SECTION 1

The First Humans

Guide to Reading

Main Ideas

- By 10,000 B.C., Homo sapiens sapiens had spread throughout the world.
- Systematic agriculture brought about major economic, political, and social changes for early humans.

Key Terms

hominid, nomad, Neolithic Revolution, systematic agriculture, domestication, civilization

People to Identify

Neanderthals, Homo sapiens sapiens

Places to Locate

Africa, Europe

Preview Questions

- 1. What important developments took place during the Paleolithic Age?
- 2. What changes occurred during the Neolithic Revolution that made the development of cities possible?

Reading Strategy

Summarizing Information As you read this section, fill in a chart like the one below listing six characteristics of a civilization.

1.	4.	
2.	5.	
3.	6.	

\$3,000,000 B.C.	100,000 B.C.	30,000 B.C.	♦10,000 B.C.	♦ 8000 B.C.	3000 B.C.
3,000,000 B.C. Australopithecines make simple stone tools	100,000 B.C. Neanderthals appear	30,000 B.C. Neanderthals are extinct	8000 B.C. Neolithic Age begins	8000 B.C. Systematic agriculture develops	River valley civilizations develop

Cave painting of a bison in Altamira, Spain

Voices from the Past

In 1879, a Spanish landowner, who was an amateur archaeologist, took his 12-yearold daughter Maria with him to examine a cave on their farm in northern Spain. While her father busied himself digging for artifacts at the entrance to the cave, Maria wandered inside, holding a lantern. She was startled by what she discovered:

66Ahead was a big dark hole like a doorway. Beyond it was a huge long room. I held my lantern high for a better look. Then, suddenly, I saw big red-and-black animals all over the ceiling. I stood amazed, looking at them. 99

- Secrets from the Past, Gene S. Stuart, 1979

Today, the simple cave paintings made by Stone Age artists provide historians with clues to the lives of early humans.

Before History

Historians rely mostly on documents, or written records, to create their pictures of the past. However, an account of prehistory—the period before written records—depends on the work of archaeologists and anthropologists. These scientists rely on the analysis of artifacts and human fossils to construct theories about the development of early human beings.

Early Stages of Development The earliest humanlike creatures lived in Africa as long as three to four million years ago. Called australopithecines (aw *STRAY * loh • PIH • thuh • SYNS), or "southern apes," they flourished in eastern and southern Africa. They were the first hominids (humans and other humanlike creatures that walk upright) to make simple stone tools.

A second stage in early human development occurred with the appearance of *Homo erectus* ("upright human being"), a species that emerged around 1.5 million years ago. *Homo erectus* made use of larger and more varied tools.

Around 250,000 years ago, a third—and crucial—stage in human development began with the emergence of a new species, Homo sapiens ("wise human being"). Two distinct subgroups, Neanderthals and Homo sapiens sapiens, both developed from Homo sapiens.

Neanderthals were first found in the Neander Valley in Germany. Their remains have been dated between 100,000 and 30,000 B.C. and have been found in Europe and Southwest Asia. Neanderthals relied on a variety of stone tools and seem to be the first early people to bury their dead.

The first anatomically modern humans (people who looked like us), known as *Homo sapiens sapiens* ("wise, wise human being"), appeared in Africa between 150,000 and 200,000 years ago. Recent evidence indicates that they began to spread outside Africa around 100,000 years ago.

The Spread of Homo Sapiens Sapiens By 30,000 B.C., Homo supiens sapiens had replaced the Nean-derthals, who had largely died out, possibly as a result of conflict between the two groups.

The spread of these first modern humans was a slow process, but by 10,000 B.C., members of the Homo supiens supiens subgroup of the species Homo supiens could be found throughout the world. All humans today, whether they are Europeans, Aus-

tralian Aborigines (A•buh•RIJ•NEES), or Africantellong to the same subgroups of human beings.

Reading Check Summarizing Identify and describe the three stages of early human development.

The Hunter-Gatherers of the Old Stone Age

peoples used technological innovations, including stone tools, to change their physical environment.

The term *Paleolithic Age* is used to designate the early period of human history from approximately 2,500,000 to 10,000 B.C. in which humans used simple stone tools. *Paleolithic* is Greek for "old stone," and the Paleolithic Age is sometimes called the Old Stone Age.

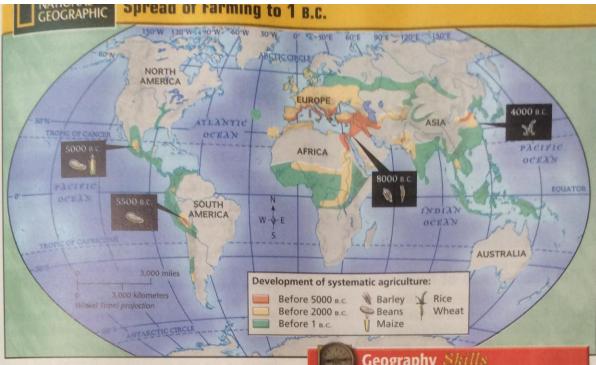
For hundreds of thousands of years, human beings lived in small communities, seeking to survive by hunting, fishing, and gathering in an often hostile environment. Over a long period of time, Paleolithic peoples learned how to create more sophisticated tools; how to use fire; and how to adapt to, and even change, their physical environment. Paleolithic peoples were primarily nomads (people who moved from place to place) who hunted animals and gathered wild plants for survival. They also created a human culture that included sophisticated cave paintings.

Reading Check Identifying What are the two most important technological innovations of Paleolithic peoples?



Picturing History

Although he was found in a glacier in the Alps, this Iceman actually died more than 5,000 years after the Ice Age. Recent discoveries prove that he was killed by an arrow. The cold mummified his remains. After the end of the last Ice Age (c. 8000 B.C.), what important change occurred that altered the pattern of human living?



The Neolithic Revolution

TURNING POINT Despite all of our technological progress, human survival still depends on the systematic growing and storing of food, an accomplishment of people in the Neolithic Age.

The end of the last Ice Age, around 8000 B.C., was followed by what is called the Neolithic Revolution—that is, the revolution that occurred in the Neolithic Age, the period of human history from 8000 to 4000 B.C. The word neolithic is Greek for "new stone." The name New Stone Age is somewhat misleading, however. The real change in the Neolithic Revolution was the shift from the hunting of animals and the gathering of food to the keeping of animals and the growing of food on a regular basis what we call systematic agriculture.

The planting of grains and vegetables provided a regular supply of food. The domestication (adaptation for human use) of animals added a steady source of meat, milk, and wool. Animals could also be used to do work. The growing of crops and the taming of food-producing animals created what historians call an agricultural revolution. Some believe this revolution was the single most important development in human history.

Geography

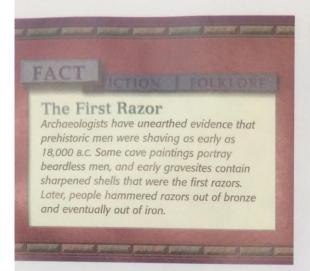
Agriculture developed independently in different regions of the world.

- 1. Interpreting Maps Between what latitudes did the earliest farming develop?
- 2. Applying Geography Skills What geologic, geographic, and climatic factors influenced the development of farming?

The growing of crops on a regular basis gave rise to more permanent settlements, which historians call Neolithic farming villages. Once people began settling in villages or towns, they saw the need to build houses for protection and other structures for storage. Organized communities stored food and other material goods, which encouraged the development

As village inhabitants mastered the art of farming, they gradually began to develop more complex societies. As their wealth increased, these societies began to create armies and to build walled cities. By 3000 B.C., large numbers of people were concentrated in the river valleys of Mesopotamia, Egypt, India, and China. This would lead to a whole new pattern for human life.

Reading Check Identifying What changes resulted from the development of systematic agriculture?



The Emergence of Civilization

In general terms, the culture of a people is the way of life that they follow. As we have seen, early human beings formed small groups that developed a simple culture that enabled them to survive. As human societies grew and became more complex, a new form of human existence—called civilization—came into being.

A civilization is a complex culture in which large numbers of human beings share a number of common elements. Historians have identified the basic characteristics of civilizations. Six of the most important characteristics are cities, government, religion, social structure, writing, and art. An increase in food production in the river valleys of Mesopotamia, Egypt, India, and China led to a significant growth in human population and the rise of cities. Growing numbers of people, the need to maintain the food supply, and the need to build walls for defense soon led to the growth of governments in these new urban civilizations.

All of the new urban civilizations developed religions to explain the workings of the forces of nature and the fact of their own existence. Rituals were developed to please the gods and goddesses. A new social structure based on economic power also arose, Rulers and an upper class of priests, government officials, and warriors dominated society.

Abundant food supplies created new opportunities, enabling some people to work in occupations other than farming. The demand of the upper class for luxury items encouraged artisans and craftspeople to create new products.

Writing was an important feature in the life of these new civilizations. Above all, rulers, priests, merchants, and artisans used writing to keep accurate records. Significant artistic activity was another feature of the new civilizations. Temples and pyramids were built as places for worship or sacrifice, or for the burial of kings and other important people. The emergence of civilizations was a dramatic new stage in the story of world history.

Reading Check Describing Describe the relationship between an increase in food production and the rise of cities and governments.

SECTION ASSESSMENT

Checking for Understanding

Define hominid, nomad, Neolithic Revolution, systematic agriculture, domestication, civilization.

- Identify Neanderthals, Homo sapiens sapiens.
- . Locate Africa, Europe.
- c. Contrast the evidence that archaeologists and anthropologists use to understand the past to that used by historians.
- List the species that emerged during the different stages of human development.

Critical Thinking

- 6. Analyze Does the development of systematic agriculture by Neolithic peoples after the end of the last Ice Age deserve to be called a revolution? Why was the shift to systematic agriculture important to the development of civilization?
- 7. Sequencing Information Create a diagram like the one below to show how changes during the Neolithic Revolution led to the emergence of civilization. In the last box, write where the first civilizations appeared.

civilization

Analyzing Visuals

8. Examine the cave painting of a bison shown on page 19. Many cave paintings from the prehistoric period depict similar subjects. What do these paintings tell us about the lifestyles of prehistoric peoples?

Writing About History

9. Expository Writing Much disagreement exists about the interpretation of available data on the origins of humankind. Discuss and document at least two different points of view besides the one precented.