

THINK AS A HISTORIAN: HISTORICAL ARGUMENTATION

In a historical argument, a historian provides evidence to support an answer to a question about the past. Evidence is specific information that is based on facts or reasons, not unsupported opinions. For each of the following questions, which statement below it would be most useful in an argument answering it?

1. What caused early agricultural and pastoral societies to become more stratified?
 - a. The development of wheeled vehicles contributed to a growing division between most people and a few wealthy elites.
 - b. The development of wheels was very important in human history.
2. Why does the amount of sculpture, painting, and other forms of art increase as a society moves from hunting and gathering to agriculture?
 - a. Agricultural societies can produce enough surplus food that people can devote more time to creating art.
 - b. People created art long before they developed agriculture, and they continued to do so after they settled into permanent communities.

WRITE AS A HISTORIAN: IDENTIFY THE THINKING SKILL

When answering an essay question, note the type of thinking that the question is asking you to demonstrate. For example, *analyze* and *evaluate* are different thinking skills. *Analyze* means to examine the parts of something; you often analyze information when you want to explain why something happened. In contrast, *evaluate* means to identify the positive and negative aspects of something or to determine its significance. In each of the following questions, which word states the type of thinking the answer should express?

1. Compare the role of women in hunter-forager and agricultural societies between 10,000 B.C.E. and 600 B.C.E.
2. In a paragraph, describe life in a hunter-forager society.
3. The Neolithic Revolution made government more important. Explain why this change happened.
4. Plows, axes, textiles, and iron were technological innovations in early societies. Select one of these and assess its significance.
5. Contrast religion before and after the Neolithic Revolution.

2

The First Civilizations

Create Babylon, whose construction you requested! Let its mud bricks be molded, and build high the shrine!

—The Epic of Creation, 1st Millennium B.C.E., a Sumerian version of how the world began.

Four of the first civilizations emerged in river valleys. In one or more of these, as well as in other early civilizations, people developed large urban areas, extensive trade, formal legal codes, sophisticated writing systems, and other critical developments that have become standard features of civilizations ever since.

The Sumerians

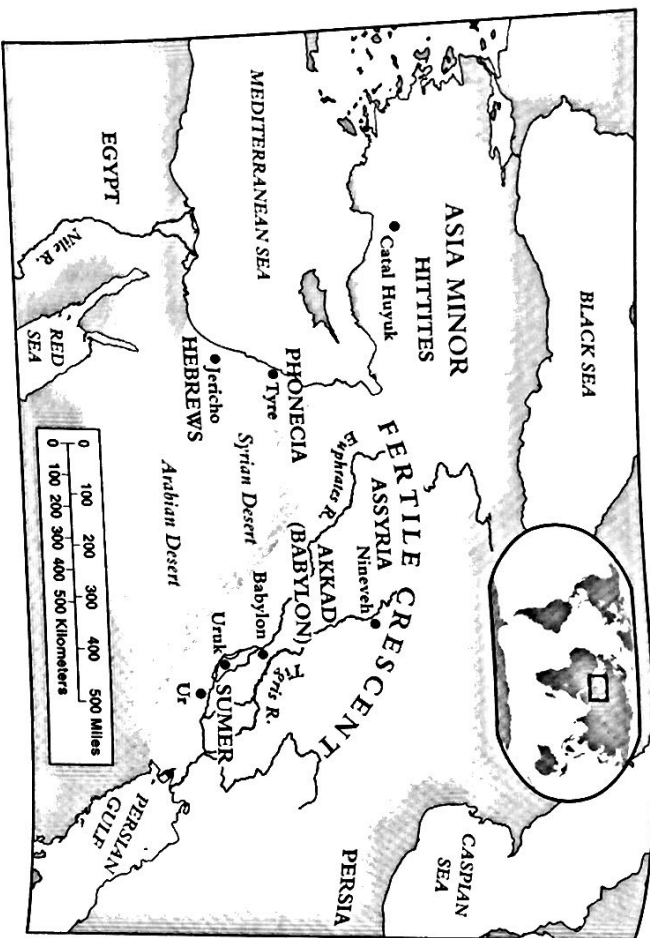
In Southwest Asia, the *Tigris* and *Euphrates* rivers flow south from modern-day Turkey through what is now Iraq to empty into the Persian Gulf. The area between these two rivers was once known as *Mesopotamia*, which comes from a Greek word meaning “between rivers.” Because so many ancient civilizations arose there, the region is now called “the cradle of civilization.” A larger area, the *Fertile Crescent*, overlaps with Mesopotamia but also includes an area to the west, along the Mediterranean coast.

The geography of Mesopotamia presented numerous agricultural benefits. Frequent flooding from the *Tigris* and *Euphrates* would leave deposits of silt, which made the soil very fertile. The water and fertile soil of Mesopotamia, combined with a warm climate, provided the resources the Neolithic people who lived in the region needed to begin farming.

Sometime before 5000 B.C.E., a group of nomadic pastoralists called *Sumerians* migrated into Mesopotamia, settling alongside people already living there. Over time, these new migrants created the civilization of *Sumer*. They built cities, canals to carry river water to fields, and dams to control the rivers’ unpredictable flooding. The first complex governments arose to coordinate these tasks. While Sumer is not a separate country today, the civilization it created provided the core and the foundation of several other civilizations in the Middle East, and its influence is evident throughout the world today.

Sumerian Government By 3000 B.C.E., some cities in Sumer were home to between 2,000 and 10,000 people. By 2700 B.C.E., the largest city, *Uruk*, had a population of 50,000. Most city dwellers were farmers, who made daily trips to the countryside to work in the fields.

SUMERIA AND OTHER CITY-STATES AND EMPIRES



Each Sumerian city and the land it controlled formed a *city-state*, which typically covered several hundred square miles. The city-states were independent, each with its own government. Since the Sumerians believed that land belonged to the gods, the first rulers were the city-states' priests. They assigned fields to the farmers, distributed the harvested crops at the city's temple, and managed all trade.

As the Sumerian city-states grew in size and number, they began to compete with each other for land and water. Wars resulted. To defend themselves, urban governments built massive stone walls around their cities and organized armies. Over time, Sumerian military leaders became more important than priests. These military rulers, called *kings*, ruled over a territory known as a *kingdom*. Religion and politics were blended in Sumerian civilization in the sense that kings were also high priests. This practice increased social stability, since the king was perceived as being a direct link between the people and the gods.

Sumerian Religion The people of Sumer were *polytheistic*, worshipping many gods. They believed that the gods controlled the natural forces around them. The priests explained the gods' will to the people and directed worship at the temple. To win the gods' favor, Sumerians made offerings and prayed that the gods would cause the rivers to flood at the right times for growing crops.

Because the floods were so important—and so uncertain—in Mesopotamia, satisfying the gods was very important to Sumerians. This may explain why they devoted so much effort and wealth to constructing monumental architecture that was religious. They placed temples and altars in large stepped pyramids,

called *ziggurats*. They believed that the gods punished humans in this life for bad behavior, but they did not believe in reward or punishment after death. Instead, they believed that the dead simply turned to dust.

Sumerian Economy and Trade Sumerians learned to farm the land intensely. As a result, they were able to produce an agricultural surplus, which had all of the effects described in Chapter 1, particularly a *division of labor*. Many Sumerians engaged in work other than producing food. They made pottery, wove cloth, cast utensils in bronze, and engaged in other crafts. The agricultural surplus also allowed Sumerians to trade extensively, not only throughout the region of Mesopotamia but interregionally with other civilizations. While some of the trade was over land, they also sailed seven-person canoes into the Mediterranean Sea and through the Persian Gulf and into the Arabian Sea. Major trade goods included gold from Egypt and tin from Persia. Through their trading networks, the Sumerians obtained goods from even farther away. They traded for beads, wood, resin, lapis lazuli, and obsidian that originated in Southeastern Africa, from the region that is the present-day country of Mozambique. From India, they obtained pearls, copper, and ivory. Many of these trade items were used by artists to create impressive and ornate sculptures and jewelry, much of which had religious significance.

Sumerian Social Structure As Sumerians became more specialized in their work, distinctions between classes became sharper. And as the society grew wealthier, the gap between the poor and the rich increased. One sign of the increase in social stratification was that a new class of nobles and wealthy landowners joined priests and kings at the top of society. The middle classes comprised merchants, farmers, and professionals such as architects. Hired workers made up the lower class. At the very bottom of society were slaves—foreign prisoners of war or Sumerian families who could not pay their debts. About 40 percent of the people living in Sumerian cities may have been slaves. Many people were needed to build the massive stone structures in cities and to create and maintain the vast irrigation systems in the countryside that formed the basis of Sumer's wealth.

Women in Sumer Upper-class Sumerian women enjoyed some freedom. They could own property and have incomes separate from those of their husbands. However, only their boys attended school; their girls were educated at home. Also, all marriages were arranged by men.

Cultural and Scientific Contributions To manage their surplus crops, manufacturing, and trade, the Sumerians needed to keep records. To accomplish this, they created the world's first writing system, called *cuneiform*, which consisted of marks carved onto wet clay tablets. (This early writing gives us the modern expression of "set in stone" because once the tablets had been hardened in ovens, the markings were unchangeable.) The development of a complex writing system required the emergence of a separate class of people who were skilled at cuneiform. Called *scribes*, these individuals were charged first with record-keeping and later with the writing of history and myths.



Source: Thinkstock (left and above)

Cuneiform wedges (left) were the first writing system. Phoenician letters (above) became the basis for the modern alphabet used by writers of English and many other languages.

Sumerians made several advances in thought and technology. They pioneered many important inventions related to farming, including carts and metal plows, as well as sundials and a 12-month calendar with which the Sumerians attempted to predict the flooding of the Tigris and Euphrates rivers. A final noteworthy invention was the Sumerian number system, which was based on 60. They used 60 because it could be divided into whole segments by 2, 3, 4, and 5. Today, people still divide an hour into 60 minutes, a minute into 60 seconds, and a circle into 360 degrees.

It was during the time of Sumer's power that *The Epic of Gilgamesh*, perhaps the oldest written story on the earth, was produced. It was originally composed on 12 clay tablets in cuneiform script. The epic concerns the adventures of a real Sumerian king named Gilgamesh who ruled the city-state of Uruk somewhere between 2750 and 2500 B.C.E. From *The Epic of Gilgamesh*, historians know something about the people who lived in the land between the Tigris and Euphrates rivers in the 2nd and 3rd millenniums B.C.E and what they valued in a leader. (Test Prep: Write a paragraph comparing Gilgamesh with the Greek heroes in Homer. See page 56.)

Sumerian Decline Mesopotamia had supplies of water and fertile land, so it attracted other groups who wanted to control the region. And because there were few natural barriers to prevent invasions, and because of the independent nature of the city-states, the Sumerian city-states fell to invaders around 2300 B.C.E. However, the culture they developed became the core and foundation of later empires in the region.

The Babylonian Empire

Sometime during the several centuries following the decline of Sumer, a new weapon appeared in Mesopotamia: the compound or composite, bow. This bow combined wood with animal bone or horn to make a stronger, and hence more deadly, bow. It was either developed in Mesopotamia or by nomadic pastoralists in central Asia. The bow gave its first users an advantage over rivals.

Around 1900 B.C.E., a Persian people from what is now Iran invaded and took control of Mesopotamia. The invaders built a new capital city called Babylon, so they became known as the *Babylonians*. They would eventually control a large territory that included diverse cultural groups, called an *empire*.

King Hammurabi The Babylonians' most powerful king was *Hammurabi*. He conquered all of Mesopotamia and ruled for more than 40 years, until about 1750 B.C.E. Hammurabi abolished local governments and appointed officials who were responsible only to him. Later, he reorganized the tax structure. These changes made it easier for his representatives to collect the tax and also increased the amounts collected. The taxes were used primarily to maintain irrigation canals to improve agricultural productivity.

Hammurabi is famous for creating a set of laws: the *Code of Hammurabi*. He had the 282 laws carved into stone monuments, one of the first instances of laws being put into writing for everyone to see. Hammurabi's laws dealt with topics such as property rights, wages, contracts, marriage, and various crimes.

The Code's main purpose was to protect people's rights. It was built on the idea of "an eye for an eye." That is, the punishment should fit the crime, often very precisely. For example: "If a builder builds a house for someone, and does not construct it properly, and the house that he built falls in and kills its owner, then that builder shall be put to death. If it kills the son of the owner, then the son of that builder shall be put to death."

Hammurabi's system of justice, though harsh, was not as violent or unpredictable as the retribution people often carried out when they felt injured. By replacing individual vengeance with a well-publicized system administered by government, Hammurabi brought greater stability and justice to society.

Babylonian Society and Culture Babylonian culture resembled that of Sumer in several ways. For example, Babylonians adopted many of the Sumerians' religious beliefs and was a *patriarchal* society, one dominated by men. However, under Babylonian rule, women enjoyed more rights than the women in Sumer had. Babylonian women could be merchants, traders, and even scribes. Marriages were arranged by parents. A Babylonian woman could leave her husband if he was cruel, although she could not divorce him. However, if she did leave him, she could take her property with her.

Some Babylonians were skilled astronomers. They could accurately predict the movement of planets and eclipses of the moon. From this knowledge, they devised a lunar calendar. In Babylonian *astronomy*, the study of objects outside Earth's atmosphere, was linked to the Babylonians' religious practices of fortune-telling and *astrology*, predicting the future by studying movements of stars and planets.

The Phoenicians

The *Phoenicians* occupied parts of present-day Lebanon, Israel, and Jordan around 3000 B.C.E. With strong sailing ships, the Phoenicians developed a wide trade network across the Mediterranean Sea, even venturing into the eastern Atlantic Ocean. The Phoenicians exported cedar logs, colorful textiles, glass, and pottery, among other items. The Phoenicians were at their peak from 1200 to 1100 B.C.E., during which time they expanded their empire around the Mediterranean. *Carthage*, a Phoenician colony on the coast of North Africa, became a significant outpost in the region.

The Phoenicians are remembered for developing an *alphabetic script*, a system of symbols (letters) that represent the sounds of speech, as an alternative to cuneiform around 1000 B.C.E. The Phoenician 22-letter alphabet was a great help to increased trade, and it was later modified by the Greeks and Romans, who spread the alphabet across their empires. It is now used by much of the Western world. The Arabic and Hebrew alphabets also evolved from the basic system pioneered by the Phoenicians. (Test Prep: Create a chart comparing the Phoenician alphabet with the Chinese writing system. See page 35.)

The Hebrews

The *Hebrews*, whose descendants became known as *Israelites* and later as *Jews*, lived in the region of Canaan—present-day Israel, Palestine, and Lebanon. What historians know of Hebrew civilization comes partly from their sacred writings, the Hebrew scriptures, which Christians have traditionally referred to as the Old Testament. In addition, archeologists have unearthed a great deal of information about the Hebrews. According to Hebrew scriptures, Canaan was founded by *Abraham* who left Mesopotamia to settle there in approximately 2000 B.C.E. Today, Jews, Christians, and Muslims all trace their religious heritage to him.

A severe drought in Canaan forced some Hebrews to migrate to Egypt where they were later enslaved for several centuries. According to Hebrew scriptures, about 1300 B.C.E., the Hebrews were led out of Egypt by *Moses* and eventually returned to Canaan. Moses also introduced the *Ten Commandments*, a code of conduct that became very influential in areas dominated by Christianity.

Monothelism Like most other groups, the early Hebrews were polytheistic. However, they were one of the first groups to adopt *monothelism*, a belief in only one deity.

Division and Diaspora Over the following centuries, the Hebrews divided into two separate kingdoms, which weakened their power. The two kingdoms were conquered by the Assyrians and the Babylonians, and the descendants of Abraham were enslaved for the second time in their history. Now known as *Israelites*, many fled or were driven out of their homes. This movement was the beginning of the *Jewish Diaspora*, the spreading of Jews throughout the Mediterranean world and the Middle East. Jews were able to

return to Jerusalem only after the Persians, who were more tolerant of religious diversity, conquered the region in 539 B.C.E.

However, Persian rule did not last. As less tolerant rulers controlled the region, Jews again suffered discrimination. Many migrated to North Africa, southern Europe, and elsewhere, continuing the Jewish Diaspora. Because of this movement of people, Jewish ideas and culture spread and would eventually spread throughout the world. While the Jews did not have their own country, they did maintain a strong sense of identity.

The Geography of Africa

Geographers have divided Africa into four major climate zones:

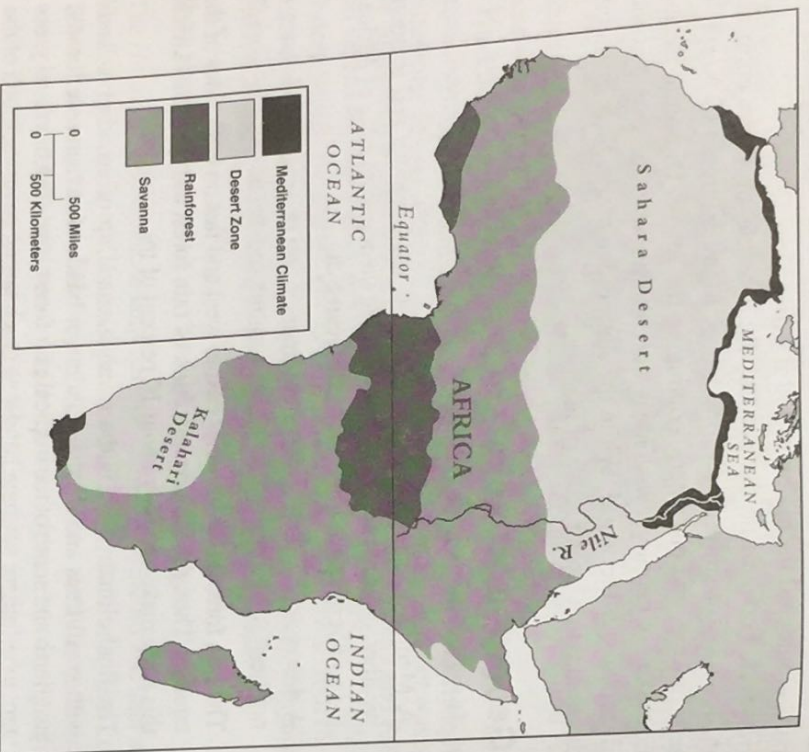
1. A Mediterranean climate zone, with its mild seasons and temperate weather, consists of a strip of land along the northern edge of Africa—the southern coast of the Mediterranean Sea.
2. A desert zone consists of the continent's two deserts—the *Sahara* in northern Africa and the *Kalahari* in southern Africa.
3. The rain forest zone stretches east to west and lies on both sides of the equator. Though many people think of rain forest as typical of Africa, this zone makes up only about 10 percent of the continent.
4. The final climate zone is the savanna, made up of broad grasslands with small trees and shrubs. Two major bands of savanna are located just north and south of the tropical rain forest zone. Ten thousand years ago, the northern savanna band was much larger, covering much of the area that is now the Sahara.

Ancient Egypt

The *Nile River* begins in the interior of Africa and flows north to empty into the Mediterranean Sea. In ancient times, rich black soil covered the banks and delta of the river, making the length of the Nile ideal for agriculture, especially wheat, barley, and the papyrus plant, which was used for writing material and also for making baskets, sandals, and other items. Annual floods would deposit silt, replenishing the soil. (Since the building of the Aswan Dam in 1968, the Nile River no longer experiences annual flooding.)

Introduction of Agriculture and Pastoralism In the Nile River Valley, people began to practice agriculture and pastoralism around 6000 B.C.E. or 5000 B.C.E. From people in Mesopotamia, Egyptians learned to grow wheat and barley. From people living in the grassy savanna land to the south, Egyptians learned to grow gourds, watermelons, and sorghum and to raise donkeys and cattle. Over the span of two thousand years, Egyptians domesticated animals, began mining copper to make jewelry and tools, and had enough agricultural surplus for towns to emerge. Just as the Sumerian civilization influenced later

AFRICA CLIMATE ZONES



people in Mesopotamia, so the earliest Egyptian civilization became the core and foundation of later ways of life in the Mediterranean world.

However, Egypt was making these advances as the climate was changing. Beginning around 5000 B.C.E., declining rainfall across North Africa was causing *desertification*, the creation of desert-like conditions. The Sahara was growing larger and dryer, and the savanna region was growing smaller.

Like the Sumerians, the Egyptians dug irrigation canals to spread the floodwaters and increase the amount of land they could farm. Indeed, some scholars think that the Egyptians may have learned this technology from trading with the Sumerians. The Egyptians may also have learned from the Sumerians about the wheel, the plow, bronze-making, and writing.

Transportation and Trade The wind blows south through the Nile Valley from the Mediterranean Sea. This geographic feature allowed early Egyptians to use the Nile River for transportation and trade. They could move south against the Nile's current by putting sails on their boats. To travel north, all they had to do was let the current carry them. As a result, Egyptians not only traded locally, but traded through the region of northeast Africa. From the mouth of the Nile, traders engaged in interregional trade with Mesopotamia.

Another feature of the Nile that promoted Egypt's prosperity was that it flowed through a vast desert. The dry lands to the west and east provided natural barriers against attacks. While invaders attacked Mesopotamia many times, Egypt developed for more than 1,300 years before its first major invasion.

Early Governments Desertification brought more people to settle near the Nile River. The need to work together to feed this larger population caused local chiefs to emerge. Strong leaders gradually united the towns into two kingdoms. One was Lower Egypt, in the north, where the Nile flows into the Mediterranean. The other, Upper Egypt, was farther south and more upstream. Around 3100 B.C.E., *King Menes* united the two kingdoms, a turning point in Egyptian history. Menes also established his capital at the city of Memphis, located at the southern end of the Nile Delta.

Historians have divided much of subsequent ancient Egyptian history into three long periods of stability: the *Old Kingdom*, *Middle Kingdom*, and *New Kingdom*. Separating this periods were shorter ones of turmoil.

The Old Kingdom (2660–2160 B.C.E.) Unlike Mesopotamia, which remained divided into city-states during the third century B.C.E., Egypt began developing a strong central government. The king or queen leading this government is now known as a *pharaoh*, although the term did not come into use until the New Kingdom. From Memphis, the kings and queens ruled as *theocrats*, rulers holding both religious and political power. Egypt's kings wielded their considerable authority to undertake extensive building projects, including the famous pyramids.

Since Egyptians believed that the pharaohs were descended from the gods and were immortal, they supported great efforts to preserve and honor their bodies after death. Most of Egypt's large pyramids were built during the Old Kingdom as tombs for rulers. Each pharaoh's body was preserved as a mummy and placed in a pyramid with jewelry and other items for use in the afterlife.

At first, all land belonged to the pharaoh, who appointed the governors and other government officials in each of the kingdom's provinces. Some pharaohs rewarded their officials with land as payment for their services. Over time, these lands and positions began to be passed from father to son. A class of nobles eventually developed as a result.

As the noble class grew stronger, some of them began to challenge the authority of the pharaohs. The pharaohs' power was further weakened by a period of drought, which resulted in famine and starvation. This all led to civil unrest, rivalries among the provinces, and the collapse of the Old Kingdom. The kingdom again split into Upper Egypt and Lower Egypt. For more than 100 years, civil wars swept Egypt as nobles competed for power and the throne.

The Middle Kingdom (2040–1786 B.C.E.) In 2040 B.C.E., Mentuhotep II took power. He moved the capital to Thebes, farther south on the Nile, and reunited Egypt under a central government, reducing the power of the provincial governors and eventually gaining control over all of Egypt. (Test Prep: Write a paragraph comparing Mentuhotep II's takeover of Egypt to similar takeovers in history. See chart on page 73.)

The pharaohs of the Middle Kingdom had a different approach to governing than had their predecessors. To encourage loyalty, they had statues and other art created that pictured them as wise and caring protectors of the people. These images, along with writings that gave the same message, were part of a great renewal in art, religion, and literature. Many temples to the gods were built during this period.

Pharaohs used their power to construct huge irrigation projects that increased the size of Egypt's farmland. In addition, they expanded their country's borders. Their armies pushed east to control the Sinai Peninsula and south into Nubia, which was rich in gold and other resources.

The Middle Kingdom ended after an invasion by a pastoral nomadic people called the *Hyksos* from modern Syria. The Hyksos used their superior technology—horse-drawn chariots and greatly improved bows and arrows—to defeat the Egyptians.

The New Kingdom (1570–1070 B.C.E.) The Hyksos occupied Egypt for a short period of time. As Egyptians learned to use the same battle technology, they were able to defeat the Hyksos, beginning the era known as the New Kingdom. Using the newly powerful army, pharaohs expanded southward into Nubia and north into Mesopotamia. Through negotiation and conquest, Egypt gained access to highly prized resources such as bronze and wood.

Around 1350 B.C.E., the pharaoh *Akhenaton* tried to change Egypt's religion. He called for the worship of one god, a sun god called *Aton*. Such a change would have dramatically changed the role of priests in Egyptian society. Many priests opposed worshiping just one god, and Akhenaton's struggle with them disrupted Egypt and weakened his power. After his death, Egypt's old religion was restored. Moreover, the priests became more powerful than ever.

A powerful pharaoh, *Ramses the Great*, took the throne around 1290 B.C.E. He remained in power for a remarkably long time—nearly 67 years—during which he successfully expanded the empire into Southwest Asia. Ramses built more temples and erected more statues than any other pharaoh. However, Egypt's empire had become a tempting target for invaders. One of these were the *Hittites*, who had a military advantage over the Egyptians because they were beginning to use iron tools and weapons. Although Ramses made peace with the attacking Hittites, his successors lacked his power and skills.

After Ramses' death, Egypt began a long period of decline. Besides carrying out expensive but failed wars against neighbors, Egypt suffered from repeated invasions from Libyans, Kushites, Assyrians, the Persians, the Macedonians, and the Romans, among others. Combined with internal revolts, these dismantled the once-mighty Egyptian Empire. Egypt did not regain its independence until modern times.

Egyptian Society The social hierarchy in Egypt was complex, with royal families, nobles, and priests at the top. Artisans worked in shops attached to temples and were paid by the government. Below this class was a large lower class, predominantly of farmers. Farmers' crops belonged to the owner of the land—the government, a temple, or a noble family. In addition to doing their own farming, farmers were required to work on irrigation and other government

construction projects. Below the farmers—at the lowest level—were the slaves, who usually hailed from lands conquered by Egypt. Except for slaves, all classes of people were equal under the law, but Egypt's class system was very rigid. It was difficult to advance from one class to a higher one. (Test Prep: Create a chart comparing Egyptian society with Indus Valley society. See page 30.)

Egyptian women had more rights and freedoms than most ancient women. They could own property, make contracts, divorce, and pursue legal disputes in court. Two women, Hatshepsut and Cleopatra, even became pharaohs. A few women held posts at temples. However, most women were not educated. They usually did not take part in government and had little political power.

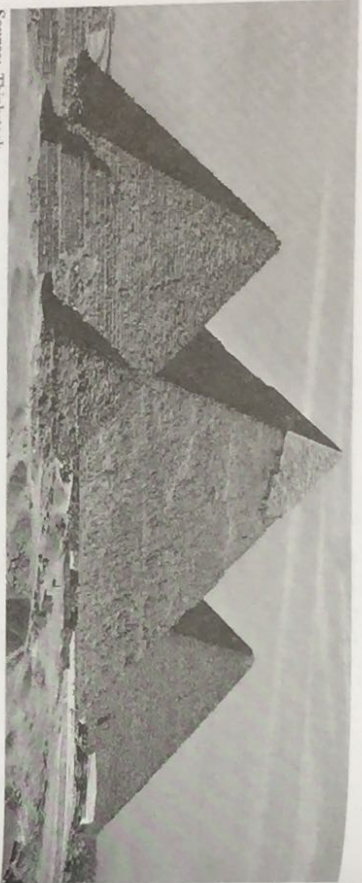
Religion Like the Mesopotamians, the ancient Egyptians were polytheistic, worshipping many gods. Among these were Ra, the sun god; Osiris, the god of life and death; and Isis, wife of Osiris, who was the goddess of nature. The gods were represented by statues and small idols. People believed that the god was present in these objects. They prayed and made offerings to the god to win the god's favor and protection.

The Egyptians believed in life after death. At first, this belief applied only to pharaohs. Later, it was extended to all people and even animals. But the Egyptians believed the body must be preserved for the dead to have an afterlife. Some people were mummified and buried in tombs. *Mummification* involved removing the body's internal organs, drying the body with salts, and packing its insides and wrapping it with chemically treated cloth. The body was then put in a sealed coffin. Only the rich could afford mummification. Poor people were buried in the desert, where the dry environment preserved their bodies.

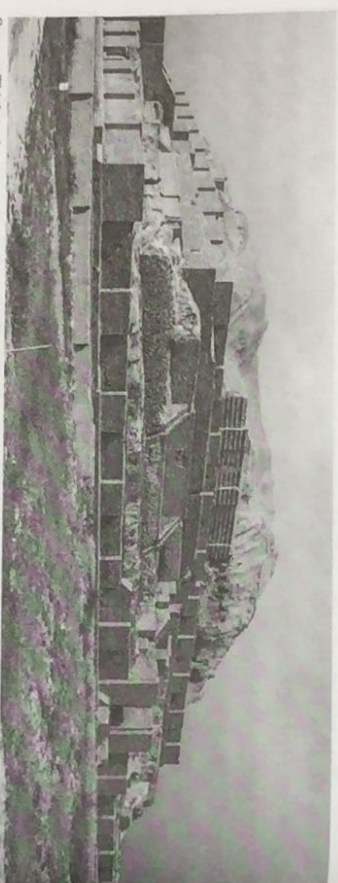
Continuous Egyptian Culture The long periods of unity under the Old, Middle, and New Kingdoms allowed a stable Egyptian culture to develop. This culture remained largely intact, even when Egypt was ruled by outsiders. In fact, invaders often adopted aspects of Egyptian culture.

Egyptian Writing By about 3000 B.C.E., people in the Nile Valley were using a form of picture-writing known as *hieroglyphics*. This writing system was much like the Sumerians' cuneiform, with the addition of symbols that represented ideas and sounds. Instead of writing on clay tablets, however, the Egyptians found a better material. They mashed *papyrus*, a type of plant that grew along the Nile River, using its fibers to create a type of paper; indeed, the English word "paper" comes from this plant's name. The *Book of the Dead* was a paper book that Egyptians put in the coffins of dead pharaohs and some nobles; each version of the book was different since it told the story of the dead person. The Egyptians also wrote hieroglyphs on the inside walls of tombs of the mummified dead to tell stories of the dead.

Scientific Contributions Ancient Egypt's pyramids and temples were engineering marvels, built with great accuracy using simple tools and surveying instruments. Egyptians cut the massive stone blocks used in their construction in distant quarries in the desert and transported them to a construction site. They then moved these heavy blocks up ramps to their place on the pyramid. Egyptians developed math and engineering skills to build the various pyramids.



Source: Thinkstock



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Monumental architecture such as pyramids in Egypt (upper) and ziggurats in Mesopotamia (lower) reflected the power of early governments to organize workers to build large structures.

The ancient Egyptians developed a number system based on 10 that was very much like the system we use today. They had knowledge of the concept of fractions as well as whole numbers. Their knowledge of geometry helped them to build the pyramids and to restore the boundaries of fields after a flooding of the Nile. They also developed a calendar based on a year that contained 365 days. The calendar was created to track the stars for religious purposes and to monitor the flooding of the Nile.

The practice of mummification gave the ancient Egyptians much knowledge about the human body—knowledge that many future civilizations would draw upon and benefit from. Egyptian physicians were able to set broken bones, amputate limbs, and stitch up wounds. They soaked cloth bandages in honey to prevent infection. They used plants and herbs to relieve pain and to treat conditions like asthma. Nevertheless, adult life expectancy was only about 35 years, and about one-third of ancient Egyptians died in infancy.

Nubia, Kush, and Axum

Just south of Egypt, three other ancient kingdoms developed. Though none were as wealthy as Egypt was at its peak, each prospered through regional trade along the Nile River, and carried on interregional trade across the Red Sea.

Nubia Nubia emerged in the Upper Nile Valley around 3500 B.C.E. Egyptian traders went to Nubia in search of gold, ivory, incense, cattle, animal skins, and slaves. Nubians were recruited to serve as mercenaries in Egyptian forces. Nubia was basically an agricultural country, growing most of the same crops and raising the same domesticated animals as Egypt. Unlike Egypt, though, the flood plain was not as wide. Therefore, Nubian farmers had to make more use of irrigation networks to water their fields.

The Nubians were heavily influenced by Egyptian culture, in part because of their close proximity to the land of the pharaohs. For example, the Nubians built Egyptian-type pyramids and palaces. They also worshipped some of the Egyptian gods and adopted Egyptian burial practices. However, the Nubians retained some of their gods as well. Likewise, the Nubians used Egyptian hieroglyphics in writing, but they also developed their own script, which was alphabetic.

Nubia lasted for nearly a thousand years before falling into decline, only to reemerge as the kingdom of *Kush*, around 2500 B.C.E.

Kush Kush remained dependent on Egypt, only establishing some political and cultural independence by about 1000 B.C.E. Kush even conquered Egypt briefly before they themselves were overthrown by the Assyrians in 663 B.C.E. Even without control of Egypt, however, Kush became an important kingdom economically, trading with the Roman Empire, India, and Arabia. Kushites exported slaves as well as ivory, gold, and cattle. The Kushites mined iron ore from which they made tools and weapons in furnaces fueled by timber. The city of Meroë was a particularly important trade center.

Kush enjoyed its greatest power from about 300 B.C.E. to 100 C.E. Afterward, their power and influence declined, partly because of *deforestation*. Kushites cut down trees in order to make the charcoal used in smelting iron. In the 340s C.E., Kush was conquered by the civilization of *Axum*.

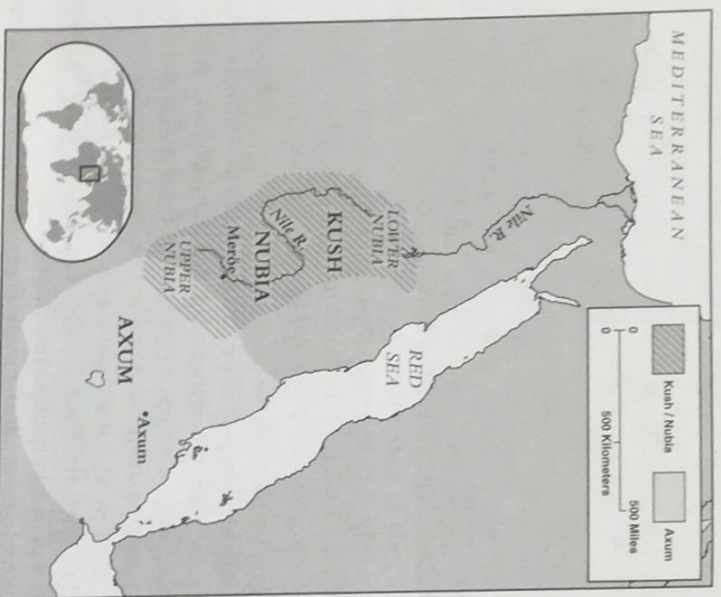
Axum The civilization of Axum was founded on the plateau of present-day Ethiopia in the first century C.E. Its capital city was also called Axum. The state had an agricultural economy, with farmers using plows to cultivate wheat, barley, and millet. Axumites also established a successful trading colony on the Red Sea called Adulis, where traders sold products from the African interior (such as hides, ivory, and slaves) in exchange for money or products from India, Arabia, and the Roman Empire. Adulis and Axum as a whole grew rich by taxing foreign trade and by requiring conquered lands to pay tribute.

Because of their trading connections with the Roman Empire, some Axum people converted to Christianity. The religion's popularity continued to increase, helping to create a more cohesive society. In 330 C.E., Christianity was decreed the official religion of Axum by then-king King Ezana.

The Axumites defeated the Kushites in Meroë in the 340s C.E. In the 500s, Axum expanded its territories to include modern Yemen, on the Arabian Peninsula. From Arabia, Axum borrowed a script for its written language.

Axum began declining around 600 C.E., but it remained strong enough to counter efforts to convert Axumites to Islam in the seventh and eighth centuries. Christianity stayed the dominant religion in the area, as it is in Ethiopia today.

NUBIA, KUSH, AND AXUM, 3500 B.C.E. TO 600 C.E.



Indus Valley Civilizations

Like civilizations in Mesopotamia and Egypt, the *Indus River Valley* civilizations developed near water and became the core and foundation of later civilizations in the region. Between 2500 and 2000 B.C.E., indigenous peoples of the Indian subcontinent, known as *Dravidians*, established two sophisticated urban centers in the Indus River Valley: *Harappa* and *Mohenjo-Daro*. Their written language, mainly in the form of pictographs, has not yet been deciphered, but it seems to be loosely connected to the Dravidian languages still existing in contemporary southern and central India. Archaeologists came to know about Harappan society's existence only in the 1920s.

Much of the archaeological evidence from Harappa and Mohenjo-Daro sites comes from a collection of artifacts as well as the remains of city walls and numerous buildings. Archaeological remains reveal evidence of an advanced civilization with division of labor. Jewelers, potters, architects, and artists all resided within these cities. Archaeologists can infer that a social hierarchy existed in the Indus Valley because the foundations of homes in the Harappa's center were found to be of varying sizes. And since most residents, rich and poor, had private toilets that drained into a municipal sewage system, the cities must have had sophisticated technology and urban planning.

Agriculture and the Environment Because so few residents of Mohenjo-Daro and Harappa were farmers, archaeologists conclude that rural areas were providing ample amounts of food to these urban areas. Evidence also shows that Harappans traded by sea and land with Sumer and Egypt and by land with the societies in eastern India. If civilization can be defined by the existence of an agricultural surplus and a resulting division of labor among a society's residents, then the Indus Valley societies should be considered civilized.

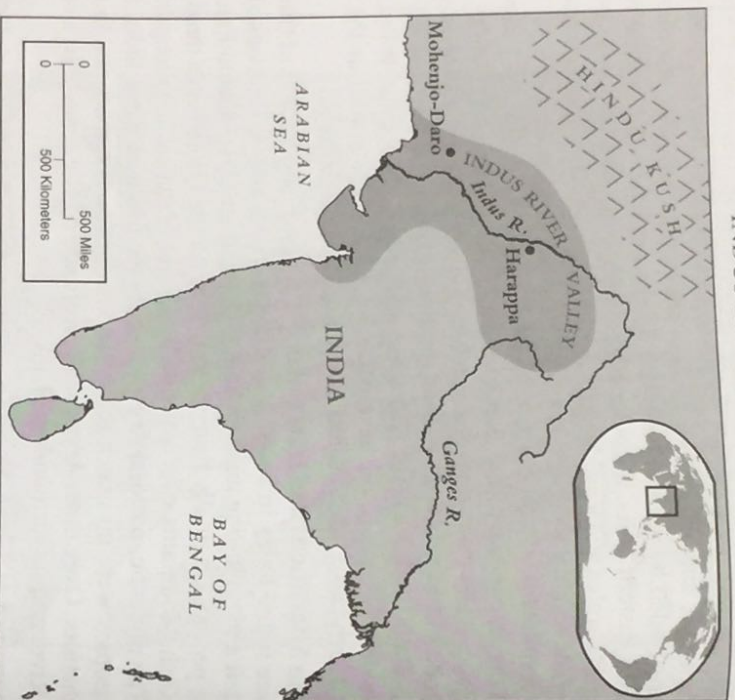
Environmental degradation probably caused the gradual decline and eventual disappearance of the Harappan and Mohenjo-Daro civilizations. Their people removed so many trees from their lands that this deforestation caused the soil to erode. Another possible reason for the disappearance of the Harappan and Mohenjo-Daro societies is the ferocious and temperamental Indus River, which often flooded. Floods could have destroyed their cities as well as the cities' remains. Earthquakes are considered to be another possibility.

Aryan Migrations and Interactions Very few, if any, features of Harappan society are found today in South Asia. The group that arrived 500 years after its decline left a more lasting mark on South Asian culture. *Aryans*, Indo-European-speaking peoples originally from Central Asia, traveled from Persia through the Hindu Kush Mountains over a period of several centuries, beginning in 1500 B.C.E. The nomadic, pastoral Aryans brought the first horses into India. Native Indian peoples were no match for Aryan warriors on horseback and in horse-drawn chariots. Over time, Aryan settlements and culture spread east along the Ganges River and its surrounding plains.

Importance of Clans Each Aryan tribe was divided into *clans*, each with its own territory and each headed by a male chief who ruled with advice from a committee of clan members. Unlike Egypt, the people had no central government, and at times, the clans fought each other. The first Aryans continued their herding lifestyle, raising horses, cattle, goats, and sheep. Eventually, though, most of them settled in villages and began to farm, intermingling with the native peoples. Wheat and barley were their main crops, but they also grew sugar cane, gourds, peas, beans, and other vegetables.

Although poor transportation made trade difficult, other types of goods gradually appeared in their villages. Early trade was by *barter*—a system by which one thing is exchanged for another. By 500 B.C.E., though, their use of silver and copper coins led to an increase in trade and in the number of craftspeople and merchants.

Aryan Language Aryans brought their sacred language, *Sanskrit*, with them to South Asia. At first, stories were passed orally from generation to generation; but sometime between 1200 and 1000 B.C.E., the Aryans developed a writing system. While most literary and religious works were recorded in this language, they also had a commonly used tongue which would evolve into *Hindi*. Because of the Aryans' Indo-European origins, Sanskrit shares traits with Latin, another *Indo-European language*. For example, the word for *king* is *rex* in Latin and *raja* in Sanskrit. Sanskrit continues to be studied by religious scholars, while Hindi is still spoken widely among many northern Indian societies.



Aryan Religious Traditions The *Vedas*, Sanskrit for “knowledge,” are a collection of Aryan religious hymns, poems, and songs. The *Rig-Veda* is the most famous; it sheds light on ancient Indian society, particularly the conflicts that occurred between the Dravidian and the Aryan peoples. The *Rig-Veda* outlined proper priestly (*brahmin*) behavior, which included performing several daily rituals honoring the gods. These responsibilities placed brahmins in a position of authority in Indian society. The importance of the Vedas in Indian spiritual life had waned a bit by 500 B.C.E. as Vedic knowledge began to meld with the spiritual contributions made by Dravidians.

Aryan and Dravidian Beliefs Many aspects of the Aryans’ language, religious traditions, and social organization continue today in South Asia. Their interactions with indigenous peoples of India, particularly the Dravidians, also had a lasting impact on Indian society.

The late *Vedic Age* (800–400 B.C.E.) was marked by the Aryans’ growing awareness of Dravidian beliefs. The interaction of both traditions came to fruition in the *Upanishads*, a collection of religious thought that illuminated several new religious concepts: *brahma*, *dharma*, *karma*, and *moksha*.

Brahma is an overarching, universal soul that connects all creatures on Earth. Each individual human being is not a separate entity; his or her individual soul is not the essence of truth or reality. An individual soul is not terribly important; one must try to escape a cycle of life and death and join

the universal soul, brahma. In order to escape the seemingly endless cycle of birth and rebirth, one must perform righteous duties and deeds, known as one’s dharma. This dharma then determines one’s karma, or fate, in the next life. If someone’s soul carries a heavy karmic burden, then one could perhaps be reborn as a lower-class person or even in a lower life form.

Conversely, a person who performs good deeds throughout life is believed to have good karma, which in turn may help his or her soul in a future life. A soul’s ultimate goal should be to attain *moksha*, or eternal peace and unity with brahma. Believers can attain moksha through intense meditation and the casting off of worldly pleasures.

The *Upanishads* is a foundational text for the set of religious beliefs that later became known as Hinduism. It is historically significant because it reflects the blending of Aryan and Dravidian religious values, and also because it reflects the social structures of Ancient India.

China’s First Civilization

The fourth core and foundational river civilization developed in eastern China. China includes two major rivers, the *Huang He* (Yellow) and the *Chiang Jiang* (Yangtze). The Chiang Jiang stretches almost 4,000 miles across central China. The Huang He, while shorter at 2,400 miles, connects China’s northern interior to the Yellow Sea. The river takes its name from the deposits of *loess*, a type of fertile soil that is yellow in color. For thousands of years, the flooding of the Huang He has deposited this silt across a wide area.

In addition to the advantage of the two rivers, much of eastern China experiences a reliable, moderate climate. Meanwhile, two geographical features protected China from invasion: the Gobi Desert in the west and the world’s tallest mountain range, the Himalayas, in the southwest.

As early as 6500 B.C.E., Neolithic people of the Yangtze Valley were growing rice. Then around 5800 B.C.E., people began farming near the Huang He. Their main crops were soybeans and a grain called millet. By 3000 B.C.E., groups along the Huang He had taken up rice farming, too. Meanwhile, both groups had begun domesticating chickens and pigs.

According to Chinese tradition, the first silk production also began around 3000 B.C.E. People wove fine silk cloth from the threads of silkworms, which fed on the leaves of the region’s mulberry trees. They also made items from copper and carvings from a precious stone called jade.

China’s First Rulers Although ancient Chinese civilization faced no outside threats, villages along the Huang He were sometimes attacked by nomadic peoples who lived in the nearby hills. According to Chinese legend, a man named Yu brought order to the region around 2100 B.C.E. He organized projects to build roads to encourage trade, create ditches to control flooding, and drain swamps to create farmland. He also organized the region’s villages into zones for defense and placed each zone under a local leader who reported to him.

Yu passed his power to his son Qi, and with his rule what is known as the *Xia Dynasty* began. (A *dynasty* is a series of rulers who all belong to the same family.) The Xia Dynasty lasted for about 400 years. Little is known about the

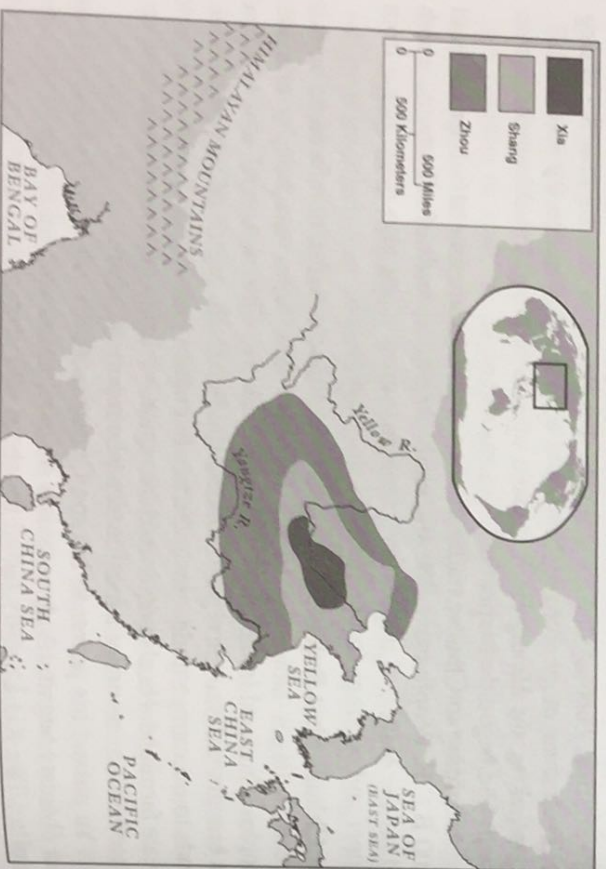
Xia Dynasty, since the early Chinese had no writing system. The only written information about the Xia kings was recorded more than a thousand years later. In recent times, though, archeologists have unearthed evidence that a Xia kingdom did indeed exist.

The Shang Dynasty Around 1750 B.C.E., a local leader named Tang overthrew the Xia king and took power. This event marked the beginning of the *Shang Dynasty*, which ruled for the next 600 years. During this time, Shang rulers conquered neighboring peoples, establishing an empire. From a succession of capital cities, the Shang kings wielded tremendous economic and religious power. (Test Prep: Create a chart comparing the Shang with other empires of its time, such as the New Kingdom in Egypt (page 26), Mohejio-Daro in India (page 30), and the Sumerians in Mesopotamia (page 17).)

Economy, Technology, and Trade The Shang economy was primarily based on agriculture. Most people were peasants, but others worked at skilled crafts, making pottery, carving jewelry from ivory and jade, and crafting weapons, tools, wheels, and other items from bronze. Artisans and merchants lived in the capital and in towns across the empire. The bronze technology came from Southwest Asia via migrating Indo-European peoples who settled in what is now western China. Traders also brought tin from Southeast Asia and jade from Central Asia.

The Shang rulers controlled the copper and tin mines in China, and they kept a monopoly over the production of bronze in the country. Their bronze weapons and armor and their horse-drawn chariots made them stronger than anyone who dared to oppose them. The Shang kings and their nobles waged frequent wars on enemies inside and outside the empire, capturing prisoners who were then enslaved or slaughtered as sacrifices to the gods.

EARLY DYNASTIES IN CHINA, TO C. 400 B.C.E.



Religion Like other early river civilizations, the Shang were polytheistic. They believed that several different gods controlled the forces of nature. The gods worshiped during the Shang Dynasty included gods of the sun, moon, clouds, and wind. Efforts to communicate with the gods produced the earliest known examples of writing from the Shang period. People would inscribe questions for the gods on oracle bones, which were turtle shells, oxen bones, or the bones of other animals. Then they would insert heated pins into the oracle bones. The heat would cause cracks to form, and the cracks could be interpreted to gain an answer to the question. Shang kings relied on the bones to tell them such things as whether to attack an enemy and if the crops would be successful.

China's long tradition of *ancestor veneration* also began during the Shang Dynasty. The ancient Chinese believed that the spirits of their ancestors could speak to the gods for them. They made offerings to their ancestors, hoping to win their favor. The Shang kings made almost daily sacrifices to the ancestors, seeking the gods' help in making their rule a success. There was no organized priesthood in ancient China.

Historians know that ancient Chinese believed in life after death because objects were buried with the dead for their use in the afterlife. When a king or noble died, some of his servants and pets were killed so that they could travel with him to the next world.

Cultural and Scientific Contributions The Shang developed a written script of *pictographs*, or graphic symbols, each of which represented an idea, concept, or object, rather than representing a single sound, as letter systems do. Like other early writing systems, the Chinese one was very complicated, and as in Mesopotamia and Egypt, usually only scribes could read and write. The written script invented during the Shang Dynasty is the forerunner of the script used by Chinese today.

Standard systems of measurement helped the Shang rule the empire. Their calendar had 12 alternating months of 29 and 30 days. Royal astronomers added extra days as needed to get to a 365-day year.

The Shang made contributions in the arts as well. Shang artisans created bronze castings, ivory carvings, silk garments, and white clay pottery. The first Chinese musical instruments also appeared during the Shang Dynasty. Drums, bells, stone chimes, and a simple wind instrument called an ocarina played melodies that have long been lost to time.

The End of the Shang Dynasty Like all civilizations, the Shang Dynasty experienced a rise and fall. Over time, the Shang kings had become weaker, and in 1045 B.C.E., a military man named Wu raised his own army and challenged Shang rule. The king was killed, the Shang Dynasty ended, and Wu established the *Zhou Dynasty* in its place.

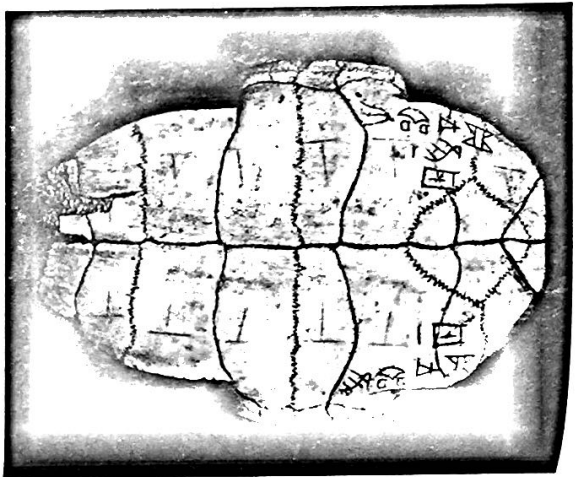
The Zhou Dynasty Zhou kings ruled for about 900 years, making their dynasty the longest in Chinese history. The first 200 years of Zhou rule has become known as China's first *Golden Age*, a period in a society of relative peace, prosperity, and innovation.

The success of the Zhou Dynasty resulted from the kings' abilities to centralize and hold power, bringing stability to the region. They also expanded the territory under their control, making the reach of the Zhou Dynasty much larger than what the Shang's had been. Another key element in the Zhou leaders' success was the introduction of a concept called the *Mandate of Heaven*, which was the idea that a just ruler's power was bestowed by the gods. Zhou kings were thus referred to as "sons of heaven." However, invasions or natural events such as a severe earthquake were often taken as signs that a ruler no longer had the Mandate of Heaven. The Zhou had used the concept to justify overthrowing the Shang. This became a precedent. Throughout China's history, the overthrow of rulers has been justified by the charge that a particular ruler had lost the Mandate of Heaven. (Test Prep: Write a paragraph comparing the Mandate from Heaven with the "divine right of kings." See page 284.)

Government The Zhou kings expanded their territory to such an extent that eventually they could not control it directly. Instead, the kingdom divided into many regions, each under the control of relatives or loyal friends who owed allegiance to the king. These regions functioned much like city-states. The local rulers governed as they wished, paying taxes to the king and providing soldiers for his army. From time to time, the regional leaders had to visit the king's court to proclaim their loyalty. The Zhou kings also made alliances with kings who ruled territory along their borders. These alliances protected the Zhou kingdom by helping to shield it from invasion by nomadic peoples from the north and west. The network of regional rulers, with relationships based on mutual defense agreements, created the basics of *feudalism*, which would reappear in many cultures later in history.

The Zhou governmental system broke down over time as regional authorities began to assert themselves. Some stopped sending the collected taxes to the king, keeping the money for their own use. Some stopped sending soldiers to serve under the king and instead formed their own armies.

Developments in metals also affected the central-regional power balance. Bronze weapons continued to be important, but the Chinese began using iron weapons during the Zhou Dynasty. Regional rulers grabbed centers that produced iron and bronze weapons, which were sometimes then used against the Zhou rulers and each other.



Source: Shutterstock
During the Shang Dynasty, people wrote on tortoise shells.

Trade and Agriculture China experienced great changes during the long Zhou rule. Internal trade expanded and there was some foreign trade. The first Chinese money came into use in the form of copper coins, with different ones minted in different regions.

The development of iron technology around the sixth century B.C.E. (the Iron Age) changed Chinese agriculture. Using iron tools, Chinese peasants built dikes, reservoirs, and irrigation canals to better control their water supply. Iron plows drawn by oxen allowed more land to be farmed and more food produced than ever before. This resulted in a steady population growth.

Most Chinese were peasant farmers who did not own the land they lived on. They lived in small villages and farmed the village fields together. They also had to devote a number of days of labor each year to work on roads, canals, and other local projects. (Test Prep: Create a chart comparing China's work requirement with the Incan mit'a system in the fifteenth century C.E., see page 261; and the French *corvée* system in the nineteenth century C.E., see page 417.)

Urbanization The trade among the regions led to the growth of towns and some cities. These urban areas needed artisans and metal production workers, although this class of people remained small. Merchants set up shops in towns and cities, selling goods from around China. Those cities that were seats of national or regional power attracted administrators, soldiers, scribes, and others.

Zhou Achievements Another reason why the Zhou Dynasty is considered a "golden age" is the large number of technological achievements attributed to it. The Zhou military benefited from the invention of the crossbow and the iron sword, and armies also began using mounted cavalry in this period. Meanwhile, Zhou farmers developed plows and improved irrigation systems in order to better exploit the waters of the Huang He and Yangtze rivers. Last but not least, roads were improved, which bolstered trade and brought increased contact with outsiders.

The Decline of the Zhou Dynasty By the 800s B.C.E., the Zhou kings had begun to lose control. Uprisings by local leaders combined with invasions from the west combined to weaken the central government. By the 400s B.C.E., the Zhou kings had little power outside their own city-state. The other states of the Zhou kingdom fought among themselves for control.

The First American Civilizations

In response to the varied climates and geographic regions in the Americas, people evolved into distinctive cultures as they moved from place to place. By 3000 B.C.E., some of the indigenous peoples, possibly first in Mexico, discovered that food could be grown and harvested, not simply gathered from wild plants. One of the first important plants to be grown by the indigenous Americans was *maize* (corn). This plant, native to the Western Hemisphere, was domesticated from wild types into several different varieties. Other important native crops were beans, potatoes, peppers, pumpkins, cotton, and tobacco.

The Chavin About the same time human settlements developed in *Mesoamerica* (Central America and what is now Mexico), settlements began near the Andes Mountains. Along the coast of what is now Peru, the *Chavin civilization* existed from around 1000 to 200 B.C.E. and centered at Chavin de Huánlar, a ceremonial center north of today's Lima. Chavin de Huánlar was home to an elaborate temple made of white granite and black limestone. Since these materials are not native to the region, they had to be obtained by trade. Drainage ditches were built under the temple to prevent flooding during rainy seasons. Shamans interpreted the temple's many sculptures and carvings.

Most of the Chavin people lived in the valleys, growing cotton, maize, potatoes, and quinoa (a food grain). Llamas provided meat, often eaten in a dried form known as jerky; wool, woven into clothes; and transport. Like earlier river valley civilizations in Afro-Eurasia, they developed irrigation systems. Because of their agricultural surpluses, the Chavin population increased, and the Chavin developed three urban centers, each with more than 10,000 people.

The Chavin developed impressive techniques in gold, silver, and copper metallurgy. They learned how to solder pieces together by melting metal. The Chavin are also remembered for the artistry of their pottery and cotton textiles, including making fishnets out of cotton thread.

Although religion united the Chavin people, their political structure was weak. Once the religious authority went into decline, there was little to hold the Chavin together, and their civilization dissolved into various regional groups.

The Olmec *Mesoamerica* became the site of several advanced civilizations. The foundation, or core, of all of these was the *Olmec*. Their language, beliefs, art, and athletics influenced the later civilizations, such as the Maya and the Aztec. The Olmec flourished in east and central Mexico from around 1200 to 400 B.C.E. Like other early civilizations, the Olmec were primarily agricultural, growing corn, beans, squash, and avocados in the warm, humid climate.

And like many early civilizations, the Olmec developed near water. Several small rivers crossed their land, so fresh water was plentiful and transportation was easy. They traded with regions as far as 250 miles away, obtaining jade and obsidian, out of which they made small jewelry, sculptures, and religious symbols portraying jaguars, snakes, feathered serpents, and half-human, half-animal figures. But the Olmec are most famous for carving enormous basalt monuments of human heads. About 17 of these have been found, with the largest about 10 feet tall and weighing thousands of pounds. Thousands of slaves were used to drag and float the heavy basalt blocks from sites 50 miles away.

The Olmec also built large earthen pyramids under which they buried jewelry, sculptures, mirrors, and mosaics. They built arenas for playing a kind of ball game that may have had religious significance.

The Olmec developed a calendar, a numbering system that included a zero (rare among early number systems), and the first writing system in the Americas. The system used *glyphs*, pictures and symbols of real objects. While the Olmec's language, use of feathered serpents, and ritual ball games provided the core and foundation of later cultures in *Mesoamerica*, later writing systems in the region do not seem to be based on the one of the Olmec.

The Pacific Peoples

The first people arrived in *Oceania*, the vast region in the Pacific Ocean that includes New Guinea, Australia, and more than a thousand other islands, about 60,000 years ago. They were hunter-foragers. Because of an Ice Age, sea levels were lower, and distances between islands were less. Thus these migrants would have needed only rafts or small boats to go from island to island.

The Austronesian Speakers The *Austronesian-speaking people* probably originated in southern China and later moved to Taiwan and the Philippines. Around 5000 to 2500 B.C.E., they began migrating to New Guinea also. They introduced agriculture (farming and herding) to the people of New Guinea. The Austronesians assimilated with the existing population. However, agriculture did not spread to Australia's *aboriginals*, who remained hunter-foragers.

During the next 1,000 years, the Austronesian people migrated by boat across a distance of over 10,000 miles. To the east, they went from one Pacific Island to another. By then, they had developed double-hull canoes that could go vast distances, reaching the islands of *Polynesia*, including Samoa, Hawaii, Easter Island, and New Zealand. Another group of Austronesians migrated west all the way to the African island of Madagascar. Wherever they went, they took along pigs, chickens, yams, and taro, so they could maintain their agricultural way of life. They supplemented this food by hunting and fishing.

Easter Island The settlers on *Easter Island* divided into clans, with a chief for each clan and one chief over all clans. They constructed large stone statues that represented ancestor-gods. For centuries, the Easter Islanders traded with other islands across vast distances. They cultivated sweet potatoes, which they probably first obtained from the coast of South America. From Easter Island, sweet potatoes spread to other Pacific islands, including New Zealand.

Gradually, the population of Easter Island grew until the island became overpopulated, lacking enough resources to support the people. Deforestation, coupled with wars between factions, caused the population size to plummet sometime before Europeans first visited the island in 1722 C.E.

HISTORICAL PERSPECTIVES: WHY DO CIVILIZATIONS RISE AND FALL?

Why do some cultures become innovative and prosperous and then lose these traits? Historians have offered various explanations.

Rise and Decline German Oswald Spengler (1880–1936) was among the first Europeans to search for global patterns in the fate of civilizations. During his life, European culture dominated the world but was showing signs of weakening. In *Decline of the West* (1917), he theorized that civilizations go through a cycle akin to the four seasons: rise of agriculture (spring), growth of towns (summer), development of large cities and centralized governments (autumn), and materialism, imperialism, and *nihilism*, the rejection of moral or ethical principles (winter). The final stage leads to a collapse in power and influence.

Links Across Culture Most scholars rejected Spengler's cyclical view. French historian Fernand Braudel (1902–1985), writing as radios, ships, and planes were connecting people across the globe, saw the path of civilization as building a web of human relationships through trade and communication. In contrast, British historian Christopher Dawson (1889–1970) argued that religion, not material things, builds relationships and civilization. More recently, British-born historian Felipe Fernández-Armesto viewed various civilizations as responses by people to the challenges in their immediate environments.

KEY TERMS BY THEME

ENVIRONMENT

Tigris and Euphrates

Mesopotamia

Fertile Crescent

Carthage

Sahara

Kalahari

Nile River

desertification

Indus River Valley

environmental

degradation

deforestation

Huang He

Chiang Jiang

loess

Mesoamerica

maize

Oceania and Polynesia

ECONOMICS

division of labor

barter

CULTURE: RELIGION

polytheistic

ziggurats

astronomy, astrology

Hebrews, Israelites,

Jews

Abraham

Moses

Ten Commandments

monotheism

Jewish Diaspora

theocrats

Aten

mummification

Aryans

Hindi

Vedas and Vedic Age

brahmin

brahma

dharma

karma

moksha

ancestor veneration

Golden Age

CULTURE: LITERATURE

scribes

The Epic of Gilgamesh

cuneiform

alphabetic script

hieroglyphics

papyrus

Book of the Dead

Indo-European

Sanskrit

Rig-Veda

Upanishads

pictographs, glyphs

Austronesian speakers

SOCIAL STRUCTURE

patriarchal

clans

feudalism

STATE-BUILDING:

KINGDOMS

Sumer and Sumerians

Uruk

city-states

king and kingdom

Babylonians

empire

Phoenicians

Old, Middle, and New

Kingdoms

Hyksos

Hittites

Kush

Axum

Dravidians

Harappa

Mohenjo-Daro

Chavin civilization

Olmec

Easter Island

aboriginals

STATE-BUILDING:

LEADERS

Hammurabi

King Menes

pharaoh

Akhenaton

Ramses the Great

Xia Dynasty

Shang Dynasty

Mandate of Heaven

Zhou Dynasty