

READ TO DISCOVER

- 1 What three main characteristics are shared by civilizations?
- 2 What two other characteristics may be shared by civilizations?
- 3 What other characteristics and achievements marked the first river valley civilizations?

DEFINE

civilization
 irrigation
 division of labor
 artisans
 cultural diffusion

WHY IT MATTERS TODAY

Civilizations today share basic characteristics with the first civilizations. Use CNNfyi.com or other **current event** sources to explore a modern civilization. Record your findings in your journal.

CNNfyi.com

The Foundations of Civilization

The Main Idea

As early settlements grew, they began to show the characteristics of major civilizations.

The Story Continues *By the end of the New Stone Age, people had learned to make tools and weapons, use fire, create works of art, tame animals, and grow food. Many had established permanent settlements. The stage was set for the next level of development.*

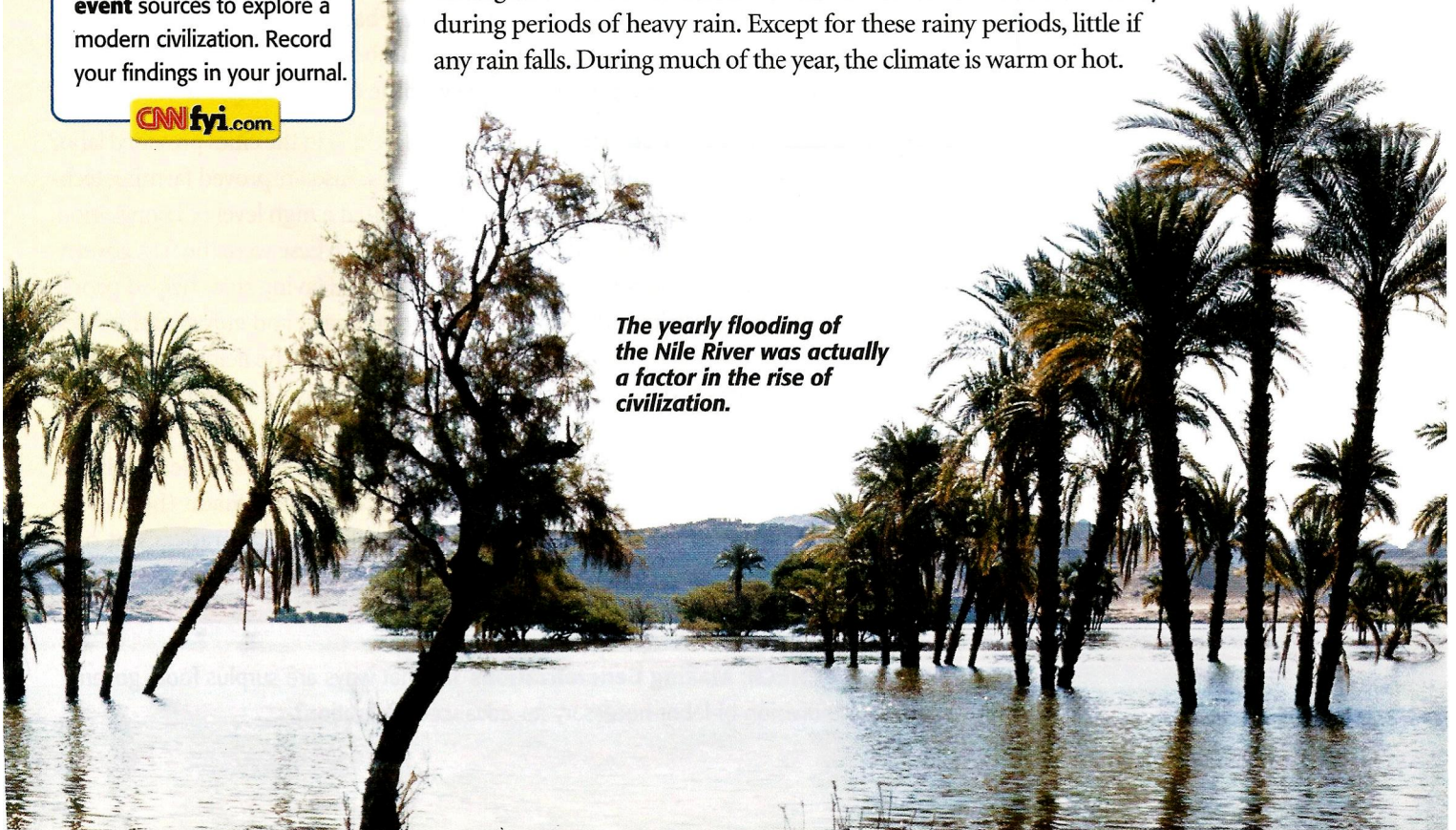
Characteristics of a Civilization

Not all people had established permanent settlements by the end of the New Stone Age. Those who lived in climates unsuitable for farming continued their old ways of hunting and gathering. Those in permanent settlements, however, began to advance more rapidly. The settlements in four specific regions were particularly important for later human development. These four regions were (1) the Nile River valley in Africa, (2) the valley of the Tigris and Euphrates (yoo-FRAY-teez) Rivers in southwestern Asia, (3) the Indus River valley in southern Asia, and (4) the Huang, or Yellow, River valley in eastern Asia.

In these four river valleys, civilizations first developed. A **civilization** is a complex culture that has at least three characteristics. The first is that people are able to produce surplus, or extra, food. The second is that people establish large towns or cities with some form of government. The third is that people perform different jobs, instead of each person doing all kinds of work.

Surplus food and irrigation. The valleys of the Nile, Tigris and Euphrates, Indus, and Huang share a common feature. Their rivers rise and flood the valleys during periods of heavy rain. Except for these rainy periods, little if any rain falls. During much of the year, the climate is warm or hot.

The yearly flooding of the Nile River was actually a factor in the rise of civilization.





River Valley Civilizations

Interpreting Maps The earliest civilizations arose across Asia and Africa.

Skills Assessment:

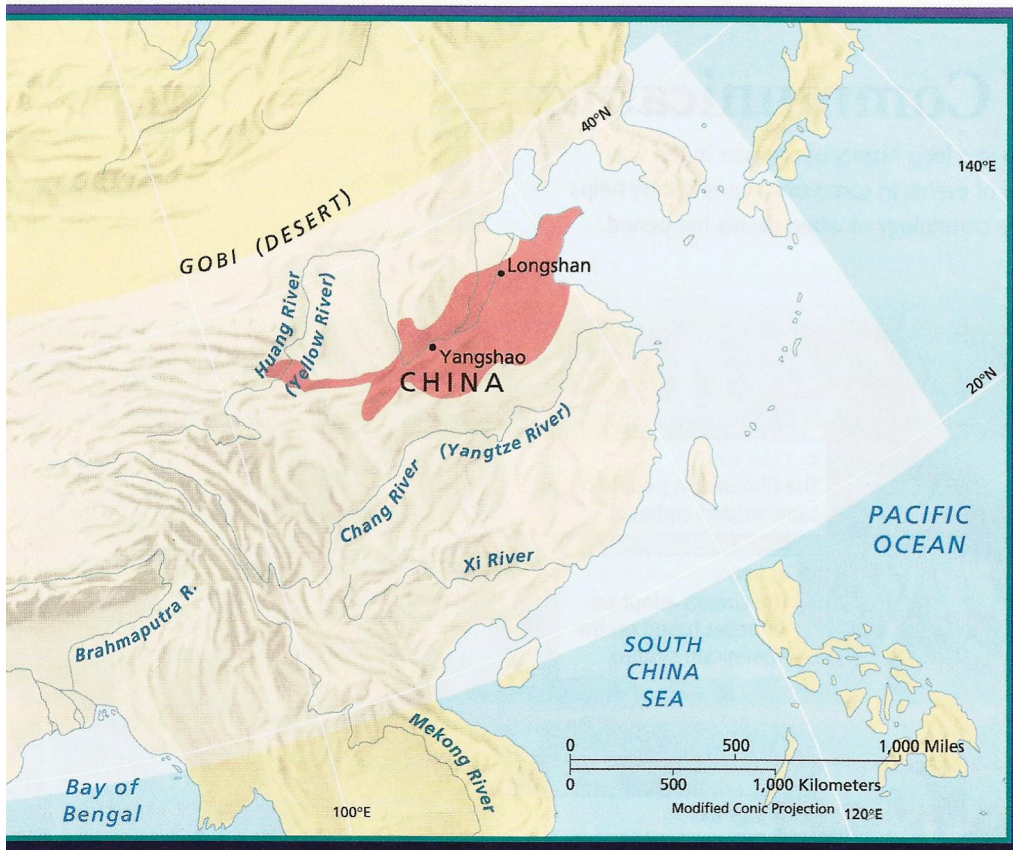
- 1. Locate** Between which degrees of latitude did the Indus, Nile, Tigris-Euphrates, and Huang river valleys lie?
- 2. Human Systems** What geographic features did the four major civilization areas share?

The climate and flooding greatly influenced the development of civilizations in these river valleys. Somehow farmers had to get water to their crops during the dry season. At some point, farmers in each valley learned to dig ditches and canals to move water from the river to their fields. Thus they developed the first systems of **irrigation**. Farmers also built dikes to keep the rivers within their banks during the rainy season. These improved farming techniques led to more and better food, which then led to increases in population. As the population grew, some of the villages became cities.

Cities, government, and labor. The large number of people in the cities provided labor to build great palaces, temples, and other public buildings. Also, improved farming techniques such as irrigation and flood-control systems required a high level of cooperation. Different forms of leadership emerged to help societies run. These were the first governments. Governments made rules to guide people's behavior. Having rules helped people plan, direct, and regulate their work. Government leaders made and enforced the rules.

As methods of farming improved, fewer people had to work the fields. Some people could specialize in other kinds of work. In other words, there was a **division of labor**. For example, people skilled in making tools could devote their time to such work. They would then trade their products for food. Soon a class of skilled workers, called **artisans**, developed. Other people became merchants and traders. They made their living by buying goods from farmers or artisans and then selling them. Traders not only transported goods to be sold, but also passed along ideas. The spread of ideas and other aspects of culture from one area to another is called **cultural diffusion**.

✓ **READING CHECK: Making Generalizations** In what ways are surplus food, government, and division of labor necessary for advanced civilization?



Other Characteristics

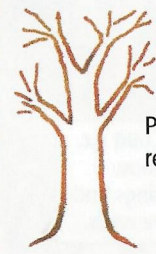
In addition to food supply, cities and government, and division of labor, some historians consider two more accomplishments to be characteristics of civilization: a calendar and some form of writing.

Early in their histories, river valley civilizations developed calendars. Because these people farmed, they needed to know when the yearly floods would start and stop. One way was to regard the time from flood to flood as a year. That year was divided according to the phases of the moon. The time from one full moon to the next full moon was a month. This system presented a major problem, however. A lunar month lasts only about 29 ½ days. Thus, 12 lunar months equal 354 days. A solar year, however, has approximately 365 ¼ days. Therefore, the moon-based calendars of the river valley civilizations fell about 11 days short of the time it took Earth to rotate around the sun. As you read about the river valley civilizations in following chapters, you will see how they coped with this problem.

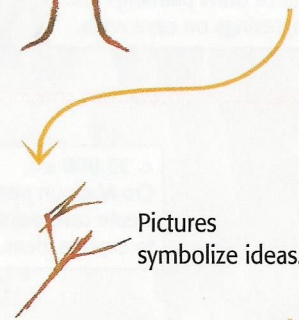
Life in a civilized society is complex. Civilizations in the river valleys were trading goods and developing rules for living and working together. These developments required new forms of communication. People needed a written language to keep and pass on information and ideas. What we now define as writing began around 3000 B.C. The development of writing was a long and complex process. By developing written languages, the early river valley civilizations created records of their cultures and societies. In other words, history had begun.

✓ **READING CHECK: Identifying Cause and Effect** How did the needs of early civilizations lead to the development of calendars and systems of writing?

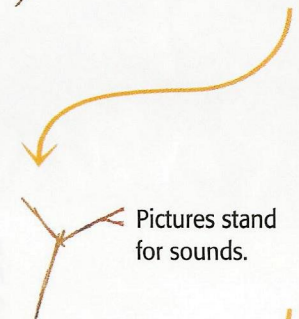
Development of Writing: One Theory



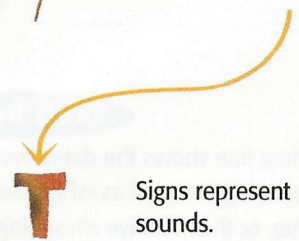
Pictures represent things.



Pictures symbolize ideas.



Pictures stand for sounds.



Signs represent sounds.

Interpreting the Chart

This flowchart of the possible development of the letter T is meant to illustrate how letters of alphabets may have been invented. **What does this chart indicate about the development of written language?**

The History of Communication

The invention of writing was just one step in a long history of changes in the way people communicate. Reading a time line of events in communications history helps us to understand the absolute and relative chronology of when events happened.

Early Advances in Communication

c. 35,000 B.C.–15,000 B.C.

People in what is now France draw paintings and engravings on cave walls.

c. 33,000 B.C.

Cro-Magnon people create cave paintings to express ideas.

c. 1150 B.C.

The Phoenician people record a standardized alphabet.

c. 800 B.C.

The Greeks adopt an alphabet based on the Phoenician system.

536 B.C.

Chinese leaders write down their legal code and display it to the public.

c. 3100 B.C.

The Sumerians develop writing. At first they use drawn images, representing specific ideas, to make up words.



This 7 1/2-inch-high gold tablet is inscribed with characters from the Phoenician alphabet. The message details the dedication of a religious shrine to a Phoenician goddess.

Skills Reminder

A time line shows the dates events happened, or their absolute chronology, as well as when events happened relative to each other, or their relative chronology. This book follows a system of dating years based on the traditional date of birth of Jesus Christ. The Muslim, Chinese, Jewish, and Hindu calendars all count the years differently. Years following Jesus's birth are numbered in order. They start with A.D., which stands for the Latin phrase *Anno Domini* ("in the year of the Lord" or "since the birth of Christ"). Years before Jesus's birth are numbered in reverse order. They are followed by B.C. ("Before Christ"). The initial c. (for "circa," meaning "approximately") indicates that the exact date is unknown and that the one given is a good estimate.

Skills Practice

- 1 Read the time line of major events in the history of communication. Approximately how many years passed between the invention of writing by the Sumerians and the Greek adoption of an alphabet?
- 2 What does the passage of time between these two events imply about the development of communication? Based on the other information given, what else does the time line imply about the development of communication?
- 3 Using information in your textbook and from other sources, create your own time line of events reflecting a characteristic other than writing that was crucial to the development of early civilizations.

The River Valley Civilizations

The river valley civilizations moved humans out of the Stone Age. People developed family roles and religious beliefs that related to their farming-based cultures.

The use of metals. More than 6,000 years ago, people in both the Nile and the Tigris-Euphrates river valleys were using copper to make tools and jewelry. In time people learned to make a more useful metal—bronze. A mixture of copper and tin, bronze is harder than copper. People in the Nile and the Tigris-Euphrates river valleys made objects of bronze as early as 5,000 years ago. People in India and China also used bronze at an early date. The invention of bronze tools marked the end of the Stone Age and the beginning of the Bronze Age.

Iron is stronger than copper or bronze. Making iron is a long, difficult process. We do not know when people discovered how to use iron. It may have been discovered separately in several different areas. We do know, however, that about 3,200 years ago people in southwestern Asia had learned to make iron. The Iron Age began.

Family and religion. Women managed the family. They cared for children, prepared food, made clothing, and probably invented pottery and weaving. When agriculture initially developed, women did much of the farming. The rise of goddesses during this time suggests that responsibility for the food supply increased women's authority and independence. However, when the plow was invented and animals were harnessed to pull it, men again became the primary food providers. This change shifted the power women had gained back to men, who continued to be the primary authorities in society.

People believed in many gods and goddesses and in unseen forces of nature. These controlled all aspects of human life. People worried that the rains would not come and their crops would not grow. They prayed to their gods and goddesses to provide water. Often they offered sacrifices. They gave thanks when they believed their prayers had been answered.

✓ **READING CHECK: Summarizing** What technologies and patterns of home life did the first river valley civilizations share?

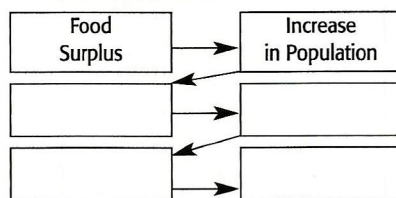
This small figure represents the mother goddess of the Indus River valley civilization.



SECTION 2 REVIEW

1. Define and explain the significance: civilization
irrigation
division of labor
artisans
cultural diffusion

2. Drawing Conclusions Make a flowchart like the one below. Add to it to show how a food surplus led people in four river valleys to develop other characteristics of civilization.



3. Finding the Main Idea


- What did the four main early civilizations have in common geographically and culturally?
- What problems did a calendar and a system of writing help solve?
- Identify aspects of the following eras and list them according to their relative chronology: Iron Age, Stone Age, Bronze Age.

4. Writing and Critical Thinking

Making Generalizations Imagine you are living in a culture before it has developed a system of writing. Describe what everyday life would be like.

Consider:

- what human activities can make use of writing
- how those same activities would be handled without writing

 **Homework Practice Online**
keyword: SP3 HP1