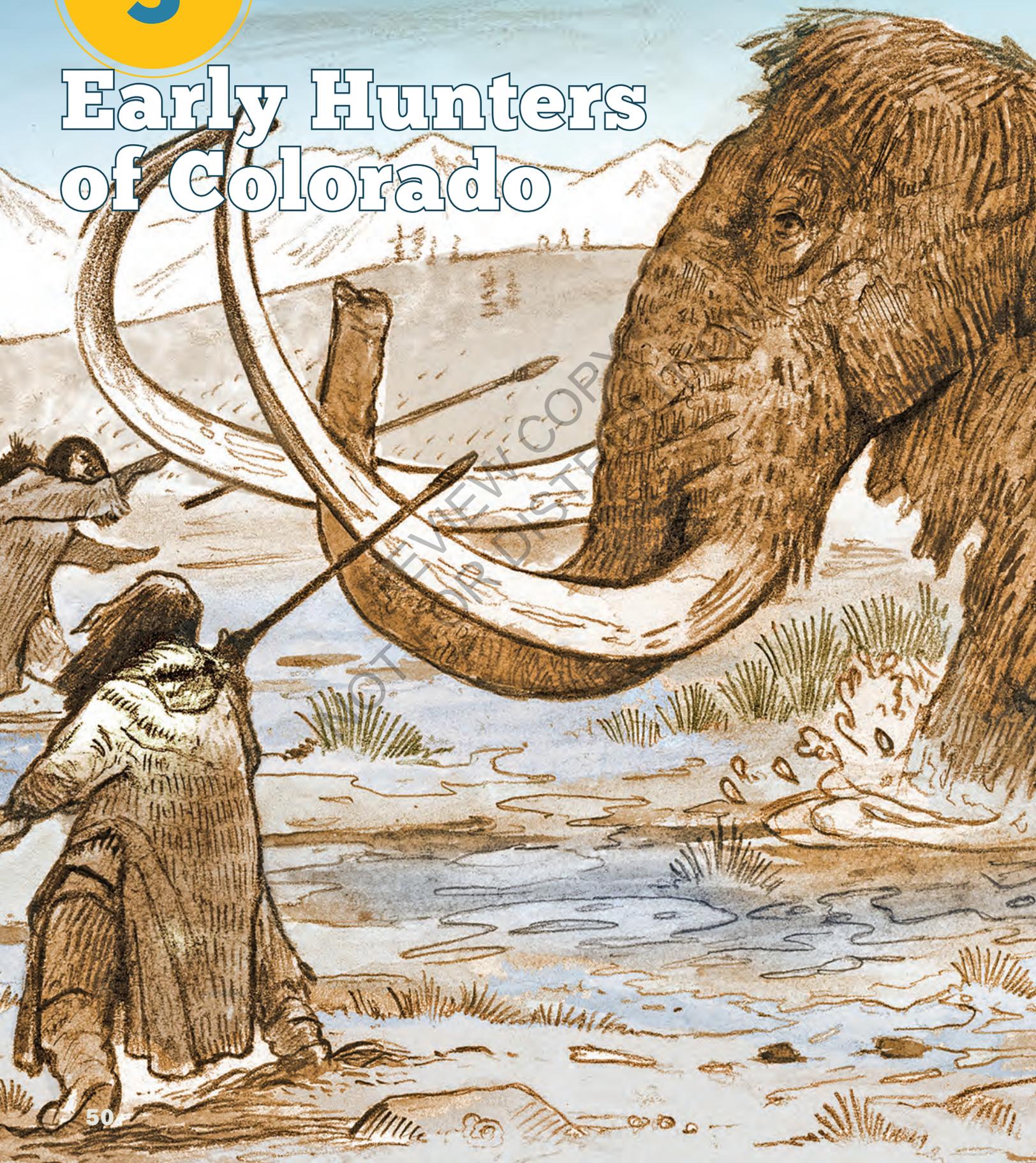


CHAPTER

3

Early Hunters of Colorado





How did hunter-gatherers respond to changes in the environment?



Before You Read

In your notebook, draw a graphic organizer with four columns and these headings:

- ➔ Paleo-Indian
- ➔ Archaic
- ➔ Plains Woodland
- ➔ Upper Republican and Apishapa

Then, skim this chapter to see how it is organized. Get ready to take notes while you read.



- **archaeologists**
- **extinct**
- **cultures**
- **artifacts**
- **gatherers**
- **pottery**

In the summer of 1926, J. D. Figgins received a box from New Mexico. He was the director of the natural history museum in Denver. The box contained a chunk of earth. Lying in the dirt were bison bones and a spear point. George McJunkin, an African American cowboy, had found bison bones near the town of Folsom, New Mexico. **Archaeologists** found the spear point next to the bones they sent to Denver. A hunter must have thrust this spear into the bison's ribs.



Clovis point

AN EXTINCT BISON

Figgins was amazed when he opened the box. The bones came from an **extinct** bison. The spear point next to it,



Route followed by Paleo-Indian hunters over the Bering Strait land bridge

although broken, was well made, with finely chipped edges. Long grooves ran down each side. Figgins had never seen a spear point like it. But the most amazing thing was the age of the bison. It had been extinct for about 10,000 years. That placed humans in New Mexico much longer ago than anyone had imagined. The spear point was given the name “Folsom point,” after the town of Folsom, New Mexico.

The study of early people in North America began with this find. It sent archaeologists out in search of early bison hunters. They found Folsom points in Colorado and other places in North America.

THE PALEO-INDIANS (12,000 BC TO 5000 BC)

The first people who lived in North America are called Paleo-Indians. The word *paleo* means “very old.” These people arrived from Siberia about 18,000 to 20,000 years ago. They crossed the Bering Strait, a waterway between Siberia and Alaska. During the last Ice Age, the strait was a land bridge. Ancient hunters used it to follow herds of animals into North America.

The Paleo-Indians hunted mammoths, camels, and bison. They killed them with spears that had sharp stone points. There were three different Paleo-Indian **cultures**: Clovis, Folsom, and Plano. The people of each culture used a different kind of spear point.

Clovis Culture

In 1932, J. D. Figgins visited a Paleo-Indian site near Dent, Colorado. (An archaeological site is any place where



Focus Your Reading

- When did Folsom people live in Colorado?
- How were Clovis and Folsom points alike?
- How did Plano people hunt bison?



artifacts, or objects made by humans, are found.) A railroad worker had found a pile of bones washed out of a ravine. Mixed with the bones were spear points. The bones and stone points were different from those found at Folsom, New Mexico. These points were larger and heavier and were not as well made. The bones were those of a Columbian mammoth, an extinct elephant. These huge animals had died out at least 11,000 years ago. Figgins concluded that the spear points at Dent were even older than the Folsom points.

Who Made the Clovis Point?

The points found at Dent are now called Clovis points. They were named for similar points found near Clovis, New Mexico. The way of life of the people who made them is called the Clovis culture.

Archaeologists have found Clovis points elsewhere in Colorado. They also found stone blades, probably used to scrape hides. The heavy points and scrapers tell us that Clovis people hunted big animals and likely wore hide clothing. They may have overhunted the mammoth. These big animals soon became extinct. What did these people look like? What kinds of shelters did they build? No one knows. A few stone tools are the only Clovis artifacts that have survived.

Folsom Culture

After finding Folsom points in New Mexico, archaeologists looked for them elsewhere. They found the grooved points in dozens of places in the United States. Colorado alone has eleven Folsom sites. Some are kill sites, where bison were



Folsom point found next to bison bones



While You Read

Look for clues in the three sections about Paleo-Indian culture that will answer the questions: *Who are we reading about—Folsom, Clovis, or Plano?* and *What do we know about them?* Write the answers to these questions in the first column of your organizer.



The Case of the Missing Bones

The tailbones were missing from the skeletons of the ancient bison found at Folsom, New Mexico. The missing bones provided additional evidence that humans had killed the bison. When the hunters skinned the animals, they removed the tail with the hide. They took the tailbones with them.



slaughtered. Others are campsites where hunters stopped for a while. Campsites usually contain the most artifacts.

A Folsom Campsite

We know a great deal about Folsom culture from a campsite near Fort Collins. In the camp, archaeologists found Folsom points in various stages of manufacture. These helped them understand how the points were made. The archaeologists also found stone scrapers and bone needles, probably used to make clothing. They found engraved bones that may have been used like dice, as game pieces. Folsom people did not just hunt bison. The bones included those from pronghorn antelopes, rabbits, foxes, wolves, and coyotes.

Plano Culture

In 1957, a dust storm on the plains exposed still more ancient bones. The wind uncovered the top layer of a ravine filled with bison bones. Joe Ben Wheat, an archaeologist, dug up the rest. Altogether, he found the bones of 190 ancient bison. Most were from fully grown bulls and cows. Some were from calves only a few days old. Mixed with the bones were dozens of human artifacts.

A Plano Bison Hunt

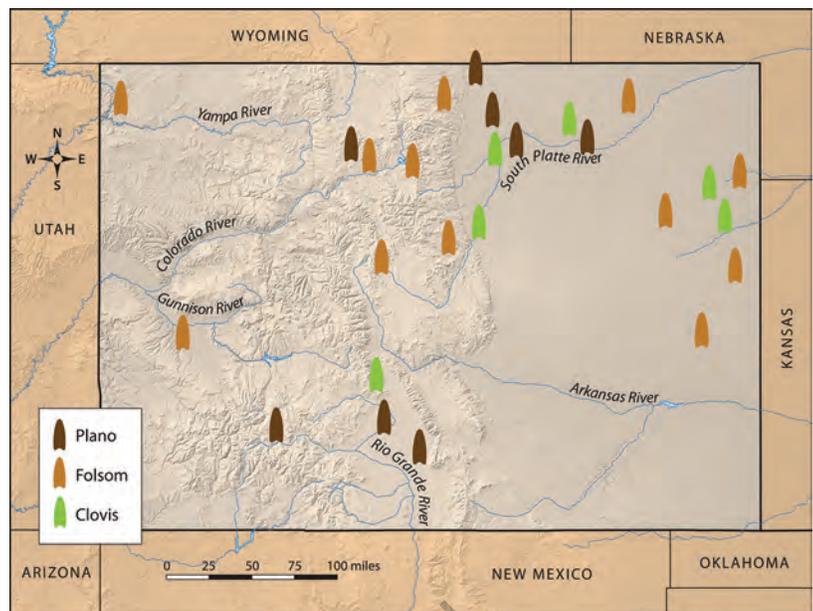
From this evidence, Joe Ben Wheat pieced together the following story. One day about 6500 BC, hunters came upon a herd of bison. Coming in quietly from three sides, the hunters surrounded the herd. On the fourth side was a dry ravine. At a signal from the leader, the hunters must have rushed at the herd, shouting and yelling.

The bison stampeded toward the ravine. The lead animals probably jumped across the six-foot-wide ditch. Others tripped and fell. The rest of the herd tumbled over them into the ravine. As the bison piled on top of one another, the hunters rushed in with spears. Within a few minutes, they had killed nearly 200 bison.

The way the bones were placed told Joe Ben Wheat what the hunters did next. He found leg and rib bones with cut marks heaped together in separate piles. The hunters had cut off the legs and ribs of the animals lying on top. They had moved these pieces aside and sliced off the meat. At the bottom of the ravine, Wheat found complete skeletons. These animals were buried under the bison on top of them. The hunters had not bothered to remove the meat from these animals. The bison on top provided all the meat they could use.

Plano Points

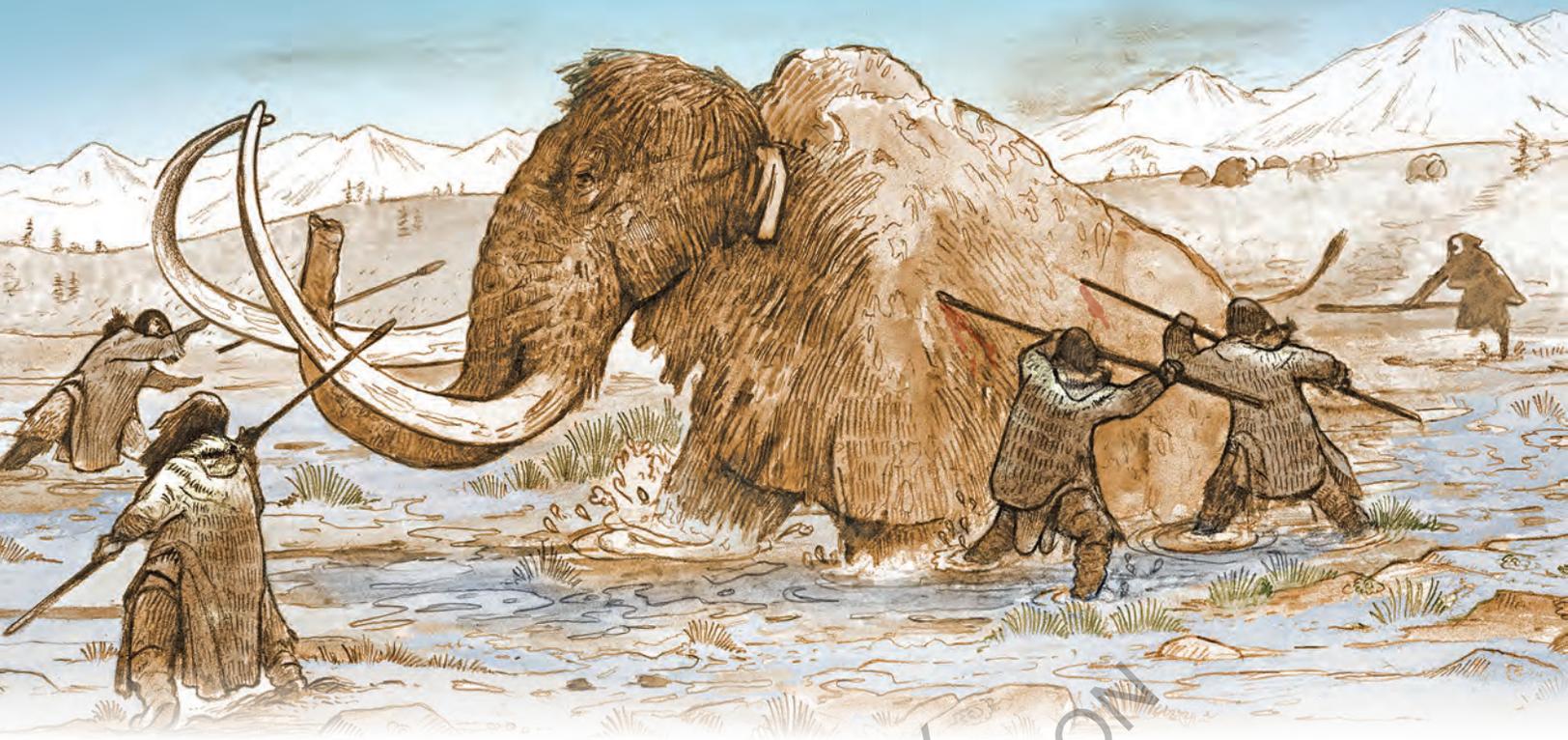
Among the bones, Wheat found scrapers and stone spear points. Some of the scrapers were worn down or broken. The hunters must have worn them out scraping the hides. The spear points were narrower and lighter than Clovis



Folsom, Clovis, and Plano archaeological sites in Colorado



A bison skull



Paleo-Indian mammoth hunters in Colorado

or Folsom points. They were very finely chipped but did not have grooves on the side. They are called Plano points. The way of life of these hunters is called the Plano culture.

The Plano people lived in Colorado after the Clovis and Folsom hunters. Plano sites date from about 8000 BC to 5000 BC. They, too, hunted a bison that is now extinct. This animal, *Bison occidentalis*, was larger than present-day bison but smaller than those of Clovis and Folsom times. Plano people lived in larger groups than the earlier hunters. The hunters at the site Joe Ben Wheat uncovered had cut off enough meat to feed 150 people for a month. Plano hunting bands must have been about that large.

A Wet and Cool Climate

The environment during Clovis and Folsom times was wetter and cooler than today. Larger plants and taller grasses grew on the plains of eastern Colorado. Huge mastodons and mammoths found more than enough food. Later on, the climate changed, becoming warmer and drier. How would that affect plant and animal life? How would humans adjust to climate change?



Skills and Tools for Learning

Identifying and Interpreting Artifacts

Imagine that you are an archaeologist who has uncovered an Archaic Period campsite in Colorado. You have carefully removed most of the soil from around the artifacts you have found. Before removing them, you decide to make a list identifying what you have found. Study the graphic carefully. Some of the items are human-made; others are objects found in nature.

Write this list on a sheet of paper, with plenty of space after each term.

- Spear point
- Bone tool (awl)
- Stone scraper
- Grinding stone
- Pottery shard

Identifying the Artifacts

Now draw a picture of the artifact next to the term it represents. Exchange artifact sheets with a partner, and discuss any differences you may find.

Interpreting the Artifacts

Using the artifacts you have identified, answer each of these questions. Be sure to explain how the artifacts helped you answer the question:

- Did they farm for a living? How do you know?
- Did they hunt mastodons or other big animals? How do you know?
- Did they include seeds and wild grain in their diet? How do you know?
- Did they probably use animal hides? How do you know?





Using an atlatl



Focus Your Reading

- How did hunting change during the Archaic Period?
- How did weapons change?
- What kind of shelter did these people use?



THE ARCHAIC PERIOD (5000 BC TO AD 1)

Between 5000 BC and AD 1, the hunters' way of life changed. They developed a new spear point, used their weapons in new ways, and changed their diet. Archaeologists call this the Archaic Period. Archaic means "ancient."

Hunters in Colorado began to use a new spear point about 5000 BC. These were smaller than Plano points and had notches in the sides. They probably needed smaller points because they hunted smaller animals. Campsites of this period are littered with the bones of deer, jackrabbits, cottontails, and prairie dogs. The sites include few bison bones. The notched sides or corners probably helped the hunters tie the points onto their spear shafts.

These hunters used their spears in a new way. Earlier hunters killed most animals close up. They rushed up to a mammoth or bison and jabbed it with their spears. Hunters of the Archaic Period threw their spears. They used an atlatl to throw them farther and with greater force. An atlatl is a stick with a hook attached to one end. The hook fits into the butt end of the spear. In effect, this tool lengthens the thrower's arm.



While You Read

In the second column of your organizer, list all the things you have read about the Archaic Period people that make them **different** from the Paleo-Indians.



Learning from Primary Sources

Rock Art

We also know about the early hunters and gatherers through the drawings they made on rock formations. Archaeologists have found Archaic Period images on the walls of shallow caves, under rock overhangs, and on the smooth sides of canyons. Some are pictographs, which are images painted on the stone walls. Others, called petroglyphs, were pecked into the walls with

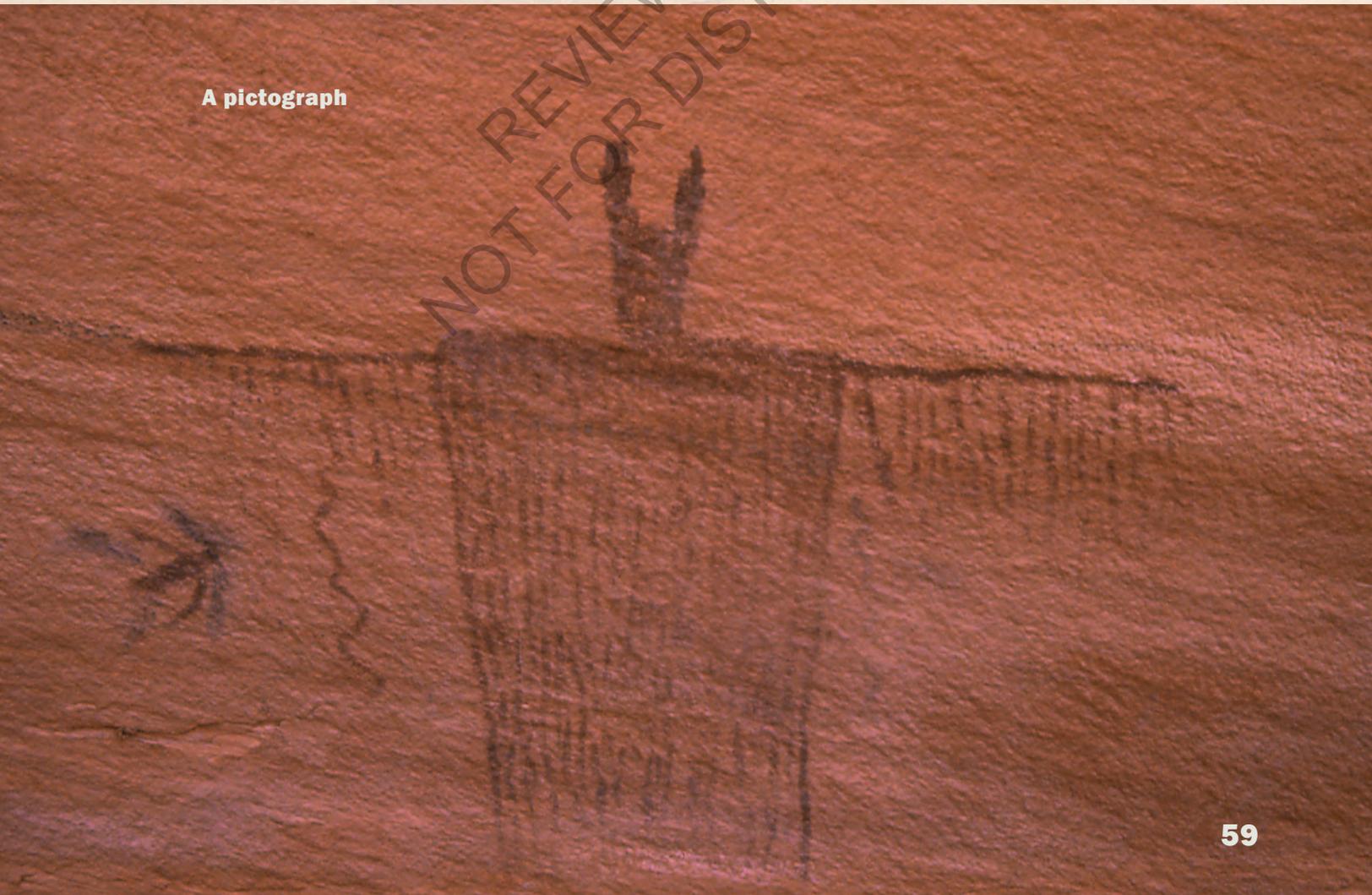
stones. *Petro* means stone; *glyphs* are marks used in writing. Still others combine the two forms, with lines and symbols pecked onto the surface of painted figures.

These early artists created a variety of images. Most are outline drawings of people and animals, including deer, bears, and birds. Petroglyphs of animal paw prints are also

common, especially bear paws. The images remind us of the importance of animals in the lives of these people. However, archaeologists do not know why they created these images. Were they records of hunts? Were they attempts to communicate with the spirits of animals before a hunt? Did they have a religious purpose? No one knows for certain.

- **What do you think the pictograph below represents?**
- **Why would someone have created it?**

A pictograph



Rock Shelter Clues

Rock shelters provide the best evidence about life in Colorado during the Archaic Period. South-facing rock overhangs were cool in summer and warm in winter. They protected hunters from wind, rain, and snow. People used them as long as there was food nearby. The shelters also protected the human artifacts, or clues, that tell archaeologists about these people.



A Warmer Climate

The people of the Archaic Period lived during a time of climate change. The lower elevations became hotter and drier. Plant and animal life changed as well. People had to adjust to environmental change. How did it affect their way of life?

People then not only ate smaller animals than earlier hunters, but they probably ate less meat and more seeds and roots. Archaeologists have found large numbers of grinding stones at these sites. The people used these hand stones and grinding stones, which were flat rocks, to grind up seeds into flour. By mixing water with the flour, they could make mush or patties to be baked over hot coals.

More Permanent Homes

The hunters and **gatherers** of the Archaic Period also had more permanent homes. Archaeologists have found Archaic spear points and grinding stones under south-facing, overhanging rock ledges. Hunting bands must have gathered under the overhangs during the winter for protection from snow and wind. In 1981, archaeologists digging near the town of Granby found the remains of an Archaic Period hut. It had been made of poles and twigs and plastered over with

mud. How could anything be left of a 4,000-year-old mud shelter? The hut had burned down, leaving behind chunks of fire-hardened clay. The shapes of the upright poles from the walls were imprinted in the clay.

THE PLAINS WOODLAND CULTURE (AD 1 TO AD 1300)

For the hunters on the plains of eastern Colorado, even larger changes were in store. About AD 1 they probably used bows and arrows for hunting. They also made clay **pottery** for cooking and storing food. They borrowed these new ideas from people living in Kansas and Nebraska. Those people, in turn, got the ideas from the Eastern Woodland people who lived east of the Mississippi River. This new way of doing things was called the Plains Woodland culture.

These plains people used different kinds of stone points. Some were spear points. The smaller points look like arrowheads. Archaeologists have not found bows or arrow shafts. Wooden weapons from that long ago would not have survived. But few doubt that Plains Woodland people hunted with bows and arrows.

Bison Drives

These plains hunters killed bison by driving them over cliffs. They laid out lanes with boulders leading toward the cliffs. Along the lanes they built rock piles large enough to hide a person. As hunters chased a bison herd into the lane, others shot arrows from behind the rock piles. The herd stampeded toward the cliff, trying to escape. Those not brought down by the hunters were killed in the fall.

Some Plains Woodland hunters covered large areas in search of food. Those who spent winters along the Front Range set out each spring on a huge circular trip. Archaeologists call this yearly trip “the grand circuit,” or “the rotary engine.” The hunters moved north along the Front



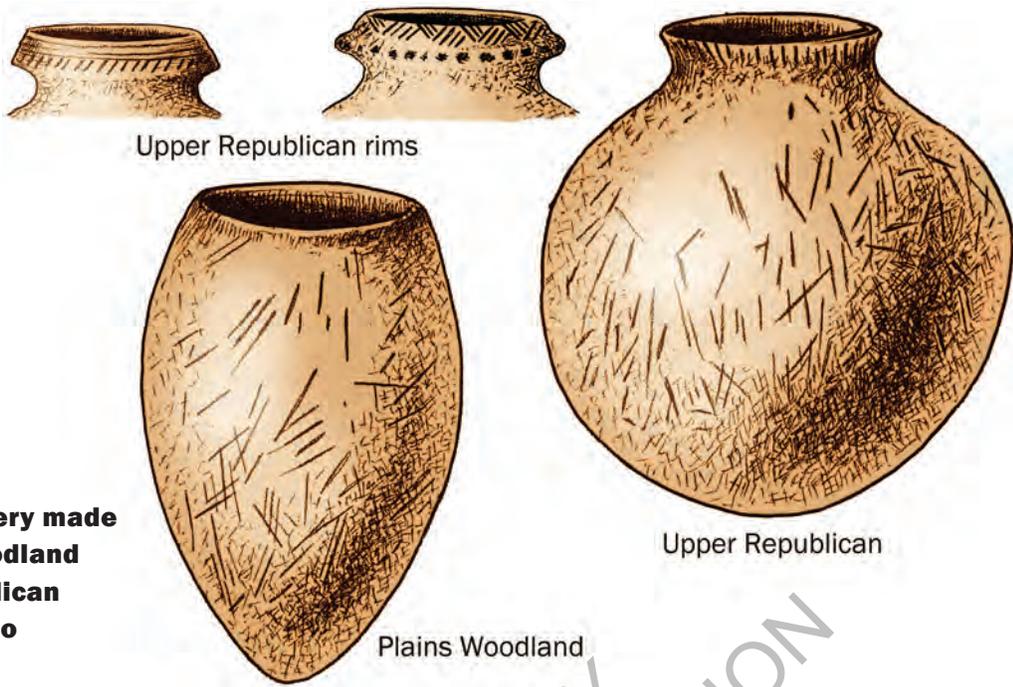
Focus Your Reading

- What ideas did the Plains Woodland people borrow?
- What do the terms *grand circuit* and *rotary engine* mean?
- What kind of pottery did Plains Woodland people make?



While You Read

Look for the main idea in each of the paragraphs in this section. These ideas help us understand how the Plains Woodland people of eastern Colorado lived. Write the main ideas in the third column of your organizer.



Examples of pottery made by the Plains Woodland and Upper Republican people in Colorado

Bull elk



Range during the spring. In Wyoming they used snow-free passes to cross the Continental Divide. Turning south, they spent the summer hunting bison and elk in North Park and Middle Park. In late fall, they climbed back up the Continental Divide to hunt bighorn sheep.

Along the way, they made new stone points from rocks called jasper and chert found in the mountains. They also collected nuts and other plants. In the fall, they returned to the plains. The nuts, seeds, and dried meat they brought back would last them through the next winter.



Using Clay Pots

The Plains Woodland people were the first plains people to use fired clay pots for cooking and storing food. Their pots are easy to recognize. They have a wide mouth and a pointed bottom. Such pots had to be set in holes in the ground to keep them upright. The pots also have distinctive cord markings on the outside. The pottery makers used paddles wrapped with cords to help mold the fresh clay. The plains people did not give up using baskets. They still used them for gathering seeds and roots.

The Plains Woodland people probably lived in low huts covered with animal skins. Archaeologists have found circles outlined with stones that date from this period. The stones were probably used to hold down the skin covers of huts.



Apishapa shelter with walls made from upright stone slabs



Focus Your Reading

- How did the Upper Republican people get food?
- How was their pottery different from Plains Woodland pottery?
- What kinds of shelters did the Apishapa people build?



THE UPPER REPUBLICAN AND APISHAPA CULTURES (AD 1000 TO AD 1300)

Late in the Plains Woodland Period, two other cultures appeared on the Eastern Plains. About AD 1000, hunters from Kansas and Nebraska moved into the northeastern corner of what is now Colorado. They lived in small hunting camps along the upper Republican River. Their way of life is called the Upper Republican culture. People from Oklahoma and Texas also built camps in what is now southern Colorado along the Arkansas River. Their way of life is known as the Apishapa culture.



While You Read

In the fourth column of your organizer, write about the differences between the Upper Republican and the Apishapa peoples. Then, sketch a picture of their shelters.



Upper Republican People

The Upper Republican culture was much like the Plains Woodland way of life. These people were hunters and gatherers. They probably lived in skin-covered huts. They also used pottery. Their pots were cord marked, like other plains pots. However, they were round in shape. Some pots had handles.

Apishapa People

The Apishapa people were also hunters and gatherers. They, too, made round-shaped, cord-marked pottery. But their shelters were different from those of the Upper Republican and Plains Woodland peoples.

The Apishapa built shelters on the high rims of canyons in what is now southern Colorado. They overlooked the river valley below. Some shelters had as many as twenty-five rooms. The walls were made of upright stone slabs. Stone posts held up the roofs. The first white settlers called them “forts.” The Apishapa people may have been guarding against possible attacks. They certainly used the slabs of stone they found in that area in a creative way.



After You Read

1. Use the notes you've written on your graphic organizer to help you as your class discusses the ways the four cultures of big-animal hunters were the same and the ways they were different.
2. Which of the big-animal hunter cultures do you think archaeologists know the most about? Why do you think this is so? Write about it in your notebook.





Thinking about Colorado Water

Do you know . . .

how water connects us to prehistoric times?

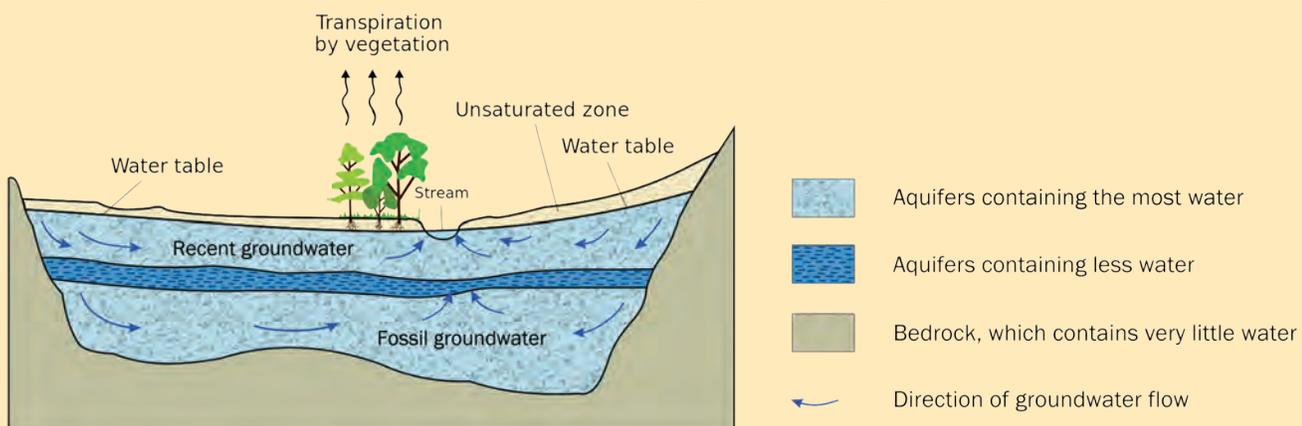
Some of the water that we use in Colorado is called groundwater. It is water from underground that is brought to the surface by pumps. Many towns and small cities rely on groundwater for drinking. Farmers on the eastern plains use it to irrigate their crops.

Have you ever wondered why there is water underground?

Groundwater is rain or snow that collects underground in layers of rock. These layers are called aquifers. Some of this water fell as rain in recent times or seeped into the earth from nearby rivers or streams. Water in the deepest aquifers is the oldest. It collected there in prehistoric times. This water is also called “fossil water” because some of it is as old as plant and animal fossils.

Some wells in Colorado are hundreds of feet deep. Water from deep wells fell as rain or snow thousands or perhaps millions of years ago.

- ➔ Do you live in a city that depends on groundwater?
- ➔ Have you eaten food grown in eastern Colorado?
- ➔ Could it have been grown with water that fell as rain or snow when prehistoric people lived in Colorado?





Asking Historical Questions

Your Response

This chapter began with this question:

How did hunter-gatherers respond to changes in the environment?

1. Review

Review the information in your notes and in this chapter about how hunter-gatherers responded to changes in the environment.

2. Reflect

With a partner or in a small group, discuss how hunter-gatherers responded to changes in the environment.

3. Respond

In your notebook, explain how hunter-gatherers responded to changes in the environment.

