Name _____ Date _____

CHAPTER 1
Section 1

GUIDED READING *Human Origins in Africa*

A. ***Categorizing*** As you read about early humans, fill in the chart below by describing the physical traits and achievements of each species of hominid listed.

Name	Traits	Achievements
1. Australopithecines		
2. *Homo habilis*		
3. *Homo erectus*		
4. Neanderthals		
5. Cro-Magnons		

B. ***Comparing and Contrasting*** Fill in the chart below to compare the Old Stone Age and the New Stone Age.

Stone Age	Began	Ended	Achievements
Paleolithic Age			
Neolithic Age			

C. ***Writing for a Specific Purpose*** On the back of this paper, explain the work of anthropologists, archaeologists, and paleontologists. Use the following terms in your explanation.

artifacts **culture** **technology**

Name _____ Date _____

CHAPTER 1

Section 2

GUIDED READING *Humans Try to Control Nature*

A. ***Summarizing*** As you read this section, take notes to answer questions about the development of agriculture.

People of the Old Stone Age were nomads who wandered from place to place in search of food.

1. How did hunter-gatherers use technology to improve their chances of survival?	2. What types of art did Paleolithic people create?

About 10,000 years ago, an agricultural revolution began.

3. What factors led to the agricultural revolution?	4. How did farming develop and spread worldwide?

Farming led to a settled way of life.

5. What were some of the cultural achievements of Neolithic villagers?	6. What problems did early villagers face?

B. ***Identifying Problems and Solutions*** On the back of this paper explain how stone age peoples used **slash-and-burn farming** and the **domestication** of animals to produce a steady source of food.

Name _____ Date _____

CHAPTER 1

Section 3

GUIDED READING *Patterns of Change: Civilization*

A. ***Determining Main Ideas*** As you read this section, fill in the boxes below. List the social and economic changes that led to the development of cities and the rise of civilization.

Village and town life begin.

1. Economic changes

2. Social changes

Cities emerge and grow.

3. Economic changes

4. Social changes

Civilizations arise.

B. ***Writing Expository Paragraphs*** On the back of this paper, explain how Ur typified an ancient civilization. Use the following terms in your explanation.

specialization	**artisans**	**institution**	**scribes**
cuneiform	**barter**	**ziggurat**	

Name _____ Date _____

CHAPTER 1

BUILDING VOCABULARY *The Peopling of the World*

A. *Matching* Match the description in the second column with the term or name in the first column. Write the appropriate letter next to the word.

____ 1. artifact	a. skilled worker who makes goods by hand
____ 2. Paleolithic Age	b. the New Stone Age, in which people learned to grow crops and raise animals
____ 3. Neolithic Age	c. group whose food supply depends on hunting animals and collecting plant foods
____ 4. *Homo sapiens*	d. the earlier and longer part of the Stone Age, in which tools were invented
____ 5. hunter-gatherer	e. period of time when people began making bronze tools and weapons
____ 6. artisan	f. the species name for modern humans
____ 7. scribe	g. human-made object
____ 8. Bronze Age	h. professional record-keeper

B. *Completion* Select the term or name that best completes the sentence.

culture	Neolithic	farming	barter
hominid	Revolution	cuneiform	ziggurat
nomad	slash-and-burn		

1. A _____ moves from place to place searching for new sources of food.
2. Ancient Sumerians practiced _____ when they traded goods and services without using money.
3. Sumerian scribes invented _____, a system of writing using wedge-shaped symbols.
4. A people's unique way of life is called _____.
5. The beginnings of farming that characterized the _____ brought far-reaching changes in human life.
6. In _____, people cut trees or grasses and burn them to clear fields for planting crops.

C. *Writing* Write a paragraph summarizing how early civilizations developed using the following terms.

technology domestication specialization institution

Name _____ Date _____

CHAPTER 1
Section 1

SKILLBUILDER PRACTICE *Interpreting Maps*

The map on page 10 of your textbook shows early human migration routes. To interpret the information depicted in the map, first study the compass rose, scale, and legend. The compass rose shows direction, the scale indicates distance, and the legend explains what the colors and symbols represent. Then answer the questions below. (See Skillbuilder Handbook)

1. In what directions did *Homo erectus* migrate from Kenya in east Africa to Indonesia? _____

2. To what continents did *Homo sapiens* migrate from Asia? _____

3. What is the approximate distance *Homo erectus* traveled as they migrated from Ubeidiya, Israel, to Lantian, China? _____

4. What environmental factors may have influenced migration routes? _____

5. a. On what continents are fossil sites of *Homo erectus* located? _____

   b. On what continents are there fossil sites of *Homo sapiens*? _____

   c. What do the dates of these sites reveal about the chronology of early human migration? _____

6. What conclusions can you draw about early humans from the information presented in the map? _____

Name _____ Date _____

CHAPTER 1
Section 2

GEOGRAPHY APPLICATION: PLACE *Catal Huyuk*

Directions: Read the paragraphs below and study the illustration carefully. Then answer the questions that follow.

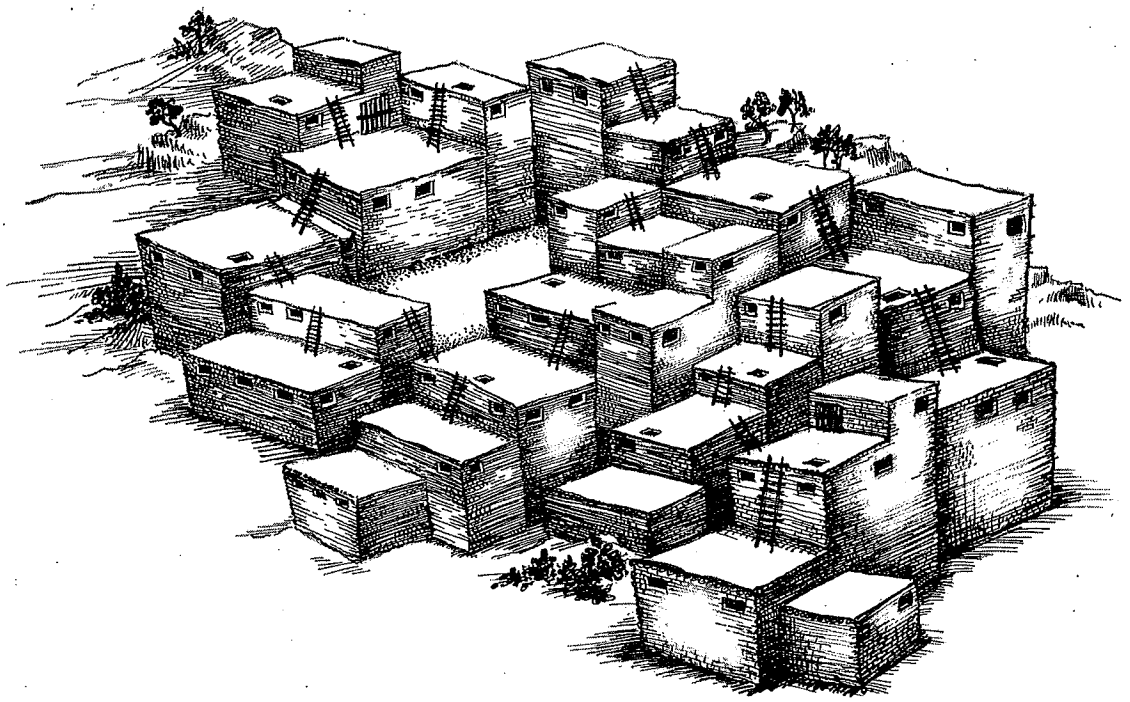
Among the many ancient settlements of human beings in the world was the village of Catal Huyuk. Founded approximately 8,000 years ago in the hills of what is now Turkey, Catal Huyuk lasted for nearly 2,000 years before mysteriously disappearing.

The settlement was the world's most advanced human center of the first agricultural age. However, Catal Huyuk did not develop near a major river system, as might have been expected of a farming village. Instead, it developed near a small stream in the shadow of three menacing volcanoes.

The people of Catal Huyuk fortified themselves against invaders and wild animals by building a village that contained no doors or streets. Instead, inhabitants used a hole in the roof to enter and exit and people simply moved around on top of each other's dwellings. Families constructed their houses with strong mud-dried brick. The roofs were made of woven reeds and mud and were connected on one or more sides to the units next to them. Each family dwelling contained an open hearth, an oven in the wall, and clearly defined sleeping areas.

The residents of Catal Huyuk appeared to be a religious people. Elaborate shrines were constructed in the same fashion as the dwellings, and contained four or five rooms. Paintings filled the walls of these shrines and often included the chief deity, who was believed to be a goddess. This goddess was frequently depicted giving birth, nursing a child, or living as an old woman accompanied by a vulture.

The economic base of Catal Huyuk was also highly sophisticated for the time. Like their ancestors, these people still hunted, but they also bred goats, sheep, and cattle. In addition, they produced many different types of foods, including peas, several grains, berries, and berry wine. However, like other prehistoric humans, the people of Catal Huyuk did not live much past their twenties.



Interpreting Text and Visuals

1. What does the illustration reveal about the way that the people of Catal Huyuk entered their dwellings and moved from house to house? _____

2. Where was Catal Huyuk located? _____

3. Describe the physical surroundings of Catal Huyuk. _____

4. Explain how the village of Catal Huyuk was constructed. _____

5. What role did religion play in the lives of the people of Catal Huyuk? _____

6. If Catal Huyuk had been built near a major river system, how might life have been different?

7. Look again at the illustration. Explain what you think the inhabitants of Catal Huyuk gained by constructing their settlement in this manner. _____

Name _____ Date _____

CHAPTER 1

Section 1

PRIMARY SOURCE *from Lucy: The Beginnings of Humankind*

In the following excerpt, American paleoanthropologist Donald Johanson describes how he and his colleague Tom Gray found the fossils of a 3.5 million-year-old hominid they nicknamed "Lucy." As you read, consider how the scientists feel about their discovery.

On the morning of November 30, 1974, I woke, as I usually do on a field expedition, at daybreak. I was in Ethiopia, camped on the edge of a small muddy river, the Awash, at a place called Hadar, about a hundred miles northeast of Addis Ababa. I had been there for several weeks, acting as coleader of a group of scientists looking for fossils.

. . . It was still relatively cool, not more than 80 degrees. The air had the unmistakable crystalline smell of early morning on the desert, faintly touched with the smoke of cooking fires. Some of the Afar tribesmen who worked for the expedition had brought their families with them, and there was a small compound of dome-shaped huts made of sticks and grass mats about two hundred yards from the main camp. . . .

Tom Gray joined me for coffee. Tom was an American graduate student who had come out to Hadar to study the fossil animals and plants of the region, to reconstruct as accurately as possible the kinds and frequencies and relationships of what had lived there at various times in the remote past and what the climate had been like. My own target—the reason for our expedition—was hominid fossils: the bones of extinct human ancestors and their close relatives. I was interested in the evidence for human evolution. But to understand that, to interpret any hominid fossils we might find, we had to have the supporting work of other specialists like Tom.

"So, what's up for today?" I asked.

Tom said he was busy marking fossil sites on a map.

"When are you going to mark in Locality 162?"

"I'm not sure where 162 is," he said.

"Then I guess I'll have to show you." I wasn't eager to go out with Gray that morning. I had a tremendous amount of work to catch up on. . . . I should have stayed in camp that morning—but I didn't. I felt a strong subconscious urge to go with Tom, and I obeyed it. I wrote a note to myself in my daily diary: Nov. 30, 1974. To Locality 162 with Gray in A.M. Feel good.

As a paleoanthropologist—one who studies the fossils of human ancestors—I am superstitious. Many of us are, because the work we do depends a great deal on luck. The fossils we study are extremely rare, and quite a few distinguished paleoanthropologists have gone a lifetime without finding a single one. I am one of the more fortunate. This was only my third year in the field at Hadar, and I had already found several. I know I am lucky, and I don't try to hide it. That is why I wrote "feel good" in my diary.

. . . Gray and I got into one of the expedition's four Land-Rovers and slowly jounced our way to Locality 162. . . . Although the spot we were headed for was only about four miles from camp, it took us half an hour to get there because of the rough terrain. When we arrived it was already beginning to get hot. . . .

Gray and I parked the Land-Rover on the slope of [a gully.] We were careful to face it in such a way that the canvas water bag that was hanging from the side mirror was in the shade. Gray plotted the locality on the map. Then we got out and began doing what most members of the expedition spent a great deal of their time doing: we began surveying, walking slowly about, looking for exposed fossils.

Some people are good at finding fossils. Others are hopelessly bad at it. It's a matter of practice, of training your eye to see what you need to see. I will never be as good as some of the Afar people. They spend all their time wandering around in the rocks and sand. They have to be sharp-eyed; their lives depend on it. Anything the least bit unusual they notice. . . .

Tom and I surveyed for a couple of hours. It was now close to noon, and the temperature was approaching 110. We hadn't found much. . . .

"I've had it," said Tom. "When do we head back to camp?"

"Right now. But let's go back this way and survey the bottom of that little gully over there."

The gully in question was just over the crest of the rise where we had been working all morning. It had been thoroughly checked out at least twice before by other workers, who had found nothing interesting. Nevertheless, conscious of the "lucky" feeling that had been with me since I woke, I decided to make that small final detour. There was virtually no bone in the gully. But as we turned to leave, I noticed something lying on the ground partway up the slope.

"That's a bit of a hominid arm," I said.

"Can't be. It's too small. Has to be a monkey of some kind."

We knelt to examine it.

"Much too small," said Gray again.

I shook my head. "Hominid."

"What makes you so sure?" he said.

"That piece right next to your hand. That's hominid too."

. . .He 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."

"By God, you'd better believe it!" shouted Gray. "Here it is. Right here!" His voice went up into a howl. I joined him. In that 110-degree heat we began jumping up and down. With nobody to share our feelings, we hugged each other, sweaty and smelly, howling and hugging in the heat-shimmering gravel. . . .

"We've got to stop jumping around," I finally said. "We may step on something. Also, we've got to make sure."

"Aren't you sure . . . ?"

"I mean, suppose we find two left legs. There may be several individuals here, all mixed up. Let's play it cool until we can come back and make absolutely sure that it all fits together."

We collected a couple of pieces of jaw, marked the spot exactly and got into the blistering Land-Rover for the run back to camp. On the way we picked up two expedition geologists who were loaded down with rock samples they had been gathering.

"Something big," Gray kept saying to them. "Something big. Something big."

"Cool it," I said.

But about a quarter of a mile from camp, Gray could not cool it. He pressed his thumb on the Land-Rover's horn, and the long blast brought a scurry of scientists who had been bathing in the river. "We've got it," he yelled. " . . . We've got it. We've got The Whole Thing!"

That afternoon everyone in camp was at the gully, sectioning off the site and preparing for a massive collecting job that ultimately took three weeks. When it was done, we had recovered several hundred pieces of bone (many of them fragments) representing about forty percent of the skeleton of a single individual. Tom's and my original hunch had been right. There was no bone duplication.

But a single individual of what? On preliminary examination it was very hard to say, for nothing quite like it had ever been discovered. The camp was rocking with excitement. That first night we never went to bed at all. We talked and talked. We drank beer after beer. There was a tape recorder in the camp, and a tape of the Beatles song "Lucy in the Sky with Diamonds" went belting out into the night sky, and was played at full volume over and over again out of sheer exuberance. At some point during that unforgettable evening—I no longer remember exactly when—the new fossil picked up the name of Lucy, and has been so known ever since, although its proper name—its acquisition number in the Hadar collection—is AL 288-1.

from Donald C. Johanson and Maitland A. Edey, *Lucy: The Beginnings of Humankind* (New York: Simon and Schuster, 1981), 13–18.

Discussion Questions

1. ***Summarizing*** Where did Johanson and Gray find Lucy?
2. ***Making Inferences*** Why do you think Johanson and Gray felt that they had discovered "something big"?
3. ***Drawing Conclusions*** What important clues do you think fossils like Lucy provide about the past?

Name _____ Date _____

CHAPTER 1
Section 2

PRIMARY SOURCE Lascaux Cave Painting

A prehistoric artist painted this bull in the Lascaux Cave in France. What can this cave painting tell you about prehistoric life?

Research Options

1. ***Interpreting Visual Sources*** Find and compare photographs of cave paintings like this one that have been found in France, Spain, South America, and Africa. What do these paintings have in common? How are they different? With classmates, create a bulletin board display to illustrate a variety of Stone Age art.

Using Research in Writing

2. Find out more about how prehistoric artists made their cave paintings. What tools did they use? How did they make colored paints? Share your findings with classmates.
3. Cave art provides important clues to prehistoric life. With a partner, research what is being done to protect and preserve cave paintings.

Name _____ Date _____

CHAPTER 1
Section 2

PRIMARY SOURCE *from* "Window on the Stone Age"
by Leon Jaroff

In December 1994 Jean-Marie Chauvet and two fellow cave explorers discovered Stone Age cave paintings in southeastern France. As you read this account, think about the significance of their discovery.

At the base of a cliff in the Ardèche region in southeastern France last December, the three middle-aged spelunkers felt a breeze wafting from a pile of rock and debris. "That was a sign that there was a cave beneath it," recalls Jean-Marie Chauvet. With his companions, Chauvet cleared away an opening, then wriggled through a tunnel into a complex of large caves.

Then, in the pale glow of their head lamps, the explorers noticed two red lines on a cavern wall. Chauvet, a government employee who oversees the protection of the many historically important caves in the region, recognized the markings as "characteristic of the Stone Age." What he did not immediately realize—and the world did not know until the French Culture Ministry announced it last week—was that they had discovered an archaeological trove that may rival even the fabled drawings on the cave walls at Lascaux in France and Altamira in Spain. The spelunkers had found an extraordinarily clear window on prehistoric life. . . . Probing deeper into the cavern system, they began coming upon exquisite, intricately detailed wall paintings and engravings of animals, as well as numerous images of human hands, some in red, others in black pigment. "I thought I was dreaming," says Chauvet. "We were all covered with goose pimples."

The art was in pristine condition, apparently undisturbed for up to 20,000 years, as was other evidence of the ancient artists' presence: flint knives, mounds of clay used for making paint, and charred fire pits.

Photographs of the Stone Age art show images of lions, bison, deer, bears, horses and some 50 woolly rhinos. "These paintings are more beautiful than those in Lascaux," says Patrice Béghain, the regional head of cultural affairs. "There is a sense of rhythm and texture that is truly remarkable." . . .

Of particular interest to Jean Clottes, France's foremost expert on prehistoric rock art, is the fact that, in contrast to previous cave artwork, images of predatory and dangerous species—bears, lions, rhinos, a panther and a hyena—far outnumber the horses, bison, deer and mammoths usually hunted by Stone Age people. "The paintings in this cave," he says, "will force us to change how we interpret Stone Age art."

Béghain is particularly struck by the skull of a bear perched on a stone near a wall adorned by an ursine image. "What is significant," says the official, "is that some 17,000 to 20,000 years ago, a human being decided to put it in that particular place for a particular reason. I think it fair to assume that the bear did not self-decapitate on that spot to intrigue us." Was this an altar for some Paleolithic ceremony?

Stung by lessons learned at Altamira and Lascaux, where initial unrestricted access to the caves obliterated archaeological clues and led to the rapid deterioration of artwork, the French Culture Ministry has put the Chauvet cave off limits to all but a handful of experts and installed video surveillance cameras and police guards at the entrance. "Our goal," says Béghain, "is to keep the cave in this virgin state so that research can, in theory, continue indefinitely." —Reported by Bruce Crumley/Paris

from *Time*, January 30, 1995, 80–81.

Activity Options

1. ***Writing Narrative Paragraphs*** Imagine that you are Jean-Marie Chauvet. Write a diary entry about your discovery and share it with classmates.
2. ***Forming and Supporting Opinions*** With your classmates, hold an informal debate about whether the public should or should not have unlimited access to the Chauvet cave. Draw on information in your textbook and on independent research on cave art to prepare your argument.

Name _____ Date _____

CHAPTER 1

Section 1

LITERATURE SELECTION *from The Clan of the Cave Bear*
by Jean M. Auel

In her novel* The Clan of the Cave Bear, *American writer Jean M. Auel describes how a group of humans on the dry grassy plains of Russia may have lived about 30,000 years ago. As you read this excerpt, notice how Brun, Iza, and Creb—members of the Clan of the Cave Bear—look, dress, speak, and act.

The band of travelers crossed the river just beyond the waterfall where it widened and foamed around rocks jutting up through the shallow water. They were twenty in number, young and old. The clan had totaled twenty-six before the earthquake that destroyed their cave. Two men led the way, far in front of a knot of women and children flanked by a couple of older men. Younger men trailed behind.

They followed the broad stream as it began its braided, meandering course across the flat steppes, and watched the carrion birds circling. Flying scavengers usually meant that whatever had attracted their attention was still alive. The men in the lead hurried to investigate. A wounded animal was easy prey for hunters, providing no four-legged predators had similar ideas.

A woman, midway along in her first pregnancy, walked in front of the rest of the women. She saw the two men in the lead glance at the ground and move on. It must be a meat eater, she thought. The clan seldom ate carnivorous animals.

She was just over four and a half feet tall, large boned, stocky, and bow-legged, but walked upright on strong muscular legs and flat bare feet. Her arms, long in proportion to her body, were bowed like her legs. She had a large beaky nose, a prognathous jaw jutting out like a muzzle, and no chin. Her low forehead sloped back into a long, large head, resting on a short, thick neck. At the back of her head was a boney knob, an occipital bun, that emphasized its length.

A soft down of short brown hair, tending to curl, covered her legs and shoulders and ran along the upper spine of her back. It thickened into a head of heavy, long, rather bushy hair. She was already losing her winter pallor to a summer tan. Big, round, intelligent, dark brown eyes were deep set below overhanging brow ridges, and they were filled with curiosity as she quickened her pace to see what the man had passed by.

The woman was old for a first pregnancy, nearly twenty, and the clan thought she was barren until the life stirring within her started to show. The load she carried had not been lightened because she was pregnant, however. She had a large basket strapped to her back, with bundles tied behind, hanging below, and piled on top of it. Several drawstring bags dangled from a thong, which was wrapped around the pliable hide she wore in such a way as to produce folds and pouches for carrying things. One bag was particularly distinctive. It was made from an otter hide, obviously so because it had been cured with its waterproof fur, feet, tail, and head left intact.

Rather than a slit in the skin of the animal's belly, only the throat had been cut to provide an opening to remove the innards, flesh, and bones, leaving a pouchlike bag. The head, attached by a strip of skin at the back, was the cover flap, and a red-dyed cord of sinew was threaded through holes punched around the neck opening, drawn tight, and tied to the thong at her waist.

When the woman first saw the creature the men had left behind, she was puzzled by what appeared to be an animal without fur. But when she drew closer, she gasped and stepped back a pace, clutching the small leather pouch around her neck in an unconscious gesture to ward off unknown spirits. She fingered the small objects inside her amulet through the leather, invoking protection, and leaned forward to look closer, hesitant to take a step, but not quite able to believe she saw what she thought she was seeing.

Her eyes had not deceived her. It was not an animal that had drawn the voracious birds. It was a child, a gaunt, strange-looking child!

The woman looked around, wondering what other fearful enigmas might be nearby, and started to skirt the unconscious child, but she heard a moan. The woman stopped and, forgetting her fears, knelt beside the child and shook her gently. The medicine woman reached to untie the cord that held the otter-skin bag closed as soon as she

saw the festering claw marks and swollen leg when the girl rolled over.

The man in the lead glanced back and saw the woman kneeling beside the child. He walked back to them.

"Iza! Come!" he commanded. "Cave lion tracks and scat ahead."

"It's a child, Brun. Hurt but not dead," she replied.

Brun looked at the thin young girl with the high forehead, small nose, and strangely flat face. "Not Clan," the leader gestured abruptly and turned to walk away.

"Brun, she's a child. She's hurt. She'll die if we leave her here." Iza's eyes pleaded as she made the hand signals.

The leader of the small clan stared down at the imploring woman. He was much bigger than she, over five feet tall, heavily muscled and powerful, with a deep barrel chest and thick bowed legs. The cast of his features was similar, though more pronounced—heavier supraorbital ridges, larger nose. His legs, stomach, chest, and upper back were covered with a coarse brown hair that was not enough to be called a pelt, but not far from it. A bushy beard hid his chinless jutting jaw. His wrap was similar, too, but not as full, cut shorter, and tied differently, with fewer folds and pouches for holding things.

He carried no burdens, only his outer fur wrap, suspended on his back by a wide band of leather wrapped around his sloping forehead, and his weapons. On his right thigh was a scar, blackened like a tattoo, shaped roughly like a U with the tops flaring outward, the mark of his totem, the bison. He needed no mark or ornament to identify his leadership. His bearing and the deference of the others made his position clear.

He shifted his club, the long foreleg of a horse, from his shoulder to the ground, supporting the handle with his thigh, and Iza knew he was giving her plea serious consideration. She waited quietly, hiding her agitation, to give him time to think.

Brun didn't like making quick decisions about anything unusual that might affect his clan, especially now when they were homeless, and he resisted the impulse to refuse at once. I should have known Iza would want to help her, he thought; she's even used her healing magic on animals sometimes, especially young ones. She'll be upset if I don't let her help this child. Clan or Others, it makes no difference, all she can see is a child who is hurt. Well, maybe that's what makes her a good medicine woman.

But medicine woman or not, she is just a woman. What difference will it make if she's upset? Iza knows better than to show it, and we have enough problems without a wounded stranger. But her totem will know, all the spirits will. Would it make them more angry if she's upset? If we find a cave . . . no, when we find a new cave, Iza will have to make her drink for the cave ceremony. What if she's so upset she makes a mistake? Angry spirits could make it go wrong, and they're angry enough already. Nothing must go wrong with the ceremony for the new cave.

Let her take the child, he thought. She'll soon get tired of carrying the extra load, and the girl is so far gone, not even my sibling's magic may be strong enough to save her. Brun shrugged noncommittally. It was up to her; Iza could take the girl with them or not as she pleased. He turned and strode off.

Iza reached into her basket and pulled out a leather cloak. She wrapped it around the girl, hoisted her up, and secured the unconscious child to her hip with the aid of the supple hide, surprised at how little she weighed for her height. The girl moaned as she was lifted and Iza patted her reassuringly, then fell into place behind the two men.

The other women had stopped, holding back from the encounter between Iza and Brun. When they saw the medicine woman pick something up and take it with her, their hands flew in rapid motions punctuated by a few guttural sounds, discussing it with excited curiosity. Except for the otter-skin pouch, they were dressed the same as Iza, and as heavily burdened. Among them they carried all the clan's worldly possessions, those that had been salvaged from the rubble after the quake.

Two of the seven women carried babies in a fold of their wraps next to their skin, convenient for nursing. While they were waiting, one felt a drop of warm wetness, whipped her naked infant out of the fold, and held it in front of her until it was through wetting. When they weren't traveling, babies were often wrapped in soft swaddling skins. To absorb moisture and soft milky stools, any of several materials were packed around them: fleece from wild sheep gathered from thorny shrubs when the moufion were shedding, down from birds' breasts, or fuzz from fibrous plants. But while they traveled, it was easier and simpler to carry babies naked and,

without missing a step, let them mess on the ground.

. . . An older girl, not yet a woman but carrying a woman's load, walked behind the woman who followed Iza, glancing back now and then at a boy, very nearly a man, trailing the women. He tried to allow enough distance between himself and them so it would seem he was one of the three hunters bringing up the rear and not one of the children. He wished he had game to carry, too, and even envied the old man, one of the two flanking the women, who carried a large hare over his shoulder, felled by a stone from his sling.

The hunters were not the only source of food for the clan. The women often contributed the greater share, and their sources were more reliable. Despite their burdens, they foraged as they traveled, and so efficiently it hardly slowed them down. A patch of day lilies was quickly stripped of buds and flowers, and tender new roots exposed with a few strokes of the digging sticks. Cattail roots, pulled loose from beneath the surface of marshy backwaters, were even easier to gather.

If they hadn't been on the move, the women would have made a point of remembering the location of the tall stalky plants, to return later in the season to pick the tender tails at the top for a vegetable. Later still, yellow pollen mixed with starch pounded from the fibers of old roots would make doughy unleavened biscuits. When the tops dried, fuzz would be collected; and several of the baskets were made from the tough leaves and stalks. Now they gathered only what they found, but little was overlooked.

New shoots and tender young leaves of clover, alfalfa, dandelion; thistles stripped of prickles before they were cut down; a few early berries and fruits. The pointed digging sticks were in constant use; nothing was safe from them in the women's deft hands. . . . Though the selection would be more varied later in the summer, food was plentiful—if one knew where to look.

Iza looked up when an old man, past thirty, hobbled up to her after they were on their way again. He carried neither burden nor weapon, only a long staff to help him walk. His right leg was crippled and smaller than the left, yet he managed to move with surprising agility.

His right shoulder and upper arm were atrophied and the shriveled arm had been amputated below the elbow. The powerful shoulder and arm and muscular leg of his fully developed left side made him appear lopsided. His huge cranium was even larger than those of the rest of the clan, and the difficulty of his birth had caused the defect that crippled him for life.

He was also a sibling of Iza and Brun, first-born, and would have been leader but for his affliction. He wore a leather wrap cut in the masculine style and carried his warm outer fur, which was also used as a sleeping fur, on his back as the other men did. But he had several pouches hanging from his waist thong and a cloak similar to the kind the women used which held a large bulging object to his back.

The left side of his face was hideously scarred and his left eye was missing, but his good right eye sparkled with intelligence, and something more. For all his hobbling, he moved with a grace that came from great wisdom and a sureness of his place within the clan. He was Mog-ur, the most powerful magician, most awesome and revered holy man of all the clans. He was convinced that his wasted body was given to him so that he could take his place as intermediary with the spirit world rather than at the head of his clan. In many ways he had more power than any leader, and he knew it. Only close relatives remembered his birth name and called him by it.

"Creb," Iza said in greeting and acknowledged his appearance with a motion that meant she was pleased he had joined her.

"Iza?" he questioned with a gesture toward the child she carried. The woman opened her cloak and Creb looked closely at the small flushed face. The girl moaned, and Creb's expression softened. He nodded his approval.

"Good," he said. The word was gruff, guttural. Then he made a sign that meant, "Enough have died."

Discussion Questions

1. ***Describing Character*** What do men and women from the Clan of the Cave Bear look like? Describe their physical characteristics and clothing.
2. ***Determining Main Ideas*** What food do clan members eat, and how do they obtain it?
3. ***Drawing Conclusions*** Why do Brun and the other men leave the injured girl behind?
4. ***Making Inferences*** How similar or different is Auel's portrayal of Stone Age life from that of present-day life in the United States?

Name _____ Date _____

CHAPTER 1
Section 1

HISTORYMAKERS

Mary Leakey

Digger into the Past

"I never felt interpretation was my job. What I came to do was to dig things up and take them out as well as I could. There is so much we do not know, and the more we do know, the more we realize that early interpretations were completely wrong."—Mary Leakey

Mary Leakey gained fame for two reasons. She was extremely skillful—and she had incredible luck. Brian Fagan, a well-known archaeologist, praised the "fierce determination and passion for detail" she showed when working in the field. She also made spectacular finds, maybe because of what people called "Leakey luck." The daughter of an artist, Mary Douglas Nicol showed skill at drawing when she was young. She also showed a rebellious nature; in fact, two different schools expelled her. As a teen, she began to combine her ability to draw with her interest in prehistoric people. She joined archaeological digs and sketched the objects that scientists found.

Luck changed Mary's life in 1933. At a London dinner party, she was introduced to Louis Leakey. A paleoanthropologist—someone who studies humanlike creatures that predate human beings—Leakey, whom she eventually married, asked her to illustrate a book with drawings of fossils he had discovered in Africa. Two years later they traveled to Africa, which, Mary later said, "cast its spell" on her. For the next few decades the Leakeys worked together, trying to understand human origins.

They made an excellent team. Their son Richard Leakey, himself a famous naturalist, summed up their talents. "She was much more organized and structured and much more of a technician. He was much more excitable, a magician." Louis traveled the world, lecturing on his theories and working to raise money for more digs. Meanwhile Mary, though never formally trained in the field, stayed in Africa to supervise the work.

Mary did more than just lead digs. Over the years, she made several major finds. The first came in 1948. She found the fossil remains of a creature that the Leakeys named Proconsul. This animal is a common ancestor of apes and humans.

Another discovery came in 1959. Louis was ill one day and had to stay in camp. Mary went fossil hunting with her two dogs for company and she found a small piece of bone jutting out of the ground. She raced back to tell Louis that she had found an early hominid. "I've got him!" she said. Working with dental picks and delicate brushes, they unearthed nearly 400 pieces of bone. Carefully piecing together the puzzle, they assembled the skull of a humanlike creature. Then "Leakey luck" struck again. A camera crew reached the camp the day after the discovery. Their film helped spread the news quickly, and the Leakeys became famous. Soon they received more money to continue their work. A few years later, Mary found another hominid creature and named this specimen *Homo habilis,* which means "able man."

In 1972, Louis died and Mary added public lecturing and fundraising to her work in the field. However, she tried to avoid the heated debates over human origins. Her role, she thought, was simply to find fossils. She once described the attraction of her work: "For me it was the sheer instinctive joy of collecting, or indeed one could say treasure hunting."

In 1978, Mary made perhaps her greatest find. While some members of her team were playing near their camp, one found fossilized animal prints in the dirt. Under Mary's leadership, they carefully cleaned a large area. Their efforts revealed a remarkable find: the footprints of two, and perhaps three, hominids who had walked upright. "Now this," Mary told the team, "is really something to put on the mantelpiece."

Five years later, Mary Leakey finally retired from the field. She continued with her artwork and writing until her death in 1996. She had lived, as a former colleague said, "an extraordinary life."

Questions

1. ***Comparing and Contrasting*** How did Louis and Mary Leakey balance each other with their special talents?
2. ***Determining Main Ideas*** What major finds did Mary Leakey make?
3. ***Drawing Conclusions*** What did she like about studying human origins?

Name _____ Date _____

CHAPTER 1
Section 2

HISTORYMAKERS

The Iceman

Frozen in Time

"I needed only one second to see that the body was [at least] 4,000 years old."—archaeologist Konrad Spindler

Two storms and two walks in the mountains combined to give archaeologists one of their most treasured finds in recent history. Around 3000 B.C., a lone man was walking through the Alps, a mountain range in south-central Europe. For some reason, he lay down to rest. While he was sleeping, a sudden storm dropped snow on him, and he froze to death. Yet the blanket of snow that caused his death preserved the man's body for thousands of years. It cushioned him from the great weight of the Alps' glaciers as they moved over his resting place.

In recent years warmer weather has melted those glaciers, revealing the snow underneath. Then, in the fall of 1991, came the second storm—a dust storm in the Sahara Desert, far away in Africa. It was so large that dust blew north to the Alps. The dust absorbed the heat of the sun, causing the snow to melt. Days later, a German couple strolled along this mountain trail and saw a human head and shoulders. After a long undisturbed rest, the Iceman was revealed to the world.

An archaeologist later commented on the timing of the couple's walk. "We think [the Iceman] was found only three days after he had melted out," the scientist said, "and three days later, the snow fell again—enough to have buried him. He was out of the ice, then, only six days, at maximum."

At first, no one knew what a treasure the Iceman was. Some thought he was a modern mountain climber who had died of the cold. Police tried to remove the body using a jackhammer, which tore away a piece of the Iceman's hip. Workers finally pried the body out using ski poles and wooden sticks. Then archaeologist Konrad Spindler arrived. Seeing a copper ax found with the body, Spindler realized that the Iceman could be thousands of years old. He also saw that contact with the air had caused fungus to grow on the body. He ordered the mummy placed in a freezer to save it for further study.

As the scientists examined the body, local people named him. Ötzi, they called him, after the nearby Ötztal Valley. He was five feet two inches tall and had brown curly hair. He had tattoo marks on his back, one kneecap, and one foot. Since all these areas would have been covered by clothing, scientists think the tattoos were not decorations but had spiritual meaning. His pants and jacket were made from the skin of animals. He also wore a long cape made of grass. His leather shoes had been stuffed with grass to help keep his feet warm in the cold mountains. In the tatters of his clothing, the scientists spotted some grains of wheat that grew only at low altitudes. The few pieces of charcoal he carried were made of trees that now grow in a valley just a few hours walk to the south.

Scientists also studied his tools. The Iceman had a six-foot long bow that had not yet been strung. He carried 14 arrows, two of which had stone arrowheads and feathers. His deerskin quiver excited the scientists—they had never seen such an object from this period. He carried a small stone-point knife and several pieces of flint that were ready to be sharpened into arrowheads or other points. A long stick ended in a piece of deer antler. Scientists think it was used to sharpen the flint into points. He had a backpack and carried two mushrooms that are known to have value as medicines. Most spectacular was the Iceman's ax. It had a wooden handle that curved at the top, where notches were made to fit the ax blade. The blade itself was solid copper, putting the Iceman in the period archaeologists call the Copper Age.

Scientists continue to work on the Iceman and his tools. They keep Ötzi's body frozen to preserve it, only removing it from the freezer for periods of 20 minutes at a time. As the scientists revisit this remarkable mummy, though, they add more and more to our understanding of the human past.

Questions

Determining Main Ideas

1. How was the body revealed?
2. How did the Iceman try to protect himself from the cold?
3. ***Drawing Conclusions*** Based on the evidence, what could you say about the Iceman's diet?

Name _____ Date _____

CHAPTER 1

Section 3

CONNECTIONS ACROSS TIME AND CULTURES

From Ancient to Modern Communities

THEMATIC CONNECTION: ECONOMICS

Early cities like Ur were both similar to and different from their modern-day counterparts. Compare your community with ancient Ur by answering the following questions.

1. Farmers, artisans, and merchants were the economic job base in Ur. What types of jobs are the economic base of your community? _____

2. How would a physical description of your community differ from that of Ur? Consider street layout, homes, and businesses. _____

3. Business and trade took place in a bazaar in Ur. How is a bazaar like a modern shopping mall? _____

4. Fill in this chart to show how Ur and your community display the five characteristics of civilization.

Characteristic	Ur	Your Community
Advanced cities		
Specialized workers		
Record keeping		
Complex institutions		
Advanced technology		

Name _____ Date _____

CHAPTER 1

Section 1

RETEACHING ACTIVITY *Human Origins in Africa*

Determining Main Ideas

The following questions deal with the development of a culture. Answer them in the space provided.

1. What do anthropologists mean when they use the term *culture*?

_____

_____

2. What are some common practices that a culture shares?

_____

_____

3. What are some examples of the social organization of a culture?

_____

_____

4. From what institutions or groups in a society do individuals learn their culture?

_____

_____

Reading Comprehension

Find the name or term in the second column that best matches the description in the first column. Then write the letter of your answer in the blank.

5. _____ human-made objects
6. _____ humans and other creatures that walk upright
7. _____ another name for the Old Stone Age
8. _____ ways of applying knowledge, tools, and inventions to meet human needs
9. _____ species name for modern humans
10. _____ famous discovery of cave paintings

a. technology
b. hominids
c. *Homo sapiens*
d. Lascaux
e Paleolithic Age
f. artifacts

Name _____ Date _____

CHAPTER 1

Section 2

RETEACHING ACTIVITY

Humans Try to Control Nature

Multiple Choice

Choose the best answer for each item. Write the letter of your answer in the blank.

____1. Highly mobile people who moved from place to place searching for new food sources were called
a. neanderthals.
b. hominids.
c. nomads.
d. farmers.

____2. People whose food supply depended on hunting animals and collecting plant foods were called
a. nomads.
b. a culture group.
c. Cro-Magnons.
d. hunter-gatherers.

____3. Discoveries of artistic works from early men and women include all of these *except*
a. polished beads made from mammoth tusks.
b. cave paintings.
c. watercolor paintings.
d. necklaces of seashells.

____4. Another name for the Neolithic Revolution is the
a. industrial revolution.
b. agricultural revolution.
c. New Stone Age.
d. technological revolution.

____5. Early farmers used slash-and-burn methods because
a. the ashes fertilized the soil and brought renewed growth after a few years.
b. they didn't want their neighbors to be able to use the land.
c. it produced the largest crops in the shortest period of time.
d. lack of rain made it the only method possible.

____6. The taming of animals in order to raise them as a constant source of food was known as
a. the agricultural revolution.
b. domestication.
c. herding.
d. ranching.

____7. The agricultural village known as Catal Huyuk was best known for its
a. obsidian products.
b. religious artifacts.
c. fossilized animal skeletons.
d. strong social organization.

____8. One drawback to the new settled way of life of people in villages such as Catal Huyuk was
a. boredom.
b. crowded conditions.
c. easily spread diseases.
d. overproduction of food.

Name _____ Date _____

CHAPTER 1
Section 3

RETEACHING ACTIVITY

Civilization
Case Study: Ur in Sumer

Summarizing
Complete the chart below by summarizing information about the key characteristics of a civilization.

CHARACTERISTIC	*EXPLANATION*	*EXAMPLE*
Advanced cities	1.	2.
Specialized workers	3.	4.
Complex institutions	5.	6.
Record keeping	7.	8.
Improved technology	9.	10.

Reading Comprehension
Find the name or term in the second column that best matches the description in the first column. Then write the letter of your answer in the blank.

____ 11. the development of skills in a specific kind of work

____ 12. professional record keepers

____ 13. the time when people began using a mixture of copper and tin to shape tools and weapons

____ 14. a system of writing invented in Sumer

____ 15. a way of trading goods and services without money

____ 16. a pyramid-shaped, tiered monument found in Ur

a. ziggurat
b. scribes
c. cuneiform
d. Bronze Age
e. barter
f. specialization