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

Essential Question
How did early peoples organize their societies and build advanced civilizations?

What You Will Learn
In this chapter you will learn about the civilizations that developed on fertile river plains in Africa and Asia.

SECTION 1 City-States in Mesopotamia
Main Idea: The earliest civilization in Asia arose in Mesopotamia and organized into city-states.

SECTION 2 Pyramids on the Nile
Main Idea: Using mathematical knowledge and engineering skills, Egyptians built magnificent monuments to honor dead rulers.

SECTION 3 Planned Cities on the Indus
Main Idea: The first Indian civilization built well-planned cities on the banks of the Indus River.

SECTION 4 River Dynasties in China
Main Idea: The early rulers introduced ideas about government and society that shaped Chinese civilization.

Previewing Themes

INTERACTION WITH ENVIRONMENT The earliest civilizations formed on fertile river plains. These lands faced challenges, such as seasonal flooding and a limited growing area.

Geography What rivers helped sustain the four river valley civilizations?

POWER AND AUTHORITY Projects such as irrigation systems required leadership and laws—the beginnings of organized government. In some societies, priests controlled the first governments. In others, military leaders and kings ruled.

Geography Look at the time line and the map. In which empire and river valley area was the first code of laws developed?

SCIENCE AND TECHNOLOGY Early civilizations developed bronze tools, the wheel, the sail, the plow, writing, and mathematics. These innovations spread through trade, wars, and the movement of peoples.

Geography Which river valley civilization was the most isolated? What factors contributed to that isolation?
Early River Valley Civilizations, 3500 B.C.–450 B.C.

Credit:
Four River Valley Civilizations

Ancient Egypt:
Iconic Structures

HISTORY
hmhsocialstudies.com

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

1027 B.C.
Zhou Dynasty forms in China.
(Zhou bronze vessel)

1750 B.C.
Indus Valley civilization declines.
(fragment of a Harappan pot)
Why do communities need laws?

The harvest has failed and, like many others, you have little to eat. There are animals in the temple, but they are protected by law. Your cousin decides to steal one of the pigs to feed his family. You believe that laws should not be broken and try to persuade him not to steal the pig. But he steals the pig and is caught.

The law of the Babylonian Empire—Hammurabi’s Code—holds people responsible for their actions. Someone who steals from the temple must repay 30 times the cost of the stolen item. Because your cousin is unable to pay this fine, he is sentenced to death. You begin to wonder whether there are times when laws should be broken.

EXAMINING the ISSUES

- 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 civilization in this chapter, consider why societies developed systems of laws.
City-States in Mesopotamia

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

The development of this civilization reflects a settlement 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. Over 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.

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 provided 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. It includes the lands facing the Mediterranean Sea and a plain that became known as Mesopotamia (MEH•uh•puh•TAH•mee•uh). The word in Greek means “land between the rivers.”

The rivers framing Mesopotamia are the Tigris (TY•grihs) and Euphrates (yoo•FRAY•teez). They flow southeastward to the Persian Gulf. (See the map on page 30.) 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. Farmers planted grain in this rich, new soil and irrigated the fields with river water. The results were large quantities of wheat and barley at harvest time. The surpluses from their harvests allowed villages to grow.

Environmental Challenges People first began to settle and farm the flat, swampy lands in southern Mesopotamia before 4500 B.C. Around 3300 B.C., the people called the Sumerians, whom you read about in Chapter 1, arrived on the scene. Good soil was the advantage that attracted these settlers. However, there were three disadvantages to their new environment.

• Unpredictable flooding combined with a period of little or no rain. The land sometimes became almost a desert.
• With no natural barriers for protection, a Sumerian village was nearly defenseless.
• The natural resources of Sumer were limited. Building materials and other necessary items were scarce.
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 blue line.

Solving Problems Through Organization  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.
  • Sumerians traded their grain, cloth, and crafted tools with the peoples of the mountains and the desert. In exchange, they received raw materials such as stone, wood, and metal.

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—and eventually of civilization. ▶

Sumerians Create City-States

The Sumerians stand out in history as one of the first groups of people to form a civilization. As you learned in Chapter 1, five key characteristics set Sumer apart from earlier human societies: (1) advanced cities, (2) specialized workers, (3) complex institutions, (4) record keeping, and (5) improved 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, the center of all Sumerian cities was the walled temple with a ziggurat in the middle. There the priests and rulers appealed to the gods for the well-being of the city-state.

**Priests and Rulers Share Control** 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. (See page 22 for a ziggurat.) From the ziggurat the priests managed the irrigation system. Priests demanded a portion of every farmer’s crop as taxes.

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. 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. After 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.

By 2500 B.C., new cities were arising all over the Fertile Crescent, in what is now Syria, northern Iraq, and Turkey. Sumerians exchanged products and ideas, such as living in cities, with neighboring cultures. This process in which a new idea or a product spreads 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 dry and 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 more than one god is called polytheism (PAHL•ee•thee•uhm). Enlil, the god of storms and air, was among the most powerful gods. Sumerians feared him as “the raging flood that has no rival.” Demons known as Ugallu protected humans from the evil demons who caused disease, misfortune, and misery.

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

**Analyzing Causes**

How did military leaders gain power in the city-states?
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. (See a selection from the Gilgamesh epic on page 83.)

**Life in Sumerian Society**  With civilization came the beginning of what we call social classes. Kings, landholders, and some priests 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. Debt slaves could hope to eventually buy their freedom.

Social class affected the lives of both men and women. Sumerian women could work as merchants, farmers, or artisans. They could hold property in their own names. Women could also join the priesthood. Some upper-class women did learn to read and write, though Sumer’s written records mention few female scribes. However, Sumerian women had more rights than women in many later civilizations.

**Sumerian Science and Technology**  Historians believe that Sumerians invented the wheel, the sail, and the plow and that they were among the first to use bronze. Many new ideas and inventions arose from the Sumerians’ practical needs.

- **Arithmetic and geometry**  In order to erect city walls and buildings, plan irrigation systems, and survey flooded fields, Sumerians 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.
- **Architectural innovations**  Arches, columns, ramps, and the pyramid shaped the design of the ziggurat and permanently influenced Mesopotamian civilization.
- **Cuneiform**  Sumerians created a system of writing. 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, chemistry, and medicine.

**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. 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 loosely controlled land 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 famine.

**Babylonian Empire** In about 2000 B.C., nomadic warriors known as Amorites invaded Mesopotamia. Gradually, 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.

**Hammurabi’s Code** Hammurabi recognized that a single, uniform code of laws would help to unify the diverse groups within his empire. He 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.

---

**Hammurabi’s Code of Laws**

The image at the right shows the top of a pillar that had Hammurabi’s Code engraved on it. Hammurabi’s law code prescribed punishments ranging from fines to death. Often the punishments were based on the social class of the victim.

Here are some examples of the laws:

**PRIMARY SOURCE**

8. 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.

142. 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.

143. If the woman is at fault, she shall be thrown into the river.

196. If a man put out the eye of another man, his eye shall be put out.

198. If he puts out the eye of a freed man or break the bone of a free man, he shall pay one gold mina.

199. If he put out the eye of a man’s slave, or break the bone of a man’s slave, he shall pay one-half of its value.

**CODE OF HAMMURABI, adapted from a translation by L. W. King**

---

**DOCUMENT-BASED QUESTIONS**

1. **Making Inferences** Why might the punishments for the crimes be based on social class?

2. **Forming Opinions** What do you think the value was in making the punishments for the crimes known to all?
The code lists 282 specific laws dealing with everything that affected the community, including family relations, business conduct, and crime. Since many people were merchants, traders, or farmers, for example, many of the laws related to property issues. Additionally, the laws sought to protect women and children from unfair treatment. The laws tell us a great deal about the Mesopotamians’ beliefs and what they valued.

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.

The prologue of the code set out the goals for this body of law. It said, “To bring about the rule of righteousness in the land, to destroy the wicked and the evil-doers; so that the strong should not harm the weak.” Thus, Hammurabi’s Code 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. 

Nearly two centuries after Hammurabi’s reign, the Babylonian Empire, which had become much smaller, fell to the neighboring Kassites. Over the years, new groups dominated the Fertile Crescent. Yet the later peoples, including the Assyrians, Phoenicians, and Israelites, would adopt many ideas of the early Sumerians. 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.
Pyramids on the Nile

MAIN IDEA

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

WHY IT MATTERS NOW

- delta
- Narmer
- pharaoh
- theocracy

TERMS & NAMES

- pyramid
- mummification
- hieroglyphics
- papyrus

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 Africa to the Mediterranean Sea, the Nile River flows northward across Africa for over 4,100 miles, making it the longest river in the world. (See the map on page 36.) 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 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 called silt.

Before the scorching sun could dry out the soil, the peasants would prepare their wheat and barley fields. All fall and winter they watered their crops from a network of irrigation ditches.

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.”

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.
GEOGRAPHY SKILLBUILDER: Interpreting Maps

1. Movement  In which direction does the Nile flow?
2. Location  Describe the location of Upper Egypt and Lower Egypt.

• When 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 starved.
• When floodwaters were a few feet higher than usual, the unwanted water destroyed 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 live on a very small portion of the land and reduced interaction with other peoples. However, the deserts shut out invaders. For much of its early history, Egypt was spared the constant warfare that plagued the Fertile Crescent.

Upper Egypt and Lower Egypt  Ancient Egyptians lived along the Nile from the mouth well into the interior of Africa. River travel was common, but it ended at the point in the Nile where boulders turn the river into churning rapids called a cataract. This made it impossible for riverboats to pass this spot, known as the First Cataract, to continue upstream south to the interior of Africa.

Between the First Cataract and the Mediterranean lay two very different regions. Because its elevation is higher, the river area in the south is called Upper Egypt. It is a skinny strip of land from the First Cataract to the point where the river starts to fan out into many branches. To the north, near the sea, Lower Egypt includes the Nile delta region. The delta 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.
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.

**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. Eventually the two kingdoms were united. There is conflicting historical evidence over who united Upper and Lower Egypt. Some evidence points to a king called Scorpion. More solid evidence points to a king named Narmer.

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. A carved piece of slate known as the Narmer Palette shows Narmer wearing the crown of Lower Egypt on one side and the crown of Upper Egypt on the other side. Some scholars believe the palette celebrates the unification of Egypt around 3000 B.C.

Narmer created a double crown from the red and white crowns. It symbolized a united kingdom. He shrewdly settled 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. Historians suggest that the pattern for Egypt’s great civilization was set during the period from 3200 to 2700 B.C. The period from 2660 to 2180 B.C., known as the Old Kingdom, marks a time when these patterns became widespread.

**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. The Egyptian god-kings, called pharaohs (FAIR•ohz), were thought to be almost as splendid and powerful as the gods of the heavens. This type of government in which rule is based on religious authority is called a theocracy.

The pharaoh stood at the center of Egypt’s religion as well as its government and army. 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 life force, or ka, which continued to take part in the governing of Egypt. In the Egyptians’ 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.
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 just across the Nile. 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 and technological means 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 played an important role in the lives of Egyptians.

**Religion and Life**  Like the Mesopotamians, the early Egyptians were polytheistic, believing in many gods. The most important gods were Re, the sun god, and Osiris (oh-SY-rihs), god of the dead. 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. Anubis, god and guide of the underworld, 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.

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. Royal and elite Egyptians’ bodies were preserved by *mummification*, which involves embalming and drying the corpse to prevent it from decaying. Scholars still accept Herodotus’s description of the process of mummification as one of the methods used by Egyptians.

**Primary Source**

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*. 

**Vocabulary**

deities: gods or goddesses
Pyramids and Mummies

Etched into some of the stones of the pyramids are the nicknames of the teams of workers who built them—“the Vigorous 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? Peasants provided most of the labor. They worked for the government when the Nile was in flood and they could not farm. In return for their service, though, the country provided the workers with food and housing during this period.

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.

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.

The ancient Egyptians mummified the body so the soul could return to it later. Egyptian embalmers were so skillful that modern archaeologists have found mummies that still have hair, skin, and teeth.

This solid gold death mask of the pharaoh Tutankhamen covered the head of his mummy. The mask, which weighs 22.04 pounds, is part of a popular exhibit in the Egyptian Museum in Cairo, Egypt.

SKILLBUILDER: Interpreting Visual Sources

1. Making Inferences What does the elaborate nature of Egyptian burials suggest about their culture?
2. Comparing and Contrasting In what ways are modern burial practices similar to those of the ancient Egyptians? How are they different?
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 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 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.

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. Simple pictographs were the earliest form of writing in Egypt, but scribes quickly developed a more flexible writing system called hieroglyphics (h•y•uh•r•uh•GLIH•ihks). This term comes from the Greek words hieros and gluph, meaning “sacred carving.”

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

Although hieroglyphs were first written on stone and clay, as in Mesopotamia, the Egyptians soon invented a better writing surface—papyrus (puh•PY•ruhs) reeds. These grew in the marshy delta. The Egyptians split the reeds into narrow strips, placed them crosswise in two layers, 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. For example, the Egyptians developed a calendar to help them keep track of the time between floods and to plan their planting season. Priests observed that the same star—Sirius—appeared above the eastern horizon just before the floods came.

The Rosetta Stone

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.

MAIN IDEA

Comparing

How was the status of women similar in Egyptian and Sumerian societies?
They calculated the number of days between one rising of the star and the next as 365 days—a solar year. 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.

Egyptians developed a system of written numbers for counting, adding, and subtracting. The system would have helped to assess and collect taxes. Scribes 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 make accurate measurements to construct their remarkable pyramids and palaces. Egyptian architects were the first to use stone columns in homes, palaces, and temples.

Egyptian medicine was also famous in the ancient world. Egyptian doctors knew how to check a person’s heart rate by feeling for a pulse in different parts of the body. They set broken bones with splints and had effective treatments for wounds and fevers. They also used surgery to treat some conditions.

**Invaders Control Egypt**

The power of the pharaohs declined about 2180 B.C., marking the end of the Old Kingdom. Strong pharaohs regained control during the Middle Kingdom (2040–1640 B.C.) and restored law and order. They improved trade and transportation by digging a canal from the Nile to the Red Sea. They built huge dikes 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 from the area of present-day Israel moved across the Isthmus of Suez into Egypt. These people were the Hyksos (HIHK•sahs), which meant “the rulers of foreign lands.” The Hyksos ruled much of Egypt from 1630 to 1523 B.C.

Egypt would rise again for a new period of power and glory, the New Kingdom, which is discussed in Chapter 4. During approximately the same time period as the Old Kingdom and Middle Kingdom existed in Egypt, civilization was emerging in the Indus River Valley.
Work and Play in Ancient Egypt

For ancient Egyptians, life often involved hard work. When the weather was good, most worked in the fields, producing food for their families and for export. During flood season, thousands of these farmers were called upon to help build the pharaohs’ temples.

But life was not all about work. Archaeological digs offer evidence that both upper-class Egyptians and the common people found ways to enjoy themselves.

RESEARCH WEB LINKS Go online for more on life in ancient Egypt.

Games

Games were popular with all classes of Egyptian society. The board shown below is for the game senet—also depicted in the painting. Players threw sticks or knuckle bones to move their pieces through squares of good or bad fortune. A player won by moving all his or her pieces off the board.

Farmers

This detail from a tomb painting shows Egyptian farmers at work. Egyptians grew enough wheat and barley to have food reserves for themselves and for export to other civilizations. They also grew fruit and vegetables in irrigated fields.
**Games**

Games were popular with all classes of Egyptian society. The board shown below is for the game senet—also depicted in the painting. Players threw sticks or knuckle bones to move their pieces through squares of good or bad fortune. A player won by moving all his or her pieces off the board.

**Cosmetics**

Ancient Egyptians used cosmetics for both work and play. They protected field workers from sun and heat and were used to enhance beauty. Egyptian men and women applied makeup, called kohl, to their eyes. They made kohl from minerals mixed with water. They also soaked flowers and fragrant woods in oil and rubbed the oil into their skin. The dark eye makeup softened the glare of the sun. The oils protected their skin from the dry air. Egyptians kept their cosmetics in chests such as the one shown above.

**Temple Builders**

The artist’s colorful drawing of what the Karnak Temple Complex might have looked like explains why Egyptian pharaohs needed thousands of laborers to build their temples. Some historians believe the laborers may have been part of a rotating workforce drafted from the agricultural classes around Egypt. The photo at lower left shows the temple as it is today. Although faded and eroded, the temple still inspires awe.

**DATA FILE**

MORE ON WORK

- **Surgeons** Ancient Egypt had skilled surgeons. Written evidence shows that Egyptian surgeons knew how to stitch cuts and set broken bones. Some Egyptian mummies even show evidence of being operated on. We know the names of about 150 physicians—2 of them were women.

- **Papyrus Growers** A large industry was built around the harvesting of papyrus. Papyrus was used to make the material Egyptians wrote on. Scrolls of various sizes could be made. One mathematics papyrus was 15 feet long and 3 inches wide.

MORE ON PLAY

- **Pets** Egyptians kept various animals as pets. Nobles would even have their pets mummified and buried with them. A single pet cemetery was discovered that contained 1,000,000 bird mummies.

- **Royal Dogs** The Pharaoh hound was very popular in ancient Egypt. Artifacts from 4000 B.C. show images of the breed. Today, a Pharaoh hound puppy bred for competition can cost up to $1,500.

**Connect to Today**

1. **Making Inferences** From what you have read here, what inferences can you make about Egyptian society?


2. **Comparing and Contrasting** How are the work and leisure activities of ancient Egypt different from those in the United States today? How are they similar?