

Objectives

As you teach this section, keep students focused on the following objectives to help them answer the Section Focus Question and master core content.

- Learn how scholars study the historical past.
- Find out how anthropologists investigate the period of prehistory.
- Understand how discoveries in Africa and beyond have influenced anthropologists' views about early humans and their ancestors.

Prepare to Read

Build Background Knowledge **L3**

Ask students to brainstorm a list of terms and topics that they associate with the distant past. Have them preview the headings and visuals in this section and predict what they will read about.

Set a Purpose **L3**

- **WITNESS HISTORY** Read the selection aloud or play the audio.

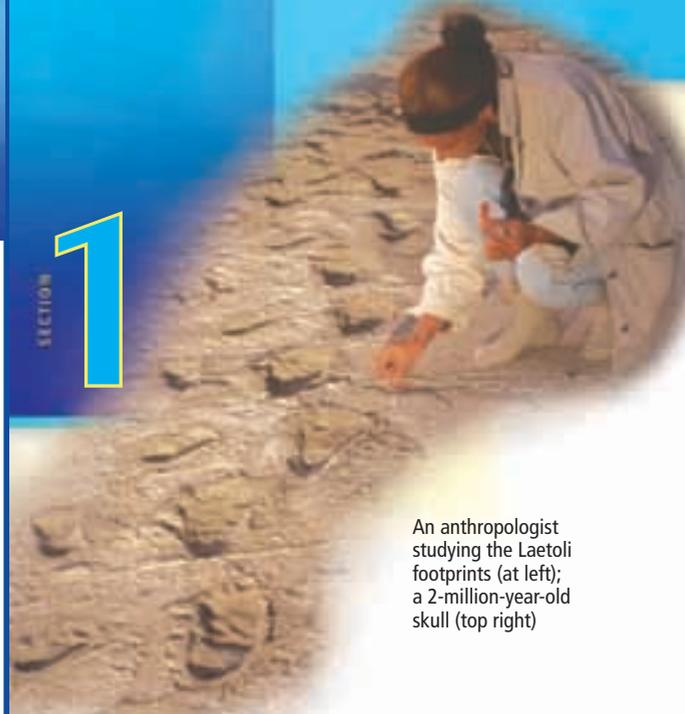
 **Witness History Audio CD,**
A Clue From the Past

Ask **What was remarkable about the footprints that Leakey found in Tanzania?** (*They were 3.7 million years old. It is rare to find such old evidence of the past, especially something like footprints, which usually get wiped away quickly.*)

- **Focus** Point out the Section Focus Question and write it on the board. Tell students to refer to this question as they read. (*Answer appears with Section 1 Assessment answers.*)
- **Preview** Have students preview the Section Objectives and the list of Terms, People, and Places.
- **Reading Skill** Have students use the *Reading Strategy: Summarize* worksheet.

 Teaching Resources, Unit 1, p. 6

1



An anthropologist studying the Laetoli footprints (at left); a 2-million-year-old skull (top right)

WITNESS HISTORY  AUDIO

A Clue From the Past

Mary Leakey spent her career studying the earliest ancestors of humans. In 1978, in Laetoli, Tanzania, she uncovered a remarkable and unique remnant of the early ancestors of humans—their footprints, preserved over time in volcanic ash. As Leakey studied the pattern of the footprints, she imagined how they might have been created:

“At one point, . . . the traveler stops, pauses, turns to the left to glance at some possible threat or irregularity, then continues to the north. This motion, so intensely human, transcends time. Three million seven hundred thousand years ago, a remote ancestor—just as you or I—experienced a moment of doubt.”

Focus Question What have scholars learned about the ancestors of humans, and how have they done so?

Understanding Our Past

Objectives

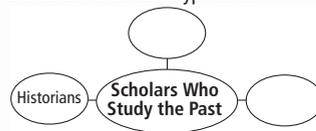
- Learn how scholars study the historical past.
- Find out how anthropologists investigate the period of prehistory.
- Understand how discoveries in Africa and beyond have influenced anthropologists' views about early humans and their ancestors.

Terms, People, and Places

prehistory	Mary Leakey
historian	Louis Leakey
artifact	Olduvai Gorge
anthropology	technology
culture	Donald Johanson
archaeology	

Note Taking

Reading Skill: Summarize As you read, use a concept web like the one below to identify the types of scholars who study the past and summarize what each type does.



By about 5,000 years ago, groups of people in different parts of the world had begun to keep written records. The invention and use of writing marked the beginning of recorded history. However, humans and their ancestors had lived on Earth for thousands upon thousands of years before the recording of history began. We call the long period of time before people invented writing **prehistory**.

Studying the Historical Past

Historians are scholars who study and write about the historical past. Historians often learn details of the past from **artifacts**, or objects made by humans. Clothing, coins, artwork, and tombstones are all types of artifacts. However, historians rely even more on written evidence, such as letters or tax records. Although it is often hard to find thorough written records from early times, those that exist offer us a narrative of events, as well as names and dates. Historians of the recent past also study such evidence as photographs or films.

Like a detective, a historian must evaluate all evidence to determine if it is reliable. Do records of a meeting between two officials tell us exactly what was said? Who was taking notes? Was a letter writer really giving an eyewitness report or just passing on rumors? Could the letter be a forgery? Historians try to find the answers to questions like these. They then interpret the evidence, or explain what it means. Often, a historian's goal is to determine

Vocabulary Builder

Use the information below and the following resources to teach the high-use word from this section.

 Teaching Resources, Unit 1, p. 5; Teaching Resources, Skills Handbook, p. 3

High-Use Word
technique, p. 6

Definition and Sample Sentence

n. procedure, skill, or art used in a particular task

I practiced free throws every day so my **technique** would be good enough for me to make the basketball team.

the causes of a certain development or event, such as a war or an economic collapse. By explaining why things occurred in the past, historians can help us understand what happens today and what may happen in the future.

Generally, historians try to give a straightforward account of events. However, sometimes their personal experiences, cultural backgrounds, or political opinions bias their interpretations. Other times, historians disagree with one another about what the evidence proves. Such differences can lead to lively debates.

✓ Checkpoint What kinds of evidence do historians use to study the past?

Investigating Prehistory

About 150 years ago, scholars began studying the period of prehistory. They hoped to learn about the origins and development of people and their societies. Today, we call this field of study **anthropology**.

Anthropology Modern anthropologists specialize in certain areas of their field. For example, some study the bones of our ancestors to understand how human physical traits have changed over time. Other anthropologists focus on the characteristics of human cultures from both the past and present. In anthropology, **culture** refers to the way of life of a society, which includes its beliefs, values, and practices. Culture is handed down from one generation to the next through learning and experience.

Archaeology Within the field of anthropology, a specialized branch exists called archaeology (ahr kee AHL uh jee). **Archaeology** is the study of past people and cultures through their material remains. These remains include buildings and artifacts such as tools, weapons, pottery, clothing, and jewelry. Archaeologists find and analyze artifacts to learn about life during prehistory as well as during historical times. This helps them draw conclusions about the beliefs, values, and activities of our ancestors. However, most archaeologists agree that the story of the past is never fully known. Since archaeologists make new discoveries frequently, at times they must revise their theories in light of the new evidence.

Mycenaean pottery from about 1350 B.C.



Dating Material Remains

Relative Dating Methods

For artifacts such as pottery that change in style over time, archaeologists can group similar artifacts and then order the groups in a series from earliest style to latest style.

Archaeologists can create a chronology of artifacts based on the fact that, in general, older artifacts are found in lower levels of the site than newer ones.

When the ages of geological features at the site are known, archaeologists can use these dates to help determine the ages of material remains found near them.

Absolute Dating Methods

Because scientists know that bones lose chemical elements at a certain rate, archaeologists can determine whether or not bones found near each other were buried at the same time.

Because the age of a tree can be determined by studying the inside of its trunk, archaeologists can determine fairly accurate ages for structures built from wood.

All living things contain carbon-14, a radioactive element that decays at a set rate. Archaeologists can use carbon-14 levels to date the remains of once-living items such as bones, wood, and ash.

Chart Skills Relative dating means determining whether material remains are older or newer than one another. Absolute dating means determining exact ages. *How might you determine the ages of ten pots found buried under the floor of a wooden structure?*

- **Note Taking** Have students read this section using the Guided Questioning strategy (TE, p. T20). As they read, have students fill in the concept web describing scholars who study the past.

Reading and Note Taking
Study Guide, p. 9

Teach

Studying the Historical Past

L3

Instruct

- **Introduce: Key Terms** Ask students to find the key term **prehistory** (in blue) in the text and explain its meaning. Point out that writing is useful evidence for historians. Ask students to speculate how scholars learn about prehistory differently than they learn about history.
- **Teach** Ask **Once a historian determines causes and effects associated with past events, how can we use this information in the present or the future?** (*We can learn lessons from past mistakes and achievements and try to apply those lessons to actions we take now or in the future.*)

Independent Practice

Have students create a flowchart showing the steps historians typically follow.

Monitor Progress

- Check that students' flowcharts include the steps described in the text in their correct order: evaluate evidence, answer questions, and interpret evidence.
- As students fill in their concept webs, circulate to make sure they understand the different types of scholars. For a completed version of the concept web, see **Note Taking Transparencies, 49A**

Differentiated

Instruction Solutions for All Learners

- L1 Special Needs** **L2 Less Proficient Readers** **L2 English Language Learners**

To help students better understand how historians work, ask them to write down the details of what has happened in the past week of their lives. Encourage them to include day-to-day details such as eating breakfast, going to school, and doing their homework as well as less frequent activities, such as watching a

movie, competing in a sports event, or performing in a play. Then ask them to think about reasons why certain events took place or had particular outcomes. What lessons can they learn from the week that they could apply in the future?

Answers

- ✓ artifacts such as clothing, coins, artwork, and tombstones, as well as written evidence such as letters or tax records

Chart Skills You might determine the relative age of the pots by comparing them to a series of dated pottery styles. Also, determining the date of the wooden floor by measuring its carbon-14 would help date the pottery.

Investigating Prehistory LB

Instruct

■ Introduce: Vocabulary

Builder Have students read the Vocabulary Builder term and definition. Ask them to preview the information given under the red heading Investigating Prehistory, including the chart on the previous page and the Infographic. Ask students to predict the types of *techniques* they will learn about in this section.

■ **Teach** Discuss the field of anthropology. Ask **What is the focus of the anthropology?** (*It focuses on the origins and development of people and their societies.*) **What types of information do anthropologists study to learn about human culture and its origins?** (*Some anthropologists study changes in human physical traits over time. Others study material remains such as buildings and artifacts.*)

■ **Analyze the Visuals** Refer students to the Infographic on this page. Have a volunteer read each caption and describe the accompanying scene. Ask students to describe what the scholar is doing in each scene. How is the scholar piecing together the findings?

Vocabulary Builder

technique—(tek NEEK) *n.* procedure, skill, or art used in a particular task

Archaeologists at Work Finding ancient artifacts can be difficult, but archaeologists have devised many useful means of doing so. In the 1800s and early 1900s, archaeologists would pick a likely place, called a site, and begin digging. The farther down they dug, the older the artifacts they found. Some of the objects, which had been buried for very long periods of time, crumbled as soon as they were removed from the ground. Today, archaeologists and others who work with them take great care to preserve such fragile artifacts.

Once archaeologists have found artifacts, they analyze them. One technique is to mark the location of each type of artifact found on a map of the site. After studying the map, an archaeologist may be able to tell what activities people took part in at different locations within the site. An area full of rabbit bones, for example, might suggest the workplace of a cook. Archaeologists also need to find out how old the artifacts are.

● INFOGRAPHIC

Piecing the Past Together

Many objects, monuments, or structures that archaeologists find have fallen apart over the course of time. To understand what the remains represent, an archaeologist must figure out how to piece them together correctly and then analyze their form and location. Sometimes this means fitting a building back together brick by brick; other times, it means carefully digging a skeleton out of the ground and studying the items found directly around it. The possibilities of what archaeologists might find and where they will find them are quite numerous, so they use careful procedures and their well-trained eyes to solve as best they can whatever puzzles they encounter.



Perched atop a newly found building, an archaeologist studies blocks of ancient Maya writing that have fallen from the wall they once supported.

Careers

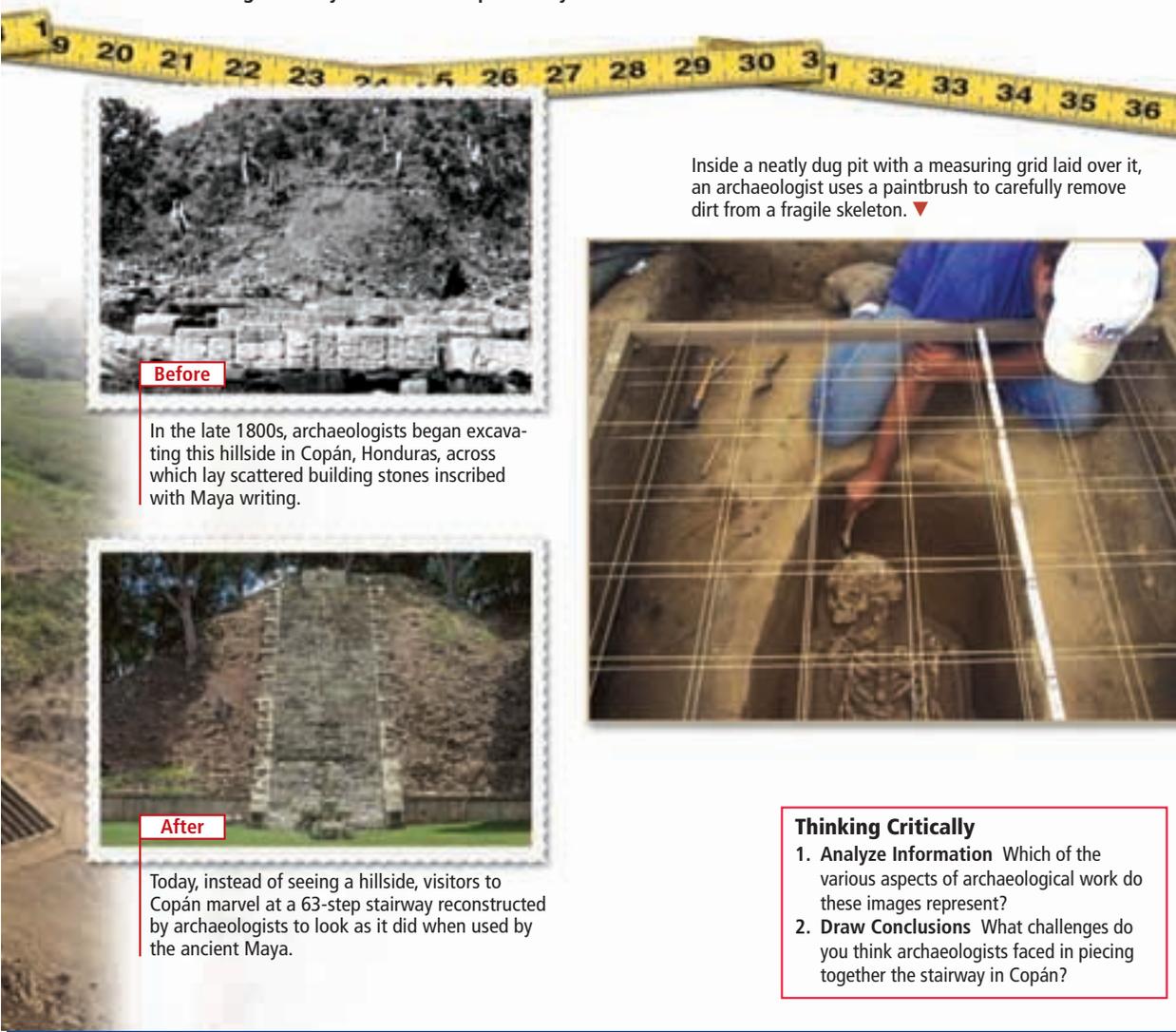
Anthropologist To become an anthropologist is an exciting career prospect for many students. The field of anthropology is divided into three branches: archaeology, biological anthropology, and cultural anthropology. The first two branches, which the students have read about in the text, focus on studying the past. The third branch focuses on studying people and societies today. Often, anthropologists begin their

careers by studying the subject in college or graduate school. However, since anthropology is very hands-on, many anthropologists also learn the trade through research “in the field”—that is, by excavating artifacts or analyzing bones at a dig site or by living with a community they are studying for an extended period of time.

Geologists, or experts on earth science, can help with this task by determining the age of rocks located near archaeological sites. In addition, botanists and zoologists—experts on plants and on animals—examine seeds and animal bones to learn about the diets of our ancestors. Experts on climate determine what conditions our ancestors faced on the plains of Africa or in ice-covered parts of Europe. Biologists analyze human bones as well as bloodstains found on old stone tools and weapons.

In addition to working with experts in various fields, archaeologists today use many modern innovations to study their findings. Computers help them store and sort data or develop accurate maps of archaeological sites. Aerial photographs help archaeologists to better see the layout of land and structures once lived in by past people. Techniques for measuring radioactivity aid scientists in determining the age of objects.

✓ Checkpoint What types of evidence do anthropologists and archaeologists study to learn about prehistory?



Inside a neatly dug pit with a measuring grid laid over it, an archaeologist uses a paintbrush to carefully remove dirt from a fragile skeleton. ▼

Before

In the late 1800s, archaeologists began excavating this hillside in Copán, Honduras, across which lay scattered building stones inscribed with Maya writing.

After

Today, instead of seeing a hillside, visitors to Copán marvel at a 63-step stairway reconstructed by archaeologists to look as it did when used by the ancient Maya.

Thinking Critically

- Analyze Information** Which of the various aspects of archaeological work do these images represent?
- Draw Conclusions** What challenges do you think archaeologists faced in piecing together the stairway in Copán?

Independent Practice

- Ask students to study the chart on page 5, titled Dating Material Remains. For each dating method, have students write a description of when it could be used.
- **Viewpoints** To have students learn more about how historians gather and analyze evidence, have them read the selection *What Killed the Woolly Mammoth?* and answer the questions.

All in One Teaching Resources, Unit 1, p. 8

Monitor Progress

To help students review the section so far, ask them to reread the paragraphs under the black heading Archaeologists at Work. Then ask them to explain how archaeologists incorporate many types of modern technology and the work of other scientists into their own work.

Differentiated

Instruction Solutions for All Learners

L4 Advanced Readers **L4 Gifted and Talented**

To challenge students, ask them to think about how future archaeologists might view today's society. In small groups, have them create a list of ten artifacts representing modern society that will be placed in a

time capsule that will be opened in the year 3108. Then have each group share their lists with the class and make a class list of artifacts for the time capsule.

Answers

- ✓ material remains, including bones, buildings, and artifacts such as tools, weapons, pottery, clothing, and jewelry

Thinking Critically

1. digging, excavation, analysis, and reconstruction
2. the historical accuracy of the reconstruction and fragility of the materials

Discoveries in Africa and Beyond

L3

Instruct

- **Introduce** Display **Color Transparency 1: Piecing Together Lucy's Skeleton**. Then read the Primary Source quotation on the next page aloud or play the audio selection, and explain that Johanson is describing the skeleton that students see on the transparency. Ask **What did Johanson speculate about the relationship of the bones he found?** (*He thought the bones might be from the same, very ancient skeleton.*) **Why was Johanson so astonished by this possibility?** (*No complete skeleton that old had ever been found.*)

 **Color Transparencies, 1**

 **WITNESS HISTORY AUDIO CD, Donald Johanson**

- **Teach** List the different capabilities of hominid groups on the board. Then discuss the significance of these developments. Use the Think-Write-Pair-Share strategy (TE, p. T23) and ask **Homo habilis and Homo erectus both made stone tools, but they made them for different uses. What does this tell us about the needs and skills of each group?** (*Both hominid groups had a need for tools and had the technical skills to create them from stone as well as the communications skills to pass on the technology. The difference in use of stone tools might indicate different needs or different skills.*)

- **Quick Activity** Display **Color Transparency 2: Important Hominid Finds**. Point out that many of the remains come from small regions in Africa. Ask students to speculate why. (*Sample: hominids only lived in those areas; the areas preserved the most remains, perhaps because of geography or because scholars have only been able to find them in those areas.*)

 **Color Transparencies, 2**

Note Taking

Reading Skill: Summarize As you read, keep track of the key details scholars have learned about different hominid groups by completing a summary table like the one below. Look for dates, innovations, and other details about each hominid group.

Hominids	
Group	Summary
Australopithecines	

Discoveries in Africa and Beyond

Before the 1950s, anthropologists knew little about early humans and their ancestors. Prehistoric groups did not have cities, countries, organized central governments, or complex inventions, so clues about them were hard to find. However, archaeologists in East Africa started uncovering ancient footprints, bones, and tools. With these first key discoveries, scholars began to form a picture of life during prehistory.

Ancient Clues Found in East Africa In the 1930s, anthropologists **Mary Leakey** and **Louis Leakey** started searching for clues to the human past in a deep canyon in Tanzania called **Olduvai Gorge** (OHL duh vy). Geologists have dated the bottom layers of Olduvai Gorge to an age of 1.7 to 2.1 million years. As the Leakeys searched the sides of the gorge, they found very ancient tools chipped from stone. Although these tools looked simple, with jagged edges and rough surfaces, they showed that whoever had made them had learned to develop technologies to help them survive. **Technology** refers to the skills and tools people use to meet their basic needs and wants. More recent stone tools proved more sophisticated—both smooth and polished—but the older ones were exciting to the Leakeys. They felt there must be evidence of the makers of those tools in Olduvai Gorge as well.

BIOGRAPHY

Louis Leakey

Louis Leakey (1903–1972) was born in Kenya, where his English parents lived with the Kikuyu people. Leakey was initiated as a Kikuyu warrior at age 13 and continued to speak the Kikuyu language for many years after leaving Kenya. Leakey moved to England to attend Cambridge University, where he studied anthropology. Afterward, he returned to East Africa to search for the remains of early humans. He and his wife, Mary, found many tools, bones, and other artifacts. In later life, he traveled all over the world, lecturing and raising funds for new research projects. Leakey's enthusiasm inspired a generation of anthropologists. **Why might someone devote his or her life to studying early humans?**

Mary Leakey

Mary Leakey (1913–1996) was born in London, England. During her childhood, she traveled throughout Europe and visited numerous prehistoric sites, which increased her interest in the fields of archaeology and geology. Because of her natural artistic talent, Leakey began working as an illustrator at archaeological sites during her teenage years. In particular, she focused on drawing Stone Age tools. Through this work, she met Louis Leakey, whom she married in 1936. Together they spent 30 years digging for early humans in East Africa. Mary Leakey found many remains that have become key to our understanding of early hominids. **How did Mary Leakey become interested in studying the ancient past?**



Link to Science

An Archaeological Goldmine Olduvai Gorge is located in eastern Africa and cuts through the Serengeti Plains in northern Tanzania, forming a gash nearly 30 miles long and 295 feet deep. The Gorge was carved out of the surrounding plain nearly 20,000 years ago when violent earthquakes and volcanoes created a crack that widened because of erosion. The steep sides of the gorge reveal numerous distinct sedimentary layers of ash and lava deposited over

millions of years to form the plain. These distinct layers can all be dated. Those near the top date to about 400,000 years ago and those near the bottom to about 1,800,000 years ago. The layers provide a sort of "geological yardstick" for measuring the age of the early stone tools and hominid bones excavated at the site. The remains of more than 50 hominids, as well as some of the best examples of stone tools, have been found there.

Answer

BIOGRAPHY Louis Leakey: curiosity about how people lived in the past. Mary Leakey: She visited numerous prehistoric sites as a child.

In 1959, after more than two decades of searching, Mary Leakey found a skull embedded in ancient rock at Olduvai Gorge. After careful testing, the Leakeys concluded that the skull belonged to an early hominid. Hominids, a group that includes humans and their closest relatives, all walk upright on two feet. Humans are the only hominids that live today.

Additional evidence of early hominids was found in 1974 by anthropologist **Donald Johanson**. In Ethiopia, Johanson found many pieces of a single hominid skeleton, which was dated to at least 3 million years ago. For the first time, archaeologists had enough of one skeleton to piece together and really look at an early hominid. Johanson named his historic find “Lucy” after a Beatles’ song. Studying Lucy’s skeleton, Johanson could see that she was an upright walker who was about 4 feet (1.2 meters) tall.

Evidence of Early Hominid Groups As of today, scientists and anthropologists have discovered and studied numerous remains and artifacts of hominids. From this work, they have established that a number of different groups of hominids lived over the course of several million years. They call the earliest group of hominids australopithecines (aw stray loh PITH uh synz). Lucy and the hominids who left their footprints in Laetoli were australopithecines. All the australopithecines lived in Africa. Anthropologists think that they may have lived there as early as 7 million years ago.

About 2 million years ago, a group of hominids emerged that anthropologists call *Homo habilis*. Scholars gave the group this name, which means “handy man,” because they thought these were the first hominids to make stone tools. Since the discovery of *Homo habilis*, anthropologists have uncovered even older stone tools—2.6 million years in age—but they have not determined which hominids created them. By studying many stone tools, anthropologists have concluded that *Homo habilis* used their tools for purposes such as cutting, scraping, chopping, or sawing plants, animals, and wood.

Another group of hominids, called *Homo erectus*, also appeared around 2 million years ago. They were given their name, which means “upright man,” because their skeletons show that they were fully upright walkers. *Homo erectus* were notable for having larger brains and bones and smaller teeth than other hominids. They also showed a greater range of capabilities. For example, *Homo erectus* are thought to be the first hominids to learn how to use fire. They also pioneered a new form of stone tool, called a hand ax, that could be used as the earlier tools were but also worked for digging, shattering stone or bone, and boring holes into hard surfaces. *Homo erectus* remains have been found in Asia and Europe, making scholars think they were the first hominids to migrate out of Africa.

Donald Johanson was with another researcher, Tom Gray, when he began finding pieces of Lucy’s skeleton. How would you describe Johanson’s reaction to their discovery?

Primary Source

“[Gray] picked it up. It was the back of a small skull. A few feet away was part of a femur: a thighbone. . . . We stood up, and began to see other bits of bone on the slope: a couple of vertebrae, part of a pelvis—all of them hominid. An unbelievable, impermissible thought flickered through my mind. Suppose all these fitted together? Could they be parts of a single, extremely primitive skeleton? No such skeleton had ever been found—anywhere.

‘Look at that,’ said Gray. ‘Ribs.’

A single individual?

‘I can’t believe it,’ I said. ‘I just can’t believe it.’”

—Donald Johanson  AUDIO



Donald Johanson at work in Ethiopia

Independent Practice

■ **Note Taking** As they read, have students fill in the table listing the key details about different hominid groups.

 **Reading and Note Taking**
Study Guide, p. 9

■ **Biography** To help students better understand Donald Johanson’s life and work as an anthropologist, have them read the biography *Donald Johanson* and complete the worksheet.

 **Teaching Resources, Unit 1, p. 7**

■ **Link to Literature** To help students better understand what it is like to be at an archeological dig, have them read the excerpt from James Michener’s *The Source* and complete the worksheet.

 **Teaching Resources, Unit 1, p. 11**

Monitor Progress

As students fill in their tables, circulate to make sure they understand the key details about each hominid group. For a completed version of the table, see

 **Note Taking Transparencies, 49B**

History Background

Evidence Abounds in Africa In addition to Olduvai Gorge, archaeologists have uncovered hominid and stone tool remains at more than 70 sites across Africa. Australopithecine fossils have been found in South Africa, Ethiopia, Kenya, and Tanzania. Lake Turkana in Kenya was home to members of *Homo habilis*.

Stone tools, which offer a record of hominids’ ability to adapt to their environment, have also been found at an array of sites. Pebble tools, very early and crude, have been found in northern Tanzania, Uganda, Algeria, Kenya, and Ethiopia.

Answer

PRIMARY SOURCE disbelief,
amazement

Assess and Reteach

Assess Progress

- Have students complete the Section Assessment.

- Administer the Section Quiz.

All in One Teaching Resources, Unit 1, p. 2

- To further assess student understanding, use

 Progress Monitoring Transparencies, 1

Reteach

If students need more instruction, have them read the section summary.

 Reading and Note Taking Study Guide, p. 10

 Adapted Reading and Note Taking Study Guide, p. 10

 Spanish Reading and Note Taking Study Guide, p.10

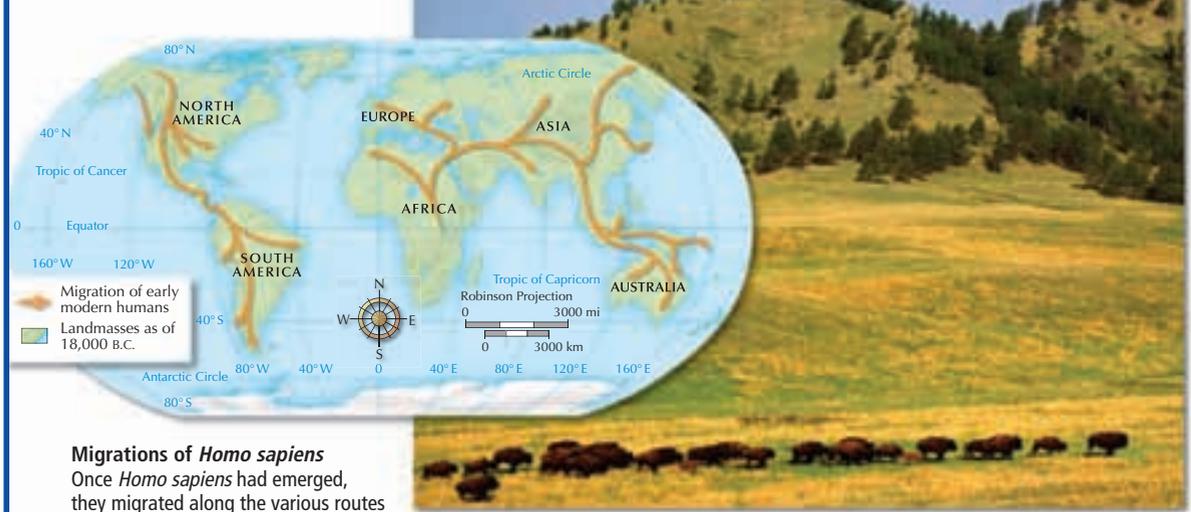
Extend

See this chapter's Professional Development pages for the Extend Online activity on recent archaeological digs.

Answers

Caption A food source was always available, as were other useful parts of large animals, such as bones and hides.

- ✓ *Homo habilis* used stone tools for cutting, scraping, chopping, or sawing plants, animals, and wood, and *Homo erectus* used a new form of stone tool, called a hand ax, that could be used for those same purposes, as well as for digging, shattering stone or bone, and boring holes into hard surfaces.



Migrations of *Homo sapiens*

Once *Homo sapiens* had emerged, they migrated along the various routes shown on the map. Many of these routes followed the paths of large herd animals such as bison. *What do you think was the benefit to *Homo sapiens* of following large herd animals?*

First Finds of Humans Around the World Scientists think that between 250,000 and 100,000 years ago, *Homo erectus* disappeared and a new group of hominids emerged. This new group, called *Homo sapiens*, is the group to which modern humans belong. There is some dispute over where *Homo sapiens* first lived. Many scholars think the archaeological and scientific evidence supports the “Out of Africa” theory, which says that *Homo sapiens* first lived in Africa and then migrated into other areas of the world. Other scientists think that *Homo erectus* developed into *Homo sapiens* around the same time in different parts of the world.

Either way, scholars think that two groups of *Homo sapiens* soon arose—Neanderthals and the earliest modern humans. Early modern humans eventually spread all over the world, while Neanderthals lived mostly in Europe and western Asia. Sometime between 50,000 and 30,000 years ago, the Neanderthals disappeared, leaving early modern humans as the only hominids on Earth.

- ✓ **Checkpoint** What have anthropologists learned about the use of tools during prehistory?

1 Assessment

Terms, People, and Places

1. For each term, person, or place listed at the beginning of the section, write a sentence explaining its significance.

Note Taking

2. **Reading Skill: Summarize** Use your completed concept web and table to answer the Focus Question: What have scholars learned about the ancestors of humans, and how have they done so?

Comprehension and Critical Thinking

3. **Express Problems Clearly** What types of obstacles do historians have to overcome to give a straightforward account of events? How do you think they might do this?
4. **Analyze Information** In what ways do archaeologists work with new technologies and other scholars in their work?
5. **Synthesize Information** Describe the story that anthropologists think the bones and tools they have discovered reveal about prehistory.

Writing About History

Quick Write: Explore a Topic Choose a specific topic from this section and write a series of questions that you could use to direct your research for a report on it. For example, on the topic of Olduvai Gorge, you could ask the following:

- Why did the Leakeys decide to investigate this particular site?
- Have any discoveries other than the ones described in the text been made at Olduvai Gorge?

Section 1 Assessment

1. Sentences should reflect an understanding of each term, person, or place listed at the beginning of the section.
2. Anthropologists have identified four groups of hominids. The earliest, australopithecines, may have lived as early as 7 million years ago in Africa. Later, *Homo erectus* and *Homo sapiens* spread out of Africa. Today, humans are the only living

- hominids. Anthropologists have learned this through bone and artifact evidence.
3. Historians should be careful to look for their own biased viewpoints and weed them out of their work.
4. computers to store and sort data and to develop site maps; aerial photographs to see the layout of the land; radioactivity to measure the age of objects; work with other scholars to determine ancestors' diets and the climates they lived in

5. Different groups of hominids emerged at different times in prehistory.

Writing About History

Responses should show an understanding of ways questions can be used to direct research.

For additional assessment, have students access **Progress Monitoring Online** at **Web Code naa-0111**.