

CHAPTER

2

Early River Valley Civilizations, 3500 B.C.–450 B.C.

Connect History *and* Geography

By 2000 B.C., four important civilizations were flourishing in major river valleys of the ancient world. The map to the right shows these four civilizations. Use the map to answer the following questions.

1. What rivers helped sustain these four civilizations?
2. Where was the Indus Valley?
3. Why might civilizations develop where rivers empty into seas?
4. Why might it be reasonable to infer that these civilizations developed independently of each other?

For more information on ancient Sumer, Egypt, and China . . .

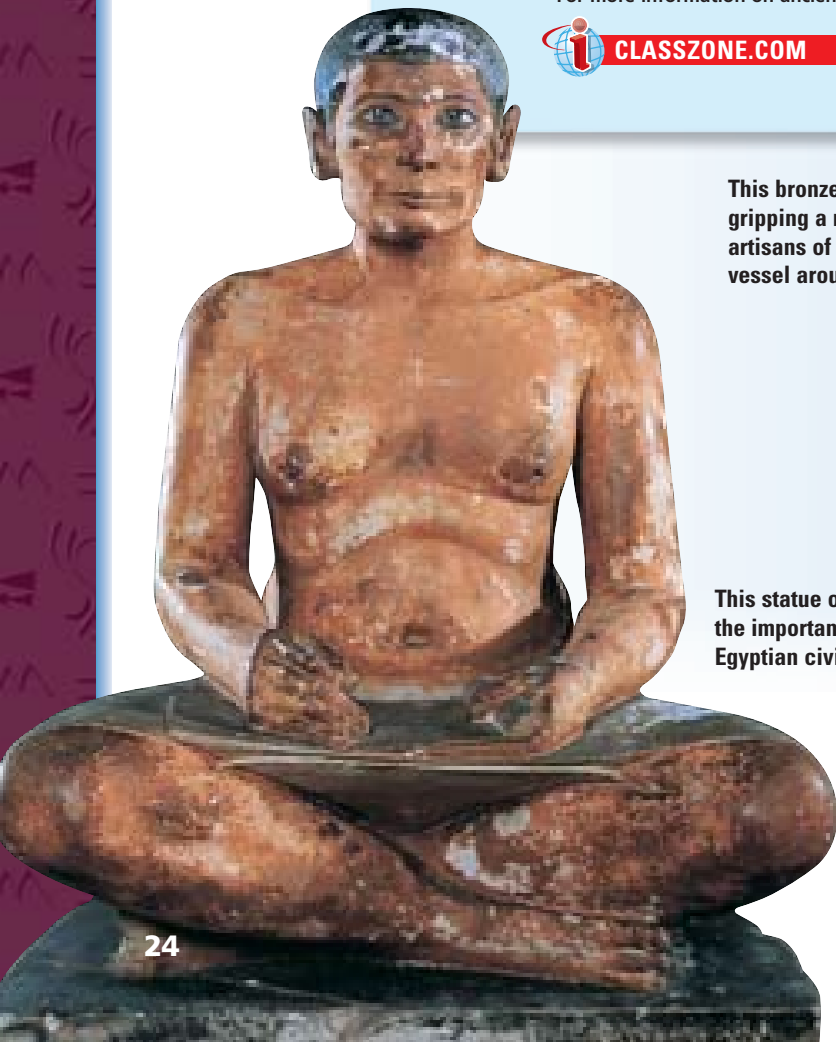


CLASSZONE.COM

This bronze ritual vessel depicts a tiger gripping a man in his teeth. Chinese artisans of the Shang Dynasty made the vessel around 1200 B.C.



This statue of a scribe reflects the importance of writing in Egyptian civilization.



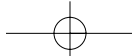
3000 B.C.

City-states form in Sumer, Mesopotamia.

2660 B.C.

Egypt's Old Kingdom develops.

3500 B.C.



Four River Valley Civilizations

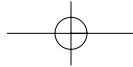


1792 B.C. Hammurabi develops code of laws for Babylonian Empire.

1550 B.C. Indus Valley civilization declines.

1027 B.C. Zhou dynasty forms in China.

450 B.C.



Interact *with* History

It has been a tough year ever since the harvest failed. Many times, you've cursed the name of Mummar, the government official responsible for overseeing the harvest. But now that you've heard about the king's punishment for Mummar, you're not sure what to think.

The law of the Babylonian Empire—Hammurabi's Code—holds people responsible for

their actions. It usually applies retaliation as punishment. That is, if you put out the eye of another, your own eye will be put out. Mummar had hired a substitute to handle the harvest this year, and the harvest was a disaster. Because of Mummar's decision, your city has suffered through a serious food shortage. Some people may die. Therefore, the king has sentenced Mummar to die.

Does Mummar's punishment fit the crime?

A scribe records the proceedings against Mummar.

The Babylonian ruler Hammurabi, accompanied by his judges, sentences Mummar to death.

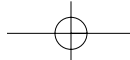
EXAMINING *the* ISSUES

- Does the king's decision represent justice or revenge?
- What should be the main purpose of laws: to promote good behavior or to punish bad behavior?
- Do all communities need a system of laws to guide them?

Hold a class debate on these questions. As you prepare for the debate, think about what you have learned about the changes that take place as civilizations grow and become more complex.

As you read about the growth of civilizations in this chapter, consider why societies developed systems of laws.

Mummar pleads for mercy.



1 City-States in Mesopotamia

TERMS & NAMES

- Fertile Crescent
- silt
- irrigation
- city-state
- dynasty
- cultural diffusion
- polytheism
- empire
- Hammurabi

MAIN IDEA

The earliest civilization in Asia arose in Mesopotamia and organized into city-states.

WHY IT MATTERS NOW

The development of this civilization reflects a pattern that has occurred repeatedly throughout history.

SETTING THE STAGE Two rivers flow from the mountains of what is now Turkey, down through Syria and Iraq, and finally to the Persian Gulf. Six thousand years ago, the waters of these rivers provided the lifeblood that allowed the formation of farming settlements. These grew into villages and then cities. This pattern would also occur along other river systems in northern Africa, India, and China, as the world's first civilizations developed.

Geography of the Fertile Crescent

A desert climate dominates the landscape between the Persian Gulf and the Mediterranean Sea in Southwest Asia. Yet within this dry region lies an arc of land that provides some of the best farming in Southwest Asia. The region's curved shape and the richness of its land led scholars to call it the **Fertile Crescent**.

Fertile Plains In the eastern part of the Fertile Crescent, the Tigris (TY·grihs) and Euphrates (yoo·FRAY·teez) rivers flow southeastward to the Persian Gulf. (See the map on page 28.) Between them lies a plain that became known as Mesopotamia (MEHS·uh·puh·TAY·mee·uh), which in Greek means “land between the rivers.”

The Tigris and Euphrates rivers flooded Mesopotamia at least once a year. As the floodwater receded, it left a thick bed of mud called **silt**. In this rich, new soil, farmers could plant and harvest enormous quantities of wheat and barley. The surpluses from their harvests allowed villages to grow.

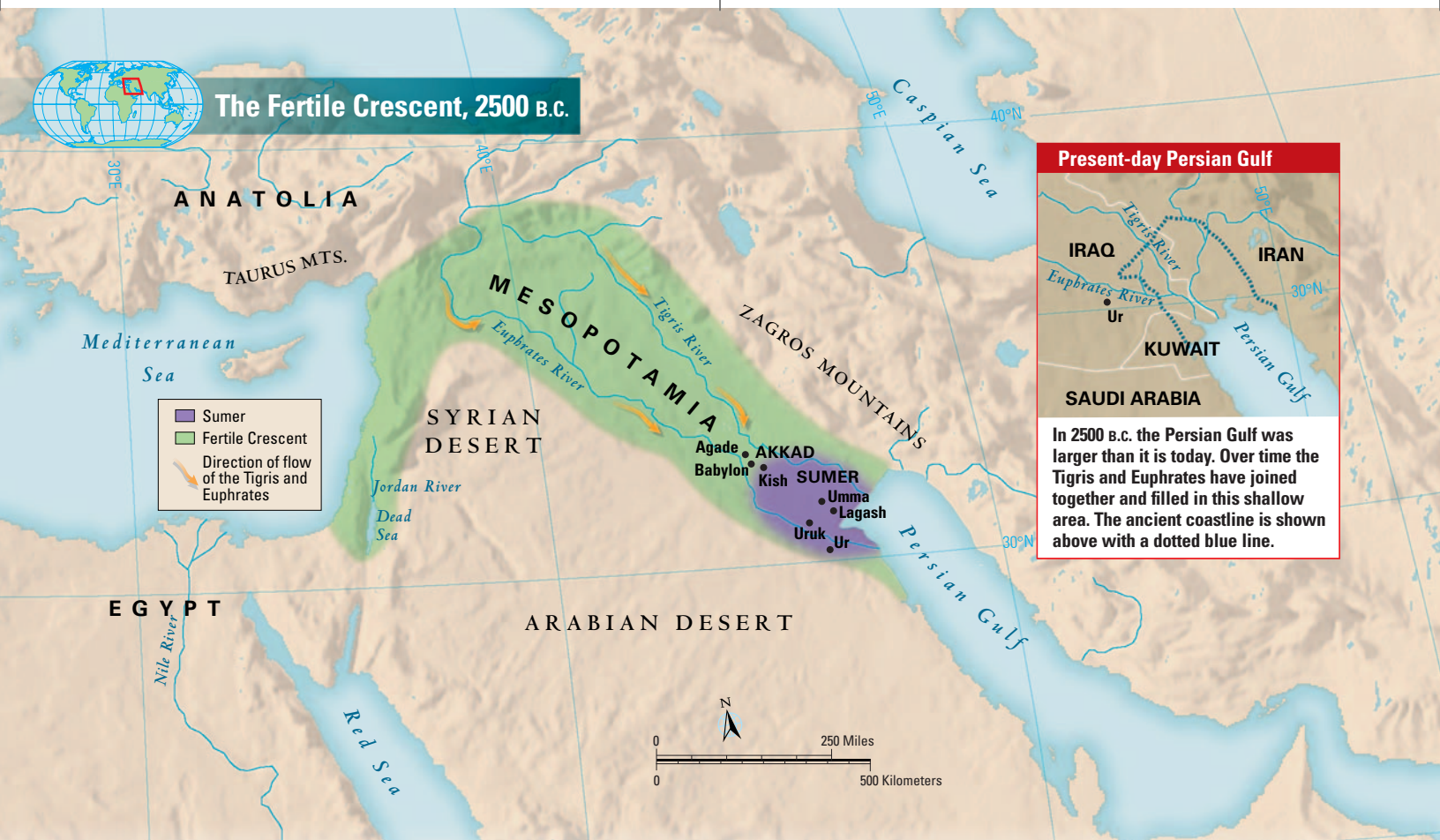


The Zagros Mountains in Iran lie to the east of Mesopotamia. Melting snows from this and other ranges swelled the Tigris and Euphrates rivers each spring.

THINK THROUGH HISTORY

A. Clarifying Why was silt so important to the inhabitants of Mesopotamia?

Environmental Challenges People first began to settle and farm in southern Mesopotamia before 4500 B.C. Around 3500 B.C., the people called the Sumerians, whom you read about in Chapter 1, arrived on the scene. The Sumerians mixed with the local farmers, and their language became dominant in the region. No one knows for sure where the Sumerians came from. Good soil was the advantage that attracted these settlers to the flat, swampy land of Sumer. There were, however, three disadvantages to their new environment.



The Fertile Crescent, 2500 B.C.

Present-day Persian Gulf



In 2500 B.C. the Persian Gulf was larger than it is today. Over time the Tigris and Euphrates have joined together and filled in this shallow area. The ancient coastline is shown above with a dotted blue line.

GEOGRAPHY SKILLBUILDER: Interpreting Maps

- Location** Where is the Tigris and Euphrates river valley found?
- Place** What are the physical characteristics of this valley?

First, the flooding of the rivers was unpredictable. Sometimes it came as early as April, sometimes as late as June. After the flood receded, the hot sun quickly dried out the mud. Little or no rain fell, and the land became almost a desert. How could Sumerian farmers water their fields during the dry summer months in order to make their barley grow?

Second, Sumer was a small region, only about the size of Massachusetts. The villages were little clusters of reed huts standing in the middle of an open plain. With no natural barriers for protection, a Sumerian village was almost defenseless. How could the villagers protect themselves?

Third, the natural resources of Sumer were extremely limited. Without a good supply of stone, wood, and metal, what were the Sumerians to use for tools or buildings?

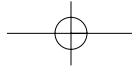
Creating Solutions Over a long period of time, the people of Sumer created solutions to deal with these problems. To provide water, they dug **irrigation** ditches that carried river water to their fields and allowed them to produce a surplus of crops. For defense, they built city walls with mud bricks. Finally, Sumerians traded with the peoples of the mountains and the desert for the products they lacked. Sumerians traded their grain, cloth, and crafted tools for the stone, wood, and metal they needed to make their tools and buildings.

These activities required organization, cooperation, and leadership. It took many people working together, for example, for the Sumerians to construct their large irrigation systems. Leaders were needed to plan the projects and supervise the digging. These projects also created a need for laws to settle disputes over how land and water would be distributed. These leaders and laws were the beginning of organized government.

THINK THROUGH HISTORY

B. Making

Inferences What were the human characteristics of the Tigris and Euphrates river valley?



Sumerians Create City-States

The Sumerians stand out in history as one of the first groups of people to form a civilization. Five key characteristics set Sumer apart from earlier human societies: (1) advanced cities, (2) specialized workers, (3) complex institutions, (4) record keeping, and (5) advanced technology. All the later peoples who lived in this region of the world built upon the innovations of Sumerian civilization.

By 3000 B.C., the Sumerians had built a number of cities, each surrounded by fields of barley and wheat. Although these cities shared the same culture, they developed their own governments, each with its own rulers. Each city and the surrounding land it controlled formed a **city-state**. A city-state functioned much as an independent country does today. Sumerian city-states included Uruk, Kish, Lagash, Umma, and Ur. As in Ur, which Chapter 1 describes, the center of all Sumerian cities was the walled temple with a ziggurat at its center. There the priests appealed to the gods for the well-being of the city-state.

The Power of Priests Sumer's earliest governments were controlled by the temple priests. The farmers believed that the success of their crops depended upon the blessings of the gods, and the priests acted as go-betweens with the gods. In addition to being a place of worship, the ziggurat was like a city hall. From the ziggurat the priests managed the irrigation system. They also demanded a portion of every farmer's crop as taxes.

Monarchs Take Control In time of war, however, the priests did not lead the city. Instead, the men of the city chose a tough fighter who could command the city's soldiers. At first, a commander's power ended as soon as the war was over. After 3000 B.C., wars between cities became more and more frequent. Gradually, Sumerian priests and people gave commanders permanent control of standing armies.

In time, some military leaders became full-time rulers, or monarchs. These rulers usually passed their power on to their sons, who eventually passed it on to their own heirs. Such a series of rulers from a single family is called a **dynasty**. Between 3000 and 2500 B.C., many Sumerian city-states came under the rule of dynasties.

The Spread of Cities Sumer's city-states grew prosperous from the surplus food produced on their farms. These surpluses allowed Sumerians to increase long-distance trade, exchanging the extra food and other goods for items they needed but did not have.

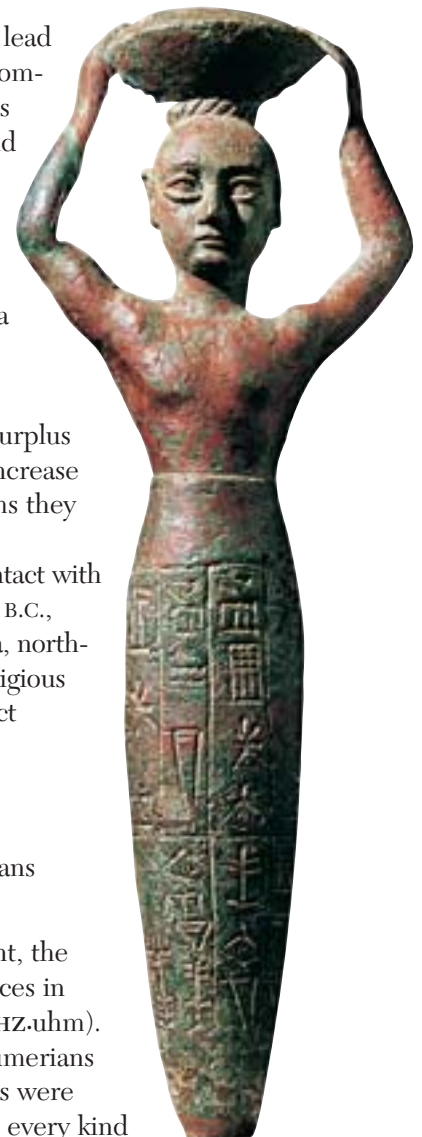
As their population and trade expanded, the Sumerians came into contact with other peoples, and their ideas—such as living in cities—spread. By 2500 B.C., new cities were arising all over the Fertile Crescent, in what is now Syria, northern Iraq, and Turkey. So, too, did the Sumerians absorb ideas such as religious beliefs from neighboring cultures. This process of a new idea or a product spreading from one culture to another is called **cultural diffusion**.

Sumerian Culture

The belief systems, social structure, technology, and arts of the Sumerians reflected their civilization's triumph over its harsh environment.

A Religion of Many Gods Like many peoples in the Fertile Crescent, the Sumerians believed that many different gods controlled the various forces in nature. The belief in many gods is called **polytheism** (PAHL-ee-thee-IHZ-uhm). Enlil, the god of clouds and air, was among the most powerful gods. Sumerians feared him as “the raging flood that has no rival.” Lowest of all the gods were demons known as Wicked Udugs, who caused disease, misfortune, and every kind

The writing on this Sumerian copper figurine from about 2100 B.C. tells that a king of Ur erected a temple for the goddess Inanna.



THINK THROUGH HISTORY

C. Analyzing

Causes How did monarchs gain power in the city-states?



This panel made of shells and stone comes from the Sumerian city of Ur. It shows people and livestock captured in war being presented to the victorious king.

of human trouble. Altogether, the Sumerians believed in roughly 3,000 gods.

Sumerians described their gods as doing many of the same things humans do—falling in love, having children, quarreling, and so on. Yet the Sumerians also believed that their gods were both immortal and all-powerful. Humans were nothing but their servants. At any moment, the mighty anger of the gods might strike, sending a fire, a flood, or an enemy to destroy a city. To keep the gods happy, the Sumerians built impressive ziggurats for them and offered rich sacrifices of animals, food, and wine.

Sumerians worked hard to earn the gods' protection in this life. Yet they expected little help from the gods after death. The Sumerians believed that the souls of the dead went to the "land of no return," a dismal, gloomy place between the earth's crust and the ancient sea. No joy awaited souls there. A passage in a Sumerian poem describes the fate of dead souls: "Dust is their fare and clay their food."

Some of the richest accounts of Mesopotamian myths and legends appear in a long poem called the *Epic of Gilgamesh*. It is one of the earliest works of literature in the world. Through the heroic adventures of Gilgamesh, a legendary king, the narrative offers a glimpse into the beliefs and concerns of the ancient Sumerians. The epic tells of Gilgamesh's unsuccessful quest for immortality, a theme that recurs in ancient literature.

A VOICE FROM THE PAST

Gilgamesh, whither are you wandering?
Life, which you look for, you will never find.
For when the gods created man, they let
Death be his share, and withheld life
In their own hands.

Epic of Gilgamesh

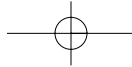
Sumerian beliefs and legends such as those in the *Epic of Gilgamesh* greatly influenced other ancient cultures, including the Hebrews and the Greeks.

Life in Sumerian Society With civilization came greater differences between groups in society, or the beginning of what we call social classes. Priests and kings made up the highest level in Sumerian society. Wealthy merchants ranked next. The vast majority of ordinary Sumerian people worked with their hands in fields and workshops. At the lowest level of Sumerian society were the slaves. Some slaves were foreigners who had been captured in war. Others were Sumerians who had been sold into slavery as children to pay the debts of their poor parents. By working obediently day and night, Sumerian slaves could hope to earn freedom.

Social class affected the lives of both men and women. On the whole, Sumerian women could pursue most of the occupations of city life, from merchant to farmer to artisan. They could hold property in their own name. Women could also join the lower ranks of the priesthood. However, Sumer's written records mention few female

Vocabulary

epic: a long heroic poem that tells the story of a historical or legendary figure.



scribes. Therefore, scholars have concluded that girls were not allowed to attend the schools where upper-class boys learned to read and write. Even so, Sumerian women had more rights than women in many later civilizations.

Sumerian Science and Technology

Sumerians invented the wheel, the sail, and the plow; they were the first to use bronze; and they developed the first system of writing, cuneiform. Cuneiform tablets provide evidence of other Mesopotamian innovations. One of the first known maps was made on a clay tablet in

about 2300 B.C. Other tablets contain some of the oldest written records of scientific investigations in the areas of astronomy, chemical substances, and symptoms of disease.

Many other new ideas arose from the Sumerians' practical needs. In order to erect city walls and buildings, plan irrigation systems, and survey flooded fields, they needed arithmetic and geometry. They developed a number system in base 60, from which stem the modern units for measuring time (60 seconds = 1 minute) and the 360 degrees of a circle. Sumerian building techniques, including the use of mud bricks and mortar, made the most of the resources available. Their architectural innovations—such as arches, columns, ramps, and the pyramid-shaped design of the ziggurat—permanently influenced Mesopotamian civilization.

The First Empire Builders

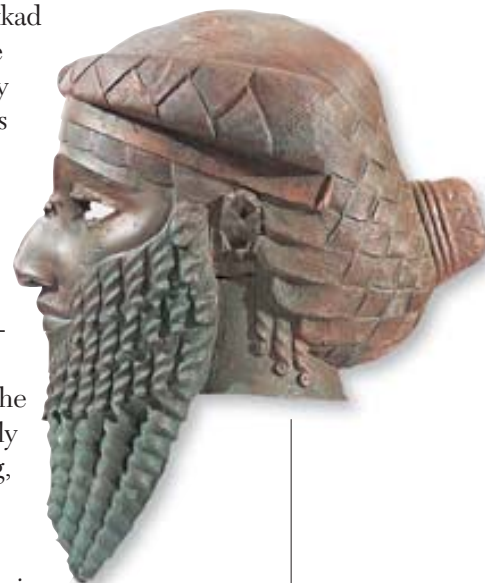
From 3000 to 2000 B.C., the city-states of Sumer were almost constantly at war with one another. The weakened city-states could no longer ward off attacks from the peoples of the surrounding deserts and hills. Although the Sumerians never recovered from the attacks on their cities, their civilization did not die. Succeeding sets of rulers adapted the basic ideas of Sumerian culture to meet their own needs.

Sargon of Akkad About 2350 B.C., a conqueror named Sargon defeated the city-states of Sumer. Sargon led his army from Akkad (AK-ad), a city-state north of Sumer. Unlike the Sumerians, the Akkadians were a Semitic (suh.MIHT.ihk) people—that is, they spoke a language related to Arabic and Hebrew. The Akkadians had long before adopted most aspects of Sumerian culture. Sargon's conquests helped to spread that culture even farther, beyond the Tigris-Euphrates Valley.

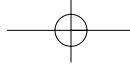
By taking control of both northern and southern Mesopotamia, Sargon created the world's first empire. An **empire** brings together several peoples, nations, or previously independent states under the control of one ruler. At its height, the Akkadian Empire extended from the Mediterranean Coast in the west to present-day Iran in the east. Sargon's dynasty lasted only about 200 years, after which it declined due to internal fighting, invasions, and a severe famine.

Babylonian Empire In about 2000 B.C., nomadic warriors known as Amorites, another Semitic group, invaded Mesopotamia. Within a short time, the Amorites overwhelmed the Sumerians and established their capital at Babylon, on the Euphrates River. The Babylonian Empire reached its peak during the reign of **Hammurabi**, from 1792 B.C. to 1750 B.C. Hammurabi's most enduring legacy is the code of laws he put together.

This bronze head depicts Sargon of Akkad, who created the world's first empire.



THINK THROUGH HISTORY
D. Contrasting How does an empire differ from a city-state?



HISTORYMAKERS



Hammurabi
? –1750 B.C.

The noted lawgiver Hammurabi was also an able military leader, diplomat, and administrator of a vast empire. Hammurabi himself described some of his accomplishments:

When [the gods] Anu and Bel gave me the land of Sumer and Akkad to rule, . . . I dug out the Hammurabi-canal named Nuhus-nisi, which bringeth abundance of water unto the land of Sumer and Akkad. Both the banks thereof I changed to fields for cultivation, and I garnered piles of grain, and I procured unfailling water for the land. . . .

As for the land of Sumer and Akkad, I collected the scattered peoples thereof, and I procured food and drink for them. In abundance and plenty I pastured them, and I caused them to dwell in peaceful habitation.

Hammurabi's Code Although individual Sumerian cities had developed codes of laws, Hammurabi recognized that a single, uniform code would help to unify the diverse groups within his empire. He therefore collected existing rules, judgments, and laws into the Code of Hammurabi. Hammurabi had the code engraved in stone, and copies were placed all over his empire.

The code lists 282 specific laws dealing with everything that affected the community, including family relations, business conduct, and crime. The laws tell us a great deal about the Mesopotamians' beliefs and what they valued. Since many were merchants and traders, for example, many of the laws related to property issues.

Although the code applied to everyone, it set different punishments for rich and poor and for men and women. It frequently applied the principle of retaliation (an eye for an eye and a tooth for a tooth) to punish crimes. Following are two of the laws:

A VOICE FROM THE PAST

- If a man has stolen an ox, a sheep, a pig, or a boat that belonged to a temple or palace, he shall repay thirty times its cost. If it belonged to a private citizen, he shall repay ten times. If the thief cannot pay, he shall be put to death.
- If a woman hates her husband and says to him "You cannot be with me," the authorities in her district will investigate the case. If she has been chaste and without fault, even though her husband has neglected or belittled her, she will be held innocent and may return to her father's house. . . . If the woman is at fault, she shall be thrown into the river.

Code of Hammurabi, adapted from a translation by L. W. King

Despite its severity, Hammurabi's Code carried forward an important idea in Mesopotamian civilization. It reinforced the principle that government had a responsibility for what occurred in society. For example, if a man was robbed and the thief was not caught, the government was required to compensate the victim for his loss.

Two centuries after Hammurabi's reign, the Babylonian Empire fell to nomadic warriors. Over the years, new groups dominated the Fertile Crescent. Yet many ideas of the early Sumerians would be

adopted by the later peoples, including the Assyrians, Phoenicians, and Hebrews. Meanwhile, a similar pattern of development, rise, and fall, was taking place to the west, along the Nile River in Egypt. Egyptian civilization is described in Section 2.

THINK THROUGH HISTORY

E. Recognizing Effects How did Hammurabi's law code advance civilization?

Section 1 Assessment

1. TERMS & NAMES

Identify

- Fertile Crescent
- silt
- irrigation
- city-state
- dynasty
- cultural diffusion
- polytheism
- empire
- Hammurabi

2. TAKING NOTES

Recreate the chart below on your paper. List three environmental challenges the Sumerians faced and their solutions to these challenges.

Challenges	Solutions
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3. MAKING INFERENCES

What advantages did living in cities offer the people of ancient Mesopotamia? Do modern cities offer any of the same advantages? Support your answer with references to the text.

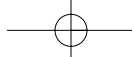
THINK ABOUT

- characteristics of Sumer's city-states
- characteristics of Sumer's economy and society
- development of organized government

4. ANALYZING THEMES

Interaction with Environment

Do you think that living in a river valley with little rainfall helped or hurt the development of civilization in Mesopotamia? Explain your response.



2 Pyramids on the Nile

TERMS & NAMES

- cataract
- delta
- Menes
- pharaoh
- theocracy
- pyramid
- mummification
- hieroglyphics
- papyrus

MAIN IDEA

Along the Nile River, civilization emerged in Egypt and became united into a kingdom ruled by pharaohs.

WHY IT MATTERS NOW

Many of the monuments built by the Egyptians stand as a testament to their ancient civilization.

SETTING THE STAGE To the west of the Fertile Crescent in Africa, another river makes its way to the sea. While Sumerian civilization was on the rise, a similar process took place along the banks of this river, the Nile in Egypt. Yet the Egyptian civilization turned out to be very different from the collection of city-states in Mesopotamia. Early on, Egypt was united into a single kingdom, which allowed it to enjoy a high degree of unity, stability, and cultural continuity over a period of 3,000 years.

The Geography of Egypt

From the highlands of east-central Africa to the Mediterranean Sea, the Nile River flows northward for over 4,100 miles, making it the longest river in the world. (See the map on page 34.) A thin ribbon of water in a parched desert land, the great river brings its water to Egypt from distant mountains, plateaus, and lakes in present-day Burundi, Tanzania, Uganda, and Ethiopia.

Egypt's settlements arose along the Nile on a narrow strip of land made fertile by the river. The change from fertile soil to desert—from the Black Land to the Red Land—was so abrupt that a person could stand with one foot in each.

The Gift of the Nile As in Mesopotamia, yearly flooding brought the water and rich soil that allowed settlements to grow. Every year in July, rains and melting snow from the mountains of east-central Africa caused the Nile River to rise and spill over its banks. When the river receded in October, it left behind a rich deposit of fertile black mud.

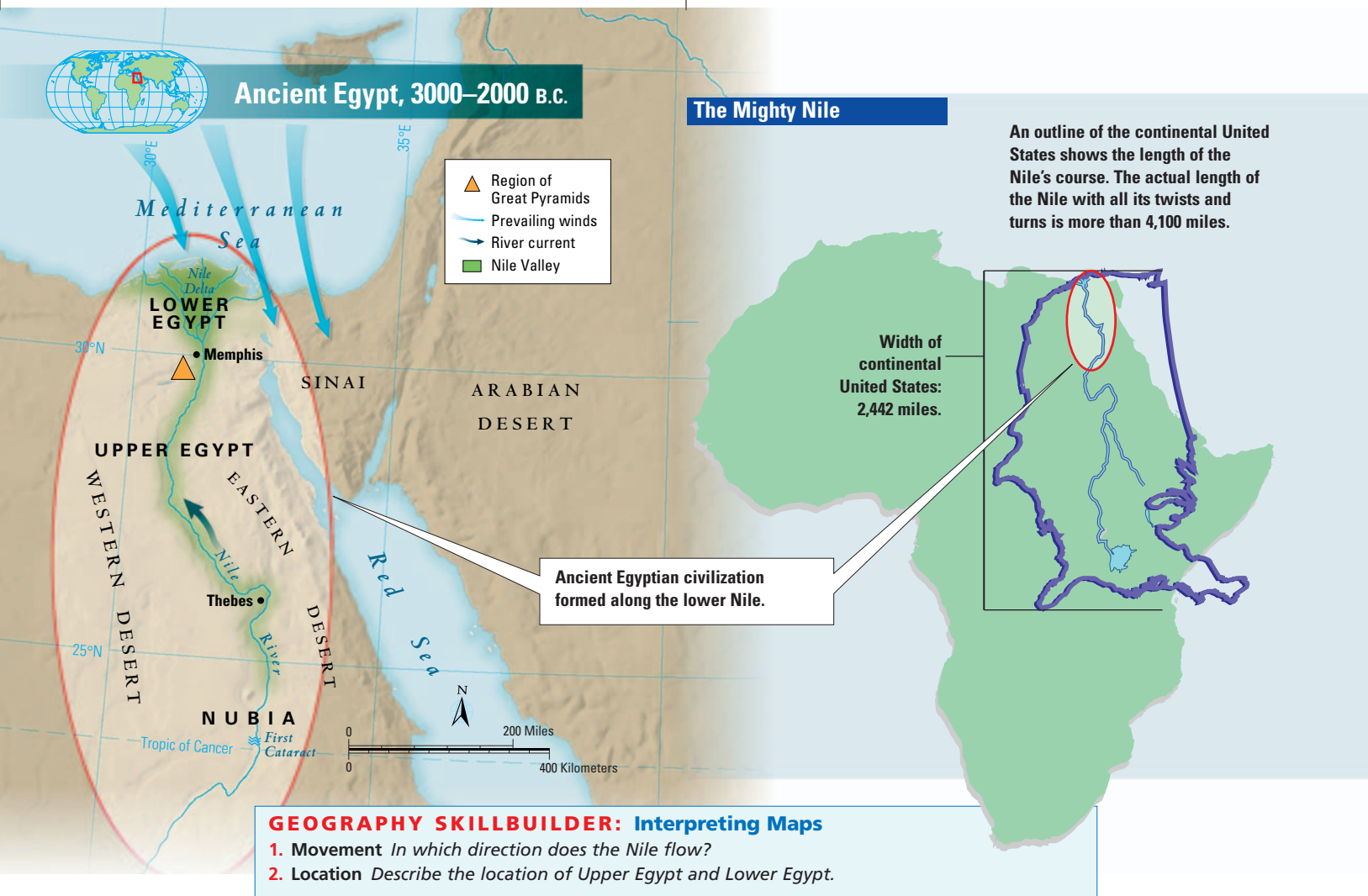
Before the scorching sun could dry out the soil, the peasants would hitch their cattle to plows and prepare their fields for planting. All fall and winter, they tended the wheat and barley plants. They watered their crops from an intricate network of irrigation ditches. At last came the welcome harvest. This cycle repeated itself year after year—flood, plant, harvest; flood, plant, harvest.

In an otherwise parched land, the abundance brought by the Nile was so great that the Egyptians worshiped it as a god who gave life and seldom turned against them. As the ancient Greek historian Herodotus (hih-RAHD-uh-tuhs) remarked in the fifth century B.C., Egypt was the “gift of the Nile.”

Upper Egypt and Lower Egypt For most of their history, ancient Egyptians knew only the lower part of the Nile—the last 750 miles before the river empties north into the Mediterranean Sea. Their domain ended at a point where jagged granite cliffs and boulders turn the river into churning rapids called a **cataract** (KAT-uh-rakt). Riverboats could not pass this spot, known as the First Cataract, to continue upstream to the south.



A traditional sailboat sails the Nile River in Egypt.



Between the First Cataract and the Mediterranean lay two very different regions. Upper Egypt (to the south) was a skinny strip of land from the First Cataract to the point where the river starts to fan out into many branches. Lower Egypt (to the north, near the sea) consisted of the Nile **delta** region, which begins about 100 miles before the river enters the Mediterranean. The delta is a broad, marshy, triangular area of land formed by deposits of silt at the mouth of the river. This rich land provided a home for many birds and wild animals.

The Nile provided a reliable system of transportation between Upper and Lower Egypt. The Nile flows north, so northbound boats simply drifted with the current. Southbound boats hoisted a wide sail. The prevailing winds of Egypt blow from north to south, carrying sailboats against the river current. The ease of contact made possible by this watery highway helped unify Egypt's villages and promote trade.

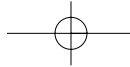
Environmental Challenges Egyptian farmers were much more fortunate than the villagers of Mesopotamia. Compared to the unpredictable Tigris and Euphrates rivers, the Nile was as regular as clockwork. Even so, life in Egypt had its risks. If the Nile's floodwaters were just a few feet lower than normal, the amount of fresh silt and water for crops was greatly reduced. Thousands of people might starve. If the floodwaters were a few feet higher than usual, the water would spread beyond the fields to the mud-brick villages nearby. The unwanted water might destroy houses, granaries, and the precious seeds that farmers needed for planting.

The vast and forbidding deserts on either side of the Nile acted as natural barriers between Egypt and other lands. They forced Egyptians to stay close to the river, their lifeline, which reduced their interaction with other peoples. At the same time, the deserts also shut out invaders. For much of its early history, Egypt was spared the constant warfare that plagued the Fertile Crescent.

THINK THROUGH HISTORY

A. Contrasting

What was the main difference between the flooding of the Nile and that of the rivers in Mesopotamia?



Movement of Goods and Ideas By 3200 B.C., Egyptians were coming into contact with the people of Mesopotamia. Caravans loaded with goods for trade were traveling between the two regions. By about 2000 B.C., Egyptian traders were also traveling up the Nile on barges to the lands of Nubia and Kush to the south. They were in search of such goods as gold, ivory, cattle, and granite blocks for their massive temples and tombs.

Whole groups of people seem to have moved freely from one region to another in search of better land for farming or grazing. The early Egyptians may have borrowed some ideas from the Mesopotamians in the early development of their cities and in their system of writing. However, the period of Mesopotamian influence ended quickly. From then on, Egypt followed its own cultural path, which was very different from Mesopotamia's. Egypt blended the cultures of the Nile Valley peoples with the cultures of peoples who migrated into the valley from other parts of Africa and from the Fertile Crescent. Egypt thus was a land of cultural, ethnic, and racial diversity throughout its 3,000-year history.

Egypt Unites into a Kingdom

Egyptians lived in farming villages as far back as 5000 B.C., perhaps even earlier. Each village had its own rituals, gods, and chieftain. By 3200 B.C., the villages of Egypt were under the rule of two separate kingdoms, Lower Egypt and Upper Egypt.

According to legend, the king of Lower Egypt wore a red crown, and the king of Upper Egypt wore a tall white crown shaped like a bowling pin. About 3100 B.C., a strong-willed king of Upper Egypt named **Menes** (MEE.neez) united all of Egypt. As a symbol of his united kingdom, Menes created a double crown from the red and white crowns. Menes shrewdly established his capital, Memphis, near the spot where Upper and Lower Egypt met, and established the first Egyptian dynasty. Eventually, the history of ancient Egypt would consist of 31 dynasties, spanning 2,600 years.

Little is known of Egypt's first two dynasties, but records improve with the Third Dynasty. The Third Dynasty begins the period historians call the Old Kingdom, which lasted from 2660 to 2180 B.C. The Old Kingdom set the pattern for Egypt's great civilization.

Pharaohs Rule as Gods The role of the king was one striking difference between Egypt and Mesopotamia. In Mesopotamia, kings were considered to be representatives of the gods. To the Egyptians, kings *were* gods, almost as splendid and powerful as the gods of the heavens. The Egyptian god-kings came to be called **pharaohs** (FAIR.ohz).

The pharaoh stood at the center of Egypt's religion as well as its government and army. This type of government in which the ruler is a divine figure is called a **theocracy**. Egyptians believed that the pharaoh bore full responsibility for the kingdom's well-being. It was the pharaoh who caused the sun to rise, the Nile to flood, and the crops to grow. It was the pharaoh's duty to promote truth and justice.

Builders of the Pyramids Egyptians believed that their king ruled even after his death. He had an eternal spirit, or *ka* (kah), which continued to take part in the governing of Egypt. In the Egyptian's mind, the *ka* remained much like a living king in its needs and pleasures. Since kings expected to reign forever, their tombs were even more important than their palaces. For the kings of the Old Kingdom, the resting place after death was an immense structure called a **pyramid**. The Old Kingdom was the great age of pyramid building in ancient Egypt.

HISTORYMAKERS

Menes

Who was Menes? Did he exist at all? Historians cannot answer these questions, because the evidence of this early period is very limited. Written accounts of Menes' accomplishments were recorded hundreds or even thousands of years later. By then, Menes had become a legendary hero.

In the retelling, Menes' deeds became imaginary myths. According to one story, Menes finally died after a long and triumphant reign when he was carried off and killed by a hippopotamus.



crown of
Upper Egypt

crown of Upper
and Lower Egypt

crown of
Lower Egypt

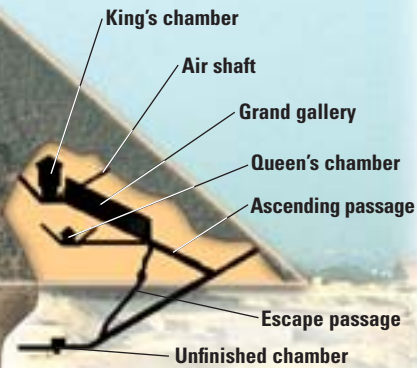
THINK THROUGH HISTORY

B. Making

Inferences Why were Egypt's pharaohs unusually powerful rulers?



The largest of the pyramids is the Great Pyramid (right background) at Giza, completed about 2556 B.C. The diagram shows how the interior of a pyramid looks.



Daily Life

Builders of the Pyramids

Etched into some of the stones of the pyramids are the nicknames of the teams of workers who built them—"the Victorious Gang," "the Enduring Gang," and "the Craftsman Gang," for example. Just as construction workers today leave their marks on the skyscrapers they build, the pyramid builders scratched messages for the ages inside the pyramids.

Who were the pyramid builders? The ancient Greek historian Herodotus claimed that the pharaohs worked an army of laborers to death. However, it was actually peasants who provided most of the labor. They had to work for the government when the Nile was in flood and they could not farm. In return for their service, the country provided the workers with food and housing during this period.

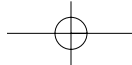
These magnificent monuments were remarkable engineering achievements, built by people who had not even begun to use the wheel. Unlike the Sumerians, however, the Egyptians did have a good supply of stone, both granite and limestone. For the Great Pyramid of Giza, for example, the limestone facing was quarried 400 miles upriver. Each perfectly cut stone block weighed at least 2 1/2 tons. Some weighed 15 tons. More than 2 million of these blocks were stacked with precision to a height of 481 feet. The entire structure covered more than 13 acres.

The pyramids also reflect the strength of the Egyptian civilization. They show that Old Kingdom dynasties had developed the economic strength to support massive public works projects, as well as the leadership and government organization to carry them out.

Egyptian Culture

With nature so much in their favor, Egyptians tended to approach life more confidently and optimistically than their neighbors in the Fertile Crescent.

Religion and Life Like the Mesopotamians, the early Egyptians were polytheistic, believing in many gods. The most important gods were Ra, the sun god, and Horus, the god of light. The most important goddess was Isis, who represented the ideal mother and wife. In all, Egyptians worshiped more than 2,000 gods and goddesses. They built huge temples to honor the major deities.



In contrast to the Mesopotamians, with their bleak view of death, Egyptians believed in an afterlife, a life that continued after death. Egyptians believed they would be judged for their deeds when they died. Osiris (oh-SY-rihs), the powerful god of the dead, would weigh each dead person's heart. To win eternal life, the heart could be no heavier than a feather. If the heart tipped the scale, showing that it was heavy with sin, a fierce beast known as the Devourer of Souls would pounce on the impure heart and gobble it up. But if the soul passed this test for purity and truth, it would live forever in the beautiful Other World.

THINK THROUGH HISTORY

C. Analyzing

Motives Why do you think the Egyptians used mummification? How does it reflect their religious beliefs?

People of all classes planned for their burials, so that they might safely reach the Other World. Kings and queens built great tombs, such as the pyramids, and other Egyptians built smaller tombs. Egyptians preserved a dead person's body by **mummification**—embalming and drying the corpse to prevent it from decaying. (See *Something in Common*, pages 40–41.) Scholars still accept Herodotus' description of the process of mummification.

A VOICE FROM THE PAST

First, they draw out the brains through the nostrils with an iron hook. . . . Then with a sharp stone they make an incision in the side, and take out all the bowels. . . . Then, having filled the belly with pure myrrh, cassia, and other perfumes, they sew it up again; and when they have done this they steep it in natron [a mineral salt], leaving it under for 70 days. . . . At the end of 70 days, they wash the corpse, and wrap the whole body in bandages of waxen cloth.

HERODOTUS, *The History of Herodotus*

Attendants placed the mummy in a coffin inside a tomb. Then they filled the tomb with items the dead person could use in the afterlife, such as clothing, food, cosmetics, and jewelry. Many Egyptians purchased scrolls that contained hymns, prayers, and magic spells intended to guide the soul in the afterlife. This collection of texts is known as the *Book of the Dead*. These texts often contained declarations intended to prove the soul was worthy of eternal life.

A VOICE FROM THE PAST

Behold, I have come to you, I have brought you truth, I have repelled falsehood for you. I have not done falsehood against men, I have not impoverished my associates, I have done no wrong in the Place of Truth, I have not learnt that which is not, I have done no evil. . . . I have not caused pain, I have not made hungry, I have not made to weep, I have not killed, I have not commanded to kill, I have not made suffering for anyone. . . . I am pure, pure, pure, pure!

Book of the Dead, translated by Raymond O. Faulkner

Life in Egyptian Society Like the grand monuments to the kings, Egyptian society formed a pyramid. The king, queen, and royal family stood at the top. Below them were the other members of the upper class, which included wealthy landowners, government officials, priests, and army commanders. The next tier of the pyramid was the middle class, which included merchants and artisans. At the base of the pyramid was the lower class, by far the largest class. It consisted of peasant farmers and unskilled laborers.

In the later periods of Egyptian history, slavery became a widespread source of labor. Slaves, usually captives from foreign wars, served in the homes of the rich or toiled endlessly in the gold mines of Upper Egypt.

The Egyptians were not locked into their social classes. Lower- and middle-class Egyptians could gain higher status through

Daily Life



Egyptian Cosmetics

The dark-lined eyes that look out at us from the artwork of ancient Egypt were the height of fashion 3,000 years ago. Men and women applied the makeup, called kohl, to their eyes with small sticks. They made kohl from powdered minerals mixed with water.

The Egyptians also wore lipstick, made from powdered red ocher (iron oxide) mixed with oil. They soaked flowers and fragrant woods in oil and rubbed the oil into their skin. Sometimes they decked their hairdos with cones of scented wax, which melted slowly in the heat.

These cosmetics were more than just beauty aids. The dark eye makeup softened the glare of the desert sun. The oils protected skin, lips, and hair from the dry desert air. Egyptians kept their cosmetics in chests such as the one shown above, which was found in an Egyptian tomb.



marriage or success in their jobs. Even some slaves could hope to earn their freedom as a reward for their loyal service. To win the highest positions, people had to be able to read and write. Once a person had these skills, many careers were open in the army, the royal treasury, the priesthood, and the king's court.

SPOTLIGHT ON

The Rosetta Stone

Although it lasted more than 2,500 years, Egyptian civilization eventually declined. Soon after, the ability to read hieroglyphics was lost and remained so for many centuries.

In 1799, near the delta village of Rosetta, some French soldiers found a polished black stone inscribed with a message in three languages. One version was written in hieroglyphics (top inset). A second version was in a simpler form of hieroglyphics and the third was in Greek (both are shown in the bottom inset).

Since ancient Greek was a well-known language, it provided clues to the meaning of the hieroglyphics. Still, deciphering the Rosetta Stone took many years. In 1822, a French scholar named Jean François Champollion (shahm-paw.LYAWN) finally broke the code of the hieroglyphics.

Women in Egypt held many of the same rights as men. For example, a wealthy or middle-class woman could own and trade property. She could propose marriage or seek divorce. If she were granted a divorce, she would be entitled to one-third of the couple's property.

Egyptian Writing As in Mesopotamia, the development of writing was one of the keys to the growth of Egyptian civilization. Crude pictographs were the earliest form of writing in Egypt, but scribes quickly developed a more flexible writing system called **hieroglyphics** (HY-ur-uh.GLIHF:ihks). This term comes from the Greek words *hieros* and *gluphē*, meaning "sacred carving."

As with Sumerian cuneiform writing, in the earliest form of hieroglyphics a picture stood for an idea. For instance, a picture of a man stood for the idea of a man; a picture of a bird stood for the idea of a bird. In time, the system changed so that pictures stood for sounds as well as ideas. The owl, for example, stood for an *m* sound. Hieroglyphics could be used almost like letters of the alphabet.

Although hieroglyphics were first written on stone and clay, as in Mesopotamia, the Egyptians soon invented a better writing surface. They used another gift of the Nile, the tall stalks of the **papyrus** (puh-PY.ruhs) reeds that grew in the marshy delta. The Egyptians split the reeds into narrow strips, dampened them, and then pressed them. As the papyrus dried, the plant's sap glued the strips together into a paperlike sheet.

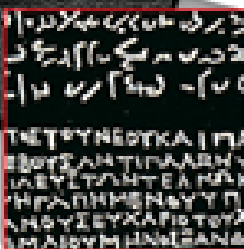
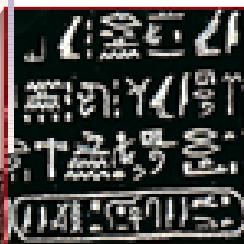
Egyptian Science and Technology Practical needs led to many Egyptian inventions. In order to assess and collect taxes, the Egyptians developed a system of written numbers for counting, adding, and subtracting. Farmers used an early form of geometry to survey and reset property boundaries after the annual floods.

Mathematical knowledge helped Egypt's skillful engineers and architects as well. Builders needed to make accurate calculations and measurements to construct their remarkable pyramids and palaces. Egyptian architects were also the first to use stone columns in homes, palaces, and temples.

To help them keep track of the time between floods and plan their planting season, the Egyptians developed a calendar. Egyptian priests had

THINK THROUGH HISTORY

D. Comparing How was the status of women similar in Egyptian and Sumerian society?





This detail from a tomb painting shows how the Egyptians grew their grain.

observed that a very bright star, now known as Sirius, began to appear above the eastern horizon just before the floods came. The time between one rising of Sirius and the next was 365 days. They divided this year into 12 months of 30 days each and added five days for holidays and feasting. This calendar was so accurate that it fell short of the true solar year by only six hours.

Egyptian medicine was also famous in the ancient world. Although Egyptian medical writings contain all sorts of magic charms and chants, Egyptian doctors also relied on practical knowledge. They knew how to check a person's heart rate by feeling for a pulse in different parts of the body. They set splints for broken bones and had effective treatments for wounds and fevers. They also used surgery to treat some conditions. All in all, the Egyptians approached their study of medicine in a remarkably scientific way.

THINK THROUGH HISTORY

E. Summarizing

What were the main achievements of the ancient Egyptians?

Chariot Riders Invade Egypt

The power of the pharaohs declined about 2180 B.C., marking the end of the Old Kingdom. Historians call the period of weakness and turmoil that followed the First Intermediate Period. Strong pharaohs regained control during the Middle Kingdom (2080–1640 B.C.) and restored law and order. They improved trade and transportation by having a canal dug from the Nile to the Red Sea. With the wealth from new trade, the kings undertook other public projects. They had huge dikes built to trap and channel the Nile's floodwaters for irrigation. They also created thousands of new acres of farmland by draining the swamps of Lower Egypt.

The prosperity of the Middle Kingdom did not last. In about 1640 B.C., a group of Asian nomads swept across the Isthmus of Suez into Egypt in horse-drawn chariots. These chariot-riders were the Hyksos (HIHK-sahs), which meant "the rulers of the uplands." The Hyksos ruled much of Egypt from 1640 to 1570 B.C. This 70-year period is sometimes called the Second Intermediate Period.

Egypt fell to the Hyksos at roughly the same time other nomads were invading Mesopotamia and the Indus Valley farther to the east. But Egypt would rise again for a new period of power and glory, the New Kingdom, which is discussed in Chapter 4.

Section 2 Assessment

1. TERMS & NAMES

Identify

- cataract
- delta
- Menes
- pharaoh
- theocracy
- pyramid
- mummification
- hieroglyphics
- papyrus

2. TAKING NOTES

Recreate the web below on your paper and fill in examples related to the main idea in the center.



Which would you consider most important? Why?

3. DRAWING CONCLUSIONS

Look at the map on page 34. Three natural features determined the boundaries of ancient Egyptian civilization: the Nile River, the First Cataract, and the surrounding desert. In your judgment, which of these features was most important to Egypt's history? Explain your conclusion.

4. THEME ACTIVITY

Interaction with Environment

Using information from Sections 1 and 2, create a chart, sketch, or drawing to show how Sumerians and Egyptians made use of their environment. Then tell which group you think made better use of what they had. Be prepared to defend your opinions.



SOMETHING IN COMMON *across cultures*

Dealing with Death

All humans face death. Anthropologists believe that religious beliefs grew out of humanity's attempts to explain what happens after death. The Egyptians wrapped their dead as mummies to preserve the body for an afterlife. The ways other cultures treat their dead reveal their own beliefs about God and the soul. As you compare and contrast the customs on these pages, look for how they are influenced by the religious beliefs of the people who practice them.

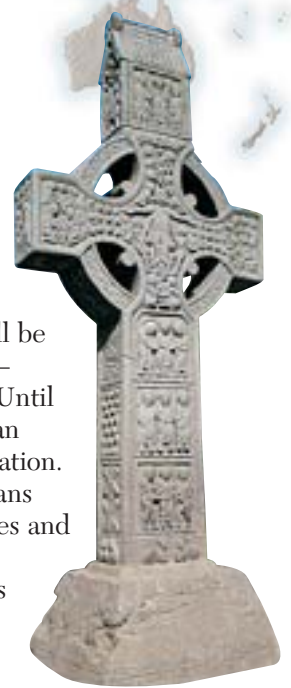


Ancient Egypt

Among the first people to believe in life after death, the ancient Egyptians mummified the body so the soul could return to it later. Embalmers used chemicals to dry out the body. Then they wrapped the mummy in fine linen and adorned it with jewelry. Egyptian embalmers were so skillful that modern archaeologists have found mummies that still have hair, skin, and teeth thousands of years after burial.

9th-Century Ireland

Christians believe that the dead will be resurrected—brought back to life—before the time of final judgment. Until modern times, therefore, the Roman Catholic Church discouraged cremation. Since the first century A.D., Christians have buried their dead in cemeteries and marked each grave with a stone, a monument, or a cross. The carvings on this 9th-century Irish cross reflect Christian symbolism.



a closer look

EGYPTIAN MUMMIES

The Egyptians also mummified the pets of the deceased. These are mummies of a cat and a dog.



These clay vessels are called Canopic jars. After preparing the mummy, embalmers placed the brain, liver, and other internal organs of the mummy in these jars.





Modern Bali

Hindus cremate, or burn, their dead. They consider the body as just a container for a soul that never dies. After a person dies, they believe the soul is reborn in another person. Hindu cremations are sacred rituals. On the Indonesian island of Bali, these rituals involve an elaborate celebration. Several bodies are put in a tall tower made of wood and bamboo, such as the one pictured at right. The whole tower is burned and the ashes scattered in the ocean.



19th-Century Native Americans

Just as Native American languages and lifestyles varied widely, so did Native American customs for dealing with the dead. Many 19th-century Plains Indians, such as the Sioux and the Blackfeet (pictured below), placed their dead on raised platforms. This protected the bodies from wild animals and also lifted the dead closer to the sky, where many spirits were believed to dwell.



This solid gold death mask of the pharaoh Tutankhamen covered the head of his mummy. The mask, which weighs 22.5 pounds, is part of a popular exhibit in the Egyptian Museum in Cairo, Egypt.

Connect to History

Recognizing Effects Which groups believed in preserving the body after death? How did those religious beliefs affect their customs?

 SEE SKILLBUILDER HANDBOOK, PAGE R6

Connect to Today

Reporting Find out about modern Jewish and Muslim burial practices. Illustrate each of these with a picture and a caption like those above. Then write a paragraph comparing them to either Christian or Hindu practices.

3 Planned Cities on the Indus

TERMS & NAMES

- subcontinent
- monsoon

MAIN IDEA

The first Indian civilization built well-planned cities on the banks of the Indus River.

WHY IT MATTERS NOW

The culture of India today has its roots in the civilization of the early Indus cities.

SETTING THE STAGE The great civilizations of Mesopotamia and Egypt rose and fell. They left behind rich histories, but the current cultures in those areas have few links to their predecessors' ancient glories. Farther east, in India, another civilization arose about 2500 B.C. Historians know less about its origins and the reasons for its eventual decline than they do about the origins and decline of Mesopotamia and Egypt. Yet many characteristics of modern Indian culture can be traced to that early civilization.

The Geography of South Asia

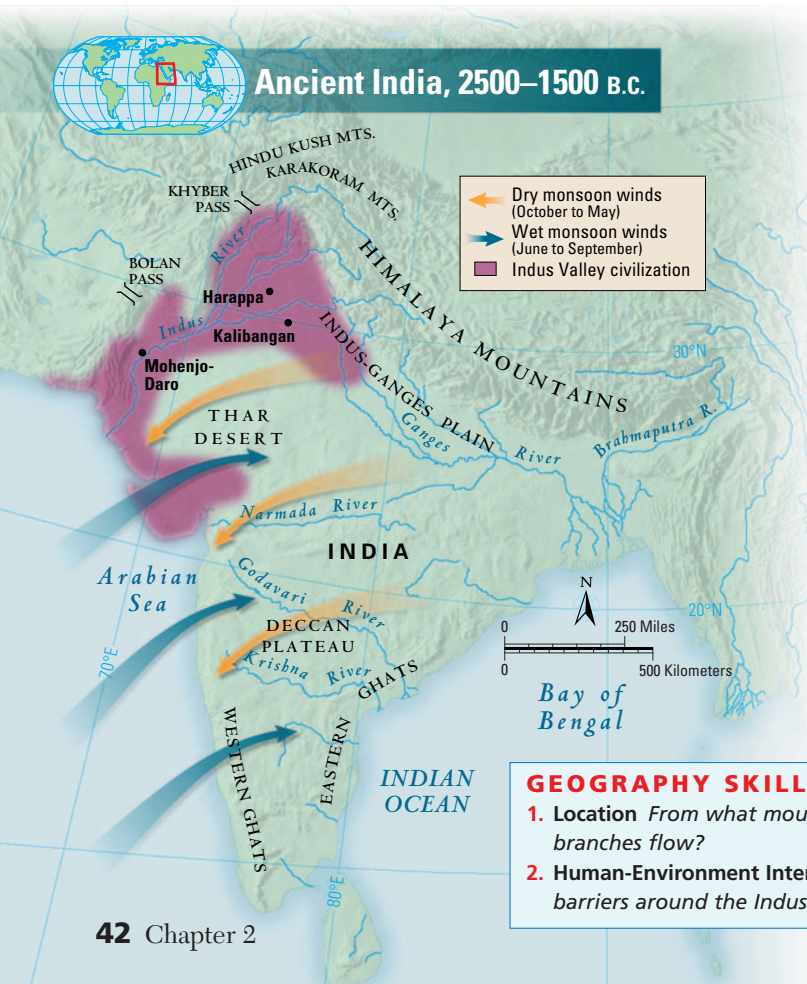
A wall of mountains—the Hindu Kush, Karakoram, and Himalaya ranges—separates South Asia from the rest of the continent. As a result, geographers often refer to the land mass that includes what is now India, Pakistan, Nepal, and Bangladesh as a **subcontinent**—the Indian subcontinent.

Rivers, Mountains, and Monsoons The mountains guard an enormous flat and fertile plain formed by two rivers—the Indus and the Ganges (GAN-jeez). These

two rivers and the lands they water make up a large area that stretches 1,500 miles across northern India and is called the Indus-Ganges Plain.

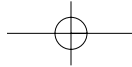
Below this plain, the southern part of the subcontinent is a peninsula that thrusts south into the Indian Ocean. The center of the peninsula is a high plateau cut by twisting rivers. This region is called the Deccan (DEK-uhn). A narrow border of lush, tropical land lies along the coasts of southern India.

Seasonal winds called **monsoons** dominate India's climate. From October to May, winter monsoons from the northeast blow dry air across the country. Then, in the middle of June, the winds shift. Spring monsoons blow from the southwest, carrying moisture from the ocean in great rain clouds.



GEOGRAPHY SKILLBUILDER: Interpreting Maps

- 1. Location** From what mountain ranges do the Indus River and its branches flow?
- 2. Human-Environment Interaction** What landforms presented natural barriers around the Indus Valley?



THINK THROUGH HISTORY

A. Identifying

Problems What environmental challenge did the farmers of the Indus Valley face that the Sumerians and Egyptians did not?

Environmental Challenges The civilization that emerged along the Indus River faced many of the same challenges as the ancient Mesopotamian and Egyptian civilizations. The Indus River flows southwest from the Himalayas to the Arabian Sea. As in Mesopotamia and Egypt, yearly floods spread deposits of rich soil over a wide area. Unlike the Nile floods, however, the floods along the Indus were unpredictable. The river sometimes changed its course. Unlike both the Mesopotamians and the Egyptians, the people of the Indus Valley had to cope with the cycle of wet and dry seasons brought by the monsoon winds. If there was too little rain, plants withered in the fields and people went hungry. Too much rain, and floods swept away whole villages.

The world's tallest mountains to the north and a large desert to the west presented natural boundaries between the Indus Valley and other areas. As in Egypt, the natural barriers helped protect the Indus Valley from invasion. At the same time, the Indus River provided a link to the sea. The river allowed valley inhabitants to develop trade with distant peoples, including the Mesopotamians.

Civilization Emerges on the Indus

Historians know less about the civilization in the Indus Valley than about those to the west. They have not yet deciphered the Indus system of writing. Evidence comes largely from archaeological digs, although many sites remain unexplored, and floods probably washed away others long ago. At its height, however, the civilization of the Indus Valley influenced an area much larger than either Mesopotamia or Egypt.

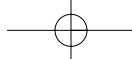
Earliest Arrivals No one is sure how human settlement began in India. Perhaps people who arrived by sea from Africa settled the south. Northern migrants may have made their way through the Khyber Pass in the Hindu Kush mountains. Archaeologists have found evidence in the highlands of agriculture and domesticated sheep and goats dating to about 7000 B.C. By about 3200 B.C., people were farming in villages along the Indus River.

Planned Cities Around 2500 B.C., while Egyptians were building pyramids, people in the Indus Valley were laying the bricks for India's first cities. Archaeologists have found the ruins of more than 100 settlements along the Indus. The largest cities were Kalibangan, Mohenjo-Daro, and Harappa. (Indus Valley civilization is sometimes called Harappan civilization, because of the many archaeological discoveries made at that site.)

One of the most remarkable achievements of the Indus Valley people was their sophisticated city planning. The cities of the early Mesopotamians were a jumble of buildings connected by a maze of winding streets. In contrast, the people of the Indus laid out their cities on a precise grid system. Cities featured a fortified area called a citadel, which contained the major buildings of the city. There were also separate residential districts. Buildings were constructed of oven-baked bricks cut in standard

The citadel arises out of the ruins of Mohenjo-Daro.



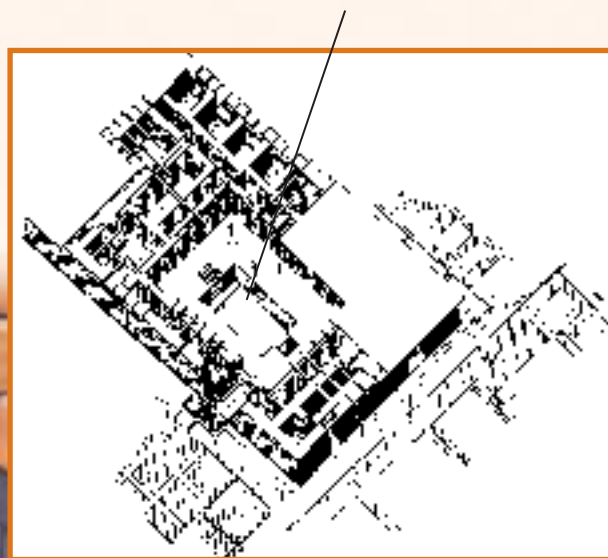


Plumbing in Mohenjo-Daro

From the time people began living in cities, they have faced the problem of plumbing: how to obtain clean water and remove human wastes? In most ancient cities, people retrieved water from the river or a central well. They dumped wastes into open drainage ditches or carted them out of town. Only the rich had separate bathrooms in their homes.

By contrast, the Indus peoples built extensive and modern-looking plumbing systems. In Mohenjo-Daro, almost every house had a private bathroom and toilet. No other civilization achieved this level of convenience until the 19th and 20th centuries. The toilets were neatly built of brick with a wooden seat. Pipes connected to each house carried wastewater into an underground sewer system.

The swimming pool–sized Great Bath in Mohenjo-Daro was probably used for ritual bathing or other religious purposes. Private dressing rooms, some with their own toilets, surrounded the pool.



In their private baths, people took showers by pouring pitchers of water over their head.

Plumbing Facts

- The ancient Romans also built sophisticated plumbing and sewage systems. Aqueducts supplied Roman cities with water.
- In the 17th century, engineers installed a series of water wheels to pump water for the fountains of Versailles, the palace of French king Louis XIV. The water was pumped from a river ten miles away. This was the first water-supply system powered by machine rather than gravity.
- The first flush toilet was patented in 1775 by Alexander Cumming, a British mathematician and watchmaker.

Wastes drained through clay pipes into brick sewers running below the streets. These sewers had manholes, through which sanitation workers could inspect the drains and clean out the muck.

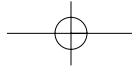
Connect to History

Making Inferences What does the attention the Indus people gave to the plumbing and sewer systems suggest about their culture?

 SEE SKILLBUILDER HANDBOOK, PAGE R16

Connect to Today

Researching Find out how water is supplied and wastewater disposed of in your home or community. Is your home connected to a municipal system? If so, when was this system built and how does it function? If not, how does your home system work? How does the system in your home or community compare to what was used in Mohenjo-Daro?

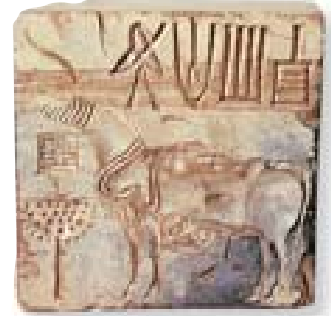


sizes, unlike the simpler, irregular, sun-dried mud bricks of the Mesopotamians. Early engineers also created sophisticated plumbing and sewage systems. These systems could rival any urban drainage systems built before the 19th century. The uniformity in the cities' planning and construction suggests that the Indus peoples had developed a strong central government.

Culture and Trade Archaeological evidence shows that Indus civilization was generally stable. The uniform housing suggests that social divisions in the society were not great. Artifacts such as clay and wooden children's toys suggest a relatively prosperous society that could afford to produce nonessential goods. Finally, few weapons of warfare have been found, suggesting that conflict was limited.

Religious artifacts reveal links to modern Hindu culture. Figures show what may be early representations of Shiva, a major Indian god. Other figures relate to a mother goddess, fertility images, and the worship of cattle. All of these became part of later Indian civilization.

Stamps and seals made of carved stone were probably used by Indus merchants to identify their goods. These show that the Indus peoples conducted long-distance trade. Indus seals found in Sumer, and Sumerian objects found in the Indus Valley ruins, reveal that the two civilizations traded a great deal. Trading began as early as the reign of Sargon of Akkad, around 2350 B.C., and continued until 2000 B.C.



Many Indus seals depict animals, especially cattle. This seal depicts a long-horned bull.

Mysterious End to Indus Valley Culture

Around 1750 B.C., the quality of building in the Indus Valley cities declined. Gradually, the great cities fell into decay. What happened? Some historians think that the Indus River changed course, as it tended to do, so that its floods no longer fertilized the fields near the cities. Other scholars suggest that people wore out the valley's land. They overgrazed it, overfarmed it, and overcut its trees, brush, and grass.

As the Indus Valley civilization neared its end, around 1500 B.C., a sudden catastrophe may have helped cause the cities' downfall. Archaeologists have found the remains of 38 bodies in the ruins of Mohenjo-Daro, seemingly never buried. Their presence suggests that residents may have abandoned the city after a natural disaster or an attack from human enemies. As Chapter 3 explains, the Aryans, a nomadic people from north of the Hindu Kush mountains, swept into the Indus Valley at about this time. Whether they caused the collapse of the first Indus civilization or followed later is not known.

Indian civilization would later grow again under the influence of these nomads. At this same time, farther to the east, another civilization was arising. It too was isolated from outside influences, as you will learn in Section 4.

THINK THROUGH HISTORY

B. Analyzing

Causes What factors may have contributed to the decline of the Indus Valley civilization?

Section 3 Assessment

1. TERMS & NAMES

Identify

- subcontinent
- monsoon

2. TAKING NOTES

Create a two-column chart like the one below. In the left column, list the environmental conditions faced by the people of the Indus Valley. Next to each condition, in the right column, put a plus sign (+) if it was a benefit or a minus sign (–) if it was a drawback.

Environmental Condition	Benefit or Drawback

3. DRAWING CONCLUSIONS

What evidence has led historians to the following beliefs about Indus civilization?

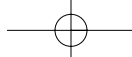
- The cities were run by a strong central government.
- Indus people carried on trade with Sumer.
- Society was generally peaceful and stable.

Choose one of these conclusions and provide a different explanation based on the evidence.

4. THEME ACTIVITY

Science and Technology

Create a "Wall of Remarkable Indus Valley Achievements." Working in teams, write a paragraph about how your team's designated achievement simplified or complicated the Indus people's lives. Include an illustration or a cartoon.



4 River Dynasties in China

TERMS & NAMES

- loess
- oracle bone
- Mandate of Heaven
- dynastic cycle
- feudalism

MAIN IDEA

The early rulers introduced ideas about government and society that shaped Chinese civilization.

WHY IT MATTERS NOW

The culture that took root during ancient times still affects Chinese ways of life today.

SETTING THE STAGE The walls of China's first cities were built 1,500 years after the walls of Ur, 1,000 years after the great pyramids of Egypt, and 1,000 years after the planned cities of the Indus valley. Though a late starter, the civilization that began along one of China's river systems 3,500 years ago continues to thrive today. The reason for this endurance lies partly in China's geography.

Background

With a few exceptions, this book uses the Pinyin system for writing Chinese names, which is now standard in most publications.

The Geography of China

Natural barriers isolated ancient China from all other civilizations. To China's east lay the Pacific Ocean. To the west lay the Taklimakan (TAH-kluh-muh-KAHN) desert and the icy 14,000-foot Plateau of Tibet. To the southwest were the Himalaya Mountains. And to the north was the desolate Gobi Desert and the Mongolian Plateau. Two major river systems flow from the mountainous west to the Pacific Ocean. They are the Huang He (hwahng-HUH) in the north and the Yangtze (yang-SEE), in central China.

China's Heartland China's geography helps explain why early settlements developed along these main river systems. Mountain ranges and deserts dominate about two-thirds of China's land mass. About 90 percent of the remaining land that is suitable for farming lies within the comparatively small plain between the Huang He and Yangtze in eastern China. This plain was China's heartland.

Background

The Yangtze is also called the Chang Jiang (chahng jyahng).

CONNECT to TODAY

Three Gorges Project

The world's largest dam is being built between the dramatic granite cliffs that overlook the Yangtze River in central China. The dam, which is slated to open in 2003, promises to provide China with electrical power equivalent to ten nuclear power plants. However, no one is certain how control of the river's flooding will affect the plains downstream from the dam, which provide one-third of China's food.

Chinese officials hail the dam as an engineering achievement that ranks with the 2,000-year-old Great Wall of China. Yet its impact will affect both the future and the past. The lake created by the dam will displace more than a million Chinese residents. It will also drown forever the archaeological sites of some of China's earliest settlements.

Throughout China's long history, its political boundaries have expanded and contracted depending on the strength or weakness of its ruling families. Yet China remained a center of civilization. In the Chinese view, people who lived outside of Chinese civilization were barbarians. Because the Chinese saw their country as the center of the civilized world, their own name for China was the Middle Kingdom.

Environmental Challenges Like the other ancient civilizations in this chapter, China's first civilization arose in a river valley. Then as now, the Huang He, whose name means "yellow river," deposited huge amounts of dusty yellowish silt when it overflowed its banks. This silt is actually fertile soil called **loess** (LOH-uhs) that is blown by the winds from deserts to the west. Like the Tigris, Euphrates, and Indus, the Huang He's floods could be generous or ruinous. At its worst, the floods devoured whole villages, earning the river the nickname "China's Sorrow." (One great flood in A.D. 1887 killed nearly a million people.)

Because of China's relative geographic isolation, early settlers had to supply their own goods rather than trading with outside peoples. However, China's natural boundaries did not completely protect these settlers from outsiders. Invasions from the west and north occurred again and again in Chinese history.



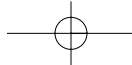
Civilization Emerges in Shang Times

Although Chinese civilization arose later than the others discussed in this chapter, humans have inhabited China for about a million years. Fossil remains show that ancestors of modern humans lived in southwest China about 1.7 million years ago. In northern China near Beijing, a *Homo erectus* skeleton was found. Known as Peking man, his remains show that people settled the river valley about 500,000 years ago.

The First Dynasties Even before the Sumerians settled in southern Mesopotamia, early Chinese cultures were building farming settlements along the Huang He. Around 2000 B.C., some of these settlements grew into China's first cities. According to legend, the first Chinese dynasty, the Xia (shyah) Dynasty, emerged about this time. Its leader was an engineer and mathematician named Yu. Yu's flood-control and irrigation projects helped tame the Huang He and its tributaries so settlements could grow. Since there are no written records from this period, the actual events of this time are unknown. During this period, however, farm surpluses allowed cities to grow. However, the legend of Yu reflects the level of technology of a society making the transition to civilization.

About the time the civilizations of Mesopotamia, Egypt, and the Indus Valley fell to outside invaders, a people called the Shang rose to power in northern China. The Shang Dynasty, which lasted from about 1532 to 1027 B.C., became the first family of Chinese rulers to leave written records. The Shang kings also built elaborate palaces and tombs that have been uncovered by archaeologists. Artifacts found among the remains have revealed a great deal about Shang society.

Early Cities Among the oldest and most important Shang cities was Anyang (ahn-YAHNG), one of the capitals of the Shang Dynasty. Unlike the cities of the Indus Valley or Fertile Crescent, Anyang was built mainly of wood. The city stood in a forest



SPOTLIGHT ON

Lady Hao's Tomb

Archaeologists have discovered several Shang royal tombs near Anyang. While most of these vast underground tombs had been robbed over the centuries, a significant one was unearthed intact—the tomb of Fu Hao.

Lady Hao was a wife of king Wu Ding, who ruled during the 1200s B.C. Her relatively small grave contained some 460 bronze artifacts, 750 jade objects, and more than 6,880 cowry shells. The other, far larger Shang royal tombs must have contained even greater wealth.

Writings found in other places reveal a remarkable figure in Lady Hao. On behalf of her husband, she led more than one military campaign, once with a force of 13,000 troops. She also took charge of rituals dedicated to the spirits of Shang ancestors, a duty reserved for the most distinguished members of the royal family.

clearing. The higher classes lived in timber-framed houses with walls of clay and straw. These houses lay inside the city walls. The peasants lived in hovels outside the city.

The Shang surrounded their cities with massive earthen walls for protection. The archaeological remains of one city include a wall of packed earth 118 feet wide at its base that encircled an area of 1.2 square miles. It likely took 10,000 men more than 12 years to build such a structure. Like the pyramids of Egypt, these walls demonstrate the Shang rulers' ability to raise and control large forces of workers.

Shang peoples needed walled cities because they were constantly waging war. The chariot, one of the major tools of war, was probably first introduced by contact with cultures from western Asia. The professional warriors, who made up the noble class, underwent lengthy training to learn the techniques of driving and shooting from horse-drawn chariots.

Social Classes Shang society was sharply divided between nobles and peasants. The Shang were governed by a ruling class of warrior-nobles headed by a king. These noble families owned the land. They governed the scattered villages within the Shang lands and sent tribute to the Shang ruler in exchange for local control.

Meanwhile, peasants tilled the soil for their overlords. The farmers had no plows, only wooden digging sticks, and hoes and sickles made of stone. (The Shang made magnificent bronze weapons and ceremonial vessels, but they believed bronze was too precious to be used for mere tools.) The soil was so rich, though, that it yielded two crops a year of millet, rice, and wheat.

The Origins of Chinese Culture

The culture that grew up in China had strong bonds that made for unity. From earliest times, the group seems to have been more important than the individual. Above all, people's lives were governed by their duties to two important authorities—their family and their king or emperor.

Family and Society The family was central to Chinese society. The most important virtue was respect for one's parents. The elder men in the family controlled the family's property and made important decisions. Women, on the other hand, were treated as inferiors. They were expected to obey their fathers, their husbands, and later, their own sons. When a girl was between 13 and 16 years old, her marriage was arranged, and she moved into the house of her husband. Only by bearing sons for her husband's family could she hope to improve her status.

A person's chief loyalty throughout life was to the family. Beyond this, people owed obedience and respect to the ruler of the Middle Kingdom, just as they did to the elders in their family.

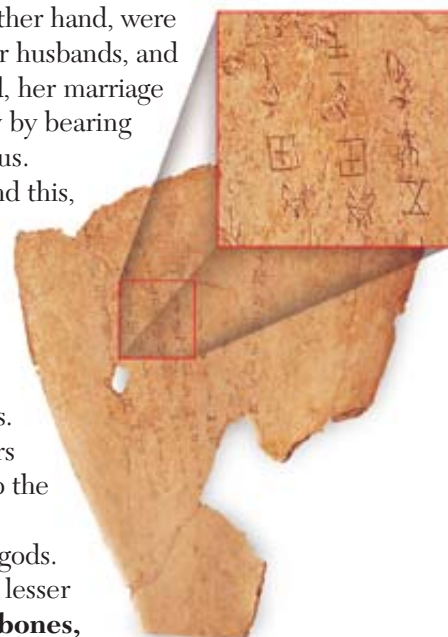
Religious Beliefs In China, the family was closely linked to religion. The Chinese believed that the spirits of family ancestors had the power to bring good fortune or disaster to living members of the family. The Chinese did not regard these spirits as mighty gods. Rather, the spirits were more like troublesome or helpful neighbors who demanded attention and respect. Every family paid respect to the father's ancestors and made sacrifices in their honor.

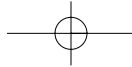
Through the spirits of the ancestors, the Shang consulted the gods. The Shang worshiped a supreme god, Shang Di, as well as many lesser gods. Shang kings consulted the gods through the use of **oracle bones**,

THINK THROUGH HISTORY

A. Compare What did Shang cities have in common with those of Sumer?

This Shang oracle bone was found in the city of Anyang.





Chinese Writing

The earliest writing systems in the world—including Chinese, Sumerian, and Egyptian—developed from pictographs, or simplified drawings of objects. The writing system used in China today is directly related to

the pictographic writing found on Shang oracle bones. As you can see in the chart below, the ancient pictographs can still be recognized in many modern Chinese characters.

	ox	goat, sheep	tree	moon	earth	water	field	heaven	to pray
Ancient symbol									
Modern character	牛	羊	木	月	土	水	田	天	祝

animal bones and tortoise shells on which priests had scratched questions for the gods. After inscribing a question on the bone, a priest applied a hot poker to it, which caused it to crack. The priests then interpreted the cracks to see how the gods had answered.

Development of Writing The earliest evidence of Chinese writing comes from the oracle bones. In the Chinese method of writing, each character stands for an idea, not a sound. Recall that many of the Egyptian hieroglyphs stood for sounds in the spoken language. In contrast, there were practically no links between China's spoken language and its written language. One could read Chinese without being able to speak a word of it. (This seems less strange when you think of our own number system. Both a French person and an American can understand the written equation $2 + 2 = 4$. But an American may not understand the spoken statement "Deux et deux font quatre.")

The Chinese system of writing had one major advantage. People in all parts of China could learn the same system of writing, even if their spoken languages were very different. Thus, the Chinese written language helped unify a large and diverse land.

The disadvantage of the Chinese system was the enormous number of written characters to be memorized—a different one for each idea. A person needed to know over 1,000 characters to be barely literate. To be a true scholar, one needed to know at least 10,000 characters. For centuries, this severely limited the number of literate, educated Chinese. As a general rule, a noble's children learned to write, but a peasant's children did not.

Shang Technology and Artistry People who were skilled in special crafts made up a separate class in Chinese society. Like other commoners, this group lived outside the walls of cities such as Anyang. They manufactured weapons, jewelry, and religious items for the city's nobles.

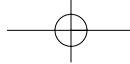
Bronzeworking was the leading craft in which Shang artisans excelled. Beautiful bronze objects were used in religious rituals and were also symbols of royal power. Some of these objects were small and graceful, such as bronze bells. Others were massive caldrons, weighing almost a ton.

In earliest Shang times, the Chinese also learned how to make silk cloth by drawing the fine threads from a silkworm's cocoon and weaving them into a light, beautiful fabric. Nobles prided themselves on their finely embroidered silk shoes, which they regarded as a symbol of civilization.

THINK THROUGH HISTORY
B. Recognizing Effects How did writing help unite China?

This detail from the ritual vessel shown on page 25 reveals the artistry of Shang bronze workers.





Zhou Bring New Ideas

Around 1027 B.C., a people called the Zhou (joh) overthrew the Shang and established their own dynasty. Due to their prior contact with the Shang, the Zhou had adopted much of the Shang culture. Therefore, the change in dynasty did not bring a new culture. Nevertheless, Zhou rule brought new ideas to Chinese civilization.

To justify their conquest, the Zhou leaders declared that the final Shang king had been such a poor ruler that the gods had taken away the Shang's rule and given it to the Zhou. This justification developed over time into a broader view that royal authority came from heaven. A just ruler had divine approval, known as the **Mandate of Heaven**. A wicked or foolish king could lose the Mandate of Heaven and so lose the right to rule. The Duke of Shao, an aide of the Zhou leader who conquered the Shang, described the mandate:

Vocabulary

mandate: a command or instruction from a higher authority.

A VOICE FROM THE PAST

Heaven, unpitying, has sent down ruin on Yin [another name for Shang]. Yin has lost the Mandate, and we Zhou have received it. I dare not say that our fortune would continue to prosper, even though I believe that heaven favors those who are sincere in their intentions. I dare not say, either that it would end in certain disaster. . . .

The Mandate of Heaven is not easy to gain. It will be lost when men fail to live up to the reverent and illustrious virtues of their forefathers.

DUKE OF SHAO, quoted in *The Chinese Heritage*

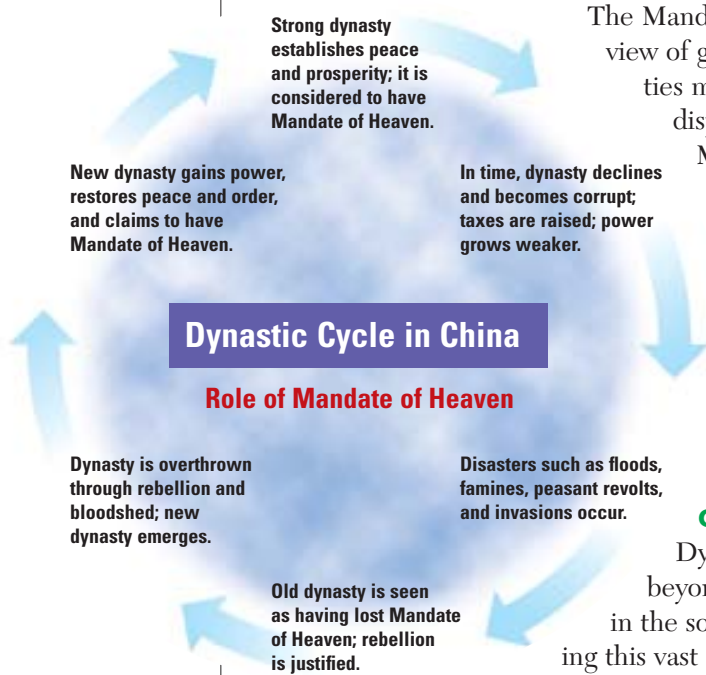
The Mandate of Heaven became central to the Chinese view of government. Floods, riots, and other calamities might be signs that the ancestral spirits were displeased with a king's rule. In that case, the Mandate of Heaven might pass to another noble family. This was the Chinese explanation for rebellion, civil war, and the rise of a new dynasty.

Chinese history is marked by a succession of dynasties until dynastic rule was finally overthrown in the early 1900s. Historians describe the pattern of rise, decline, and replacement of dynasties as the **dynastic cycle**.

THINK THROUGH HISTORY

C. Synthesizing

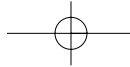
According to Chinese beliefs, what role did the Mandate of Heaven play in the dynastic cycle?



Control Through Feudalism

The Zhou Dynasty controlled lands that stretched far beyond the Huang He in the north to the Yangtze in the south. In response to the challenge of governing this vast area, they gave control over different regions to members of the royal family and other trusted nobles. This established a system called feudalism. **Feudalism** is a political system in which nobles, or lords, are granted the use of lands that legally belong to the king. In return, the nobles owe loyalty and military service to the king and protection to the people who live on their estates. (Similar systems would arise centuries later in both Japan and Europe.)

At first, the local lords lived in small walled towns and had to submit to the superior strength and control of the Zhou rulers. Gradually, however, the lords grew stronger as the towns grew into cities and expanded into the surrounding territory. Peoples who had been hostile toward the lords gradually accepted their rule and adopted Zhou ways. As a result, the local lords became less dependent on the king. More and more, they fought among themselves and with neighboring peoples for wealth and territory.



These Chinese coins shaped like a hoe and a knife come from the Zhou period. Their shapes may reflect the practice of using tools such as hoes and knives for payment before coins existed.

Improvements in Technology and Trade Although warfare was common throughout the Zhou Dynasty, the era also produced many innovations. As large cities grew, the Zhou built roads and canals to supply them. These in turn stimulated trade and agriculture. The Zhou also introduced coined money, which further improved trade. To run the daily operations of the cities, a new class of civil servants, or government administrative workers, emerged.

The major technological advancement was the use of iron. The Zhou developed blast furnaces that allowed them to produce cast iron. This skill would not be matched in Europe until the Middle Ages. The Zhou used iron to create weapons, especially dagger-axes and swords. They also used it for common agricultural tools such as sickles, knives, and spades. Since iron is stronger than bronze, iron tools made farm work easier and more productive. The ability to grow more food helped Zhou farmers support thriving cities.

A Period of Warring States The Zhou ruled from around 1027 to 256 B.C. For the first 300 years of this long period, the Zhou empire was generally peaceful and stable. Gradually, however, Zhou rule weakened. In 771 B.C., nomads from the north and west sacked the city of Hao, the Zhou capital. They murdered the Zhou monarch, but a few members of the royal family escaped eastward to the city of Luoyang (lwoh-YAHNG). Here in this new capital on the Huang He, the Zhou Dynasty pretended to rule for another 500 years.

In fact, the Zhou kings at Luoyang were almost powerless, and they could not control the noble families. Trained as warriors, the lords sought every opportunity to pick fights with neighboring lords. As their power grew, these warlords claimed to be kings in their own territory. As a result, the later years of the Zhou are often called “the time of the warring states.”

Even the style of warfare changed. Under feudalism, nobles had fought according to an honorable code of conduct. With the decline of law and order, professional warriors and mercenaries set the rules of battle. Peasant foot soldiers, supported by cavalry, replaced chariots as the main force on the battlefield. New weapons came into use, such as the crossbow, which would not be introduced in Europe until the Middle Ages.

In this time of bloodshed, traditional values collapsed. At the very heart of Chinese civilization was a love of order, harmony, and respect for authority. Now there was chaos, arrogance, and defiance. How could China be saved? The dynastic cycle was about to bring a new start at a time when migrations and invasions were changing the lands of all the early civilizations.

Background

By about 1000 B.C., most advanced civilizations produced iron tools and weapons. The cast iron of the Chinese was produced by a special process in which molten iron was poured into molds and allowed to harden.

Vocabulary

mercenary: a soldier who will fight in any army for pay.

Section 4 Assessment

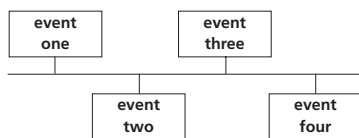
1. TERMS & NAMES

Identify

- loess
- oracle bone
- Mandate of Heaven
- dynastic cycle
- feudalism

2. TAKING NOTES

Create a time line of the major developments in the early Chinese dynasties, using a form such as the one below.



Which event do you think was the most critical turning point? Why?

3. ANALYZING

The group was often more important than the individual in Chinese culture. In your judgment, what are the benefits and drawbacks of this belief?

THINK ABOUT

- family roles
- the characteristics of a ruler
- role of spirit gods

4. ANALYZING THEMES

Power and Authority Do you think that the Zhou Dynasty's downfall resulted because of their method of control? Why or why not?

THINK ABOUT

- feudalism
- the large division of rich and poor
- the vast controlled lands
- the noble-king relationship



Chapter 2 Assessment

TERMS & NAMES

Briefly explain the importance of each of the following to early river valley civilizations, 3500–450 B.C.

1. irrigation
2. city-state
3. polytheism
4. empire
5. mummification
6. hieroglyphics
7. subcontinent
8. monsoon
9. Mandate of Heaven
10. feudalism



Interact with History

On page 26, you looked at the justice of Hammurabi's Code. Now that you have read about the development of four civilizations, think about how laws differ from place to place. How have they developed and changed over time? What similarities do you see between Hammurabi's Code and the laws you live under today? How are they different? Discuss your opinions with a small group.

REVIEW QUESTIONS

SECTION 1 (pages 27–32)

City-States in Mesopotamia

11. What is the Fertile Crescent and why is it called that?
12. Name three disadvantages of Sumer's natural environment.
13. What circumstances led to the beginning of organized government?

SECTION 2 (pages 33–41)

Pyramids on the Nile

14. Why did the Egyptians build pyramids?
15. Herodotus remarked that Egypt was the "gift of the Nile." What did he mean by this?

SECTION 3 (pages 42–45)

Planned Cities on the Indus

16. What does the uniformity of Indus Valley cities tell us about their government?
17. Give two reasons historians use to explain the downfall of Indus Valley cities.

SECTION 4 (pages 46–51)

River Dynasties in China

18. Why is it not surprising that China's early settlements developed where they did?
19. What was the great advantage of the Chinese written language?
20. Explain the dynastic cycle in China.

Visual Summary

Early River Valley Civilizations

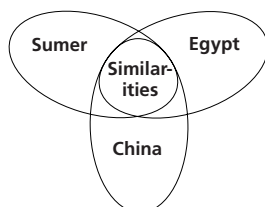
	Environment	Power & Authority	Science & Technology
Sumer	<ul style="list-style-type: none"> • Flooding of Tigris and Euphrates unpredictable • No natural barriers • Limited natural resources for making tools or buildings 	<ul style="list-style-type: none"> • Independent city-states, often warring • City-states governed first by priests, then by generals who became kings • City-states eventually united into first empires by conquerors 	<ul style="list-style-type: none"> • Irrigation • Cuneiform • Bronze • Wheel, sail, plow
Egypt	<ul style="list-style-type: none"> • Flooding of the Nile predictable • Nile an easy transportation link between Egypt's villages • Deserts were natural barriers 	<ul style="list-style-type: none"> • Kingdom with strong government organization • Theocracy, with pharaohs ruling as gods • Pharaohs built pyramids 	<ul style="list-style-type: none"> • Hieroglyphics • Pyramids • Mathematics, geometry • Medicine
Indus Valley	<ul style="list-style-type: none"> • Indus flooding unpredictable • Monsoon winds • Mountains, deserts were natural barriers 	<ul style="list-style-type: none"> • Strong centralized government • Planned cities • Social divisions not significant 	<ul style="list-style-type: none"> • Writing (not yet deciphered) • Cities built on precise grid • Plumbing and sewage systems
China	<ul style="list-style-type: none"> • Huang He flooding unpredictable • Mountains, deserts natural barriers • Geographically isolated from other ancient civilizations 	<ul style="list-style-type: none"> • Community and family more important than individual • Sharp divisions between nobles and peasants • Mandate of Heaven 	<ul style="list-style-type: none"> • Writing • Silk • Coined money • Cast iron



CRITICAL THINKING

1. RELIGIOUS BELIEFS

Create a Venn diagram like the one shown below to indicate differences and similarities in religious beliefs among these ancient civilizations.



2. PUBLIC WORKS

THEME POWER AND AUTHORITY Think about a massive public project that might be done today, such as building a large dam. In terms of government power and authority, how would this be similar to the building of the pyramids? How would it be different?

3. WOMEN IN ANCIENT SOCIETIES

If you had been a woman during this time, in which of the four civilizations would you have preferred to live? Why?

4. ANALYZING PRIMARY SOURCES

The following is an excerpt from an ancient Egyptian hymn praising the Nile. Read the paragraph and answer the questions below it.

A VOICE FROM THE PAST

The Lord of Fishes, He Who Makes the marsh birds to Go Upstream. There are no birds which come down because of the hot winds. He who makes barley and brings emmer [a kind of wheat] into being, that he may make the temples festive. If he is sluggish, then nostrils are stopped up, and everybody is poor. If there be thus a cutting down in the food offerings of the gods, then a million men perish among mortals, covetousness is practiced, the entire land is in a fury, and great and small are on the execution-block. . . . When he rises, then the land is in jubilation, then every belly is in joy, every backbone takes on laughter, and every tooth is exposed.

“Hymn to the Nile,” from *Ancient Near Eastern Texts*

- How does this quote show the importance of the Nile?
- What does the hymn show about ancient Egyptian culture?

CHAPTER ACTIVITIES

1. LIVING HISTORY: Unit Portfolio Project

THEME INTERACTION WITH ENVIRONMENT Your unit portfolio project focuses on showing how people in history have interacted with the environment (see page 3). For Chapter 2, you might use one of the following ideas.

- You are a news reporter reporting on the flood conditions in early Sumer. Ask classmates to role-play citizens before and after the invention of irrigation ditches. Tape-record your interviews.
- Write four poems, one for each civilization in the chapter. Include some reference to how each civilization interacted with the environment.
- Make a map of China showing how natural barriers helped to isolate the country from other areas. Create your map on paper using an outline map, or make a three-dimensional salt map.

2. CONNECT TO TODAY: Cooperative Learning

THEME SCIENCE AND TECHNOLOGY Indus Valley cities were laid out on a grid system. They were planned cities. Many cities without a grid system probably developed over a long time. Work with a team to create a street map of your hometown.

- Look at street maps of Washington, D.C. and Boston. Boston was not a planned city. Washington, D.C. was planned. How can you tell?



Using the Internet, the library, or government resources, research the structure of your hometown, then draw it. Was it a planned city?

3. INTERPRETING A TIME LINE

Revisit the unit time line on pages 2–3 and study the segment for Chapter 2. Which of the events are examples of a well-organized government? Why?

FOCUS ON GEOGRAPHY

Look at the four ancient cities shown on the following climate map.

- Which cities are located in desert climates?
- Which city is not located in a dry climate? What is its climate region called?

Connect to History Identify which civilization each city belongs to. Which of these civilizations developed the latest?

■	Tropical-wet
■	Tropical-dry
■	Semidesert
■	Desert
■	Mediterranean
■	Humid subtropical
■	Humid continental
■	Subarctic
■	Mountain

Climate Regions of the Ancient World

