OF TOOLS

Culture is the way of life for a group of people who share similar beliefs and customs. The **methods** Paleolithic people used to hunt and gather their food were part of their culture, as were the tools they used.

Technology (tehk•NAHL•uh•jee)—tools and methods crafted to perform tasks—was first used by Paleolithic people. Before this time, sticks, stones, and tree branches served as tools. Later, people made devices from a hard stone called flint. Have you ever imagined how difficult it would be to prepare or eat food without a cutting tool? Paleolithic people learned that by hitting flint with another hard stone, the flint would flake into pieces. These pieces had very sharp edges that could be used for cutting. Hand axes, for example, were large pieces of flint tied to wooden poles. Flint technology was a major breakthrough for early peoples.

The breakthrough seems to have happened almost simultaneously in different parts of the world. In the words of archaeologist B.B. Redding:

There is great similarity in these stone weapons and implements wherever found throughout the world. A spearhead or scraper, an arrowhead or celt from England, could not by its shape or peculiarity of manufacture be distinguished from similar implements found in Denmark, Palestine, Japan or South America. The stones used might be different but the mode of manufacture and general shape are nearly always the same. ??

-from "How Our Ancestors in the Stone Age Made Their Implements," 1879 C.E.

Over time, early people made better, more complex tools. Spears and bows and arrows made killing large animals easier by allowing hunters to kill from farther away. Harpoons, or spears with sharp points, and fishhooks increased the number of fish caught. Early humans used sharp-edged tools to cut up plants and dig roots. They used scraping tools to clean animal hides, which they used for clothing and shelter.

By the end of the Paleolithic Age, people were making smaller and sharper tools. They crafted needles from animal bones to make nets and baskets and to sew hides together for clothing. This technology had a far-reaching effect. It drove the development of more advanced farming tools and influenced where people settled.

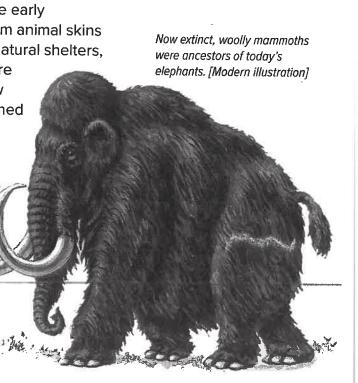
#### CHANGING TO SURVIVE

Climate affected how Paleolithic people lived. Some early people lived in cold climates and made clothing from animal skins to stay warm. They sought protection in available natural shelters, such as caves and rock overhangs. Remember, there were no houses or apartment buildings as we know them in the Paleolithic Age. Gradually, humans learned to make their own shelters. People constructed tents and huts of animal skins, brush, and wood. In very cold climates, some people made shelters from ice and snow. In regions where wood was scarce, Paleolithic people used the large bones from dead woolly mammoths, or hairy elephantlike animals, to build frames for shelters. They then covered the bones with animal hides.

People living in warmer climates, on the other hand, needed little clothing

## ANALYZING SECONDARY SOURCES

- 1. EVALUATING ARGUMENTS What claim does Redding make?
- 2. CITING TEXT EVIDENCE What evidence does Redding provide to support his claim?





Paleolithic art from c. 11,000-7500 B.C.E. has been found in caves in Argentina. Early people left a message that remains today.

ASKING QUESTIONS What are two questions that an archaeologist might ask to learn more about the people who created this cave painting?

or shelter. For the purposes of safety and comfort, however, many lived in caves and huts. These shelters provided protection against attacks by large animals.

## FIRE SPARKS CHANGES

Life became less difficult for Paleolithic people once they discovered how to make fire. People learned that fire provided warmth in cold caves. It provided light when it was dark and could be used to scare away wild animals. Armed with spears, hunters could also use fire to chase animals from bushes to be killed. Eventually, people gathered around fires to share stories and to cook. Cooked food, they discovered, tasted better and was easier to chew and digest. In addition, meat that was smoked by fire did not have to be eaten right away and could be stored.

How did people learn to use fire? Archaeologists believe early humans produced fire by friction. They learned that by rubbing two pieces of wood together, the wood became heated and charred. When the wood became hot enough, it caught fire. Paleolithic people continued rubbing wood together, eventually developing drill-like wooden tools to start fires. They also discovered that a certain stone, iron pyrite, gave off sparks when struck against another rock. The sparks could then ignite dry grass or leaves—another way to start a fire.

## LANGUAGE AND ART

Other advancements took place during the Paleolithic Age.
One important advancement was the development of spoken language. Up until this time, early people **communicated** through sounds and physical gestures. Then, they began to develop language.

Ancient peoples started to express themselves in words for the same reasons we do. We use language to communicate information and emotions. Language makes it easier for us to work together and to pass on knowledge. We also use words to express our thoughts and feelings. The spoken language of early people was **constantly** growing and changing. New technology and more complicated experiences, for example, required new words.

Early people also expressed themselves through art. Some of this art can still be seen today, even though it is thousands of years old. For example, in 1879 a young girl named Maria de Sautuola wandered into a cave on her grandfather's farm near Altamira, Spain. She was startled by what she discovered on the walls of that cave:

66 Maria entered the cave ... and suddenly reappeared all excited, shouting 'Papa, mira, toros pintados! [Papa, look, painted bulls!]' Maria had discovered one of the most famous animal-art galleries in the world. >9

-from Hands: Prehistoric Visiting Cards? by August Gansser

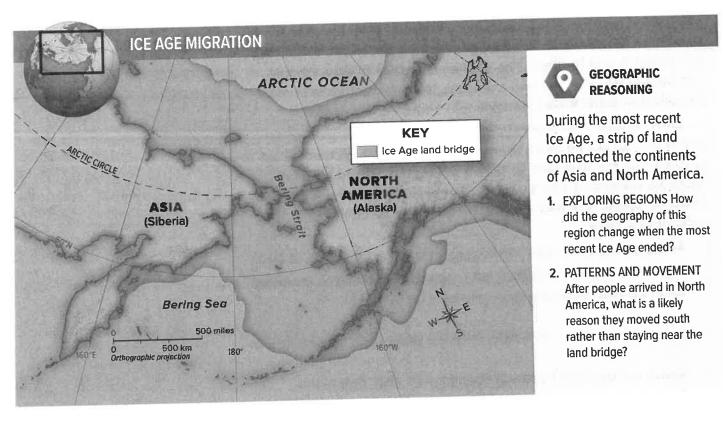
About ten thousand years before Maria's visit, Paleolithic artists had painted mysterious signs on the cave's ceiling. Some of the paintings were of shapes and handprints. Many of the signs, however, were in the shapes of animals. Images of horses, boars, bison, and deer can be found in the cave. In 1940, a cave with similar paintings to those in Spain was discovered near Lascaux (lah•SKOH) in southern France by a group of teenagers exploring the area.

Paleolithic cave paintings have been found all around the world. Early artists crushed yellow, black, and red rocks and

The paintings in the Lascaux caves, created around 20,000 years ago, are the most famous examples of Paleolithic art. Scientists now believe that such paintings took thousands of years, and hundreds of generations, to produce.

**IDENTIFYING CAUSES** Why do you think these cave paintings last so long?





combined them with animal fat to make their paints. They used twigs and their fingertips to apply these paints to the rock walls. They later used brushes made from animal hair. Early people created scenes of lions, oxen, panthers, and other animals. Few humans, however, appear in these paintings.

Historians are not sure why early artists chose to make cave paintings. Early people may have thought that painting an animal would bring hunters good luck. Some scholars believe, however, that the paintings may have been created to record the group's history. They may have been created simply to be enjoyed.

#### M CHECKING FOR UNDERSTANDING

- 1. EXPLAINING Why was fire important for Paleolithic people?
- 2. DESCRIBING How did Paleolithic people express themselves?

## THE ICE AGES

GUIDING QUESTION How did people adapt to survive during the ice ages?

Tools and fire were two important technological developments of Paleolithic people. Throughout history, people have used new technology to help them survive when the environment changes. The ice ages were major environmental disturbances. The changes they brought about threatened the very survival of humans.

ANALYZING KEY IDEAS AND DETAILS

**DESCRIBING** How did the Paleolithic people alter the way they lived to survive the last Ice Age?

#### WHAT CHANGES CAME WITH THE ICE AGES?

The ice ages were long periods of extreme cold that affected all of Earth. The most recent Ice Age began about 100,000 years ago. Thick sheets of ice moved across large parts of Europe, Asia, and North America. As the ice sheets, or glaciers, grew larger, the water level of the oceans was lowered. The low sea levels exposed a strip of dry land connecting the continents of Asia and North America. This strip of land was known as a land bridge. The land bridge acted as a natural highway that allowed people to travel from Asia into North America. From there, Paleolithic peoples moved southward to settle in different regions.

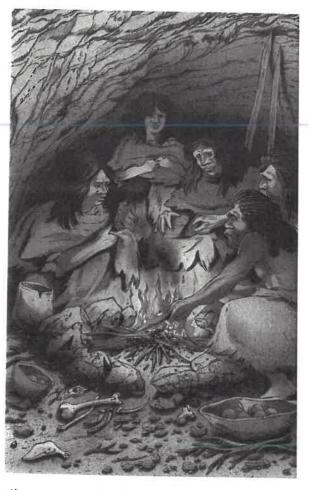
#### HOW DID THE ICE AGES AFFECT HUMANS?

Ice age conditions posed a grave threat to human life. To survive in the cold temperatures, humans had to adapt, or change, many areas of their lives. One way they adapted their diets was by enriching meals with fat. To protect themselves from the harsh environment, they

learned to build sturdier shelters. They also learned to make warm clothing using animal furs. Paleolithic people used fire to help them stay warm in this icy environment. The last Ice Age lasted about 90,000 years, ending between about 9000 and 8000 B.C.E.



- 1. EXPLAINING How was a land bridge formed during the last ice age?
- 2. EXPLAINING EFFECTS How did the Ice Age force humans to learn to do new things?



After early people controlled fire, they brought it into their shelters. At the site of some Stone Age huts. scientists have discovered an early form of a fireplace—a shallow hole lined with blackened stones. [Modern illustration]

## **LESSON 1** REVIEW AND ACTIVITIES

#### Time And Place

1. EXPLAINING How did the land bridge affect the development of the Paleolithic people?

#### **Building History-Social Science** Analysis Skills

- 2. DESCRIBING By what methods did Paleolithic people get food?
- 3. SUMMARIZING How did fire help Paleolithic people survive?
- 4. RELATING EVENTS How did the ice ages affect where peoplesettled in the Americas?
- 5. EXPLAINING ISSUES How did climate affect the type of shelter constructed by Paleolithic people?

#### Writing About History

6. NARRATIVE WRITING You are a mother or father who lives in the early Paleolithic Age. In a few paragraphs, describe your daily life.

#### Collaborating

7. PRESENTING In a small group, decide upon what you consider to be the most useful invention or adaptation that was developed in the Paleolithic Age. Be sure you can explain how it changed the lives of Paleolithic people. Prepare to defend your choice with facts and details in a short debate with other groups in your class.



Include this lesson's information Study Organizer in your Foldable®.

## **ESSENTIAL QUESTION**

 How do people adapt to their environment?

# THE **STORY** BEGINS ...

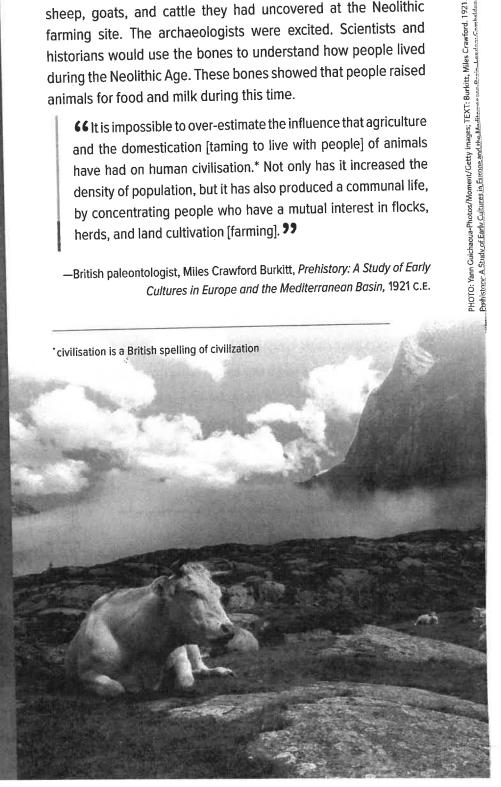
LESSON 2

## The Agricultural Revolution

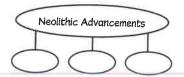
The archaeologists swept away the dirt from the bones of the sheep, goats, and cattle they had uncovered at the Neolithic farming site. The archaeologists were excited. Scientists and historians would use the bones to understand how people lived during the Neolithic Age. These bones showed that people raised animals for food and milk during this time.

66 It is impossible to over-estimate the influence that agriculture and the domestication [taming to live with people] of animals have had on human civilisation.\* Not only has it increased the density of population, but it has also produced a communal life, by concentrating people who have a mutual interest in flocks, herds, and land cultivation [farming]. 99

—British paleontologist, Miles Crawford Burkitt, Prehistory: A Study of Early Cultures in Europe and the Mediterranean Basin, 1921 C.E.



Cattle rest and graze in the Pyrenees mountain range in France.



#### ANALYZING KEY IDEAS AND DETAILS

Read closely to identify three advancements made during the Neolithic period. Use a diagram like this one to record the details. Then explain why these advancements were important.

## **NEOLITHIC TIMES**

GUIDING QUESTION How did farming change people's lives?

The earliest people were nomads who moved from place to place to hunt animals and gather plants. After the last Ice Age ended, Earth's temperatures rose. As the climate warmed, many nomads moved into areas with a mild climate and fertile land.

Another historical revolution then occurred. For the first time, people began staying in one place to grow grains and vegetables. Gradually, farming replaced hunting and gathering as the main source of food. At the same time, people began to **domesticate** (duh•MEHS•tih•kayt), or tame, animals for human use. Animals transported goods and provided meat, milk, and wool.

Author H.G. Wells describes what a revolutionary accomplishment this was:

66 Now the ploughing of land, the sowing of seed, the reaping of harvest, threshing and grinding, may seem the most obviously reasonable steps to a modern mind . . . But to the primitive man of twenty thousand years ago neither of the systems of action and reasoning that seem so sure and manifest to us to-day were at all obvious. He felt his way to effectual practice through a multitude of trials and misconceptions. ??

-from A Short History of the World, 1922 C.E.

#### THE NEOLITHIC AGE

This change in the way people lived marked the beginning of the **Neolithic Age** (nee•uh•LIH•thick). It began about 8000 B.C.E. and lasted until around 4000 B.C.E.—about 4,000 years. The word neolithic is Greek for "new stone." Calling this time period the New Stone Age, however, is somewhat misleading. Although new stone tools were made, the real change in the Neolithic Age was the shift from hunting and gathering to **systematic agriculture**. This is growing food on a regular basis.

This shift from hunting and gathering to food production, however, did not happen quickly. Even during the Mesolithic Age, or Middle Stone Age, some people continued to hunt and gather, while others began to grow their own food.

## ANALYZING KEY IDEAS AND DETAILS

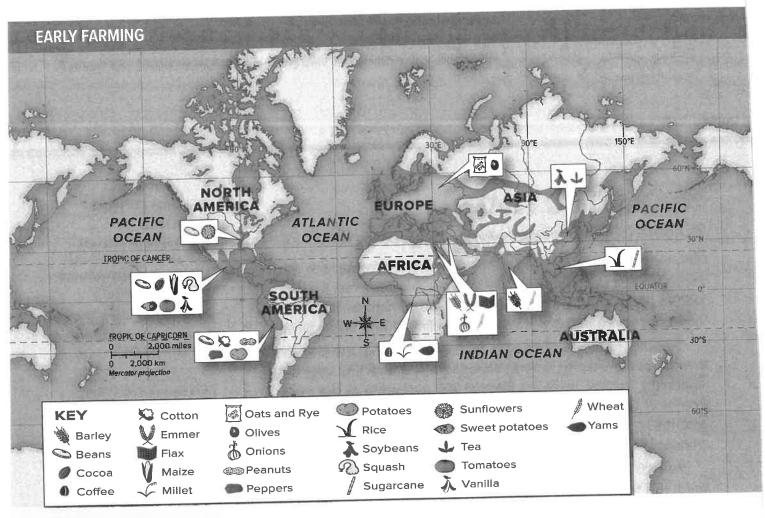
- DETERMINING CENTRAL IDEAS What was the benefit of systematic agriculture over hunting and gathering?
- 2. IDENTIFYING STEPS Where did farming spread after it emerged in Southeast Asia?

#### **DETERMINING MEANING**

What is an antonym for the word domesticate?

## ANALYZING SECONDARY SOURCES

IDENTIFYING PERSPECTIVES
 According to Wells, how did early people learn to farm?





## GEOGRAPHIC REASONING

Between about 7000 and 2000 B.C.E., farming developed on different continents.

- 1. EXPLORING REGIONS What crops were grown south of the Equator?
- 2. EXPLORING PLACE Why do you think different crops were grown in Central America?

## BIG CHANGES FOR HUMANKIND

Historians call this settled farming the Agricultural Revolution. The word *revolution* refers to any change that has an enormous effect on people's ways of life. While hunter-gatherers ate wild grains that they collected, early farmers saved some of the grains to plant. Humans lived differently once they learned how to grow crops and tame animals that produced food. They now could produce a constant food supply. This allowed the population to grow at a faster rate. Nomads gave up their way of life and began living in settled communities. Some historians consider the Agricultural Revolution the most important event in human history.

## WIDESPREAD FARMING

By 8000 B.C.E., people in Southwest Asia began growing wheat and barley. They also domesticated pigs, cows, goats, and sheep. From there, farming spread into southeastern Europe. By 4000 B.C.E., farming was an established **economic** activity in Europe.

At about the same time, around 6000 B.C.E., people had begun growing wheat and barley in the Nile Valley in Egypt.

Farming soon spread along the Nile River and into other regions in Africa. In Central Africa, different types of crops emerged. There, people grew root crops called tubers, which included yams. They also grew fruit crops, such as bananas. Wheat and barley farming moved eastward into India between 8000 and 5000 B.C.E.

By 6000 B.C.E., people in northern China were growing a food grain called millet and were domesticating dogs and pigs. By 5000 B.C.E., farmers in Southeast Asia were growing rice. From there, rice farming spread into southern China.

In the Western Hemisphere, between 7000 and 5000 B.C.E., people in Mexico and Central America were growing corn, squash, and potatoes. They also domesticated chickens and dogs.

#### CHECKING FOR UNDERSTANDING

- 1. EXPLAINING EFFECTS How did the spread of farming change the lives of nomads?
- 2. INFERRING Why did farming most likely spread along the Nile River?

## LIFE IN THE NEOLITHIC AGE

GUIDING QUESTION What was life like during the Neolithic Age?

During the Neolithic Age, people settled in villages where they built permanent homes. They **located** villages near fields so people could plant, grow, and harvest their crops more easily. People also settled near water sources, especially rivers.

## ANALYZING KEY IDEAS AND DETAILS

- CITING TEXT EVIDENCE Why is the presence of shrines significant to Çatalhüyük?
- 2. SUMMARIZING How did the roles of men and women change as early civilizations developed?



Originally, Neolithic people built large dwelling places that housed a small clan, or family group, along with their cattle and grain stores. Eventually, these were replaced by one- or two-room houses, which were usually clustered in groups. [Modern illustration]

**EXPLAINING CAUSES** Why would methods for building houses vary depending on geographical location?



The village of Çatalhüyük grew into a large community. These ruins reveal well thought out construction.

INTEGRATING VISUAL INFORMATION What was a benefit of living in a community?

## NEOLITHIC COMMUNITIES

Neolithic farming villages developed throughout Europe, India, Egypt, China, and Mexico. The biggest and earliest known communities have been found in Southwest Asia. One of the oldest communities was Jericho (JAIR•ih•koh). This farming village grew in an area between present-day Israel and Jordan called the West Bank. The village of Jericho was well established by about 8000 B.C.E. It extended across several acres. The area of sun-dried-brick houses was surrounded by walls that were several feet thick.

Another well-known Neolithic community was Çatalhüyük (chah•tahl•hoo•YOOK). The community was located in present-day Turkey. Little evidence of the community remains today. Historians know that between 6700 and 5700 B.C.E., it covered 32 acres and was home to about 6,000 people. The people lived in simple mud-brick houses that were built close together. What if, instead of a front door, your house had a roof door? In Çatalhüyük, the houses did not have front doors. Instead of going through a door in the wall, people entered their homes through holes in the rooftops. They could also walk from house to house across the roofs. People decorated the inside of their homes with wall paintings.

In addition to homes, Çatalhüyük had special buildings that were **shrines**, or holy places. These shrines were decorated with images of Gods and Goddesses. Statues of women giving birth have also been found in the shrines. Both the shrines and the statues show that the role of religion was growing in the lives of Neolithic people.

Farmers grew fruits, nuts, and different grains on land outside Çatalhüyük. People grew their own food and kept it in storerooms within their homes. They raised sheep, goats, and cattle that provided milk and meat. They ate fish and bird eggs from nearby low-lying wetlands called marshes. Scenes drawn on the walls of the city's ruins show that the people of Çatalhüyük also hunted.

# WHAT WERE THE BENEFITS OF A SETTLED LIFE?

Neolithic people needed protection from the weather and wild animals. A settled life provided greater security. Steady food supplies created healthier, growing populations. As the population increased, more workers became available. Those individuals could grow more crops. Villagers produced more than they could eat, creating a food surplus, so they began to trade their food for supplies they could not produce themselves.

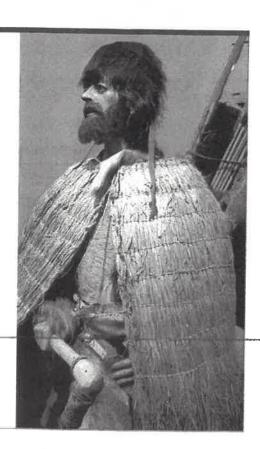
#### **BIOGRAPHY**

#### ÖTZI THE ICEMAN

(C. 3300 B.C.E.)

Mystery Man Ötzi was a Neolithic man whose remains were discovered in 1991 in the Austrian Alps. Also called the "Iceman," Ötzi presented a mystery. Did he live where he died? Did he spend his life in another location? What did he do for a living? Scientists found the same form of oxygen in Ötzi's teeth as in the water of the southern Alpine valleys. They have concluded that, even though Ötzi was found in the mountains, he lived most of his life in the valleys south of the Alps. Scientists believe Ötzi was either a shepherd or a hunter who traveled from the valleys to the mountains. [Modern illustration]

PREDICTING What types of clothing or tools do you think Ötzi used?



#### **DETERMINING MEANING**

Specialization is a noun. Specialize is a related verb. What do you think specialize means?

Bronze Age pottery shows fine details. The use of bronze for tools and weapons was another step forward for ancient peoples.

INTEGRATING VISUAL
INFORMATION Why do you
think bronze tools and weapons
would have been an important
achievement?

Because an abundant amount of food was produced, fewer people were needed in the fields. Neolithic people began to take part in economic activities other than farming. **Specialization** (speh•shuh•leh•ZAY•shun) occurred for the first time. People took up specific jobs as their talents allowed. Some people became artisans, or skilled workers. They made weapons and jewelry that they traded with neighboring communities. People made pottery from clay to store grain and food. These craftspeople, like farmers, also exchanged the goods they produced for other things they did not have. This exchange of goods by farmers and craftspeople was called a barter economy.

Hunter-gatherers covered their bodies with animal skins and woven plant fibers. During the Agricultural Revolution, humans learned to make clothing from new sources such as cotton fibers and wool from sheep and goats. They invented techniques for weaving plant and animal fibers to create different types of cloth. Early peoples discovered how to stain cloth and leather using colorful dyes made from crushed roots, flowers, leaves, tree bark, and even insects. Ötzi, the Neolithic Iceman, wore a cape made from woven grass fibers.

The roles of men and women changed when people moved into settlements. Men worked in the fields to farm and herd animals. They gradually became more responsible for growing food and protecting the village. Men emerged as family and community leaders. Women bore the children and stayed in the villages. They wove cloth, using the wool from their sheep. They also used bone needles to make clothing from cloth and animal skins. In addition, women managed food supplies and performed other tasks.

The growth of communities did not always bring benefits. In some places, such as settlements in present-day Jordan, rapid population growth caused resources such as wood supplies to be used up quickly. On occasion, this loss of forestation caused desert-like conditions to spread. Where this type of ecological damage occurred, many settlements were abandoned.

#### THE END OF THE NEOLITHIC AGE

During the late Neolithic Age, people made more technological advances. Toolmakers created better farming tools as the need for them arose. These included hoes for digging soil, sickles for cutting grain, and millstones for grinding flour. In some regions, people began to work with metals, including copper. Workers heated rocks and discovered melted copper inside them. They then experimented with making the copper into tools and weapons. These proved to be easier to make and use than those made of stone.

Craftspeople in western Asia discovered that mixing copper and tin formed bronze. This was a technological breakthrough because bronze was stronger than copper. Bronze became widely used between 3000 and 1200 B.C.E. This period is known as the **Bronze Age**. Few people, however, could afford bronze. The high price of bronze led to the continued use of tools and weapons made of stone.

#### CHECKING FOR UNDERSTANDING

- 1. EXPLAINING EFFECTS How did the spread of agriculture affect trade?
- 2. RELATING EVENTS What events marked the end of the Neolithic Age?

## **CIVILIZATIONS EMERGE**

**GUIDING QUESTION** What characteristics did early civilizations share?

Humans continued to develop more complex cultures, or ways of life. By the beginning of the Bronze Age, communities were widespread. More complex cultures called civilizations began to develop in these communities. Four of the great river valley civilizations—Mesopotamia, Egypt, India, and China—emerged around 3000 B.C.E. All civilizations share similar characteristics.

#### CITIES AND GOVERNMENT

One characteristic of these early civilizations was that they developed cities and formed governments. The first civilizations developed in river valleys with a stable food supply, where fertile land made it easy to grow crops and feed large numbers of people. The rivers provided fish and water. They also encouraged trade and the exchange of both goods and ideas. The cities that developed became the centers of civilizations.

People formed governments to protect themselves and their food supplies. In these early civilizations, the first governments were monarchies. A **monarchy** is a type of government led by a king or queen. Monarchs created armies to defend against enemies and made laws to keep order. They also appointed government officials who managed food supplies and building projects.

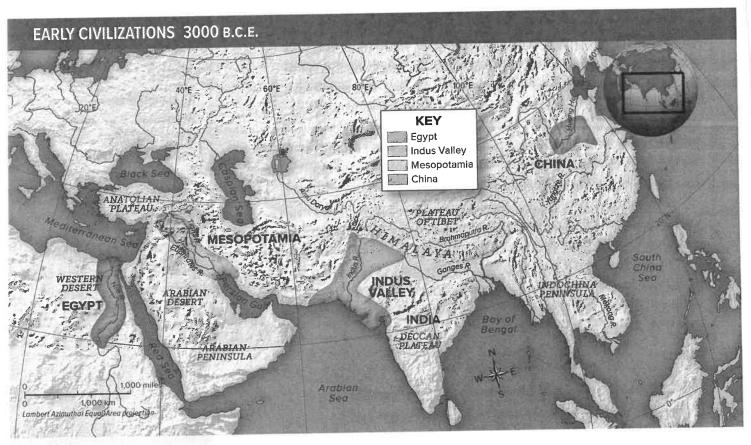
## MAKING CONNECTIONS ACROSS CULTURES

#### TRADE

As Neolithic societies developed, they traded goods with other villages. The modern-day United States works in a similar way. We do not rely solely on our own farming or manufacturing abilities. The Unites States imports (brings in) goods from other countries and exports (ships out) goods as well.

## UNDERSTANDING CRAFT AND STRUCTURE

- 1. **DETERMINING MEANING** What is a *civilization*?
- 2. ANALYZING TEXT How do "Cities and Government,"
  "Religions," "Social Structure," and "Writing and Art" contribute to the development of ideas in this section?





Civilizations developed in the river valleys of Mesopotamia, Egypt, India, and China.

- EXPLORING PLACE Along which rivers did the early civilizations of Mesopotamia and Egypt develop?
- 2. HUMAN-ENVIRONMENT
  INTERACTION As these
  cultures became more
  complex, what characteristics
  set some of them apart as
  civilizations?

#### RELIGIONS

Religions emerged in the new civilizations to help people explain their lives. For example, religions helped explain the forces of nature and the role of humans in the world.

Early people believed that Gods were responsible for a community's survival. Priests performed religious ceremonies to try to win the support of the Gods. Rulers claimed that their own power was based on the approval of the Gods.

## SOCIAL STRUCTURE

Early civilizations had social class structures. That is, people in society were organized into groups. These groups were defined by the type of work people did and the amount of wealth or power they had. Generally, rulers and priests, government officials, and warriors made up the highest social class. They set the rules and made the important decisions. Below this class was a large group of free people, including farmers, artisans, and craftspeople. At the bottom of the class structure were enslaved people, most of whom were captured from enemies during war.

## CULTURE AND TECHNOLOGY

Culture and technology are important parts of every civilization. Peoples of the great river valley civilizations created unique

cultures with their own languages and customs. They developed cultural traditions such as music, dancing, storytelling, artwork, clothing, jewelry, rituals, and ceremonies.

These early peoples invented new technologies that changed the way they lived. The earliest technologies included fire-starting tools, cooking utensils, spears, arrows, other weapons, knives for hunting and scraping animal hides, wheeled carts, and hand tools such as chisels, drills, and hammers. In time early peoples invented complex technologies such as irrigation systems, pottery wheels, calendars, and devices for counting, weighing, and measuring.

#### WRITING AND ART

To pass on information, people invented ways of writing. These early systems used symbols in place of letters and words. Writing became an important feature of these new civilizations. People used writing to keep accurate records and to preserve stories.

Civilizations also created art for enjoyment and practical purposes. Artists created paintings and sculptures portraying Gods and forces of nature. People designed massive buildings that served as places of worship or burial tombs for kings.

#### CHECKING FOR UNDERSTANDING

- 1. IDENTIFYING CAUSES Why did early peoples form governments?
- 2. DESCRIBING How did the social structure change as civilizations developed?

## **LESSON 2** REVIEW AND ACTIVITIES

#### Time And Place

 EXPLAINING How did the locations of early civilizations contribute to their development?

#### **Building History-Social Science** Analysis Skills

- 2. DESCRIBING What was the Agricultural Revolution?
- 3. EXPLAINING CAUSE AND EFFECT How did farming lead to new types of economic activities?
- 4. EXPLAINING EFFECTS What are the advantages and disadvantages when a community grows?
- 5. IDENTIFYING Which groups made up the largest social class in-early-civilizations?

#### Writing About History

6. ARGUMENTATIVE WRITING You are the leader of a band of hunter-gatherers. You have seen other bands settle in river valleys and begin to farm. Write a speech to persuade your own band to settle and begin farming.

#### Collaborating

7. USING TECHNOLOGY In groups, research online to find images of Bronze Age tools, weapons, or pottery. Create a short presentation to share with the class. Include captions for each image.



Include this lesson's information Study Organizer - in-your Foldable®.

## EARLY HUMAN STRUCTURES

During the Neolithic Age, humans began building permanent settlements to accommodate their new, more settled lifestyles. Archaeologists today have uncovered ruins of these settlements in different parts of the world. What do these settlements have in common? How are they different?

#### **VOCABULARY**

hillock: hill; mound
unearthed: discovered
massive: very large
freestanding: separate
simultaneously: at the same time

## SECONDARY SOURCE: ARCHAELOGICAL STUDY

#### EXCAVATIONS AT JERICHO, 1908 c.e.

Archaeologist John M.P. Smith describes the settlement at Jericho, located in the West Bank between present-day Israel and Jordan:

the most northern hillock where there were unearthed the ruins of a castle. It possesses a massive tower three stories high of unburned brick. The castle had four apartments on the first floor, seven on the second, and six on the third, all of them opening off the tower like cells. Some of the partition [dividing] walls of these rooms still remain intact. Rising through the three stories was a stone staircase, of which sixteen steps may still be seen, leading to the flat roof. The blackened walls of the building show that at some time it was destroyed by fire. ??

#### **ANALYZE THE TEXT**

- 1. **DRAWING CONCLUSIONS** What evidence supports the idea that Jericho was a planned settlement?
- 2. **INFERRING** How does the reader know that the people of Jericho were not nomadic?

#### SECONDARY SOURCE: ARTICLE

#### **MEHRGARH**

In this excerpt (2011 C.E.), Monica L. Smith describes the settlement discovered at Mehrgarh, in present-day Pakistan.

#### ANALYZE THE TEXT

- EXPLAINING EFFECTS How did the development of clay affect people in the fifth millennium?
- 2. **INFERRING** What can the reader infer about people in the fifth millennium based on the architecture at Mehrgarh?

(I) Smith, John M.P. 1908. "The Excavations at Jericho." The Biblical World, Vol. 31; (v) Smith, Monica L. 2011." What It Takes to Cet Complex," The Comparative Archaeology of Complex Societies. Smith. Michael E., ed. New York, Cambridge University. Press.

# Çatalhöyük Research Project. Stanford Archaeology Center http://www.catalhoyuk.com

#### SECONDARY SOURCE: WEB SITE

#### ÇATALHÖYÜK

The Çatalhöyük Research Project began in 1993 to investigate this Neolithic site. An international team of experts worked together to learn about this society and its people. The following description from the project's web site describes some of their findings.

different in shape and size, yet most follow a general layout. Each central room had an oven below the stairs where people carried out domestic tasks such as cooking. Raised platforms within the rooms were used for

sleeping and other domestic activities. Beneath these platforms inhabitants buried their dead. Side rooms were accessed off the central room providing essential storage areas.

Like we do today, people decorated their homes. At Çatalhöyük we see white plastered walls and floors, on which elaborate paintings were made depicting hunting scenes and geometric patterns. The walls were constructed of mud bricks. . . . Thick wooden posts were erected in the central room and may have been used to strengthen the structure, as well as create internal divisions of space. ??

#### ANALYZE THE TEXT

- CONTRASTING How do the structures described in the excerpt differ from homes of Paleolithic people?
- 2. **COMPARING** How are the structures described in the excerpt similar to modern-day homes?



#### **MULTIPLE PERSPECTIVES**

**COMPARING** Compare the types of structures described in each of the excerpts. Do you think the people that built the structures were similar to or different from each other? What evidence supports your answer?

**DRAWING CONCLUSIONS** What conclusion can you draw about the cultures of these settlements based on their architecture?

# CHAPTER 1 Analysis Skills Activities

Write your answers on a separate piece of paper.

## Thinking Like a Historian

 EXPLAINING CAUSE AND EFFECT How would you describe the ways people adapted to a colder environment during the Ice Age? Write an essay telling how climate affected the way people lived.

#### **Understanding Time**

UNDERSTANDING CHRONOLOGY There were many developments in the lives of early humans. These
include using fire, developing flint tools and weapons, speaking through language, developing bronze,
and forming governments. Create a chart or time line that organizes when each development
occurred.

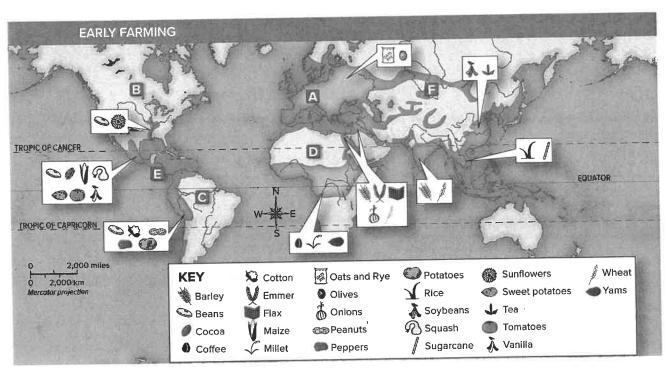
#### **Building Citizenship**

3. CIVIC AND POLITICAL INSTITUTIONS Write an essay explaining why the formation of governments benefitted early civilizations.

## O Geographic Reasoning

Use the map to answer the following questions.

- 4. EXPLORING REGIONS Match the letters on the map with the numbered list of crops grown there.
  - 1. soybeans and tea
  - 2. beans and sunflowers
  - 3. coffee, millet, and yams
  - 4. oats and olives
  - 5. beans, cotton, peanuts, peppers, and potatoes
  - 6. beans, cocoa, corn, squash, tomatoes, sweet potatoes and vanilla



## CHAPTER 1 Assessment

Write your answers on a separate piece of paper.

#### Vocabulary Practice

- Define each of the following terms as it relates to early humans.
  - A. nomad
  - B. technology
  - C. ice age
  - D. Neolithic Age
  - E. Agricultural Revolution
  - F. shrine
  - G. Bronze Age
  - H. monarchy

#### **Short Answer**

- **DESCRIBING** Why is the early period of human history called the Stone Age? What is the Paleolithic Age?
- **DETERMINING CENTRAL IDEAS** What was the main activity of Paleolithic people?
- **SUMMARIZING** List some of the tools developed by humans during the Paleolithic Age.
- **DESCRIBING** How did early humans adapt to conditions of the last ice age?
- RELATING EVENTS Why is the change from hunting and gathering to farming considered a revolution?
- **DETERMINING CENTRAL IDEAS** Near what types of landforms did Neolithic peoples build their villages? Why?
- SUMMARIZING In Neolithic villages, who were artisans, and what types of products did they create?
- EXPLAINING CAUSE AND EFFECT Why did the first civilizations develop in river valleys?
- DESCRIBING In general, who belonged to the highest social class in early civilizations?

- **11 CONTRASTING** How did the roles of Paleolithic men and women differ within their groups?
- RECONGIZING RELATIONSHIPS Describe the relationship between the animals hunted by Paleolithic people and how those peoples survived in harsh or difficult climates.
- MAKING CONNECTIONS What were the subjects of paintings by Paleolithic people? Why might these paintings have been created?
- DETERMINING CENTRAL IDEAS Why is the term
  Neolithic Age a misleading name for the time period?
- COMPARING AND CONTRASTING Study the map titled Early Farming in Lesson 2. Then compare and contrast the crops grown in Africa and Southwest Asia to those grown in the rest of Asia.
- **CONTRASTING** Contrast the dwellings found in a Neolithic village such as Çatalhüyük with those used by Paleolithic peoples. Discuss layout, building materials, and any other relevant details.
- DETERMINING CAUSE AND EFFECT How did the switch to a farming lifestyle lead to changes in technology? Describe the new types of tools that were created and the new materials being used.
- **EVALUATING** Were all the effects of the Agricultural Revolution beneficial? Explain.
- EXPLAINING Explain how the Agricultural Revolution is related to the origins of government. Describe the form of government that developed in the first civilizations in your answer.
- ANALYZING Consider the characteristics that were shared by early civilizations—cities and government, religion, social structure, culture and technology, and writing and art. Do you think these characteristics are shared by civilizations today? Explain.

#### **Need Extra Help?**

If You've Missed Question	0	2	3	4	6	6	0	8	9	10	0	12	<b>B</b>	14	13	16	17	18	19	20
Review Lesson	1, 2	· 1	1	1	1	2	2	2	2	2	1	1	1	2	2	2	2	2	2	2

## CHAPTER 1 Assessment, continued

Write your answers on a separate piece of paper.

#### **Analyzing Sources**

In his book *The Art of the Stone Age*, archaeologist Hans-Georg Bandi discusses Paleolithic cave art:

**66** The representation of animals on the walls of caves in France and Spain could, however, not have derived merely from the inspiration of a few individuals. This was no 'art for art's sake'. . . Ice Age art gives profound [deep] expression to the social and religious structure of the culture of the hunters who lived during that period. For the tribe to survive a certain stock of wild animals was always essential. There had to be sufficient quantities available, and it was a matter of concern that the stock of animals, decimated [destroyed] by hunting and natural causes, should continually be replenished [refilled]. . . . This is the only explanation for the fact that the paintings are located deep in the interior of caves and are often superposed on one another. For Ice Age man, as for hunter peoples of the present day or those that died out not long ago, the governing factor will have been similar: by confining the animal within the limits of a painting one subjected it to one's power in the hunting grounds. ??

-The Art of the Stone Age: Forty Thousand Years of Rock Art, 1961 C.E.

- **DETERMINING CENTRAL IDEAS** Which statement best summarizes the central idea of the excerpt?
  - A. Cave paintings in Spain and France were made by many people, most likely hunters.
  - **B.** Cave paintings from the lce Age demonstrate the importance of animals and hunting to people of that period.
  - C. Cave paintings from the Ice Age are different from cave paintings from other periods because they are more artistic.
  - **D.** Cave paintings are located deep inside caves, but never on the outside.
- ANALYZING POINT OF VIEW Which of the following phrases from the excerpt illustrates that the writer believes the cave paintings have a purpose?
  - A. "profound expression to the social and religious structure of the culture"
  - B. "a certain stock of wild animals was always essential"
  - C. "decimated by hunting and natural causes"
  - **D.** "hunter peoples of the present day or those that died out not long ago"

#### Need Extra Help?

If You've Missed Question	3	22	23	24	25	26
Review Lesson	1	1	1	1	1	1

- **DETERMINING MEANING** Read the phrase from the excerpt.
  - **66** The representation of animals on the walls of caves in France and Spain could, however, not have <u>derived</u> merely from the inspiration of a few individuals. **99**

Which of the following words could replace the underlined word in the phrase?

- A. stopped
- B. resulted
- C. accepted
- D. helped
- **DETERMINING CENTRAL IDEAS** Which of the following was a chief concern among people of the Ice Age?
  - A. preserving their paintings from harsh weather
  - B. producing art because it is beautiful
  - C. colder temperatures harming members of the group
  - D. animal populations dying off due to hunting
- **ANALYZING TEXT PRESENTATION** Read this phrase from the excerpt.

**66** by confining the animal within the limits of a painting one subjected it to one's power in the hunting grounds **37** 

Write a brief explanation of why you think the writer included that phrase. How does this phrase relate to the writer's main point?

#### **Extended Response Essay**

during the Ice Age. You are a member of a group during the Ice Age. You are given the responsibility of painting the art on the cave walls. Write about your experience as one of the cave painters, such as working in a group, how it feels to have this responsibility, and what you hope your efforts will bring to other group members.