

Ancient Mesopotamia

Before You Read: Previewing Key Concepts

The Big Idea below is a general historical idea. Rewrite this idea as three questions that can be answered as you read this chapter. One example is:

How did the geography of ancient Mesopotamia help agriculture develop?

Look for the answers to your questions as you read.



Big Ideas About Ancient Mesopotamia

Geography Civilizations arise in geographic locations that help the development of agriculture or trade or both.

Mesopotamia is a region that has two great rivers. They provided ancient people with water for drinking and for crops. When the rivers flooded, they deposited fresh soil on the land, making it good for farming. In addition, it was easy to move trade goods by boat down the rivers.



Integrated Technology

eEdition

- Interactive Maps
- Interactive Visuals
- Starting with a Story



Ancient Mesopotamia



INTERNET RESOURCES

- Go to **ClassZone.com** for
- WebQuest
 - Homework Helper
 - Research Links
 - Internet Activities
 - Quizzes
 - Maps
 - Test Practice
 - Current Events

AFRICA

20°E

30°E

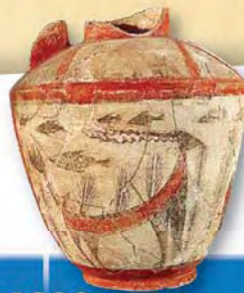
MESOPOTAMIA

WORLD

5000 B.C.

5000 B.C.
People by the Euphrates River begin to irrigate crops. (jug, about 3000 B.C.) ▶

4600 B.C.



4200 B.C.



4000 B.C.
A dry period begins in Africa, causing the Sahara to spread. ◀ (the Sahara today)

Mesopotamia, 2400 B.C.

INTERACTIVE



3500 B.C.
Farming villages grow into cities.



3000 B.C.
The first system of writing is in use.
◀ (tablet, about 2100 B.C.)

2400 B.C.
King Urukagina of Lagash reforms government.

3400 B.C.

3000 B.C.

2600 B.C.

2200 B.C.

3100 B.C.
King Narmer unifies Egypt.



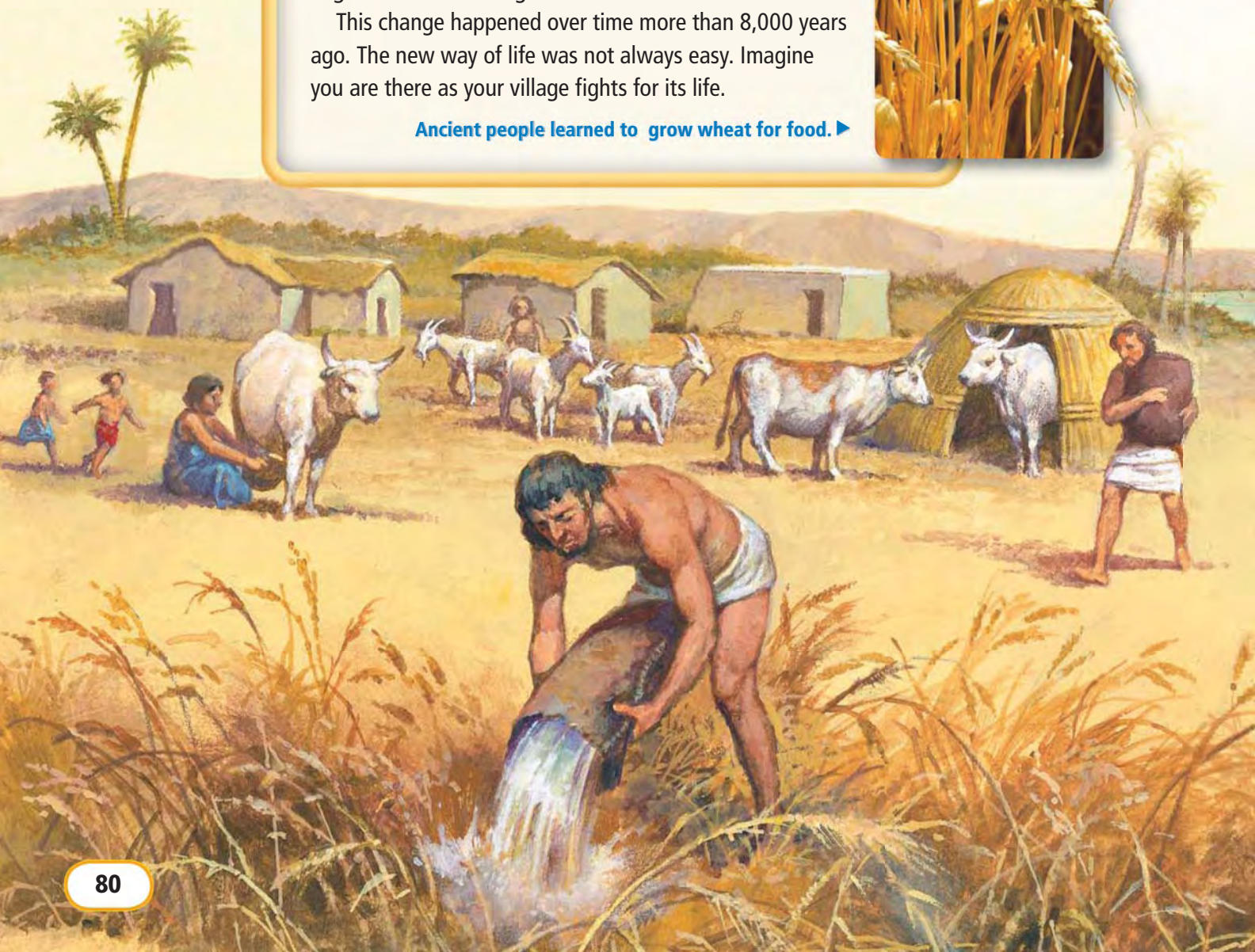
2600–2500 B.C.
People in the Indus Valley build cities.
◀ (city ruins today)

THE Long Dry Spell

Background: The first people in Southwest Asia (sometimes referred to as the Middle East) were hunters and gatherers. In some places, they found animals and plants that people began to raise themselves. Some plants that people learned to grow were wild grains. So as people learned how to plant crops for themselves, they began to settle in villages.

This change happened over time more than 8,000 years ago. The new way of life was not always easy. Imagine you are there as your village fights for its life.

Ancient people learned to grow wheat for food. ▶



You are a farmer in Southwest Asia. The oldest members of your family decided several years ago to settle in a new village near a river. They knew the river had something special about it that would make this place suitable for farming.

Every year the river floods and puts a fresh layer of rich, dark mud on the fields. This mud provides moisture to the soil and somehow seems to help plants grow. You depend on the flood to be able to farm.

This year the flood never happened because there wasn't enough rain. With no moisture, the soil was hard when you were ready to plant. Your sharpened digging stick barely penetrated the soil enough for you to put the seeds in the ground.

Now the weather is hot and dry, and the tiny plants are struggling to survive. Every day the scorching sun beats down on them. Their leaves wilt. Large cracks are appearing in the ground, and crops are dying.

The brutal heat makes it difficult to work. Yet every day you must walk to the river with animal-skin bags to get water for the plants. You repeat the trip hour after hour, until your legs feel like they won't support you any longer. Your back aches from carrying water and from bending over your crops. The plants need every drop of moisture they can get. But the heat of the sun seems to evaporate the water as soon as it hits the ground.

At times like this, farming seems like fighting a losing battle. If your crops die, your family won't have enough food. Trudging back and forth to the river, you pray to the gods for help. Sick with worry, you wonder how to avoid this situation in the future.

What can you invent to make farming easier?

Reading & Writing

- 1. READING: Setting** Setting is the place and time of a story. How did setting influence the problem in this story?
- 2. WRITING: Explanation** Write a description of your invention. Explain how it works step by step. Conclude by summarizing how the invention will change farming.

MAIN IDEAS

- 1 **Geography** The land between the Tigris and Euphrates rivers was a good region for agriculture.
- 2 **Geography** The environment of Mesopotamia presented several challenges to the people who lived there.
- 3 **Geography** Mesopotamians changed their environment to improve life.

TAKING NOTES

Reading Skill: Summarizing

To summarize is to restate a passage in fewer words. After you read Lesson 1, write a sentence or two summarizing each of the three main sections. Use a chart like this one to record your summaries.

Geography of Mesopotamia

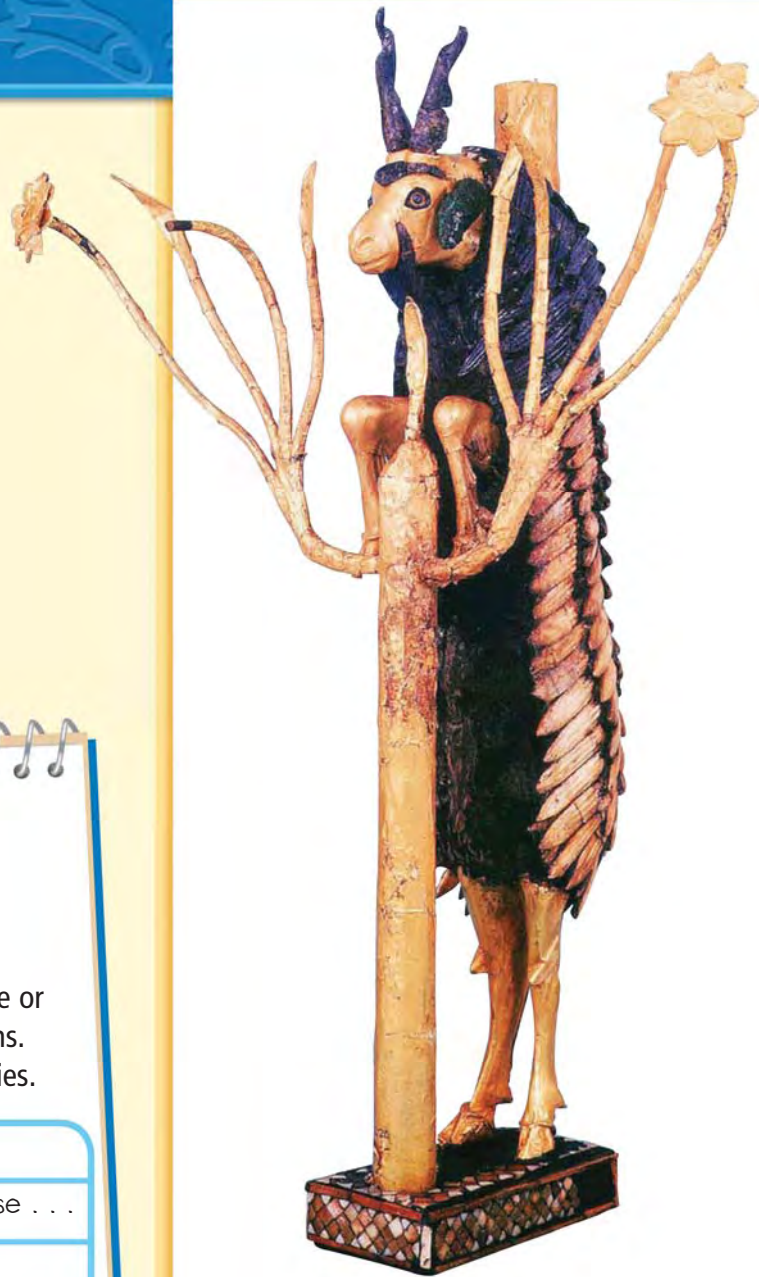
The rivers of Mesopotamia were important because . . .

Mesopotamians watered their crops by . . .

Because of a lack of resources, . . .



Skillbuilder Handbook, page R3



▲ **Ram** This figurine shows a ram caught in a thicket. It is made of gold, shell, and a blue stone called lapis.

Words to Know

Understanding the following words will help you read this lesson:

current a flowing part of a river or stream (page 83)

Experienced travelers knew how currents affected boats on the river.

swell to increase in size or volume (page 84)

The farmers knew that the river would swell, pour over its low banks, and flood their fields.

clog to block up (page 85)

The water slowed to a trickle because the canal through which it flowed was clogged with dirt.

steal to take without permission (page 85)

The thieves planned to sneak into the village at night to steal food and valuables.

Mesopotamia
 floodplain
 silt
 semiarid
 drought
 surplus

Geography of Mesopotamia

Build on What You Know Think of a time when you have seen pictures of a flood on television or in newspapers. Floods cause destruction by washing away objects in their path. Do you think a flood can also have good consequences?

The Land Between Two Rivers

- 1 ESSENTIAL QUESTION** How did the land between the Tigris and Euphrates rivers support agriculture?

The Tigris (TY•grihs) and Euphrates (yoo•FRAY•teez) rivers are in Southwest Asia. They start in the mountains of what are now Turkey and Kurdistan. From there they flow through what is now Iraq southeast to the Persian Gulf. (See the map on pages 78–79.)

Mesopotamia The region where these two rivers flow is called **Mesopotamia** (MEHS•uh•puh•TAY•mee•uh). The name means “land between the rivers.” This land was mostly flat with small, scrubby plants.

The rivers provided water and means of travel. In ancient times, it was easier to travel by boat than over land. Boats can carry heavy loads. River currents helped move boats that were traveling down river. Also, few roads existed.

Connect to Today

Euphrates River
 Even today, people of Mesopotamia farm the land next to the Euphrates River. The flat land by a river is a floodplain. ▼



Fertile Soil Almost every year, rain and melting snow in the mountains caused the rivers to swell. As the water flowed down the mountains, it picked up soil. When the rivers reached the plains, water overflowed onto the **floodplain**, the flat land bordering the banks. As the water spread over the floodplain, the soil it carried settled on the land. The fine soil deposited by rivers is called **silt**. The silt was fertile, which means it was good for growing crops.

A Semiarid Climate Usually, less than 10 inches of rain fell in southern Mesopotamia a year. Summers were hot. This type of climate is called **semiarid**. Although the region was dry, ancient people could still grow crops because of the rivers and the fertile soil. Farming villages were widespread across southern Mesopotamia by 4000 B.C.

Vocabulary Strategy

The prefix *semi-* means "half." The word *arid* means "dry." A *semiarid* region has some rain, but remains fairly dry.

REVIEW What made Mesopotamia a good region for farming?

Controlling Water by Irrigation

2 ESSENTIAL QUESTION How did the climate affect farmers?

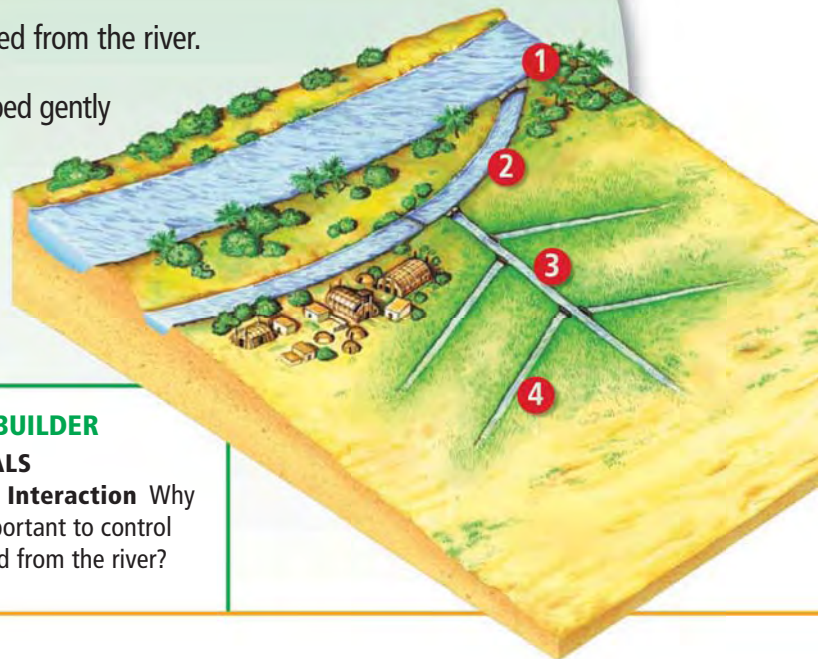
Being a farmer is difficult. Crops need the right amount of water to thrive. The floods and the semiarid climate in Mesopotamia meant that farmers often had either too much water or too little.

Geography

Ancient Irrigation

The model below shows how an ancient irrigation system worked.

- 1** Gates controlled how much water flowed from the river.
- 2** Main canals led from the river. They sloped gently downward to keep the water flowing.
- 3** Medium-sized branch canals led away from the main canals.
- 4** Small feeder canals led water directly to the fields.



GEOGRAPHY SKILLBUILDER

INTERPRETING VISUALS

Human-Environment Interaction Why do you think it was important to control how much water flowed from the river?

Floods and Droughts The yearly flood was unpredictable. No one knew when the flood would occur. It might come in April or as late as June. Farmers could not predict when to plant. Also, the flood's size depended on how much snow melted in the mountains in spring and how much rain fell. If there was too much, the flood might be violent and wash everything away. If there was too little rain and melting snow, the flood would not come.

A **drought** is a period when not enough rain and snow fall. In a semiarid region, drought is a constant danger. During a drought, the river level would drop, making it hard to water crops. If crops failed, people starved.

Irrigation By about 6000 B.C., farmers built canals to carry water from the rivers to their fields. Such a system is called irrigation. Often, the silt in the water clogged the canals. Workers had to clean out the silt to keep the water flowing. They also built dams to hold back excess water during floods.

REVIEW How did Mesopotamians water their crops during droughts?

Finding Resources

3 ESSENTIAL QUESTION How did Mesopotamians cope with a lack of resources?

Since the beginning of time, humans have had to solve problems in the environment. For example, Mesopotamia had no forests to provide wood. The region also lacked stone and minerals, such as metals.

Mud Houses and Walls Because of that lack of resources, Mesopotamians had few building materials. Since they could not build with wood or stone, they used mud for bricks and plaster. However, mud buildings crumbled easily and had to be repaired often.

Also, Mesopotamia was easy to invade because it had few mountains or other natural barriers. As a result, people from other regions often came to steal from the Mesopotamians or conquer them. The ancient Mesopotamians wanted to protect themselves, but they had no trees or stone to build barriers. So people built mud walls around their villages.



Connect to Today

▲ **Building of Mud and Reeds** This style of building has been used in the region for at least 5,000 years and is still used today.

Finding Resources Mesopotamians obtained some stone, wood, and metal outside their own land. They were able to trade for these things because they grew a surplus of grain.

Surplus means more than they needed for themselves.

Jobs such as digging canals, building walls, and trading had to be done over and over. Community leaders began to organize groups of people to do the work at the right time. Lesson 2 explains more about the organization of society.

REVIEW Why was trade important in Mesopotamia?

Lesson Summary

- The Tigris and Euphrates rivers made the soil of Mesopotamia good for growing crops.
- The people of Mesopotamia developed an irrigation system to bring water to crops.
- Mesopotamia had few resources. People traded surplus crops to get what they needed.

Why It Matters Now . . .

The Mesopotamians had to overcome a lack of resources. Today people still work to solve shortages of water, food, and resources.

1 Lesson Review

 **Homework Helper**
ClassZone.com

Terms & Names

1. Explain the importance of
- | | | |
|-------------|----------|---------|
| Mesopotamia | silt | drought |
| floodplain | semiarid | surplus |

Using Your Notes

Summarizing Use your completed chart to answer the following question:

2. How did the Mesopotamians change the environment to deal with geographic challenges?

Geography of Mesopotamia
The rivers of Mesopotamia were important because . . .
Mesopotamians watered their crops by . . .
Because of a lack of resources, . . .

Main Ideas

3. What did the Tigris and Euphrates rivers provide for ancient Mesopotamians?
4. How did the lack of natural resources affect Mesopotamians?
5. How did Mesopotamian farmers obtain the right amount of water for their crops?

Critical Thinking

6. **Understanding Causes** How was irrigation connected to trade?
7. **Drawing Conclusions** How did Mesopotamians create a successful society?

Activity

Writing Job Descriptions Create a job description for a worker in Mesopotamia. Some possible jobs include irrigation system planner, canal digger, wall builder, trader, and project scheduler. Form a small group, and share your job descriptions.

Make a Diagram

Goal: To explore the geographic relationship between resources and settlement in river valley civilizations

Prepare

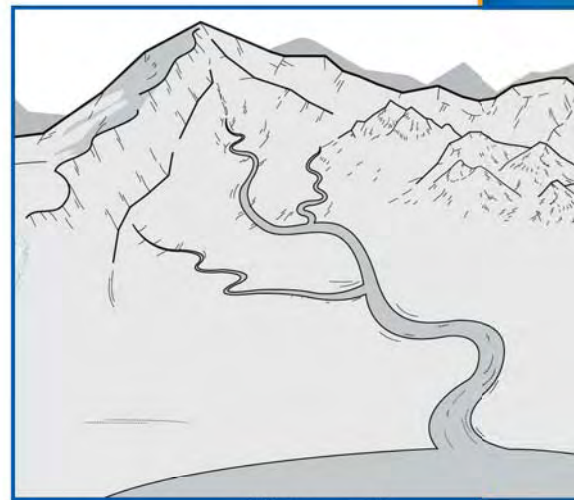
- 1 Reread the paragraph "Fertile Soil" on page 84. Also, research the processes by which rivers pick up soil, carry it to other places, and deposit it on floodplains.
- 2 Learn the terms *erosion* and *deposition*.

Do the Activity

- 1 Create a diagram showing a river flowing from mountains through a floodplain to a gulf. (Use the diagram at right as a model.) Draw an arrow to show which way the river is flowing.
- 2 Label the following areas: mountains, river, floodplain, gulf.
- 3 Color the fertile region green. (Use the map on page 79 as a model.)
- 4 Add captions to explain how rivers pick up soil and how they deposit it on the floodplain.

Materials & Supplies

- posterboard
- colored markers or pencils
- ruler
- books on earth science or encyclopedias

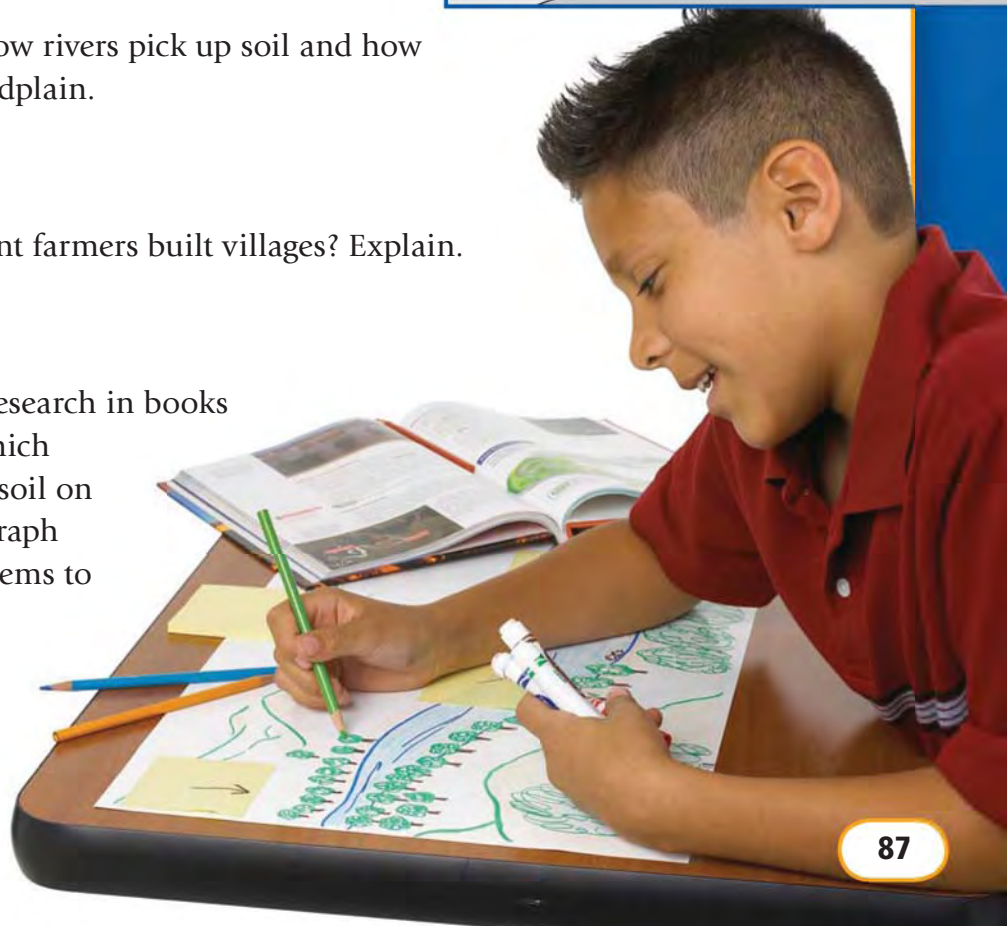


Follow-Up

Where do you think ancient farmers built villages? Explain.

Extension

Writing a Comparison Research in books or ask a science teacher which U.S. river systems deposit soil on floodplains. Write a paragraph comparing those river systems to the ones in Mesopotamia.



MAIN IDEAS

- 1 **Culture** Food surpluses, new technology, and advanced social organization led to a complex way of life. It is called civilization.
- 2 **Government** A new type of government developed in Sumer that included a city and its surrounding lands.
- 3 **Government** Religion dominated life in Sumer, but in time, powerful men who were not priests became the political rulers.

TAKING NOTES

Reading Skill: Making Generalizations

As you read Lesson 2, use your own words to record information about Sumer on a chart like this. You will be asked to make a generalization, or broad judgment, later.

Civilization in Sumer	
Advanced cities	
Specialized workers	
Complex institutions	
Record keeping	
Advanced technology	

 Skillbuilder Handbook, page R8

Words to Know

Understanding the following words will help you read this lesson:

advanced beyond others in development or progress (page 89)

Historians have studied the advanced societies that lived in Mesopotamia.

mouth the part of a river that empties into a larger body of water (page 92)

The mouths of the Tigris and Euphrates rivers are in the Persian Gulf.

hometown the town in which one is born or raised (page 92)

The hometown of the religious leader Abraham was Ur.

foothill a low hill at the start of a mountain range (page 93)

The travelers approached the foothills of the Zagros Mountains.



▲ **Votive Statues** Sumerian artists made these statues to worship the gods when people were busy doing other things. Notice how big their eyes are from gazing at the gods.

civilization

Sumer

city-state

ziggurat

polytheism

king

The First Civilization

Build on What You Know Cities today have a wide range of cultural options. These include sports, entertainment, museums, and restaurants. They also offer people the chance to gain a good education or a promising job. As you are about to read, even the earliest cities were places of opportunity and culture.

The Rise of Civilization

1 ESSENTIAL QUESTION How did civilization develop in the region of Sumer?

The rise of agriculture enabled people to settle in villages. They didn't have to search for food. As more people decided to live in communities, villages grew larger. In time, they became cities. City leaders had to start organizing workers to solve problems, such as building and cleaning irrigation canals. Over time, society and culture grew more complex. These changes led to an advanced form of culture called **civilization**. Most historians think the first civilization rose about 3300 B.C. in **Sumer**, which was a region in southern Mesopotamia.

Ruins of Ur The ancient Sumerian city of Ur once stood on the banks of the Euphrates. The river has shifted over time. Now it is ten miles away. ▼








Traits of Civilization Five traits characterize civilization: advanced cities, specialized workers, complex institutions, record keeping, and advanced technology.

- 1. Advanced Cities** Civilization is closely linked to life in cities. At first, cities became important because farmers needed a place to store and trade their surplus grain. As cities grew, they began to offer other advantages. For example, the cities of Sumer had large temples where people prayed. Cities also offered many different types of work.
- 2. Specialized Workers** In general, a society needs food surpluses before civilization can develop. Having a food surplus allows people to do other types of work besides farming. Workers can specialize, which means to do a job that requires special skills. For example, Sumerian workers built houses, made jewelry, sewed clothes, or created pottery. When people specialize, the quality of their work improves because they can develop their skill.

Because cities are crowded, people must learn to live together. They also have to cooperate on projects, such as building irrigation canals. As a result, some people took on

Civilization in Sumer

Basic Traits of Civilization	Examples from Sumer
Advanced cities	Kish, Nippur, Ur 
Specialized workers	priest, king, artisan 
Complex institutions	the temple, the army, schools 
Record keeping	writing 
Advanced technology	irrigation, bronze tools 

Kings City-states in ancient Sumer were ruled by kings. King Gudea ruled the city-state Lagash. ►



the job of organizing society. In early Sumerian cities, priests did that job. They ran society and acted as judges.

- 3. Complex Institutions** In time, religion and government became institutions. An institution is a group of people who have a specific purpose. Often it exists to help society meet its needs. For example, schools are institutions that exist to educate children. An army is an institution that exists to protect a society. Sometimes society uses an army to conquer others.
- 4. Record Keeping** Societies must keep track of many things. For example, the rulers may want to measure the food supplies stored in the city. Keeping records usually involves writing, but not always. In Mesopotamia, people started by using wooden counting sticks. Later, they invented the world's first system of writing. (You will learn about this in Lesson 3.)
- 5. Advanced Technology** Societies advance as people learn better ways to do things. For example, the people of Sumer learned to use canals to irrigate crops. They also created new tools and used new materials. For instance, the Sumerians began to make tools of bronze (a mixture of copper and tin). Bronze tools replaced tools made of copper, which is a softer metal.

REVIEW Why was Sumer a good example of civilization?

Sumerian City-States

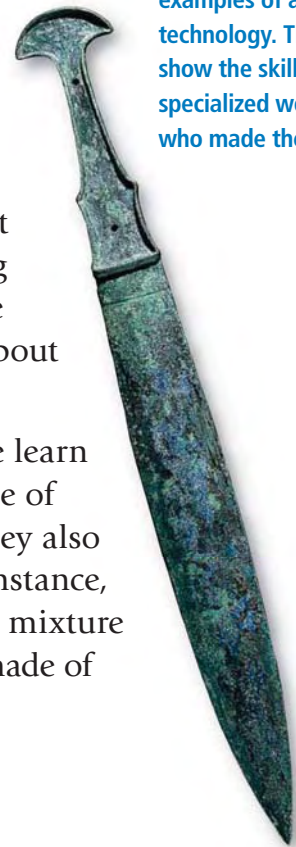
- 2 ESSENTIAL QUESTION** What new type of community developed in Sumer?

Sumerian cities offered many advantages to people who lived in the surrounding lands. Cities were centers of trade, learning, and religion. Most people still lived in the countryside. Even so, over time the cities began to rule the surrounding lands and villages.

A community that included a city and its nearby farmlands was called a **city-state**. The nearby land might include several villages. Between 10,000 and 100,000 people might have lived in a city. Each city-state ruled itself.



Helmet and Sword
This gold helmet and bronze sword are examples of advanced technology. They also show the skill of the specialized workers who made them.



The City-States of Sumer By 3000 B.C., Sumer had at least 12 city-states. Some of the more famous ones were Kish, Nippur, and Ur. As the map on page 94 shows, most city-states were located near the mouths of the Tigris and Euphrates rivers. The land was especially fertile there. As a result, farmers grew more food. Food surpluses supported a larger population.

Ur was the hometown of Abraham, who is an important person in three religions: Judaism, Christianity, and Islam. You will read about Abraham in Chapter 10.

Life in the City The cities of Sumer grew gradually. Because of this, they did not look the way many U.S. cities look today. Instead of straight streets that cross at right angles, Sumerian cities had narrow, winding streets. As you learned in Lesson 1, protective walls surrounded the city. Gates in the wall allowed people to come and go.

People built their houses of mud walls that were several feet thick. Such thick walls helped to keep out heat. Narrow tunnels ran through the walls, carrying fresh air from the outside into the house. People first made the doorways by placing a horizontal beam over two vertical posts. Then they built the mud walls around the doorways.

A house consisted of a series of rooms arranged around a courtyard. The builders covered the courtyard with a loose roof of palm leaves over wooden planks. This roof helped protect people from the hot sun. The cooking area was usually located out in the courtyard so the smoke could escape through gaps in the roof.

The Ziggurat: City Center If you were to visit a Sumerian city, one building would stand out from all the rest. The largest and most important structure in a Sumerian city was the temple. It was called a **ziggurat** (ZIHG•uh•RAT). Ziggurats were first built about 2200 B.C.

The ziggurat was not just a temple; it was the center of city life. The ziggurat functioned as a sort of city hall. This was because the priests ran the irrigation systems. People came to the ziggurat to pay the priests for their services with grain and other items. As a result, the priests controlled the storage of surplus grain. The priests ended up controlling much of the wealth of the city-state.



REVIEW What was life like in Sumerian cities?

Changes in Leadership

3 ESSENTIAL QUESTION How did the leadership of Sumer change?

As you just read, priests played an important political role in Sumer. People also went to them to ask the gods for help. The priests advised the people on how to act to please the gods.

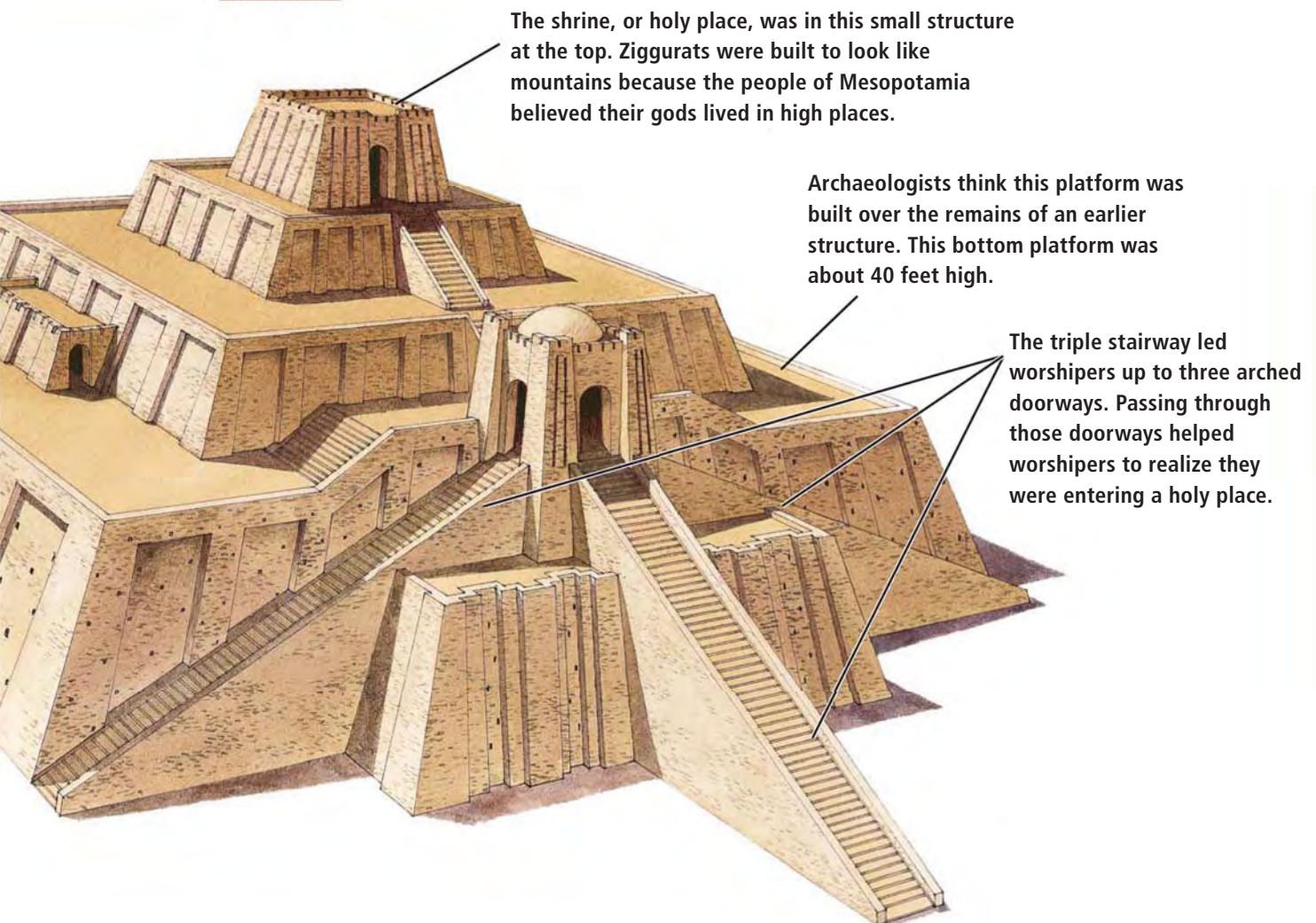
Sumerian Religion The Sumerians believed in many gods and goddesses. A belief in many gods and goddesses is called **polytheism**. Sumerians believed that four main gods created the world and ruled over it. These were the gods of sky, wind, foothills (hills that are near mountains), and fresh water. Each city-state worshiped its own god. In addition, Sumerians had thousands of lesser gods. The Sumerians believed their gods looked and acted like people.

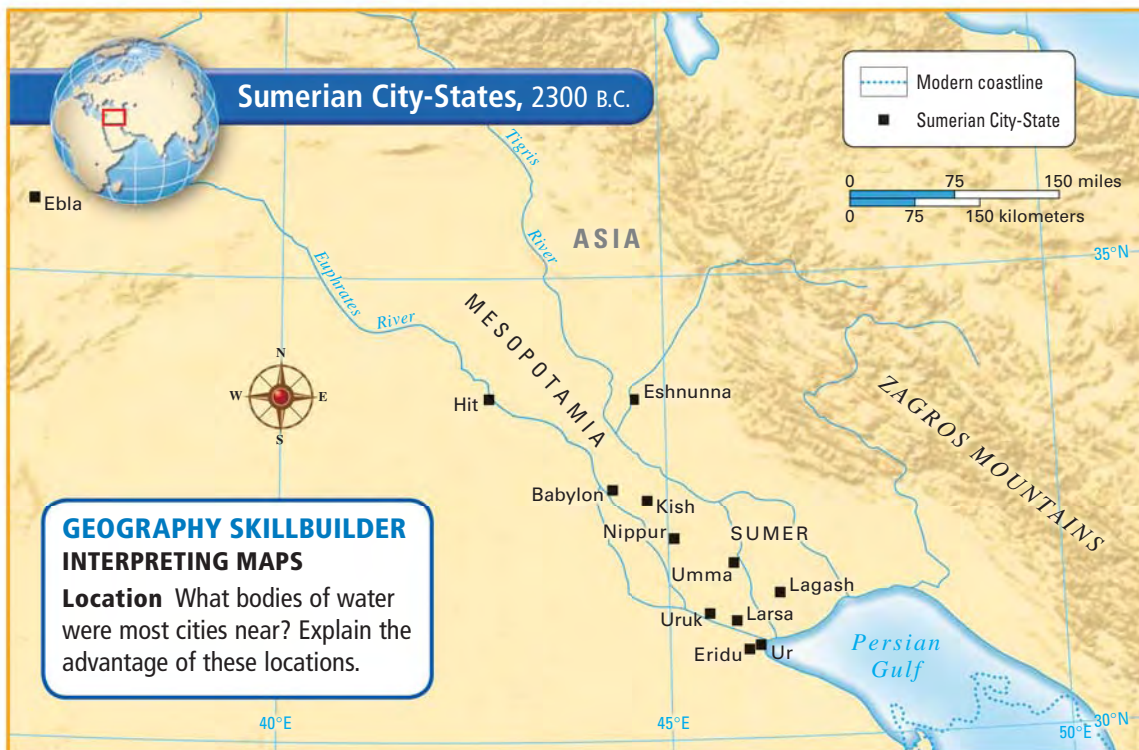
Vocabulary Strategy

The prefix *poly-* means "many," and the root word *theism* means "belief in a god."

Ziggurat

INTERACTIVE





**GEOGRAPHY SKILLBUILDER
INTERPRETING MAPS**

Location What bodies of water were most cities near? Explain the advantage of these locations.

Priests Become Leaders Life in Sumer had many dangers, such as floods, droughts, and invasions. The Sumerians believed the gods could prevent these troubles. To protect their cities, people tried to please the gods. Each god had many priests. The priests worked to satisfy the gods and claimed to have influence with them. Because of that claim, people accepted the priests as leaders.

Service to the Gods Sumerians thought of the gods as rich landowners who created humans to work for them. Priests, ordinary people, and even rulers said prayers and made offerings to the gods. Everyone took part in rituals and followed religious rules. Many of those rituals took place at the ziggurat.

Sumerians believed that the souls of dead people went to the land of no return. It was a gloomy place that was also called the underworld. Some scholars think the hardships of Sumerian life caused Sumerians to expect continued unhappiness after death.

New Leaders in Sumer Around 3000 B.C., as city-states became richer, other groups of people began to attack them to take their wealth. Some attackers came from other regions. Others came from rival city-states. In such dangerous times, the people of the city-state often asked a powerful man to rule them and protect the city.

At first, such leaders led the city-states only during wars. Eventually, they took control of the cities full-time. These new leaders took over some of the priests' jobs. They maintained the canals, managed the surplus grain, and acted as judges.

In time, this new type of ruler became a **king**, who is the highest-ranked leader of a group of people. The area a king ruled was called a kingdom. Sumer became a kingdom under one king by 2375 B.C.

The priests still remained important because their job was to keep the gods happy and keep evil away. The people believed that the gods let the kings rule.

REVIEW How did kings take over as rulers of Sumer?

Lesson Summary

- Sumer had a complex society and culture. Historians consider it the first civilization.
- Sumerian city-states were a form of government that included cities and the land around them.
- Priests were the first leaders in Sumer, but kings became leaders when the need for defense grew.

Why It Matters Now . . .

Cities first became important in Sumer. People today still move to cities to find jobs, education, and culture.



▲ Ring A Sumerian artisan created this ring about 3000 B.C.

2 Lesson Review

Terms & Names

1. Explain the importance of
- | | | |
|--------------|------------|------------|
| civilization | city-state | polytheism |
| Sumer | ziggurat | king |

Using Your Notes

Making Generalizations Use your completed chart to answer the following question:

2. What is the relationship between specialized workers and complex institutions? State your answer as a generalization.

Civilization in Sumer	
Advanced cities	
Specialized workers	
Complex institutions	
Record keeping	
Advanced technology	



Main Ideas

3. Why are food surpluses necessary for civilization to develop?
4. In what way did the ziggurat function like a city hall?
5. What did people in Sumer think their gods were like?

Critical Thinking

6. **Making Inferences** Why was a priest's job so important in Sumer?
7. **Understanding Cause and Effect** How did warfare change the government in Sumer?

Activity

Making a Poster Create a poster listing the five traits of civilization and giving examples from a modern society, such as the United States.

Reading a Map

Goal: To use a map to draw conclusions about the evolution of written language

Learn the Skill

Maps are representations of features on Earth's surface. Some maps show political features such as borders. Other maps show physical features such as mountains. A third type of map is the thematic map, which shows specific types of information such as where certain languages are spoken.



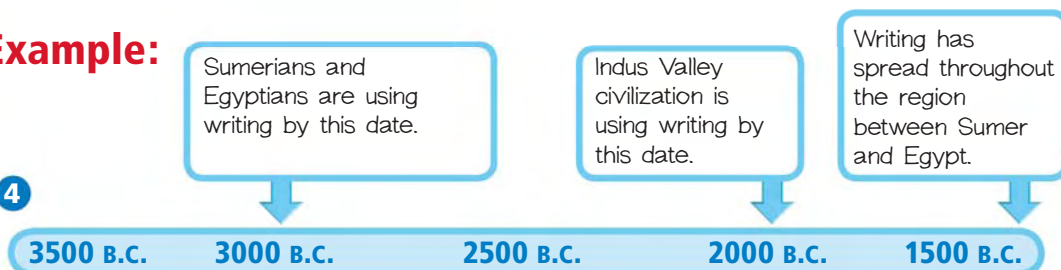
See the Skillbuilder Handbook, page R9.

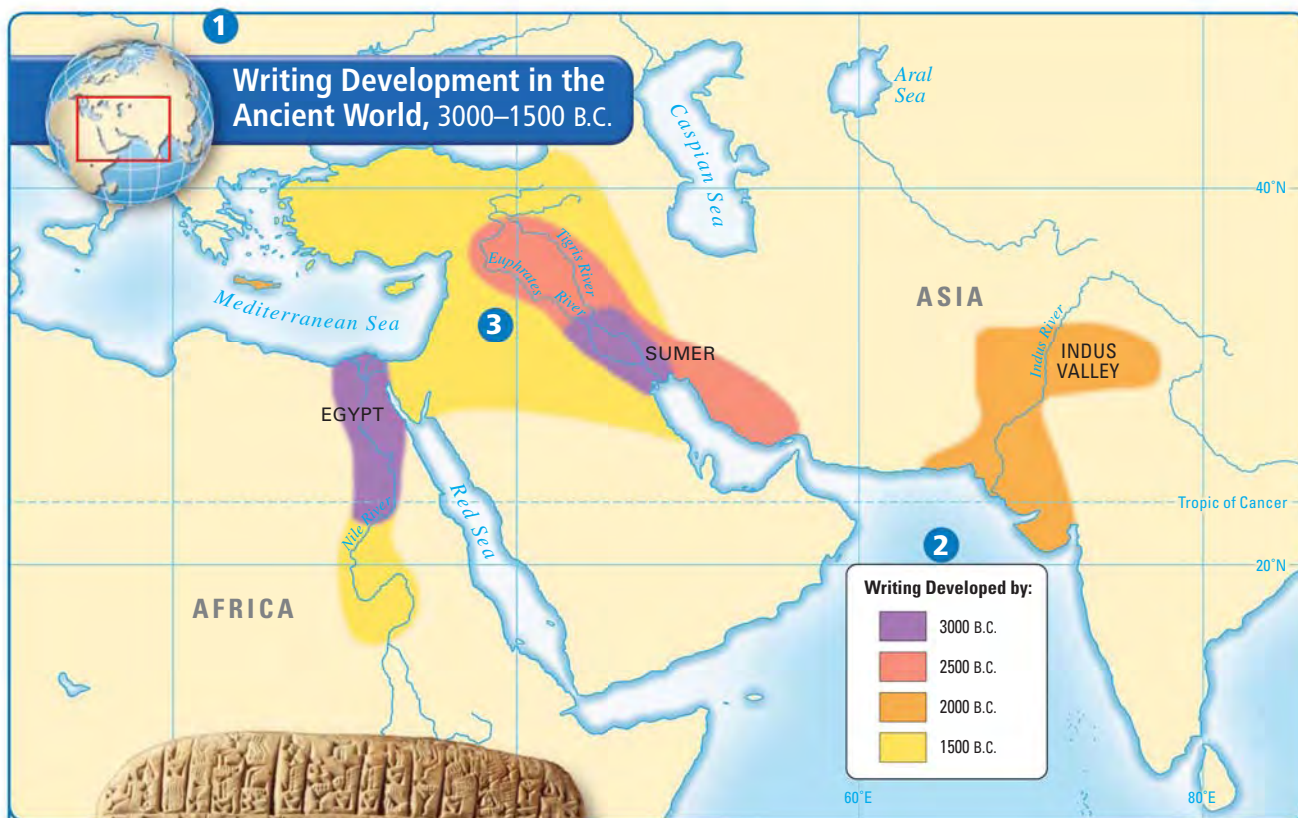
Practice the Skill

- 1 Read the title of the map at the right. It will tell you what information the map shows. This thematic map shows where the first writing systems developed.
- 2 Read the map key. It is usually in a box. It will tell you what the various symbols and colors on the map mean. Notice that on this map, color is used to show the time period a written language developed. A photograph of one of the writing systems accompanies the map.
- 3 Notice the relationship among the various regions shown on the map. See what conclusions you can draw. For example, this map shows that Sumer and Egypt were the first regions where people used writing systems. The next regions to have writing systems were located next to Sumer and Egypt. From this, you can draw the conclusion that writing spread from Sumer and Egypt to their neighbors.
- 4 Sometimes, you can use maps as a source of information for written documents or visual presentations. The time line below presents the information on the map in a different way.

Example:

4





◀ Cuneiform was the type of writing that developed in Sumer.

Apply the Skill

Look at the map on pages 78–79. It is a thematic map showing the region where the Tigris and Euphrates rivers deposited fertile soil and the region where Sumerian culture was found. Write a brief description of the relationship between these two regions.

MAIN IDEAS

- 1 Culture** Sumerian society was divided into several classes, with kings at the top and slaves at the bottom.
- 2 Science and Technology** Sumerians invented tools and developed special knowledge to improve their lives.
- 3 Culture** Sumerians created a written language called cuneiform that was based on picture writing.

TAKING NOTES

Reading Skill: Categorizing

To categorize means to sort information. As you read Lesson 3, take notes about life in Sumer. Use a chart like this one to categorize the information you gather.

Life in Sumer		
Society	Technology	Writing

 Skillbuilder Handbook, page R6



▲ **Woman with Pottery**
The woman shown in this figurine holds a pot that was probably made on a potter's wheel—a Sumerian invention.

Words to Know

Understanding the following words will help you read this lesson:

desirable having pleasing qualities (page 99)

*He had little power, so he was always assigned the least **desirable** jobs.*

daily taking place every day (page 100)

*The Sumerians may have invented the wheel, which most people now use **daily**.*

label to mark an object with a name or symbol that identifies it (page 101)

*The merchant wanted to **label** the food items that were for sale.*

reed the hollow stem of a tall grass (page 102)

*The writing tool was made from a **reed** like those growing in the swamp.*

bronze

pictograph

stylus

cuneiform

scribe

Life in Sumer

Build on What You Know Think about society today. Consider the differences between the people who have money and power and the people who don't have much of either one. Similar differences existed in ancient Sumer.

Sumerian Society

- 1 ESSENTIAL QUESTION** What were the social classes that made up Sumerian society?

As Sumerian society grew more complex, it divided into several social groups, or classes. Many societies are divided into unequal classes. Class systems often define who usually has power and who usually does the less desirable jobs.

Social Classes The king and the priests were at the top of the upper classes of Sumer. The Sumerians believed their kings and priests had a link to the gods, so they had great influence over people. The upper class also included landowners, government officials, and rich merchants.

The in-between classes included all free people. Most people in Sumer were in this group, including many farmers and artisans. Slaves made up the lowest class.

◀ **The Standard of Ur**
A standard is a flag or symbol carried on a pole. This decorated panel shows many people in Sumerian society, including farmers. The panel is about 8.5 inches by 19.5 inches.



Slaves Some past societies have used slaves as a source of cheap labor. Most slaves in Sumer were taken as prisoners during war. In other cases, if Sumerian parents died or were very poor, their children might become slaves who worked in the temple. At times, a free person might borrow more money than he or she could repay. Such persons became slaves until they worked off the debt.

Slaves had some rights. They could conduct business and borrow money. Slaves could also buy their freedom.

Role of Women All of the social classes included women, so their social positions varied widely. In general, women in early Sumer had more rights than they did in later Mesopotamia.

Some upper-class women became priestesses, which was a role of honor. Free women could own land, and they could work as merchants and artisans, such as weavers. Still, the main role for most women was raising their children.

REVIEW Why were kings and priests in the highest class?

Sumerian Science and Technology

2 ESSENTIAL QUESTION What tools did the Sumerians invent?

Sumerians were good at solving problems. They invented tools and developed special knowledge to improve their lives. They were first to invent some of the things we use daily.

Early Inventions Historians believe that Sumerians may have invented the plow (about 6000 B.C.) and the wheel (about 3500 B.C.). These inventions helped Sumerians a great deal in their daily lives.

The plow was the first important tool invented to help farmers. The first plows were often simple digging sticks with handles. They could be pulled or pushed, first by people, then by animals. Plows broke up hard soil, which made planting easier. Also, water could sink more deeply into plowed soil. As a result, the roots of plants received more water.

The Sumerians used the wheel in many ways, such as on wagons to transport goods. Wheeled wagons helped farmers take their crops to market more easily and quickly. However, transporting goods on the river was still more efficient.

Wheel Early wheels were usually made from wood with tires made of leather. ▼



One special kind of wheel was the potter's wheel. Before the invention of the potter's wheel, people made pottery by shaping coils of clay by hand. With the potter's wheel, Sumerians could make more pottery faster. Pots were important storage containers for surplus food.

Sumerians were among the first people to use **bronze**, a mixture of copper and tin. Bronze was stronger than copper so tools lasted longer and stayed sharper. Bronze tools became another item that Sumerians could trade.

Mathematics The Sumerians developed arithmetic to keep records of crops and trade goods. Their number system was based on the number 60. So today, we have 60 seconds in a minute and 60 minutes in an hour. Circles contain 360 degrees. Eventually, the measurement of time helped with the creation of calendars.

Sumerians used a triangle and a measuring rope to set land boundaries. They understood geometric shapes such as rectangles, triangles, and squares. They used those shapes to make bricks, build ramps, and dig canals.

REVIEW How did new tools make life better for the Sumerians?

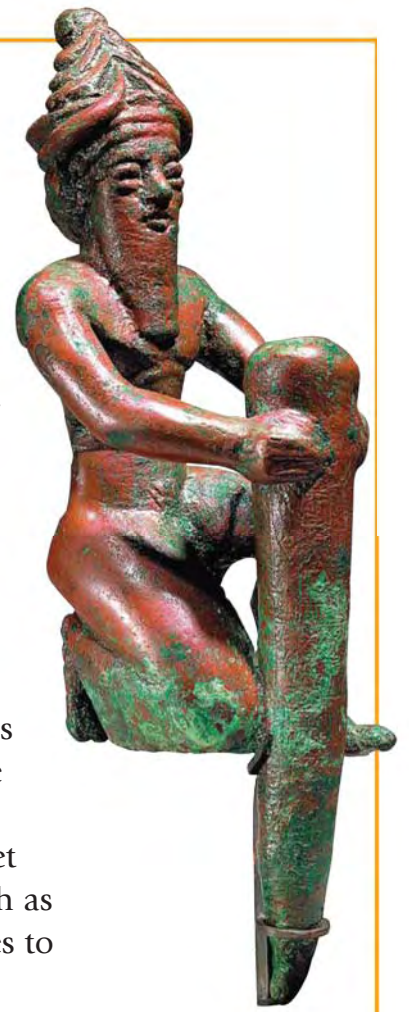
Creation of Written Language

3 ESSENTIAL QUESTION How did the Sumerians invent writing?

Sumerians invented writing by 3000 B.C. to meet the needs of business. As trade expanded, merchants needed records of exchanges. They also wanted to label goods.

Picture Writing At first, Sumerians used clay tokens that had an image of a product, such as a cow, to keep track of goods. They sealed the tokens in clay containers to make sure that no one tampered with them. The Sumerians marked the outside of the containers so people would know what was inside them.

The marks outside the container would be a symbol of the product. Such symbols are known as **pictographs**, which means "picture writing." In time, Sumerians stopped using tokens. They just drew the pictographs on clay tablets.



▲ **Nail Head** This bronze figurine of a god decorates a nail. It shows both the technical and artistic skills of the ancient Sumerians.

Visual Vocabulary



pictograph

Primary Source

Background: Cuneiform was used to write many kinds of records. These were often written on small clay tablets like the one shown. Cuneiform was also used for literature, such as proverbs. A proverb is a short saying containing wisdom or advice. Proverbs are found in many cultures.

It is not always easy to understand the meaning of ancient proverbs because every culture is different. What do you think these proverbs mean?

from *Sumerian Proverbs*

Translated by Edmund I. Gordon

Whoever has walked with truth generates life.

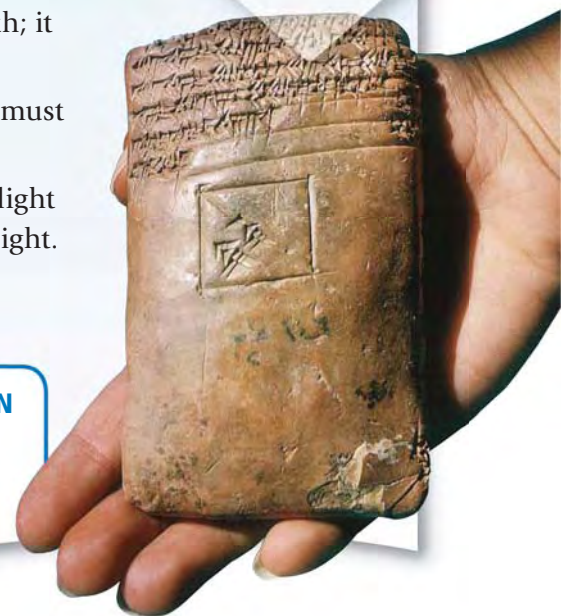
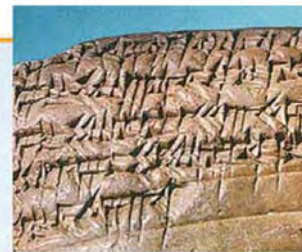
Tell a lie and then tell the truth; it will be considered a lie!

He acquires many things; he must keep close watch over them.

Possessions are sparrows in flight which can find no place to alight.

DOCUMENT-BASED QUESTION

Judging from these proverbs, how did the Sumerians feel about truth? How did they feel about possessions?



Cuneiform At first, pictographs showed actual objects. Later, they also stood for ideas. In time, the Sumerians began to use pictographs to stand for sounds too. By combining sounds, they could write more words.

The Sumerians used a sharpened reed called a **stylus** to press markings into a clay tablet. Because of its shape, the stylus made marks that were wedge shaped. Over time, the Sumerians stopped using pictures and began to use symbols made entirely of these wedge shapes. This wedge-shaped writing is called **cuneiform** (KYOO•nee•uh•FAWRM).

The writing system was very complex. The Sumerian language contained about 600 different symbols. Learning all those symbols took years. As a result, few people were able to read and write. The people who specialized in writing were called **scribes**. They were professional record keepers. Other people in Sumerian society respected them highly.

Written History At first, Sumerians used records mostly for business dealings. Later, people started writing about wars, floods, and the reigns of their kings. These records are Sumer's written history.

P Primary Source Handbook

See the excerpt from *The Epic of Gilgamesh*, page R37.

Other cultures in Mesopotamia and elsewhere adopted the cuneiform writing system from the Sumerians. Archaeologists have found thousands of cuneiform tablets in Southwest Asia. One king owned a library of more than 24,000 clay tablet records and histories from all over the region of Mesopotamia.

REVIEW Why were scribes highly respected in Sumer?

Lesson Summary

- Sumerian society had several classes. Kings and priests were at the top of society. Slaves were at the bottom.
- Inventions, such as the wheel and the plow, and mathematical knowledge improved Sumerian life.
- The Sumerians created a system of writing to record business transactions and histories.

Why It Matters Now . . .

The Sumerians developed the first system of writing. Writing makes it easier for people to pass on knowledge from generation to generation.



▲ **Scribe** This sculpture of a scribe was made later in Mesopotamian history. Notice that he is holding a stylus.

3 Lesson Review

Terms & Names

1. Explain the importance of
- | | | |
|------------|-----------|--------|
| bronze | stylus | scribe |
| pictograph | cuneiform | |

Using Your Notes

Categorizing Use your completed chart to answer the following question:

2. Which invention or technology do you think was most important? Explain why.

Life in Sumer		
Society	Technology	Writing

Main Ideas

3. How did religion affect who was in the upper class?
4. Why was the plow such an important tool for farmers?
5. How did writing evolve in Sumer?

Critical Thinking

6. **Making Inferences** Why was the invention of cuneiform an important development?
7. **Drawing Conclusions** Why do historians identify the beginning of history with the beginning of writing?



Homework Helper
ClassZone.com

Activity

Internet Activity Choose one of the Sumerian inventions and use the Internet to research it. Then give a presentation on its importance. Include visuals with captions in your presentation.

INTERNET KEYWORDS: *plow, wheel, cuneiform*

Mesopotamian Inventions

Purpose: To learn about the ancient Mesopotamian inventions of the plow, board games, and the potter's wheel

The ancient Mesopotamians are a good example of people who solved problems—and changed history by doing so. They invented technology that helped to grow crops and to create pottery more efficiently. Ever since, people all over the world have used those inventions. But don't think that ancient Mesopotamians were so serious that they worked all the time. They also invented some ways to have fun!

Plow

► **Past** The sun can bake the soil as hard as a brick. Seeds thrown on top of such hard ground usually don't sprout. Because of this, early farmers had to find a way to loosen the soil. They invented the plow, which has a blade that cuts into soil and turns it over. The plow helped farmers to grow surplus crops.

▼ **Present** Today's plows are bigger and use metal blades to turn over the soil. Now tractors instead of animals pull plows. Even there, we owe a debt to the ancient Mesopotamians. We wouldn't have tractors without the wheel—and they invented that too.



plow



Board Games

▼ **Past** This game comes from a tomb at Ur. Scholars think the goal was to move your pieces from one end to the other while an opponent blocked the narrow bridge.

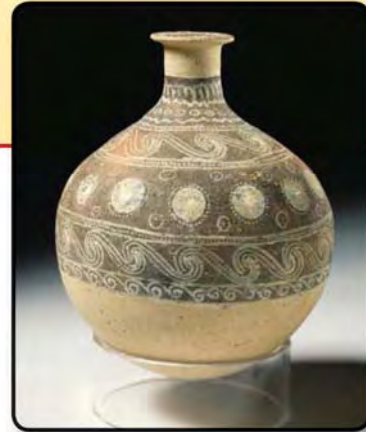
► **Present** Checkers is a board game that many people still enjoy. The object is to capture all of your opponent's pieces.



Pottery

► **Past** It is possible to create pottery entirely by hand, but the potter's wheel provides several advantages. Artisans can make pots with more even, streamlined shapes. And the process is much faster, so artisans could produce more pots than before.

▼ **Present** If you go to any craft fair, you can still find pottery that artisans make on a simple potter's wheel. Many people create pottery as a way to express their artistic side.



Activities

- 1. TALK ABOUT IT** Which of these inventions has had the greatest effect on your life? Explain.
- 2. WRITE ABOUT IT** Create instructions for the ancient board game shown here. Write them out, using a numbered, step-by-step format.

Chapter 3 Review

VISUAL SUMMARY

Ancient Mesopotamia



Geography

- Rivers made agriculture possible.
- Challenges included floods, drought, and lack of resources.



Culture

- Sumerians developed the first writing system.
- Sumerian society was divided into classes.



Belief Systems

- Sumerians worshiped many gods.
- The temple was called a ziggurat.



Government

- City-states were the form of government throughout Sumer.
- First, priests ruled in Sumer. Later, powerful men became kings.



Science & Technology

- Irrigation helped provide a steady source of water for crops.
- Sumerians invented the wheel and the plow.

TERMS & NAMES

Explain why the words in each set below are linked with each other.

1. **floodplain** and **silt**
2. **Sumer** and **civilization**
3. **ziggurat** and **polytheism**
4. **pictograph** and **cuneiform**

MAIN IDEAS

Geography of Mesopotamia (pages 82–87)

5. How did the flooding of the Tigris and Euphrates rivers both help and hurt farmers?
6. Why was irrigation so important to agriculture in Mesopotamia?

The First Civilization (pages 88–97)

7. How did advances in agriculture contribute to the rise of cities?
8. What role did the temple play in Sumerian society?


Life in Sumer (pages 98–105)

9. What roles did women and slaves have in Sumerian religion?
10. What are the characteristics of Sumerian cuneiform writing?

CRITICAL THINKING Big Ideas: Geography

- 11. UNDERSTANDING CAUSES** How did the geography of Mesopotamia help civilization develop there?
- 12. EXPLAINING HISTORICAL PATTERNS** Judging from the history of Sumer, what geographic conditions would help other ancient civilizations to develop?
- 13. UNDERSTANDING EFFECTS** How did inventions and special knowledge support agriculture in Sumer?

ALTERNATIVE ASSESSMENT

- 1. WRITING ACTIVITY** Review the section “Changes in Leadership” on pages 93–95. Decide whether you think kings or priests made better leaders in ancient Sumer. Then write a persuasive paragraph trying to convince readers to adopt your position.
- 2. INTERDISCIPLINARY ACTIVITY—SCIENCE** Use books or the Internet to research bronze. Make a poster that explains how bronze is made, what it was used for, and how it helped the economy of Sumer. Use photocopies or draw examples of bronze objects.
- 3. STARTING WITH A STORY**  Review the invention that you thought of to help the farmer. How did your ideas compare with what you learned in the chapter? Draw pictures for a wall mural that would illustrate the development of agriculture techniques in Mesopotamia.











Technology Activity

4. PLANNING A MULTIMEDIA PRESENTATION

Use the Internet or the library to research scribes in Sumer. Work with a partner to plan a multimedia presentation.

- Who could become a scribe?
- How were scribes educated?
- What kinds of work did they do?

Reading a Chart Use the chart below to answer the questions.

Early Development of Writing		
word	pictograph	cuneiform
bird		
cow		
fish		
mountain		
water		

- 1. What do all of the words on the chart have in common?**
 - A. They name a person’s actions.
 - B. They name abstract ideas.
 - C. They name human emotions.
 - D. They name things from nature.
- 2. Which of the following statements is true of the way cuneiform looked?**
 - A. It was made of realistic pictures of objects.
 - B. It was similar to our alphabet.
 - C. It was made of wedges and lines.
 - D. It used symbols that were larger than pictographs.