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WORLD HISTORY

PATTERNS OF INTERACTION

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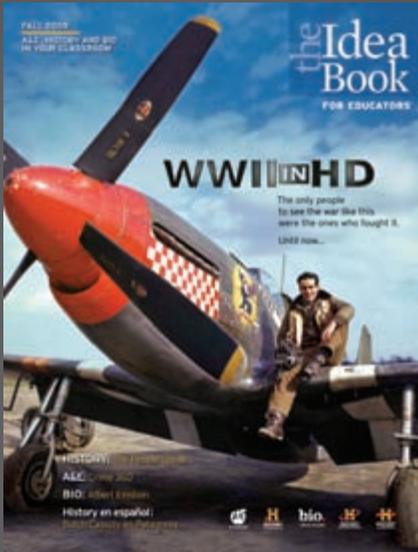
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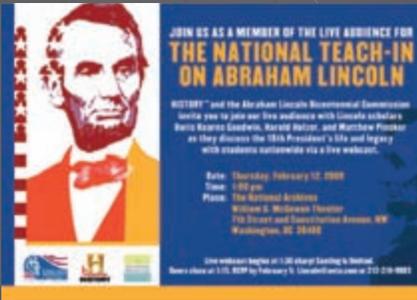
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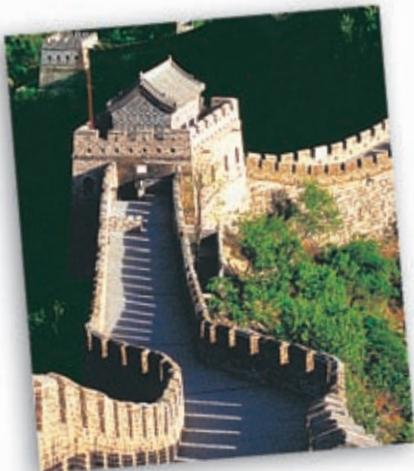
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- Strategies for Studying History
- Strategies for Taking Standardized Tests
- Economics Handbook
- Primary Source Handbook
 - Rig Veda**, *Creation Hymn*
 - Bible**, *Psalm 23*
 - Confucius**, *Analects*
 - Thucydides**, *History of the Peloponnesian War*
 - Plato**, *The Apology*
 - Tacitus**, *Annals*
 - Qur'an**
 - Sei Shōnagon**, *The Pillow Book*
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 - Elizabeth Cady Stanton**, *The Natural Rights of Civilized Women*
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 - Elie Wiesel**, *Night*
 - Jeanne Wakatsuki Houston and James D. Houston**, *Farewell to Manzanar*
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 - Cesar Chavez**, *An Open Letter*

World History Themes

While historical events are unique, they often are driven by similar, repeated forces. In telling the history of our world, this book pays special attention to eight significant and recurring themes. These themes are presented to show that from America, to Africa, to Asia, people are more alike than they realize. Throughout history humans have confronted similar obstacles, have struggled to achieve similar goals, and continually have strived to better themselves and the world around them.



Power and Authority

History is often made by the people and institutions in power. As you read about the world's powerful people and governments, try to answer several key questions.

- Who holds the power?
- How did that person or group get power?
- What system of government provides order in this society?
- How does the group or person in power keep or lose power?

Religious and Ethical Systems

Throughout history, humans around the world have been guided by, as much as anything else, their religious and ethical beliefs. As you examine the world's religious and ethical systems, pay attention to several important issues.

- What beliefs are held by a majority of people in a region?
- How do these major religious beliefs differ from one another?
- How do the various religious groups interact with one another?
- How do religious groups react toward nonmembers?

Revolution

Often in history, great change has been achieved only through force. As you read about the continuous overthrow of governments, institutions, and even ideas throughout history, examine several key questions.

- What long-term ideas or institutions are being overthrown?
- What caused people to make this radical change?
- What are the results of the change?

Interaction with Environment

Since the earliest of times, humans have had to deal with their surroundings in order to survive. As you read about our continuous interaction with the environment, keep in mind several important issues.

- How do humans adjust to the climate and terrain where they live?
- How have changes in the natural world forced people to change?
- What positive and negative changes have people made to their environment?





Economics

Economics has proven to be a powerful force in human history. From early times to the present, human cultures have been concerned with how to use their scarce resources to satisfy their needs. As you read about different groups, note several key issues regarding the role of economics in world history.

- What goods and services does a society produce?
- Who controls the wealth and resources of a society?
- How does a society obtain more goods and services?

Cultural Interaction

Today, people around the world share many things, from music, to food, to ideas. Human cultures actually have interacted with each other since ancient times. As you read about how different cultures have interacted, note several significant issues.

- How have cultures interacted (trade, migration, or conquest)?
- What items have cultures passed on to each other?
- What political, economic, and religious ideas have cultures shared?
- What positive and negative effects have resulted from cultural interaction?

Empire Building

Since the beginning of time, human cultures have shared a similar desire to grow more powerful—often by dominating other groups. As you read about empire building through the ages, keep in mind several key issues.

- What motivates groups to conquer other lands and people?
- How does one society gain control of others?
- How does a dominating society control and rule its subjects?

Science and Technology

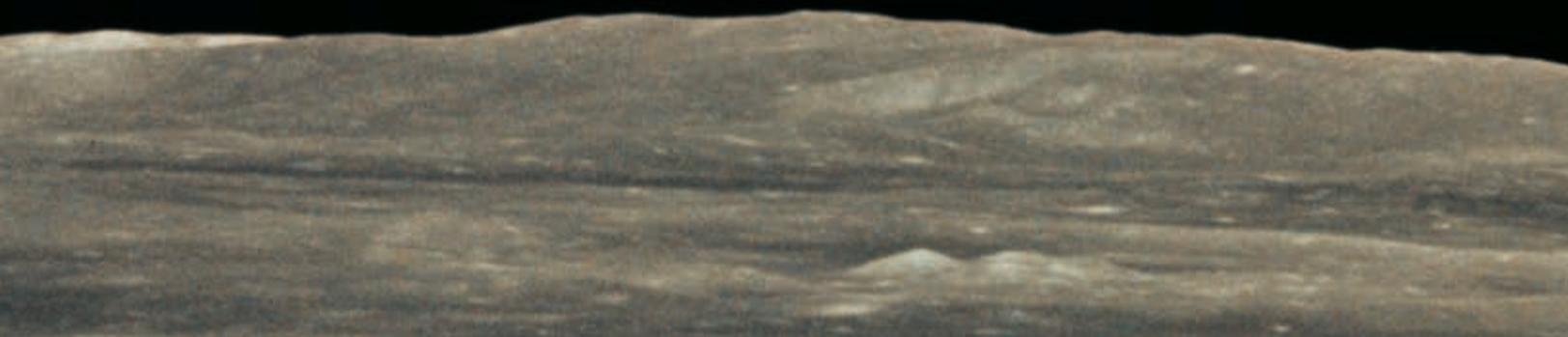
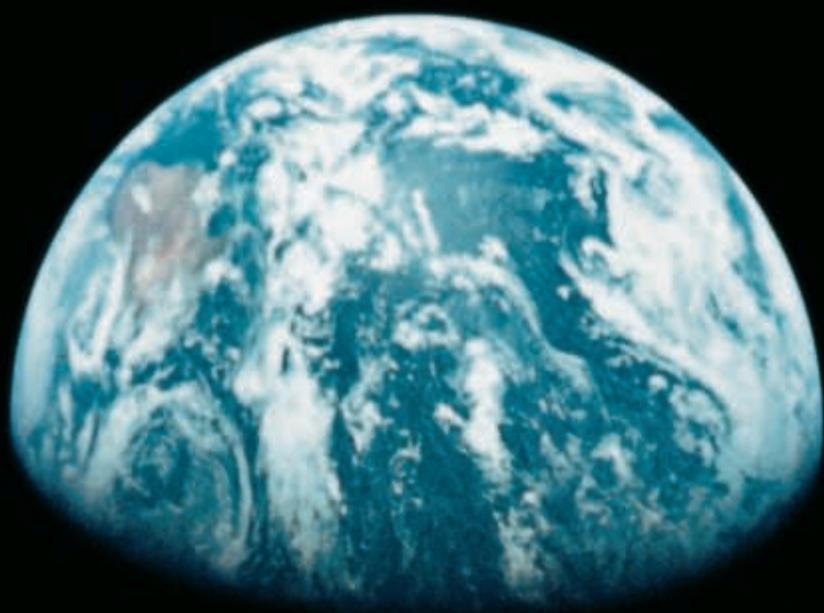
All humans share an endless desire to know more about their world and to solve whatever problems they encounter. The development of science and technology has played a key role in these quests. As you read about the role of science and technology in world history, try to answer several key questions.

- What tools and methods do people use to solve the various problems they face?
- How do people gain knowledge about their world? How do they use that knowledge?
- How do new discoveries and inventions change the way people live?



 **RAND McNALLY**

World Atlas



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Complete Legend for Physical and Political Maps

Symbols

	Lake
	Salt Lake
	Seasonal Lake
	River
	Waterfall
	Canal
	Mountain Peak
	Highest Mountain Peak

Cities

	Los Angeles	City over 1,000,000 population
	Calgary	City of 250,000 to 1,000,000 population
	Haifa	City under 250,000 population
	Paris	National Capital
	Vancouver	Secondary Capital (State, Province, or Territory)

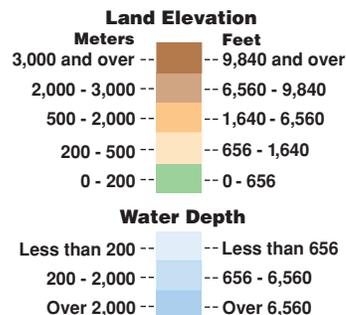
Type Styles Used to Name Features

CHINA	Country
ONTARIO	State, Province, or Territory
PUERTO RICO (U.S.)	Possession
ATLANTIC OCEAN	Ocean or Sea
Alps	Physical Feature
Borneo	Island

Boundaries

	International Boundary
	Secondary Boundary

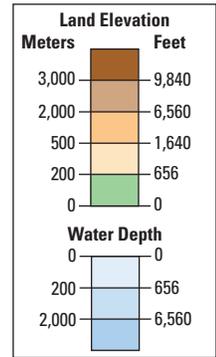
Land Elevation and Water Depths





















Land Elevation	
Meters	Feet
3,000	9,840
2,000	6,560
500	1,640
200	656
0	0
Water Depth	
0	0
200	656
2,000	6,560

0 200 400 600 800 1000 Miles
 0 300 600 900 1200 1500 Kilometers

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 Lambert Azimuthal Equal Area Projection





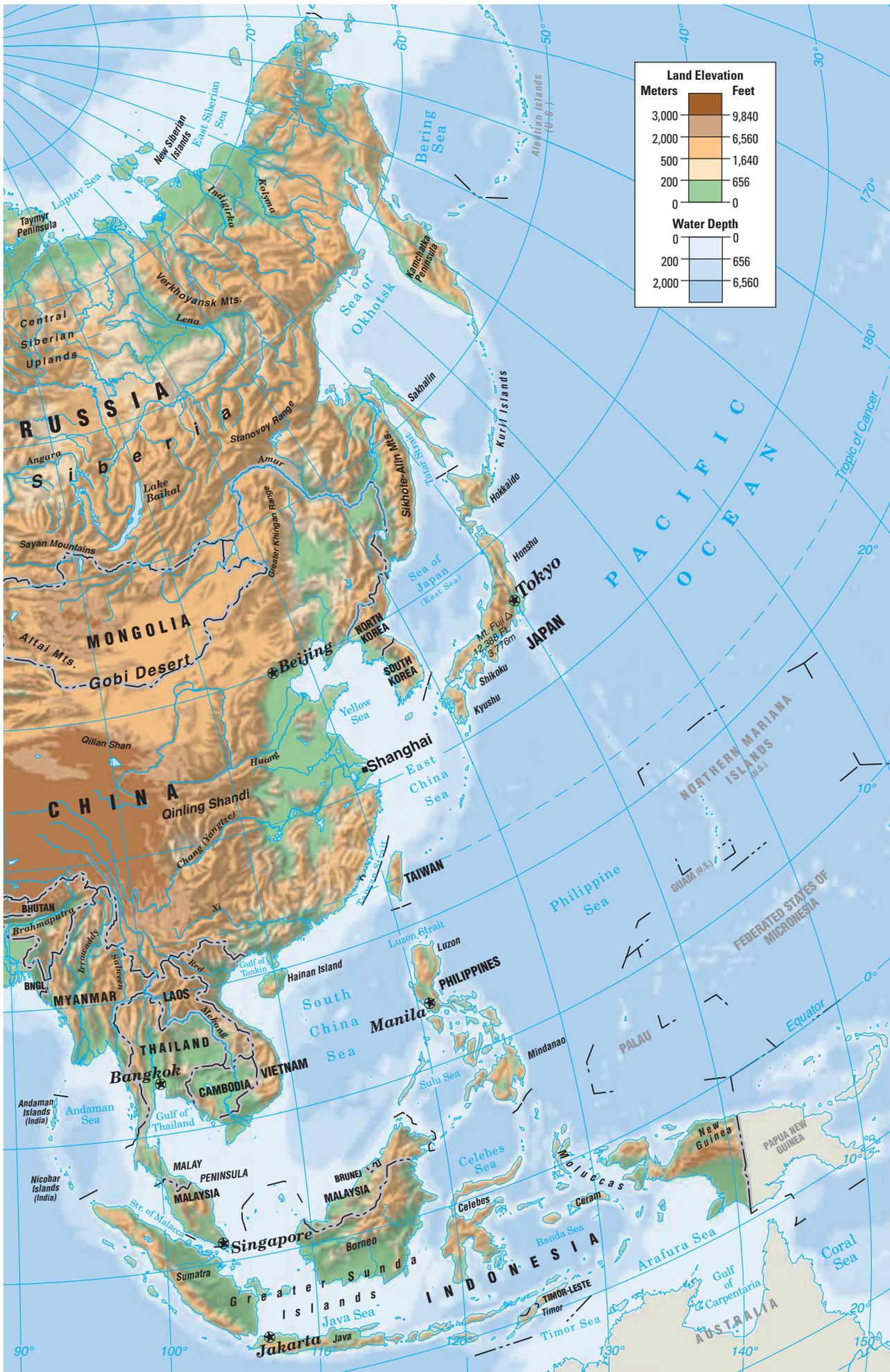


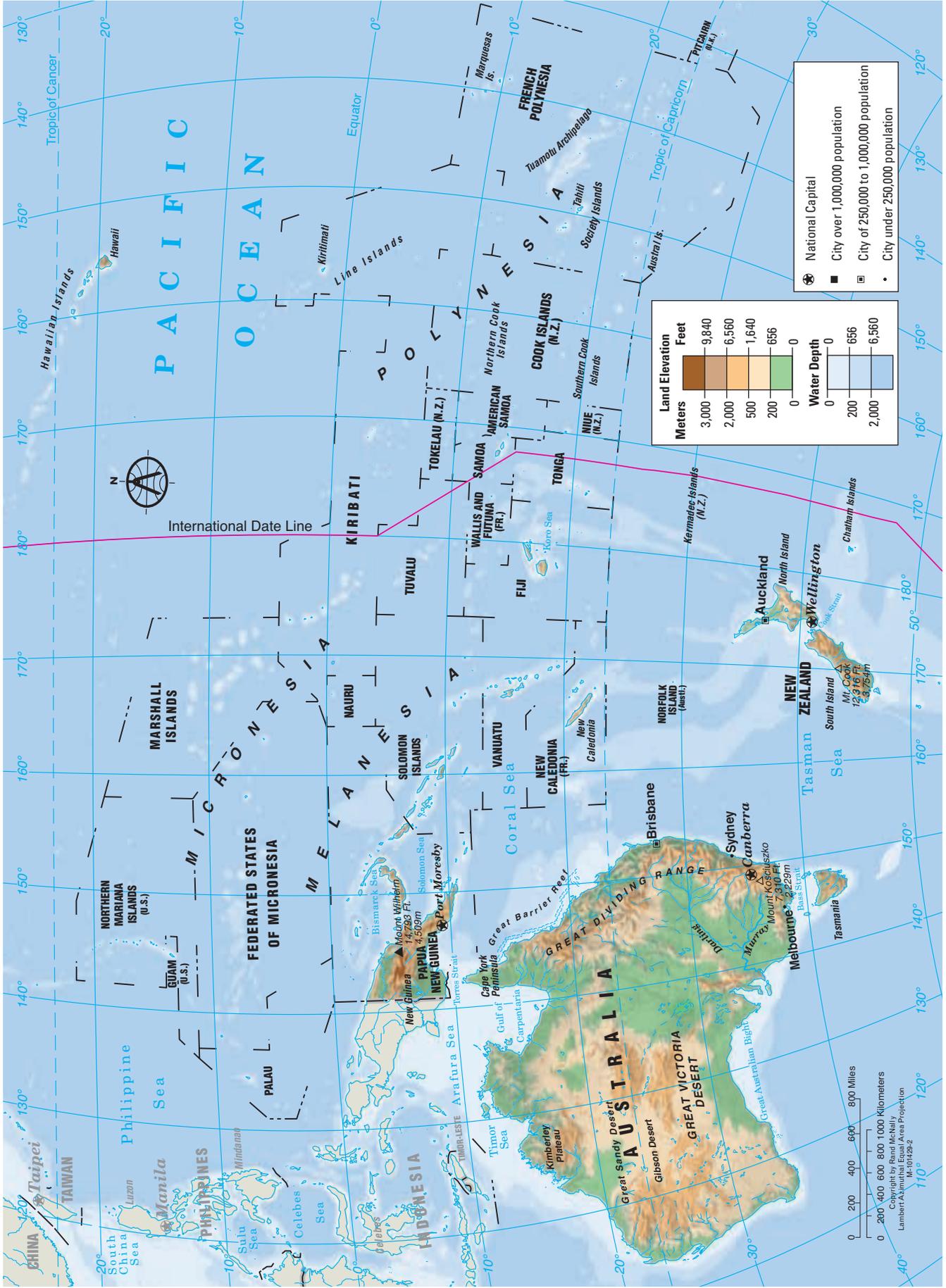


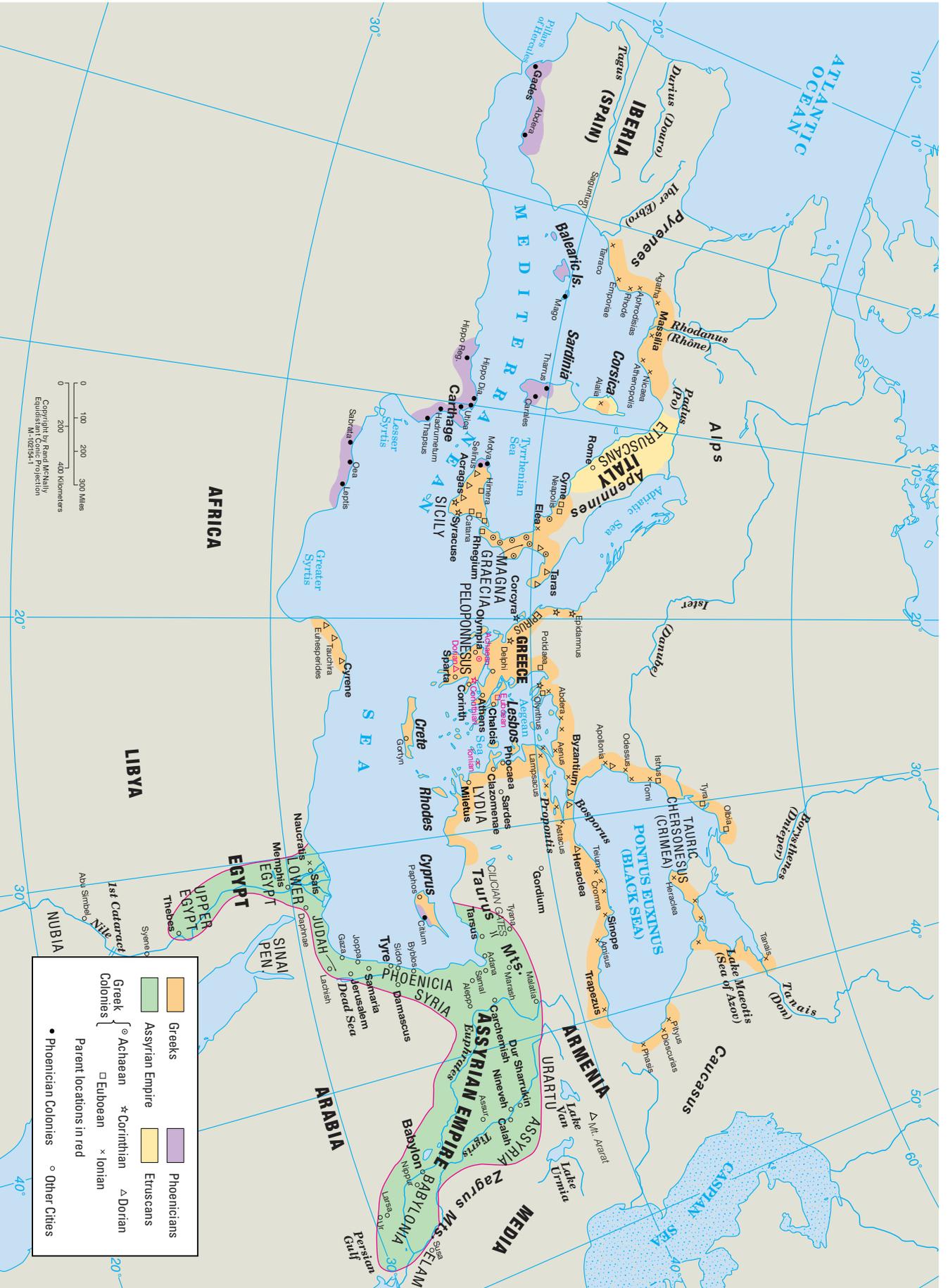












	Greeks		Phoenicians
	Assyrian Empire		Etruscans
	Greek Colonies		Phoenician Colonies
	Achaean		Corinthian
	Euboean		Ionian
	Parent locations in red		
	Other Cities		

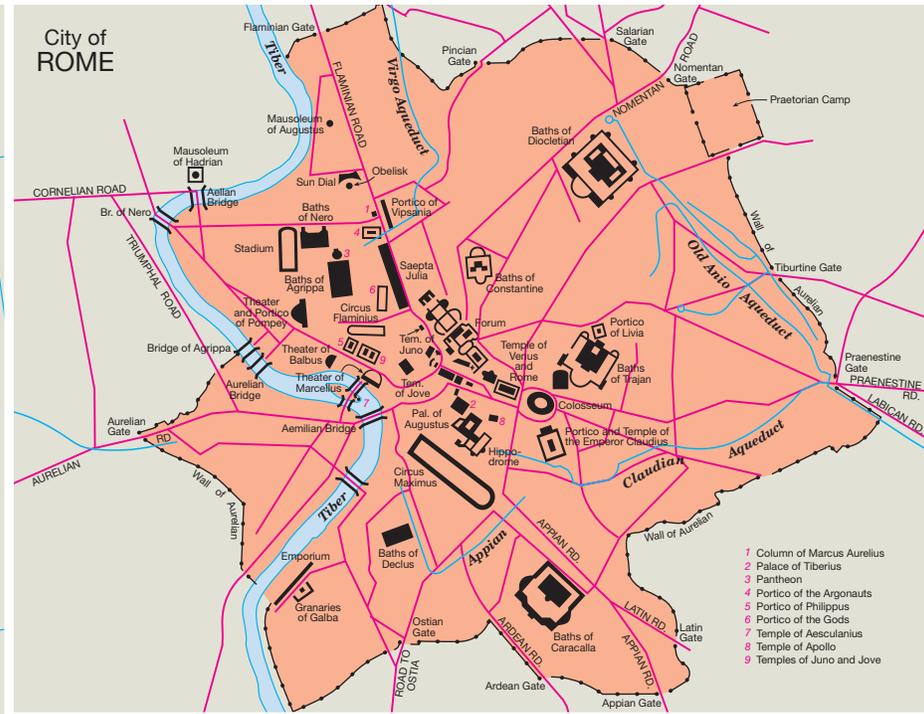
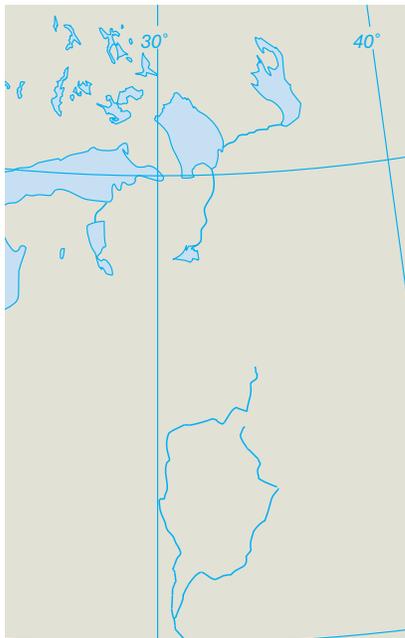
0 100 200 300 Miles
 0 200 400 Kilometers
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Roman City Names and Modern Equivalents

ROMAN NAME	MODERN NAME	ROMAN NAME	MODERN NAME
Ancyra	Ankara	Londinium	London
Aquincum	Budapest	Lugdunum	Lyon
Arelate	Aries	Lugdunum Batavorum	Leiden
Augusta Treverorum	Trier, Treves	Lutetia	Paris
Augusta Vindelicorum	Augsburg	Malaca	Malaga
Augustodunum	Autun	Massilia	Marseille
Bononia	Bologna	Mazaca Caesarea	Kayseri
Burdigala	Bordeaux	Mediolanum	Milan
Caesar Augusta	Saragossa	Moguntiacum	Mainz
Camulodunum	Colchester	Nemausus	Nimes
Carales	Cagliari	Olisipo	Lisbon
Colonia Agrippina	Cologne	Patavium	Padua
Deva	Chester	Salmantica	Salamanca
Eburacum	York	Thessalonica	Salonika
Emerita Augusta	Merida	Toletum	Toledo
Gades	Cadiz	Tolosa	Toulouse
Hispalis	Seville	Valentia	Valencia
Lindum	Lincoln	Vindobona	Vienna

	Roman Empire		Parthian Empire
	Armenia		Temporarily held by Rome







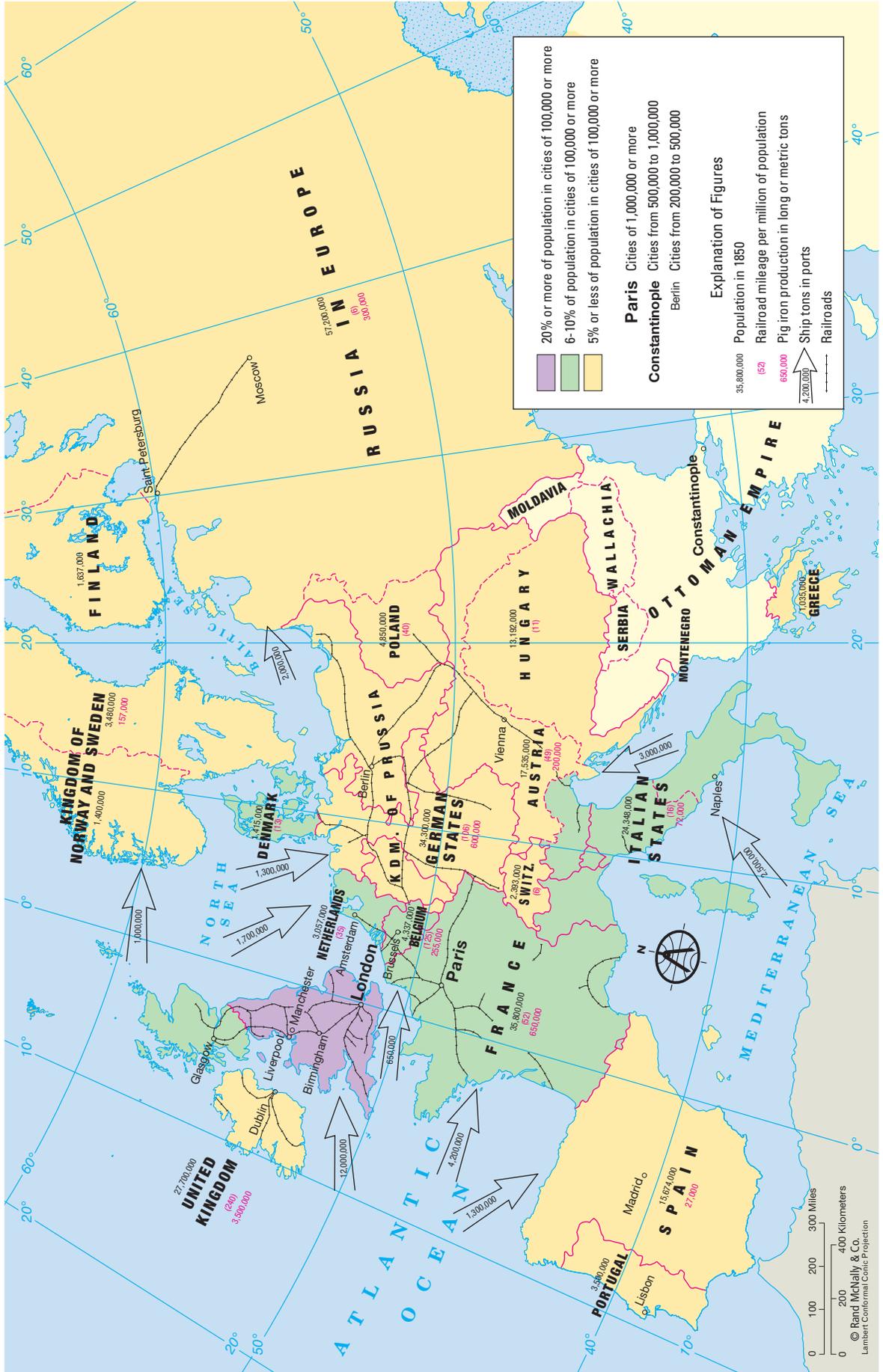






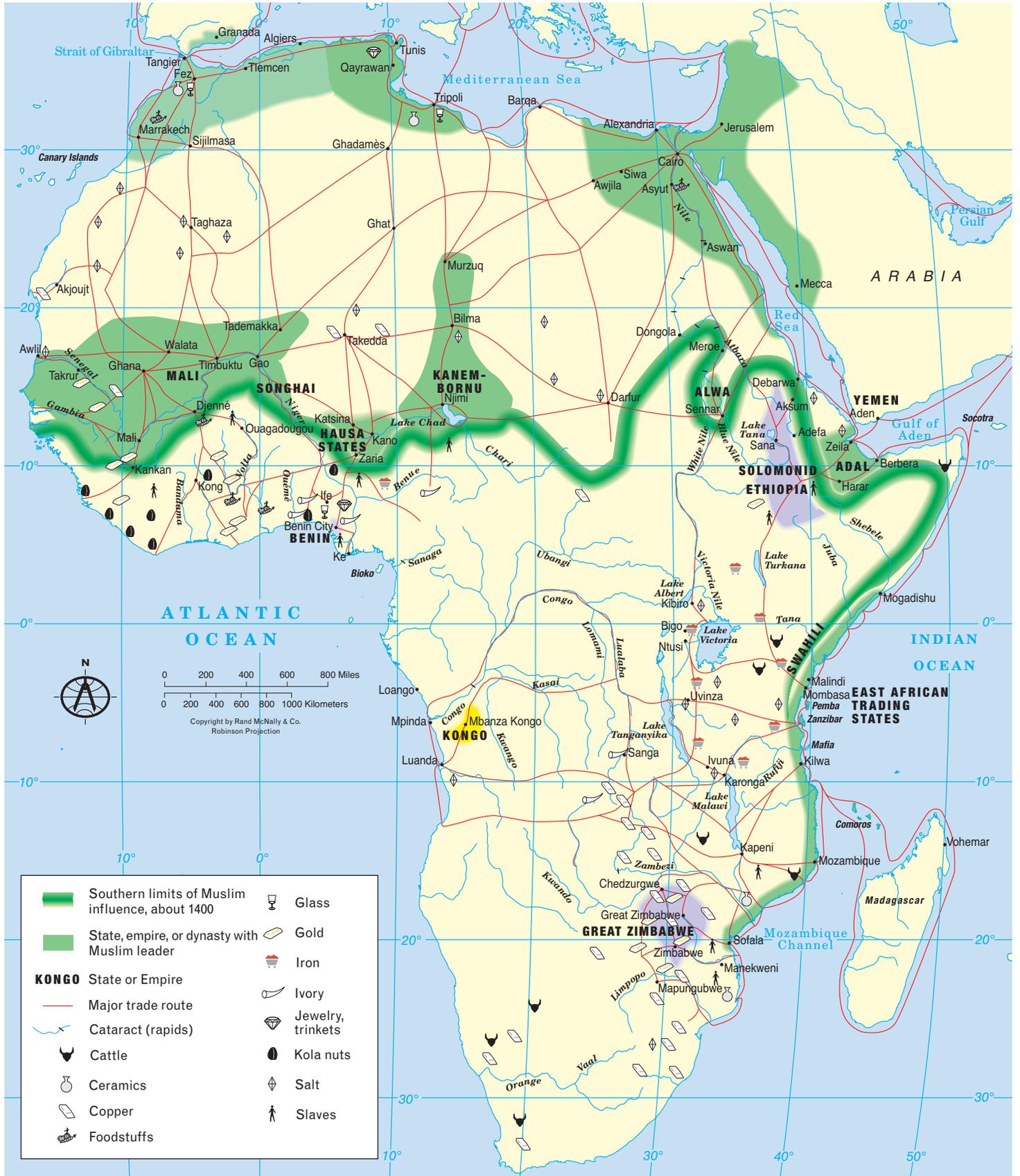


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0 400 800 1200 1600 Kilometers
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Pseudo-Cylindrical Projection

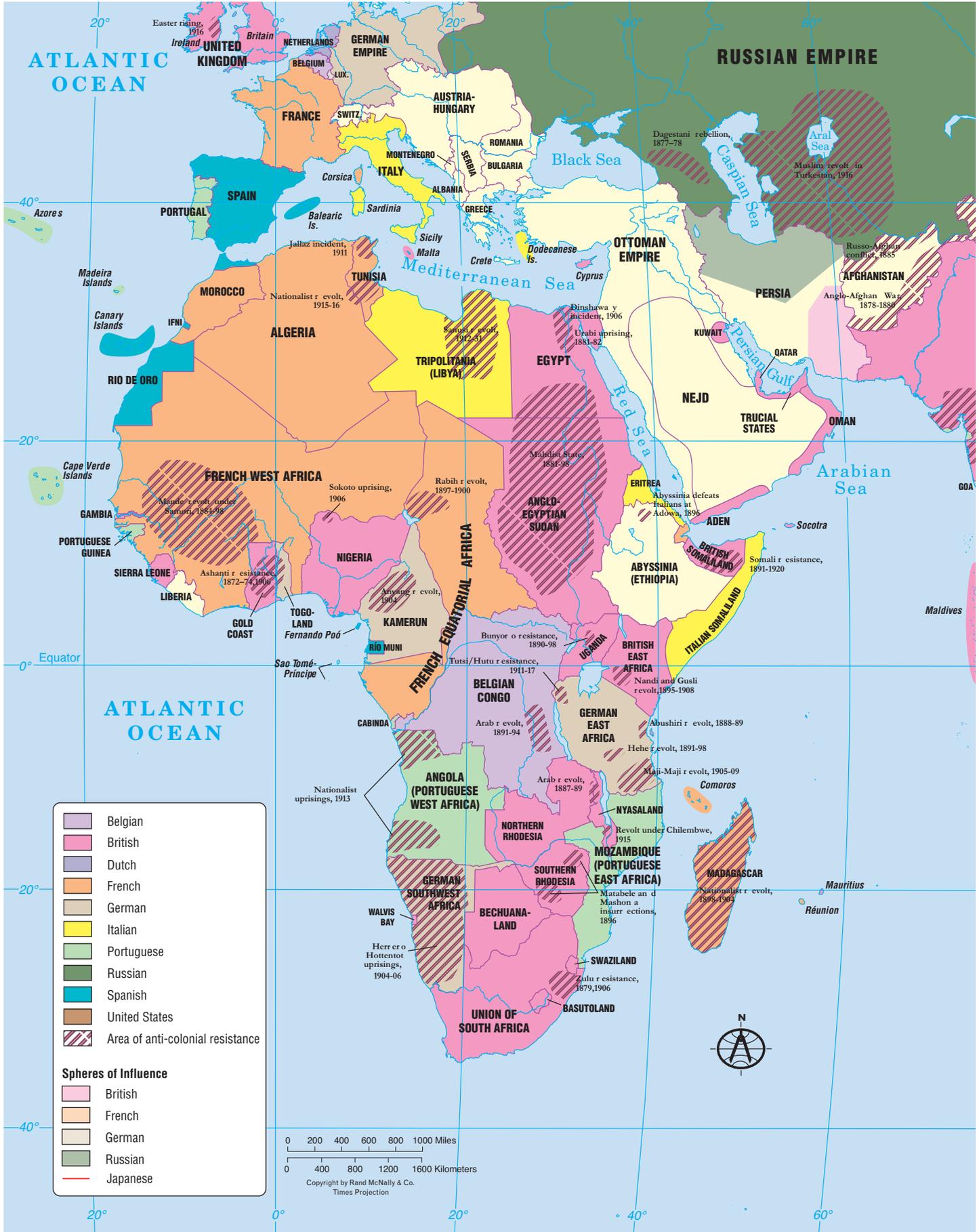




















⊛ National Capital
• Major Cities

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0 200 400 600 800 1000 Kilometers

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Beginnings of Civilization

4 million B.C. – 200 B.C.





Rising out of the sands of Egypt are enduring signs of an ancient civilization. Pictured here are the pyramids of Giza, which were built as tombs for Egyptian rulers.

Comparing & Contrasting

Ancient Civilizations

In Unit 1, you will learn about several ancient civilizations such as in Egypt. At the end of the unit, you will have a chance to compare and contrast the civilizations you studied. (See pages 112–117.)

The Peopling of the World, Prehistory–2500 B.C.

Essential Question

Where did early human beings originate and what were some of their technological and artistic achievements?



What You Will Learn

In this chapter you will learn about the origins, development, and achievements of early human life.

SECTION 1 Human Origins in Africa

Main Idea Fossil evidence shows that the earliest humans originated in Africa and spread across the globe.

SECTION 2 Humans Try to Control Nature

Main Idea The development of agriculture caused an increase in population and the growth of a settled way of life.

SECTION 3 Civilization Case Study: Ur in Sumer

Main Idea Prosperous farming villages, food surpluses, and new technology led to the rise of civilizations.

Previewing Themes

INTERACTION WITH ENVIRONMENT As early humans spread out over the world, they adapted to each environment they encountered. As time progressed, they learned to use natural resources.

Geography Study the time line and the map. Where in Africa did human life begin?

SCIENCE AND TECHNOLOGY The earliest peoples came up with new ideas and inventions in order to survive. As people began to live in settlements, they continued to develop new technology to control the environment.

Geography Early humans began to migrate about 1.8 million years ago. What paths did these migrations take?

ECONOMICS Early humans hunted animals and gathered wild plant foods for 3 to 4 million years. Then about 10,000 years ago, they learned to tame animals and to plant crops. Gradually, more complex economies developed.

Geography Early settlement sites often were near rivers. Why might they have been located there?

4,000,000 B.C.
First hominids appear in Africa.
(early hominid footprint) ▶



1,600,000 B.C.
Homo erectus
appears.

200,000 B.C.
Neanderthals
appear.

WORLD

4,000,000 B.C.

2,500,000 B.C.
Paleolithic Age begins.
(Paleolithic lunar calendar) ▶





Prehistoric World to 2500 B.C.




HISTORY Stone Age Weapons

hmsocialstudies.com VIDEO



40,000 B.C.
Cro-Magnons emerge. ▶



8000 B.C.
Neolithic Age begins;
first agriculture takes place.



3000 B.C.
◀ Bronze Age
well-established
in Mesopotamia.



2600 B.C.
◀ City of Ur
flourishes in Sumer.

2500 B.C.

How would these tools help early humans survive?

You have joined a team of scientists on an expedition to an ancient site where early humans once lived. The scientists' goal is to search for evidence that might unlock the mysteries of the past.

You're an eyewitness to their astounding discovery—human-made tools about 5,000 years old. They belonged to the so-called Ice Man, discovered in 1991. (See History in Depth, page 15.)



A birch-bark container



The remnants of a backpack



An axe

A dagger and its sheath

EXAMINING *the* ISSUES

- **What did early humans need to do to survive?**
- **What physical actions would these tools help humans do?**

As a class, discuss these questions. In your discussion, think about recent tools and inventions that have changed people's lives. As you read about the ancestors of present-day humans, notice how early toolmakers applied their creativity and problem-solving skills.

Human Origins in Africa

MAIN IDEA

INTERACTION WITH ENVIRONMENT Fossil evidence shows that the earliest humans originated in Africa and spread across the globe.

WHY IT MATTERS NOW

The study of early human remains and artifacts helps in understanding our place in human history.

TERMS & NAMES

- artifact
- culture
- hominid
- Paleolithic Age
- Neolithic Age
- technology
- *Homo sapiens*

SETTING THE STAGE What were the earliest humans like? Many people have asked this question. Because there are no written records of prehistoric peoples, scientists have to piece together information about the past. Teams of scientists use a variety of research methods to learn more about how, where, and when early humans developed. Interestingly, recent discoveries provide the most knowledge about human origins and the way prehistoric people lived. Yet, the picture of prehistory is still far from complete.

Scientists Search for Human Origins

Written documents provide a window to the distant past. For several thousand years, people have recorded information about their beliefs, activities, and important events. Prehistory, however, dates back to the time before the invention of writing—roughly 5,000 years ago. Without access to written records, scientists investigating the lives of prehistoric peoples face special challenges.

Scientific Clues Archaeologists are specially trained scientists who work like detectives to uncover the story of prehistoric peoples. They learn about early people by excavating and studying the traces of early settlements. An excavated site, called an archaeological dig, provides one of the richest sources of clues to the prehistoric way of life. Archaeologists sift through the dirt in a small plot of land. They analyze all existing evidence, such as bones and artifacts. Bones might reveal what the people looked like, how tall they were, the types of food they ate, diseases they may have had, and how long they lived. **Artifacts** are human-made objects, such as tools and jewelry. These items might hint at how people dressed, what work they did, or how they worshiped.

Scientists called anthropologists study **culture**, or a people's unique way of life. Anthropologists examine the artifacts at archaeological digs. From these, they re-create a picture of early people's cultural behavior. (See Analyzing Key Concepts on culture on the following page.)

Other scientists, called paleontologists, study fossils—evidence of early life preserved in rocks. Human fossils often consist of small fragments of teeth, skulls, or other bones. Paleontologists use complex techniques to date ancient fossil remains and rocks. Archaeologists, anthropologists, paleontologists, and other scientists work as a team to make new discoveries about how prehistoric people lived.



Use the graphic organizer online to take notes on the advances of each hominid group discussed in the section.

Culture

In prehistoric times, bands of humans that lived near one another began to develop shared ways of doing things: common ways of dressing, similar hunting practices, favorite animals to eat. These shared traits were the first beginnings of what anthropologists and historians call *culture*.

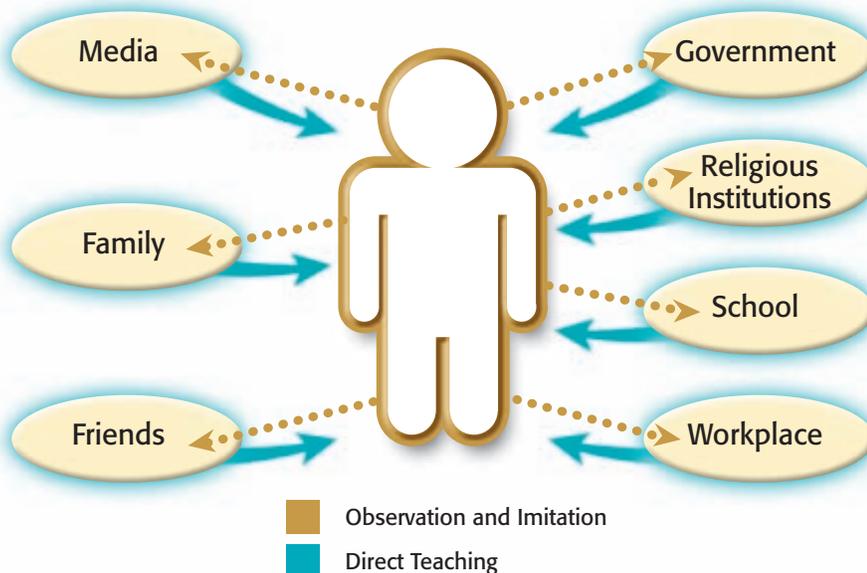
Culture is the way of life of a group of people. Culture includes common practices of a society, its shared understandings, and its social organization. By overcoming individual differences, culture helps to unify the group.

Components of Culture

Common Practices	Shared Understandings	Social Organization
<ul style="list-style-type: none"> • what people eat • clothing and adornment • sports • tools and technology • social customs • work 	<ul style="list-style-type: none"> • language • symbols • religious beliefs • values • the arts • political beliefs 	<ul style="list-style-type: none"> • family • class and caste structure • relationships between individual and community • government • economic system • view of authority

How Culture Is Learned

People are not born knowing about culture. Instead, they must learn culture. Generally, individuals learn culture in two ways. First, they observe and imitate the behavior of people in their society. Second, people in their society directly teach the culture to them, usually through spoken or written language.



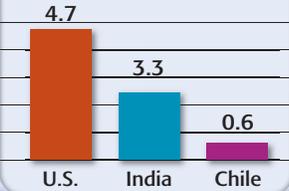
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RESEARCH WEB LINKS Go online for more on culture.

DATA FILE

CULTURAL DATA

Annual movie attendance, 2005 (per person)*



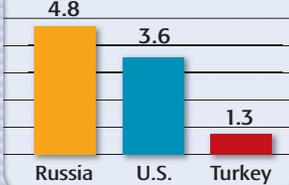
* UNESCO Institute for Statistics, last update 2006

Marriage rates, 2007 (per 1,000 population)*



* UN Demographic Yearbook 2007

Divorce rates, 2007 (per 1,000 population)*



* UN Demographic Yearbook 2007, Statistical Abstract of the United States 2010

Connect to Today

1. Forming and Supporting Opinions

In U.S. culture, which shared understanding do you think is the most powerful? Why?

See Skillbuilder Handbook, page R20.

2. Making Inferences

Judging from the divorce rate in Turkey, what components of culture do you think are strong in that country? Why?

Early Footprints Found In the 1970s, archaeologist Mary Leakey led a scientific expedition to the region of Laetoli in Tanzania in East Africa. (See map on page 10.) There, she and her team looked for clues about human origins. In 1978, they found prehistoric footprints that resembled those of modern humans preserved in volcanic ash. These footprints were made by humanlike beings now called australopithecines (aw•STRAY•loh•PIHTH•ih•SYNZ). Humans and other creatures that walk upright, such as australopithecines, are called **hominids**. The Laetoli footprints provided striking evidence about human origins:

PRIMARY SOURCE

What do these footprints tell us? First, . . . that at least 3,600,000 years ago, what I believe to be man's direct ancestor walked fully upright. . . . Second, that the form of the foot was exactly the same as ours. . . . [The footprints produced] a kind of poignant time wrench. At one point, . . . she [the female hominid] stops, pauses, turns to the left to glance at some possible threat or irregularity, and then continues to the north. This motion, so intensely human, transcends time.

MARY LEAKEY, quoted in *National Geographic*

The Discovery of "Lucy" While Mary Leakey was working in East Africa, U.S. anthropologist Donald Johanson and his team were also searching for fossils. They were exploring sites in Ethiopia, about 1,000 miles to the north. In 1974, Johanson's team made a remarkable find—an unusually complete skeleton of an adult female hominid. They nicknamed her "Lucy" after the song "Lucy in the Sky with Diamonds." She had lived around 3.5 million years ago—the oldest hominid found to that date. **A**

Hominids Walk Upright Lucy and the hominids who left their footprints in East Africa were species of australopithecines. Walking upright helped them travel distances more easily. They were also able to spot threatening animals and carry food and children.

These early hominids had already developed the opposable thumb. This means that the tip of the thumb can cross the palm of the hand. The opposable thumb was crucial for tasks such as picking up small objects and making tools. (To see its importance, try picking up a coin with just the index and middle fingers. Imagine all of the other things that cannot be done without the opposable thumb.)

The Old Stone Age Begins

The invention of tools, mastery over fire, and the development of language are some of the most impressive achievements in human history. Scientists believe these occurred during the prehistoric period known as the Stone Age. It spanned a vast length of time. The earlier and longer part of the Stone Age, called the Old Stone Age or **Paleolithic Age**, lasted from about 2.5 million to 8000 B.C. The oldest stone chopping tools date back to this era. The New Stone Age, or **Neolithic Age**, began about 8000 B.C. and ended as early as 3000 B.C. in some areas. People who lived during this second phase of the Stone Age learned to polish stone tools, make pottery, grow crops, and raise animals.

History Makers



The Leakey Family

The Leakey family has had a tremendous impact on the study of human origins. British anthropologists Louis S. B. Leakey (1903–1972) and Mary Leakey (1913–1996) began searching for early human remains in East Africa in the 1930s. Their efforts turned what was a sideline of science into a major field of scientific inquiry. Mary became one of the world's renowned hunters of human fossils.

Their son Richard; Richard's wife, Maeve; and Richard and Maeve's daughter Louise have continued the family's fossil-hunting in East Africa into the 21st century.

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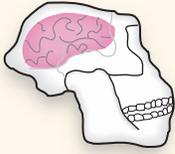
RESEARCH WEB LINKS Go online for more on the Leakey family.

MAIN IDEA

Drawing Conclusions

A Why were the discoveries of hominid footprints and "Lucy" important?

Hominid Development



Australopithecines

- 4 million to 1 million B.C.
- found in southern and eastern Africa
- brain size 500 cm³ (cubic centimeters)
- first humanlike creature to walk upright



Homo habilis

- 2.5 million to 1.5 million B.C.
- found in East Africa
- brain size 700 cm³
- first to make stone tools

4 million years ago

3 million years ago

Much of the Paleolithic Age occurred during the period in the earth's history known as the Ice Age. During this time, glaciers alternately advanced and retreated as many as 18 times. The last of these ice ages ended about 10,000 years ago. By the beginning of the Neolithic Age, glaciers had retreated to roughly the same area they now occupy.

Homo habilis May Have Used Tools Before the australopithecines eventually vanished, new hominids appeared in East Africa around 2.5 million years ago. In 1960, archaeologists Louis and Mary Leakey discovered a hominid fossil at Olduvai (OHL•duh•vy) Gorge in northern Tanzania. The Leakeys named the fossil *Homo habilis*, which means “man of skill.” The Leakeys and other researchers found tools made of lava rock. They believed *Homo habilis* used these tools to cut meat and crack open bones. Tools made the task of survival easier.

Homo erectus Develops Technology About 1.6 million years ago, before *Homo habilis* left the scene, another species of hominids appeared in East Africa. This species is now known as *Homo erectus*, or “upright man.” Some anthropologists believe *Homo erectus* was a more intelligent and adaptable species than *Homo habilis*. *Homo erectus* people used intelligence to develop **technology**—ways of applying knowledge, tools, and inventions to meet their needs. These hominids gradually became skillful hunters and invented more sophisticated tools for digging, scraping, and cutting. They also eventually became the first hominids to migrate, or move, from Africa. Fossils and stone tools show that bands of *Homo erectus* hunters settled in India, China, Southeast Asia, and Europe.

According to anthropologists, *Homo erectus* was the first to use fire. Fire provided warmth in cold climates, cooked food, and frightened away attacking animals. The control of fire also probably helped *Homo erectus* settle new lands.

Homo erectus may have developed the beginnings of spoken language. Language, like technology, probably gave *Homo erectus* greater control over the environment and boosted chances for survival. The teamwork needed to plan hunts and cooperate in other tasks probably relied on language. *Homo erectus* might have named objects, places, animals, and plants and exchanged ideas. **B**

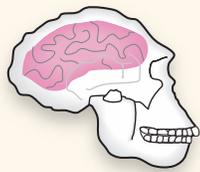
MAIN IDEA

Recognizing Effects

B How did *Homo erectus* use fire to adapt to the environment?

The Dawn of Modern Humans

Many scientists believe *Homo erectus* eventually developed into **Homo sapiens**—the species name for modern humans. *Homo sapiens* means “wise men.” While they physically resembled *Homo erectus*, *Homo sapiens* had much larger brains.



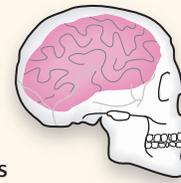
Homo erectus

- 1.6 million to 30,000 B.C.
- found in Africa, Asia, and Europe
- brain size 1,000 cm³



Neanderthal

- 200,000 to 30,000 B.C.
- found in Europe and Southwest Asia
- brain size 1,450 cm³
- first to have ritual burials



Cro-Magnon

- 40,000 to 8000 B.C.
- found in Europe
- brain size 1,400 cm³
- fully modern humans
- created art

Present

1 million years ago

2 million years ago

Neanderthal

Cro-Magnon

Scientists have traditionally classified Neanderthals and Cro-Magnons as early groups of *Homo sapiens*. However, in 1997, DNA tests on a Neanderthal skeleton indicated that Neanderthals were not ancestors of modern humans. They were, however, affected by the arrival of Cro-Magnons, who may have competed with Neanderthals for land and food.

Neanderthals' Way of Life In 1856, as quarry workers were digging for limestone in the Neander Valley in Germany, they spotted fossilized bone fragments. These were the remains of Neanderthals, whose bones were discovered elsewhere in Europe and Southwest Asia. These people were powerfully built. They had heavy slanted brows, well-developed muscles, and thick bones. To many people, the name "Neanderthal" calls up the comic-strip image of a club-carrying caveman. However, archaeological discoveries reveal a more realistic picture of these early hominids, who lived between 200,000 and 30,000 years ago.

Evidence suggests that Neanderthals tried to explain and control their world. They developed religious beliefs and performed rituals. About 60,000 years ago, Neanderthals held a funeral for a man in Shanidar Cave, located in northeastern Iraq. Some archaeologists theorize that during the funeral, the Neanderthal's family covered his body with flowers. This funeral points to a belief in a world beyond the grave. Fossil hunter Richard Leakey, the son of Louis and Mary Leakey, wrote about the meaning of this Neanderthal burial:

PRIMARY SOURCE

The Shanidar events . . . speak clearly of a deep feeling for the spiritual quality of life. A concern for the fate of the human soul is universal in human societies today, and it was evidently a theme of Neanderthal society too.

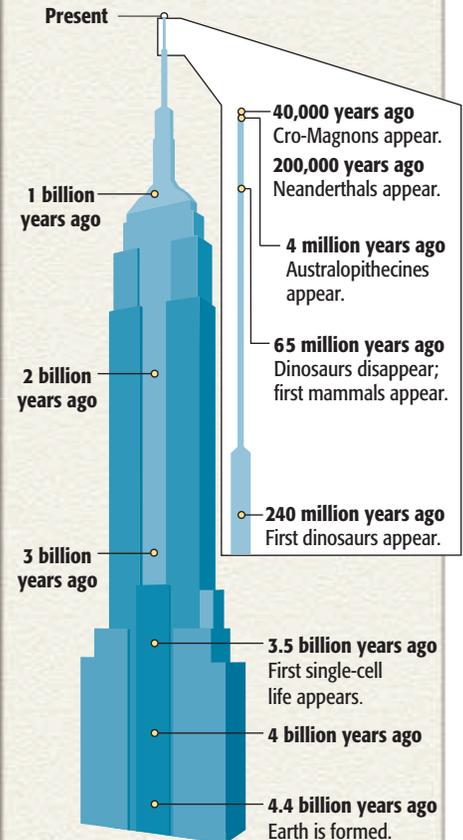
RICHARD E. LEAKEY, *The Making of Mankind*

Neanderthals were also resourceful. They survived harsh Ice Age winters by living in caves or temporary shelters made

History in Depth

Time Line of Planet Earth

Imagine the 102 stories of the Empire State Building as a scale for a time line of the earth's history. Each story represents about 40 million years. Modern human beings have existed for just a tiny percentage of the life of this planet.



of wood and animal skins. Animal bones found with Neanderthal fossils indicate the ability of Neanderthals to hunt in subarctic regions of Europe. To cut up and skin their prey, they fashioned stone blades, scrapers, and other tools. The Neanderthals survived for some 170,000 years and then mysteriously vanished about 30,000 years ago. 🕒

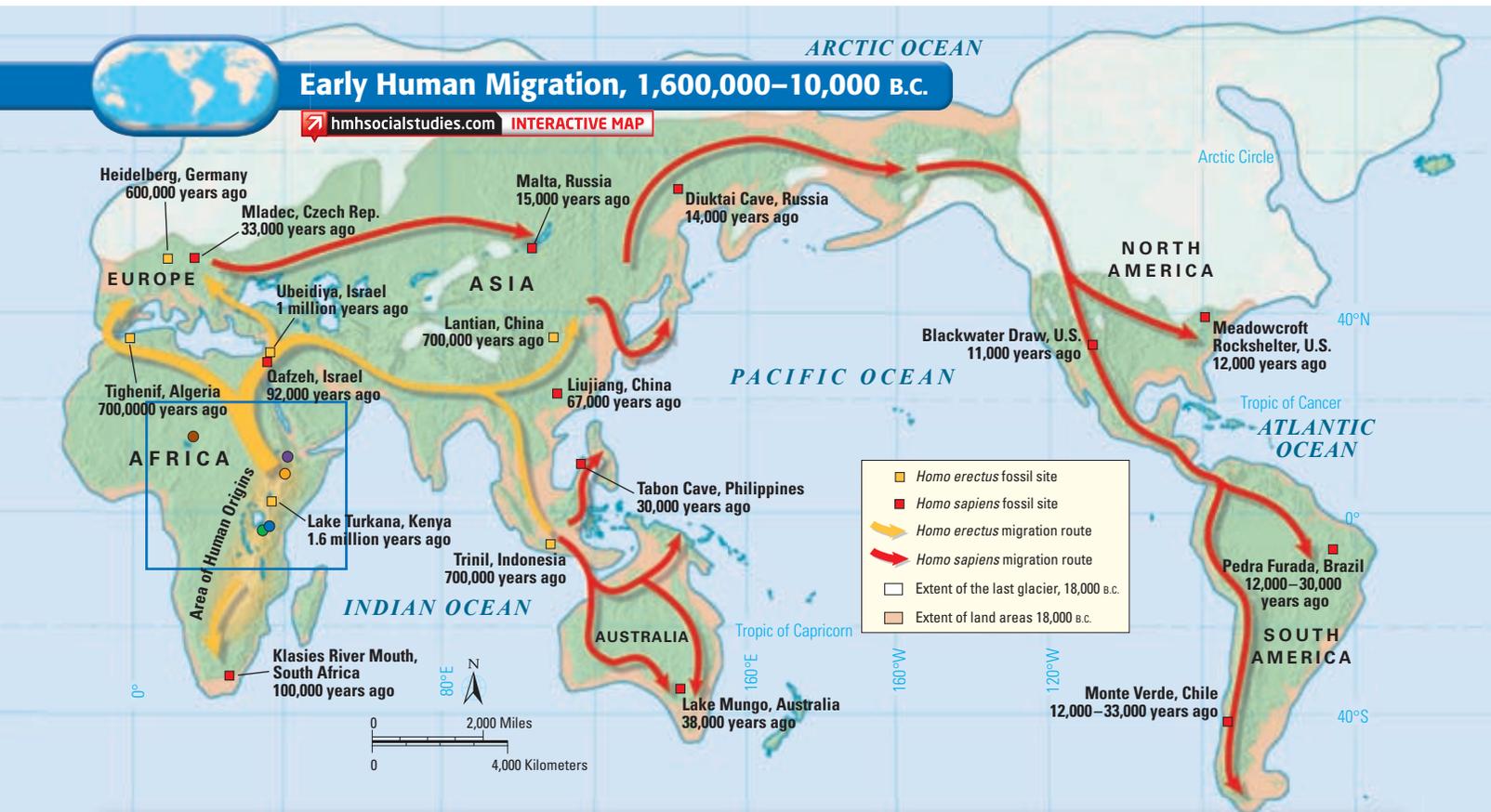
Cro-Magnons Emerge About 40,000 years ago, a group of prehistoric humans called Cro-Magnons appeared. Their skeletal remains show that they are identical to modern humans. The remains also indicate that they were probably strong and generally about five-and-one-half feet tall. Cro-Magnons migrated from North Africa to Europe and Asia.

Cro-Magnons made many new tools with specialized uses. Unlike Neanderthals, they planned their hunts. They studied animals' habits and stalked their prey. Evidently, Cro-Magnons' superior hunting strategies allowed them to survive more easily. This may have caused Cro-Magnon populations to grow at a slightly faster rate and eventually replace the Neanderthals. Cro-Magnons' advanced skill in spoken language may also have helped them to plan more difficult projects. This cooperation perhaps gave them an edge over the Neanderthals.

MAIN IDEA

Comparing

🕒 How were Neanderthals similar to people today?



- **1960** At Olduvai Gorge, Tanzania, Louis Leakey finds 2-million-year-old **stone tools**.
 - **1974** In Ethiopia, Donald Johanson finds "Lucy," a 3.5-million-year-old **hominid skeleton**.
 - **1978** At Laetoli, Tanzania, Mary Leakey finds 3.6-million-year-old **hominid footprints**.
 - **1994** In Ethiopia, an international team of scientists finds 2.33-million-year-old **hominid jaw**.
 - **2002** In Chad, scientists announce discovery of a possible 6-million-year-old **hominid skull**.
- GEOGRAPHY SKILLBUILDER: Interpreting Maps**
- 1. Movement** To what continents did Homo erectus groups migrate after leaving Africa?
 - 2. Human-Environment Interaction** What do the migration routes of Homo sapiens reveal about their survival skills and ability to adapt?

New Findings Add to Knowledge

Scientists are continuing to work at numerous sites in Africa. Their discoveries change our views of the still sketchy picture of human origins in Africa and of the migration of early humans out of Africa.

Fossils, Tools, and Cave Paintings Newly discovered fossils in Chad and Kenya, dating between 6 and 7 million years old, have some apelike features but also some that resemble hominids. Study of these fossils continues, but evidence suggests that they may be the earliest hominids. A 2.33-million-year-old jaw from Ethiopia is the oldest fossil belonging to the line leading to humans. Stone tools found at the same site suggest that toolmaking may have begun earlier than previously thought.

New discoveries also add to what we already know about prehistoric peoples. For example, in 1996, a team of researchers from Canada and the United States, including a high school student from New York, discovered a Neanderthal bone flute 43,000 to 82,000 years old. This discovery hints at a previously unknown talent of the Neanderthals—the gift of musical expression. The finding on cave walls of drawings of animals and people dating back as early as 35,000 years ago gives information on the daily activities and perhaps even religious practices of these peoples.

Early humans' skills and tools for surviving and adapting to the environment became more sophisticated as time passed. As you will read in Section 2, these technological advances would help launch a revolution in the way people lived.

Connect to Today

Chad Discovery

In 2002, an international team of scientists announced the discovery of a 6- to 7-million-year-old skull in northern Chad.



The skull is similar in size to a modern chimpanzee, with a similar brain capacity. (See photograph.)

The team reported that the skull, nicknamed *Toumai*, or “hope of life,” was the earliest human ancestor so far discovered. Its date is, in fact, millions of years older than the previous oldest-known hominid. The skull dates from the time that scientists believe the ancestors of humans split from the great apes.

Whether the skull is actually human or ape will require further study.

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INTERNET ACTIVITY Go online to create a TV news special on the Chad skull. Include conflicting theories on its origin.

SECTION

1

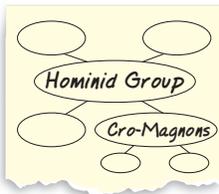
ASSESSMENT

TERMS & NAMES 1. For each term or name, write a sentence explaining its significance.

- artifact
- culture
- hominid
- Paleolithic Age
- Neolithic Age
- technology-
- *Homo sapiens*

USING YOUR NOTES

2. Which advance by a hominid group do you think was the most significant? Explain.



MAIN IDEAS

3. What clues do bones and artifacts give about early peoples?
4. What were the major achievements in human history during the Old Stone Age?
5. How did Neanderthals and Cro-Magnons differ from earlier peoples?

CRITICAL THINKING & WRITING

6. **RECOGNIZING EFFECTS** Why was the discovery of fire so important?
7. **MAKING INFERENCES** Why will specific details about the physical appearance and the customs of early peoples never be fully known?
8. **SYNTHESIZING** How do recent findings keep revising knowledge of the prehistoric past?
9. **WRITING ACTIVITY** **INTERACTION WITH ENVIRONMENT** Write a **persuasive essay** explaining which skill—toolmaking, the use of fire, or language—you think gave hominids the most control over their environment.

CONNECT TO TODAY CREATING AN ILLUSTRATED NEWS ARTICLE

Research a recent archaeological discovery. Write a two-paragraph **news article** about the find and include an illustration.

Cave Paintings

Cave paintings created by primitive people are found on every continent. The oldest ones were made about 35,000 years ago. Cave paintings in Europe and Africa often show images of hunting and daily activities. In the Americas and Australia, on the other hand, the paintings tend to be more symbolic and less realistic.

Scholars are not sure about the purpose of cave paintings. They may have been part of magical rites, hunting rituals, or an attempt to mark the events during various seasons. Another theory is that cave paintings (especially the more realistic ones) may simply be depictions of the surrounding world.

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RESEARCH WEB LINKS Go online for more on cave paintings.



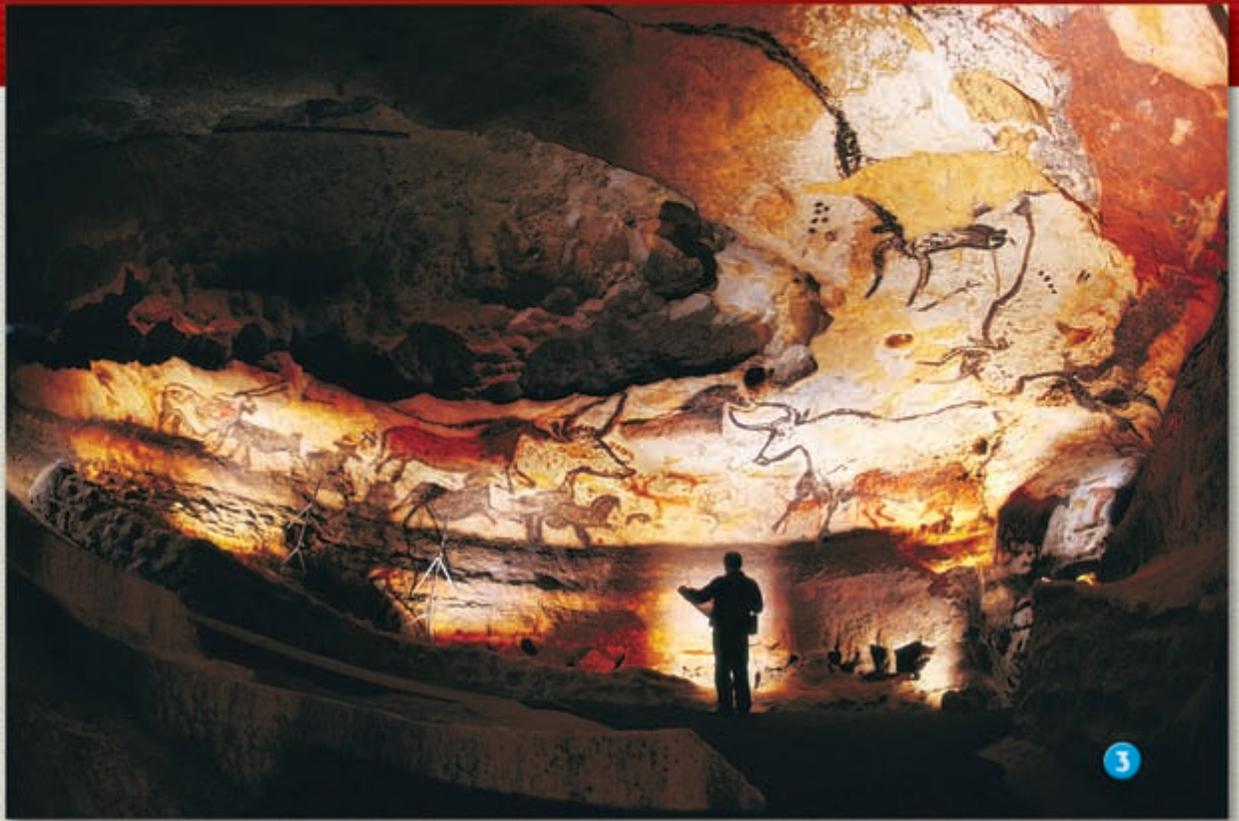
▼ Cave Paintings at *Cuevas de las Manos* in Argentina

Cuevas de las Manos (Cave of the Hands) is located in the Rio Pinturas ravine, northeast of Santa Cruz, Argentina. Its rock walls display numerous hand paintings in vivid colors. The Tehuelches (tuh•WEHL•cheez) people created the paintings between 13,000 and 9,500 years ago. The cave is about 78 feet deep and, at the entrance, about 48 feet wide and 32 feet high.

▼ Cave Paintings at Tassili n'Ajer, Algeria

These paintings depict women, children, and cattle. Located in Algeria, the Tassili n'Ajer (tah•SEEL•ee nah• ZHEER) site contains more than 15,000 images. They depict shifts in climate, animal migrations, and changes in human life. The oldest paintings date back to about 6000 B.C. Images continued to be painted until around the second century A.D.





▲ Replica of Lascaux Cave Painting, France

Discovered in 1940, the Lascaux (lah•SKOH) cave contains more than 600 painted animals and symbols. These works were probably created between 15,000 and 13,000 B.C. In 1963, the cave was closed to the public. The high volume of visitors and the use of artificial lighting were damaging the paintings. A partial replica of the cave was created and is visited by about 300,000 people a year.



▲ Australian Aboriginal Cave Painting

This Aboriginal cave painting is in Kakadu (KAH•kuh•doo) National Park, Australia. Aboriginal people have lived in this area for at least 25,000 years. The painting depicts a Barramundi (bah•uh•MUHN•dee) fish and a Dreamtime spirit. In the Aboriginal culture, Dreamtime is a supernatural past in which ancestral beings shaped and humanized the natural world.

Connect *to* Today

- 1. Analyzing Motives** Why do you think primitive peoples used the walls of caves for their paintings?
 See Skillbuilder Handbook, page R15.
- 2. Comparing and Contrasting** How are these paintings similar to or different from public murals created today?

Humans Try to Control Nature

MAIN IDEA

ECONOMICS The development of agriculture caused an increase in population and the growth of a settled way of life.

WHY IT MATTERS NOW

New methods for obtaining food and the development of technology laid the foundations for modern civilizations.

TERMS & NAMES

- nomad
- hunter-gatherer
- Neolithic Revolution
- slash-and-burn farming
- domestication

SETTING THE STAGE By about 40,000 years ago, human beings had become fully modern in their physical appearance. With a shave, a haircut, and a suit, a Cro-Magnon man would have looked like a modern business executive. However, over the following thousands of years, the way of life of early humans underwent incredible changes. People developed new technology, artistic skills, and most importantly, agriculture.

Early Advances in Technology and Art

Early modern humans quickly distinguished themselves from their ancestors, who had spent most of their time just surviving. As inventors and artists, more advanced humans stepped up the pace of cultural changes.

Tools Needed to Survive For tens of thousands of years, men and women of the Old Stone Age were nomads. **Nomads** were highly mobile people who moved from place to place foraging, or searching, for new sources of food. Nomadic groups whose food supply depends on hunting animals and collecting plant foods are called **hunter-gatherers**. Prehistoric hunter-gatherers, such as roving bands of Cro-Magnons, increased their food supply by inventing tools. For example, hunters crafted special spears that enabled them to kill game at greater distances. Digging sticks helped food gatherers pry plants loose at the roots.

Early modern humans had launched a technological revolution. They used stone, bone, and wood to fashion more than 100 different tools. These expanded tool kits included knives to kill and butcher game, and fish hooks and harpoons to catch fish. A chisel-like cutter was designed to make other tools. Cro-Magnons used bone needles to sew clothing made of animal hides.

Artistic Expression in the Paleolithic Age The tools of early modern humans explain how they met their survival needs. Yet their world best springs to life through their artistic creations. Necklaces of seashells, lion teeth, and bear claws adorned both men and women. People ground mammoth tusks into polished beads. They also carved small realistic sculptures of animals that inhabited their world.

As you read in the Cave Paintings feature, Stone Age peoples on all continents created cave paintings. The best-known of these are the paintings on the walls and ceilings of European caves, mainly in France and Spain. Here early artists drew lifelike images of wild animals. Cave artists made colored paints from



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TAKING NOTES

Use the graphic organizer online to take notes on the section's main ideas and details.

charcoal, mud, and animal blood. In Africa, early artists engraved pictures on rocks or painted scenes in caves or rock shelters. In Australia, they created paintings on large rocks.

The Beginnings of Agriculture

Vocabulary

Edible means “safe to be eaten.”

For thousands upon thousands of years, humans survived by hunting game and gathering edible plants. They lived in bands of 25 to 70 people. The men almost certainly did the hunting. The women gathered fruits, berries, roots, and grasses. Then about 10,000 years ago, some of the women may have scattered seeds near a regular campsite. When they returned the next season, they may have found new crops growing. This discovery would usher in the **Neolithic Revolution**, or the agricultural revolution—the far-reaching changes in human life resulting from the beginnings of farming. The shift from food-gathering to food-producing culture represents one of the great breakthroughs in history.

Causes of the Agricultural Revolution Scientists do not know exactly why the agricultural revolution occurred during this period. Change in climate was probably a key reason. (See chart on page 17.) Rising temperatures worldwide provided longer growing seasons and drier land for cultivating wild grasses. A rich supply of grain helped support a small population boom. As populations slowly rose, hunter-gatherers felt pressure to find new food sources. Farming offered an attractive alternative. Unlike hunting, it provided a steady source of food.

Early Farming Methods Some groups practiced **slash-and-burn farming**, in which they cut trees or grasses and burned them to clear a field. The ashes that remained fertilized the soil. Farmers planted crops for a year or two, then moved to another area of land. After several years, trees and grass grew back, and other farmers repeated the process of slashing and burning.



VIDEO

Stone Age Weapons

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History *in* Depth

The Neolithic Ice Man

In 1991, two German hikers made an accidental discovery that gave archaeologists a firsthand look at the technology of early toolmakers. Near the border of Austria and Italy, they spotted the mummified body of a prehistoric traveler, preserved in ice for some 5,000 years (upper right).

Nicknamed the “Ice Man,” this early human was not empty-handed. The tool kit found near him included a six-foot longbow and a deerskin case with 14 arrows. It also contained a stick with an antler tip for sharpening flint blades, a small flint dagger in a woven sheath, a copper ax, and a medicine bag.

Scientific research on the body (lower right) concluded that the Ice Man was in his 40s when he died in the late spring or early summer from an arrow wound. Scientists also determined that in the hours before his death, he ate wild goat, red deer, and grains. The Ice Man is housed in a special museum in Bolzano, Italy.



Domestication of Animals Food gatherers' understanding of plants probably spurred the development of farming. Meanwhile, hunters' expert knowledge of wild animals likely played a key role in the **domestication**, or taming, of animals. They tamed horses, dogs, goats, and pigs. Like farming, domestication of animals came slowly. Stone Age hunters may have driven herds of animals into rocky ravines to be slaughtered. It was then a small step to drive herds into human-made enclosures. From there, farmers could keep the animals as a constant source of food and gradually tame them.

Not only farmers domesticated animals. Pastoral nomads, or wandering herders, tended sheep, goats, camels, or other animals. These herders moved their animals to new pastures and watering places.

Agriculture in Jarmo Today, the eroded and barren rolling foothills of the Zagros Mountains in northeastern Iraq seem an unlikely site for the birthplace of agriculture. According to archaeologist Robert Braidwood, thousands of years ago the environmental conditions of this region favored the development of agriculture. Wild wheat and barley, along with wild goats, pigs, sheep, and horses, had once thrived near the Zagros Mountains.

In the 1950s, Braidwood led an archaeological dig at a site called Jarmo. He concluded that an agricultural settlement was built there about 9,000 years ago:



PRIMARY SOURCE **A**

We found weights for digging sticks, hoe-like [tools], flint-sickle blades, and a wide variety of milling stones. . . . We also discovered several pits that were probably used for the storage of grain. Perhaps the most important evidence of all was animal bones and the impressions left in the mud by cereal grains. . . . The people of Jarmo were adjusting themselves to a completely new way of life, just as we are adjusting ourselves to the consequences of such things as the steam engine. What they learned about living in a revolution may be of more than academic interest to us in our troubled times.

ROBERT BRAIDWOOD, quoted in *Scientific American*

The Jarmo farmers, and others like them in places as far apart as Mexico and Thailand, pioneered a new way of life. Villages such as Jarmo marked the beginning of a new era and laid the foundation for modern life.

Villages Grow and Prosper

The changeover from hunting and gathering to farming and herding took place not once but many times. Neolithic people in many parts of the world independently developed agriculture, as the map at the right shows.

Farming Develops in Many Places Within a few thousand years, people in many other regions, especially in fertile river valleys, turned to farming.

- **Africa** The Nile River Valley developed into an important agricultural center for growing wheat, barley, and other crops.
- **China** About 8,000 years ago, farmers along the middle stretches of the Huang He (Yellow River) cultivated a grain called millet. About 1,000 years later, farmers first domesticated wild rice in the Chang Jiang River delta.
- **Mexico and Central America** Farmers cultivated corn, beans, and squash.
- **Peru** Farmers in the Central Andes were the first to grow tomatoes, sweet potatoes, and white potatoes.

From these early and varied centers of agriculture, farming then spread to surrounding regions. **B**

MAIN IDEA

Analyzing Primary Sources

A Why do you think Braidwood believes that we can learn from early peoples?

MAIN IDEA

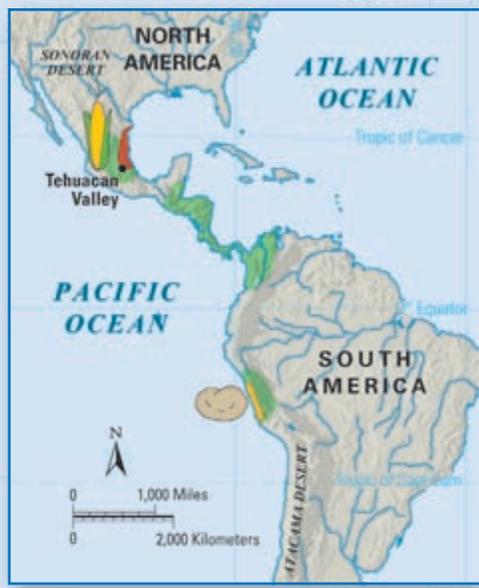
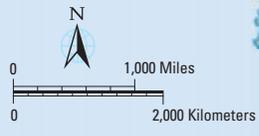
Making Inferences

B What advantages might farming and herding have over hunting and gathering?



Agriculture Emerges, 5000–500 B.C.

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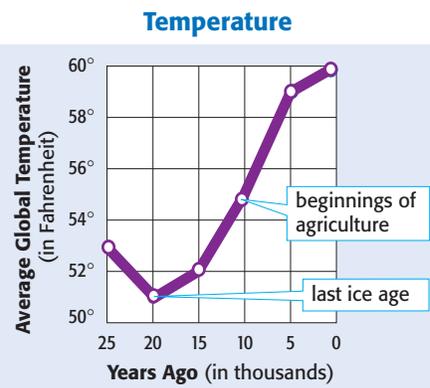


Major crops			
Bananas	Grapes	Sorghum	Wheat
Barley	Olives	Soybeans	
Corn	Potato	Agriculture by 5,000 B.C.	Agriculture by 3,000 B.C.
Cotton	Rice	Agriculture by 2,000 B.C.	Agriculture by 500 B.C.

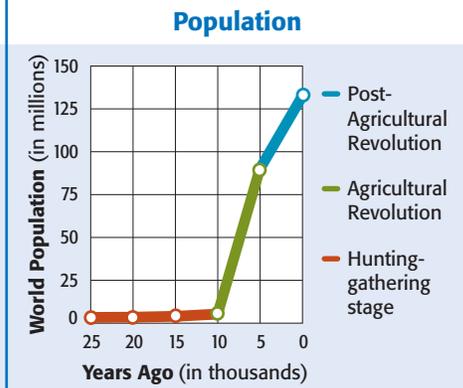


▲ A Neolithic grindstone and vessel used to grind grain

Agricultural Revolution



Source: *Ice Ages, Solving the Mystery*



Source: *A Geography of Population: World Patterns*

SKILLBUILDER: Interpreting Maps and Charts

- Map** What geographic feature favored the development of agricultural areas before 5000 B.C.?
- Chart** What effect did the agricultural revolution have on population growth? Why?

Catal Huyuk In 1958, archaeologists discovered the agricultural village now known as Catal Huyuk (chuh•TUL-hoo•YOOK), or the “forked mound.” It was located on a fertile plain in south-central Turkey (about 30 miles from modern-day Konya), near a twin-coned volcano. Catal Huyuk covered an area of about 32 acres. At its peak 8,000 years ago, the village was home to 5,000 to 6,000 people who lived in about 1,000 dwellings. These rectangular-shaped houses were made of brick and were arranged side-by-side like a honeycomb.

▼ A 9,000-year-old baked-clay figurine found in Catal Huyuk



Catal Huyuk showed the benefits of settled life. Its rich, well-watered soil produced large crops of wheat, barley, and peas. Villagers also raised sheep and cattle. Catal Huyuk’s agricultural surpluses supported a number of highly skilled workers, such as potters and weavers. But the village was best known at the time for its obsidian products. This dark volcanic rock, which looks like glass, was plentiful. It was used to make mirrors, jewelry, and knives for trade.

Catal Huyuk’s prosperity also supported a varied cultural life. Archaeologists have uncovered colorful wall paintings depicting animals and hunting scenes. Many religious shrines were dedicated to a mother goddess. According to her worshipers, she controlled the supply of grain.

The new settled way of life also had its drawbacks—some of the same that affected hunter-gatherer settlements. Floods, fire, drought, and other natural disasters could destroy a village. Diseases, such as malaria, spread easily among people living closely together. Jealous neighbors and roving nomadic bands might attack and loot a wealthy village like Catal Huyuk.

Despite problems, these permanent settlements provided their residents with opportunities for fulfillment—in work, in art, and in leisure time. As you will learn in Section 3, some early villages expanded into cities. These urban centers would become the setting for more complex cultures in which new tools, art, and crafts were created.

Vocabulary

Shrines are places where sacred relics are kept.

SECTION 2 ASSESSMENT

TERMS & NAMES 1. For each term or name, write a sentence explaining its significance.

- nomad
- hunter-gatherer
- Neolithic Revolution
- slash-and-burn farming
- domestication

USING YOUR NOTES

2. Which effect of the development of agriculture was the most significant?

Humans Try to Control Nature
 I. Early Advances in Technology and Art
 A.
 B.
 II. The Beginnings of Agriculture

MAIN IDEAS

3. How did Cro-Magnon’s new tools make survival easier?
4. What factors played a role in the origins of agriculture?
5. What were the first crops grown in the Americas?

CRITICAL THINKING & WRITING

6. **MAKING INFERENCES** What kinds of problems did Stone Age peoples face?
7. **SUMMARIZING** In what ways did Neolithic peoples dramatically improve their lives?
8. **HYPOTHESIZING** Why do you think the development of agriculture occurred around the same time in several different places?
9. **WRITING ACTIVITY** **SCIENCE AND TECHNOLOGY** Write a two-paragraph **opinion paper** on the most significant consequences of the Agricultural Revolution.

CONNECT TO TODAY CREATING A CHART

Use text information on Jarmo and Catal Huyuk to make a **chart** listing the tools, weapons, and other artifacts that archaeologists today might find at an ancient site of a farming settlement.

Civilization

CASE STUDY: Ur in Sumer

MAIN IDEA

SCIENCE AND TECHNOLOGY Prosperous farming villages, food surpluses, and new technology led to the rise of civilizations.

WHY IT MATTERS NOW

Contemporary civilizations share the same characteristics typical of ancient civilizations.

TERMS & NAMES

- civilization
- specialization
- artisan
- institution
- scribe
- cuneiform
- Bronze Age
- barter
- ziggurat

SETTING THE STAGE Agriculture marked a dramatic change in how people lived together. They began dwelling in larger, more organized communities, such as farming villages and towns. From some of these settlements, cities gradually emerged, forming the backdrop of a more complex way of life—civilization.

Villages Grow into Cities

Over the centuries, people settled in stable communities that were based on agriculture. Domesticated animals became more common. The invention of new tools—hoes, sickles, and plow sticks—made the task of farming easier. As people gradually developed the technology to control their natural environment, they reaped larger harvests. Settlements with a plentiful supply of food could support larger populations.

As the population of some early farming villages increased, social relationships became more complicated. The change from a nomadic hunting-gathering way of life to settled village life took a long time. Likewise, the change from village life to city life was a gradual process that spanned several generations.

Economic Changes To cultivate more land and to produce extra crops, ancient people in larger villages built elaborate irrigation systems. The resulting food surpluses freed some villagers to pursue other jobs and to develop skills besides farming. Individuals who learned to become craftspeople created valuable new products, such as pottery, metal objects, and woven cloth. In turn, people who became traders profited from a broader range of goods to exchange—craftwork, grains, and many raw materials. Two important inventions—the wheel and the sail—also enabled traders to move more goods over longer distances.

Social Changes A more complex and prosperous economy affected the social structure of village life. For example, building and operating large irrigation systems required the labor of many people. As other special groups of workers formed, social classes with varying wealth, power, and influence began to emerge. A system of social classes would become more clearly defined as cities grew.

Religion also became more organized. During the Old Stone Age, prehistoric people's religious beliefs centered around nature, animal spirits, and some idea of an afterlife. During the New Stone Age, farming peoples worshiped the many gods and goddesses who they believed had power over the rain, wind, and other forces of



Use the graphic organizer online to take notes on the characteristics of the civilization at Sumer.

nature. Early city dwellers developed rituals founded on these earlier religious beliefs. As populations grew, common spiritual values became lasting religious traditions.

How Civilization Develops

Most historians believe that one of the first civilizations arose in Sumer. Sumer was located in Mesopotamia, a region that is part of modern Iraq. A **civilization** is often defined as a complex culture with five characteristics: (1) advanced cities, (2) specialized workers, (3) complex institutions, (4) record keeping, and (5) advanced technology. Just what set the Sumerians apart from their neighbors?

Advanced Cities Cities were the birthplaces of the first civilizations. A city is more than a large group of people living together. The size of the population alone does not distinguish a village from a city. One of the key differences is that a city is a center of trade for a larger area. Like their modern-day counterparts, ancient city dwellers depended on trade. Farmers, merchants, and traders brought goods to market in the cities. The city dwellers themselves produced a variety of goods for exchange.

Specialized Workers As cities grew, so did the need for more specialized workers, such as traders, government officials, and priests. Food surpluses provided the opportunity for **specialization**—the development of skills in a specific kind of work. An abundant food supply allowed some people to become expert at jobs besides farming. Some city dwellers became **artisans**—skilled workers who make goods by hand. Specialization helped artisans develop their skill at designing jewelry, fashioning metal tools and weapons, or making clothing and pottery. The wide range of crafts artisans produced helped cities become centers of trade.

Complex Institutions The soaring populations of early cities made government, or a system of ruling, necessary. In civilizations, leaders emerged to maintain order among people and to establish laws. Government is an example of an **institution**—a long-lasting pattern of organization in a community. Complex institutions, such as government, religion, and the economy, are another characteristic of civilization.

With the growth of cities, religion became a formal institution. Most cities had great temples where dozens of priests took charge of religious duties. Sumerians believed that every city belonged to a god who governed the city's activities. The temple was the hub of both government and religious affairs. It also served as the city's economic center. There food and trade items were distributed. **A**

Record Keeping As government, religion, and the economy became more complex, people recognized the need to keep records. In early civilizations, government officials had to document tax collections, the passage of laws, and the storage of grain. Priests needed a way to keep track of the calendar and important rituals. Merchants had to record accounts of debts and payments.

Most civilizations developed a system of writing, though some devised other methods of record keeping. Around 3000 B.C., Sumerian **scribes**—or professional record keepers—invented a system of writing called **cuneiform** (KYOO•nee•uh•FAWRM), meaning “wedge-shaped.” (Earlier Sumerian writing consisted of pictographs—symbols of the

Global Patterns



The Incan System of Record Keeping

Early civilizations other than Sumer also developed record keeping. The empire of the ancient Incan civilization stretched along the western coast of South America. Though the Inca had no writing system, they kept records using a *quipu*, a set of colored strings tied with different-size knots at various intervals (see photograph). Each knot represented a certain amount or its multiple. The colors of each cord represented the item being counted: people, animals, land, and so on.

The *quipucamayoc*, officials who knew how to use the *quipu*, kept records of births, deaths, marriages, crops, and historical events.

MAIN IDEA

Drawing Conclusions

A Why were cities essential to the growth of civilizations?

objects or what they represented.) The scribe's tool, called a stylus, was a sharpened reed with a wedge-shaped point. It was pressed into moist clay to create symbols. Scribes baked their clay tablets in the sun to preserve the writing.

People soon began to use writing for other purposes besides record keeping. They also wrote about their cities' dramatic events—wars, natural disasters, the reign of kings. Thus, the beginning of civilization in Sumer also signaled the beginning of written history.

Improved Technology New tools and techniques are always needed to solve problems that emerge when large groups of people live together. In early civilizations, some farmers harnessed the powers of animals and nature. For example, they used ox-drawn plows to turn the soil. They also created irrigation systems to expand planting areas.

Sumerian artisans relied on new technology to make their tasks easier. Around 3500 B.C., they first used the potter's wheel to shape jugs, plates, and bowls. Sumerian metalworkers discovered that melting together certain amounts of copper and tin made bronze. After 2500 B.C., metalworkers in Sumer's cities turned out bronze spearheads by the thousands. The period called the **Bronze Age** refers to the time when people began using bronze, rather than copper and stone, to fashion tools and weapons. The Bronze Age started in Sumer around 3000 B.C., but the date varied in other parts of Asia and in Europe.



▲ The wedge-shaped symbols of cuneiform are visible on this clay tablet.

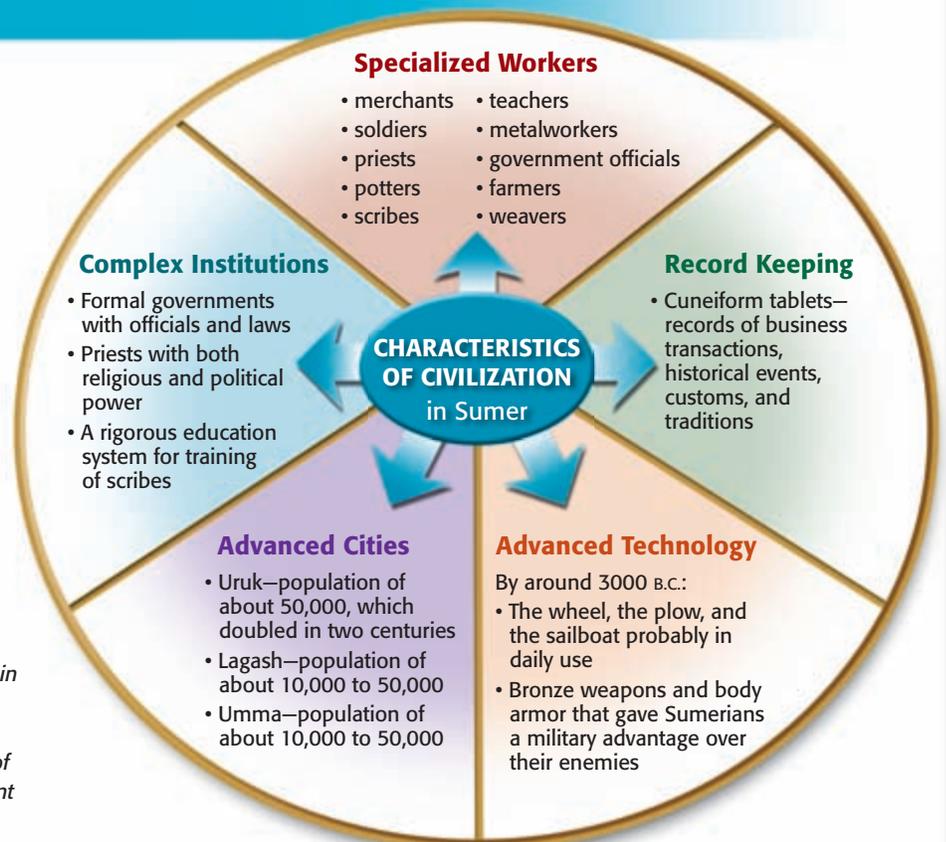
> Analyzing Key Concepts

Civilization

As the history of Sumer demonstrates, civilization first developed in cities. In fact, the very word *civilization* comes from the Latin word for citizen. However, the development of cities is only one aspect of civilization. Many scholars define civilization as a complex culture with five characteristics. The graphic organizer to the right shows how Sumer displayed these five characteristics.

SKILLBUILDER: Interpreting Graphics

- 1. Making Inferences** Judging from the information on this graphic, what economic activities probably took place in Sumerian cities?
- 2. Drawing Conclusions** What is the relationship between the development of specialized workers and the development of complex institutions?



Civilization Emerges in Ur

Ur, one of the earliest cities in Sumer, stood on the banks of the Euphrates River in what is now southern Iraq. Some 30,000 people once lived in this ancient city. Ur was the site of a highly sophisticated civilization.

After excavating from 1922 to 1934, English archaeologist Leonard Woolley and his team unraveled the mystery of this long-lost civilization. From archaeological evidence, Woolley concluded that around 3000 B.C., Ur was a flourishing urban civilization. People in Ur lived in well-defined social classes. Rulers, as well as priests and priestesses, wielded great power. Wealthy merchants profited from foreign trade. Artists and artisans created lavish jewelry, musical instruments, and gold daggers. Woolley's finds have enabled historians to reconstruct Ur's advanced culture.

An Agricultural Economy Imagine a time nearly 5,000 years ago. Outside the mud-brick walls surrounding Ur, ox-driven plows cultivate the fields. People are working barefoot in the irrigation ditches that run between patches of green plants. With stone hoes, the workers widen ditches to carry water into their fields from the reservoir a mile away. This large-scale irrigation system was developed to provide Ur with food surpluses, which keep the economy thriving. The government officials who direct this public works project ensure its smooth operation. **B**

Life in the City A broad dirt road leads from the fields to the city's wall. Inside, city dwellers go about their daily lives. Most live in windowless, one-story, box-like houses packed tightly along the street. A few wealthy families live in two-story houses with an inner courtyard.

Down another street, artisans work in their shops. A metalworker makes bronze by mixing molten copper with just the right quantity of tin. Later, he will hammer the bronze to make spearheads—weapons to help Ur's well-organized armies

MAIN IDEA

Analyzing Causes

B How did Ur's agricultural way of life foster the development of civilization there?

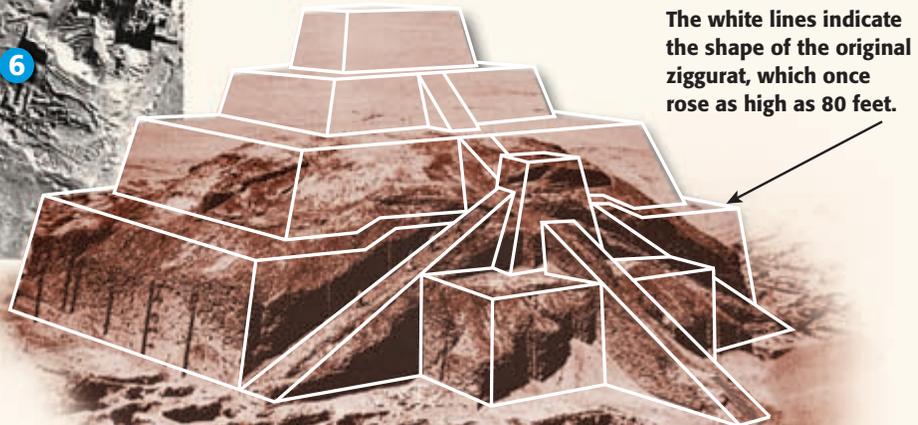


The City of Ur

hmhsocialstudies.com **INTERACTIVE**



1. **Ziggurat** A massive temple
2. **Court of Nanna** Sacred place of Ur's moon god
3. **Home of the High Priestess** Place where a woman with great religious authority lived
4. **Surrounding Wall** Defense for protecting Ur residents
5. **Temple and Treasury** Administrative centers in Ur
6. **Royal Cemetery** Burial site of the queen and king of Ur



The white lines indicate the shape of the original ziggurat, which once rose as high as 80 feet.

▲ Aerial photograph of Ur taken in 1930.

defend the city. As a potter spins his potter's wheel, he expertly shapes the moist clay into a large bowl. These artisans and other craftworkers produce trade goods that help Ur prosper.

Ur's Thriving Trade The narrow streets open into a broad avenue where merchants squat under awnings and trade farmers' crops and artisans' crafts. This is the city's bazaar, or marketplace. Coins are not used to make purchases because money has not yet been invented. But merchants and their customers know roughly how many pots of grain a farmer must give to buy a jug of wine. This way of trading goods and services without money is called **barter**. More complicated trades require a scribe. He carefully forms cuneiform signs on a clay tablet. The signs may show how much barley a farmer owes a merchant for a donkey.

The Temple: Center of City Life Farther down the main avenue stands Ur's tallest and most important building—the temple. Like a city within a city, the temple is surrounded by a heavy wall. Within the temple gate, a massive, tiered structure towers over the city. This pyramid-shaped monument is called a **ziggurat** (ZIHG•uh•RAT), which means “mountain of god.” On the exterior of the ziggurat, a flight of perhaps 100 mud-brick stairs leads to the top. At the peak, priests conduct rituals to worship the city god who looms over Ur. Every day, priests climb these stairs. They often drag a goat or sheep to sacrifice. The temple also houses storage areas for grains, woven fabrics, and gems—offerings to the city's god. Sumerians had elaborate burial rituals and believed in an afterlife.

An early city, such as Ur, represents a model of civilizations that continued to arise throughout history. While the Sumerians were advancing their culture, civilizations were developing in Egypt, China, and elsewhere in Asia.

Connect to Today

Iraq's Ancient Treasures at Risk

The ziggurat at Ur was damaged during the Persian Gulf War of 1991. In that conflict, Iraq parked military planes near the ziggurat, hoping coalition forces would not risk harming the ancient structure. While it was not attacked, bombs caused large craters nearby, and it was hit by stray machine gun fire.

During the 2003 war, the Iraqi National Museum in Baghdad was damaged and then attacked by looters. Some of the treasures of the area's ancient civilizations were either looted or destroyed.

SECTION

3

ASSESSMENT

TERMS & NAMES 1. For each term or name, write a sentence explaining its significance.

- civilization
- specialization
- artisan
- institution
- scribe
- cuneiform
- Bronze Age
- barter
- ziggurat

USING YOUR NOTES

2. Which characteristic is the most important for development of a civilization? Why?

Characteristics

- 1.
- 2.
- 3.
- 4.
- 5.

MAIN IDEAS

3. How did the social structure of village life change as the economy became more complex?
4. What role did irrigation systems play in the development of civilizations?
5. What are the key traits of a civilization?

CRITICAL THINKING & WRITING

6. **DRAWING CONCLUSIONS** How did life in Sumer differ from life in a small farming community of the region?
7. **RECOGNIZING EFFECTS** Why was writing a key invention for the Sumerians?
8. **MAKING INFERENCES** In what ways does the ziggurat of Ur reveal that Sumerians had developed an advanced civilization?
9. **WRITING ACTIVITY** **ECONOMICS** Choose a person from Ur who has a specialized skill, such as an artisan, a trader, or a scribe. Write an **expository essay** explaining that person's contribution to the economic welfare of the city.

MULTIMEDIA ACTIVITY CREATING A CHART



Use the Internet to create a **chart** showing the ten largest cities in the world, their populations, and the continent on which they are located.

INTERNET KEYWORD
city population

Chapter 1 Assessment

TERMS & NAMES

For each term or name below, briefly explain its connection to human prehistory.

1. artifact
2. culture
3. technology
4. hunter-gatherer
5. Neolithic Revolution
6. domestication
7. civilization
8. specialization
9. institution
10. Bronze Age

MAIN IDEAS

Human Origins in Africa Section 1 (pp. 5–13)

11. What kinds of evidence do archaeologists, anthropologists, and paleontologists study to find out how prehistoric people lived?
12. Why did the ability to walk upright and the development of the opposable thumb represent important breakthroughs for early hominids?
13. Why is the prehistoric period called the Stone Age?
14. What evidence supports archaeologists' beliefs that Neanderthals developed a form of religion?

Humans Try to Control Nature Section 2 (pp. 14–18)

15. Why do some archaeologists believe that women were the first farmers?
16. What role did the food supply play in shaping the nomadic life of hunter-gatherers and the settled life of farmers?
17. In what areas of the world did agriculture first develop?

Case Study: Civilization Section 3 (pp. 19–23)

18. What economic changes resulted from food surpluses in agricultural villages?
19. Why did the growth of civilization make government necessary?
20. Why did a system of record keeping develop in civilizations?

CRITICAL THINKING

1. USING YOUR NOTES

In a chart, show the differences between Paleolithic and Neolithic cultures.

	Paleolithic	Neolithic
Source of food		
Means of living		
Technology		
Type of community		

2. FORMING AND SUPPORTING OPINIONS

SCIENCE AND TECHNOLOGY Which technology of the New Stone Age had the most impact on daily life? Explain.

3. ANALYZING CAUSES AND RECOGNIZING EFFECTS

ECONOMICS What effect did trade have on the development of civilization?

4. SYNTHESIZING

What event or development in early human history do you think is of particular significance? Why?

5. MAKING INFERENCES

How did the rise of cities affect government in early cultures?

VISUAL SUMMARY

The Peopling of the World



STANDARDS-BASED ASSESSMENT

Use the quotation and your knowledge of world history to answer questions 1 and 2.

PRIMARY SOURCE

Litter of the past is the basis of archaeology. The coins, the pottery, the textiles and the buildings of bygone eras offer us clues as to how our [early ancestors] behaved, how they ran their economy, what they believed in and what was important to them. What archaeologists retrieve from excavations are images of past lives. . . . [These images] are pieced together slowly and painstakingly from the information contained in objects found.

RICHARD LEAKEY in *The Making of Mankind*

1. According to Richard Leakey, what is the job of the archaeologist?
 - A. to study coins to learn about an economy
 - B. to clean out caves where early ancestors lived
 - C. to create images of coins, pottery, and textiles
 - D. to examine artifacts found at a location
2. What term applies to the behaviors, economic activities, and beliefs referred to by Richard Leakey?
 - A. culture
 - B. civilization
 - C. case study
 - D. artifacts

Use the illustration of the Stone Age cave painting from Argentina and your knowledge of world history to answer question 3.



3. What information might an archaeologist learn from this painting?
 - A. the height of the humans living in the region
 - B. the names of gods worshiped here
 - C. types of animals found in the region
 - D. the time of year this cave was visited

 hmsocialstudies.com **TEST PRACTICE**

For additional test practice, go online for:

- Diagnostic tests
- Strategies
- Tutorials

Interact *with* History

On page 4, you played the role of an amateur archaeologist as you tried to figure out the uses of some prehistoric tools. Now that you've read the chapter, what new clues have you discovered that would help you unravel the mystery of who made the tool with the wedge-shaped blade, and why? What evidence can you use to support your conclusions about its purpose? Discuss your ideas with a small group.

FOCUS ON WRITING

Consider the religious practices of the Neanderthals, the villagers of Catal Huyuk, and the city dwellers of Ur. Write a two-paragraph **essay** analyzing the development of religious beliefs over the course of the Stone Age. In your essay, consider the archaeological evidence that supports the scientific conclusions about beliefs, practices, and organization.

MULTIMEDIA ACTIVITY



NetExplorations: Cave Art

Go to *NetExplorations* at hmsocialstudies.com to learn more about prehistoric cave art. Search the Internet for other examples of cave art—start with the list of sites at *NetExplorations*—and use some of the examples to create an online or classroom exhibit. Create a log and ask visitors to the exhibit to answer questions such as:

- What do you see in each cave art example?
- What do the materials used, the subject matter, and the style of each example suggest about the lives of prehistoric people?
- How does prehistoric art help historians learn about the people who created it?

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?*



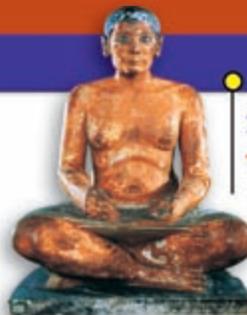
3000 B.C.

◀ City-states form in Sumer, Mesopotamia. (bronze head of an Akkadian ruler)

WORLD

3500 B.C.

2500 B.C.



2660 B.C.

◀ Egypt's Old Kingdom develops. (Egyptian scribe statue)



Four River Valley Civilizations



Ancient Egypt: Iconic Structures

hmhsocialstudies.com VIDEO



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

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



1500 B.C.

500 B.C.



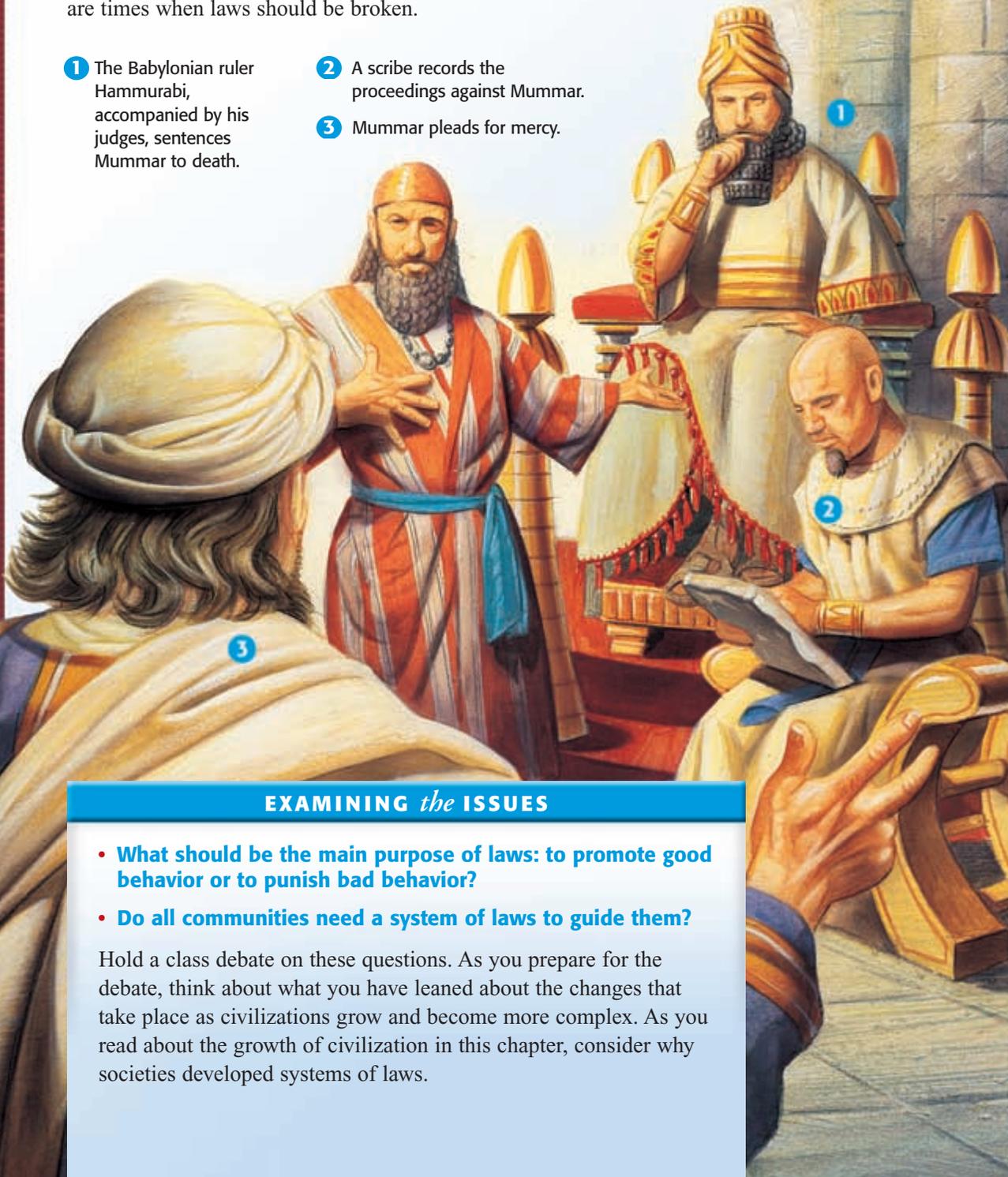
1750 B.C.
◀ Indus Valley civilization declines. (fragment of a Harappan pot)

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.

- 1 The Babylonian ruler Hammurabi, accompanied by his judges, sentences Mummar to death.
- 2 A scribe records the proceedings against Mummar.
- 3 Mummar pleads for mercy.



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

MAIN IDEA

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

WHY IT MATTERS NOW

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

TERMS & NAMES

- Fertile Crescent
- Mesopotamia
- city-state
- dynasty
- cultural diffusion
- polytheism
- empire
- Hammurabi

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** (MEHS•uh•puh•TAY•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.

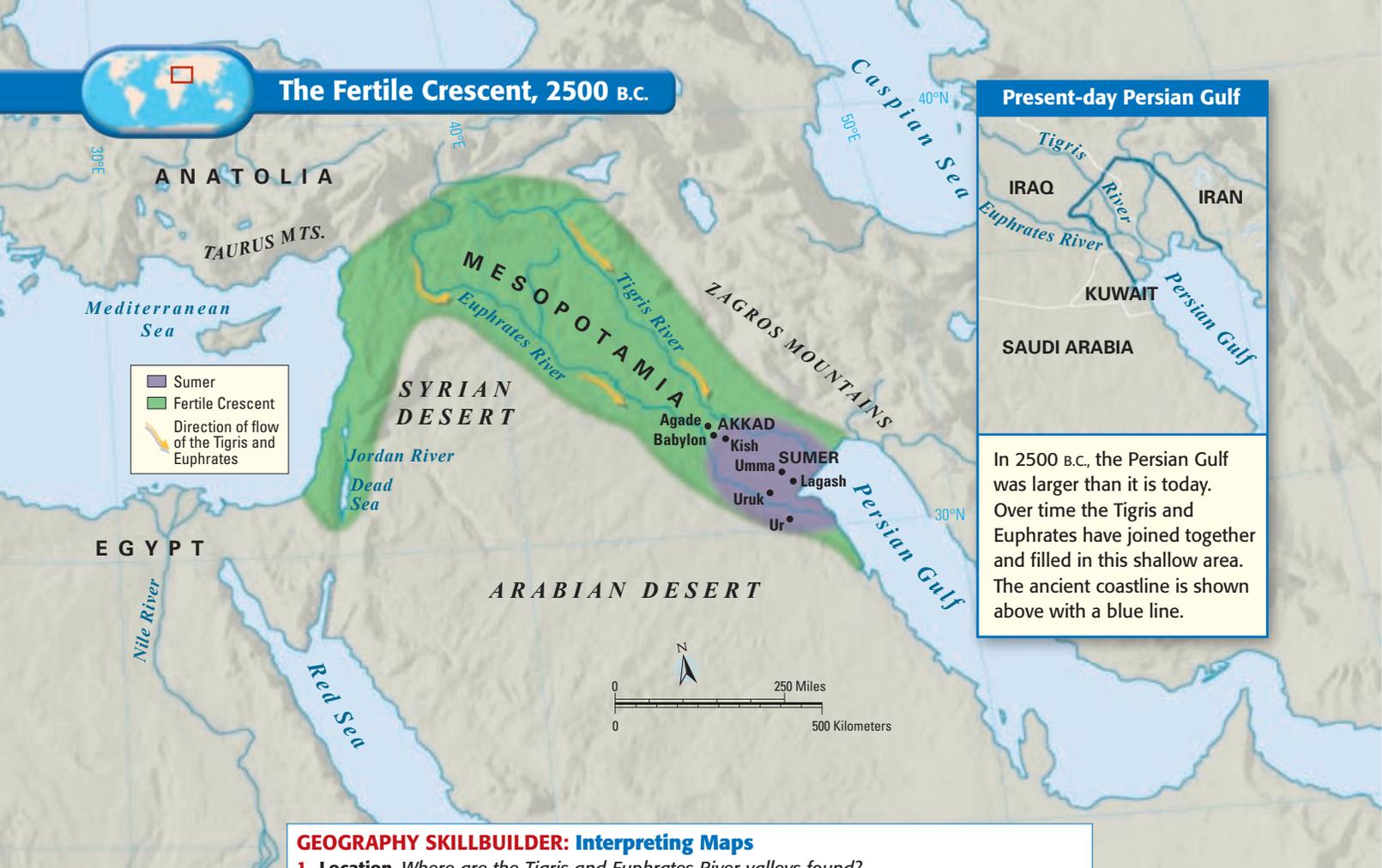
Environmental Challenges People first began to settle and farm the flat, swampy lands in southern Mesopotamia before 4500 B.C. Around 3300 B.C., the people called the Sumerians, whom you read about in Chapter 1, arrived on the scene. Good soil was the advantage that attracted these settlers. However,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



Use the graphic organizer online to take notes on Sumer's environmental problems and their solutions.

The Fertile Crescent, 2500 B.C.



GEOGRAPHY SKILLBUILDER: Interpreting Maps

- Location** Where are the Tigris and Euphrates River valleys found?
- Place** What is the most likely cause of the change in the Persian Gulf coastline?

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. **A**

MAIN IDEA

Summarizing

- A** What are three solutions to the environmental challenges of Mesopotamia?

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. **B**

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•IHZ•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

▼ Iku-Shamagen, King of Mari, a city-state in Sumer, offers prayers to the gods.



MAIN IDEA

Analyzing Causes

B How did military leaders gain power in the city-states?



▲ This gold and lapis ram with a shell fleece was found in a royal burial tomb.

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.

Vocabulary

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

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. 

MAIN IDEA

Contrasting

 How does an empire differ from a city-state?

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.

> Analyzing Primary Sources

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 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?

History Makers



Hammurabi
? –1750 B.C.

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

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

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RESEARCH WEB LINKS Go online for more on Hammurabi.

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. **D**

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.

MAIN IDEA

Recognizing Effects

D How did Hammurabi's law code advance civilization?

SECTION 1 ASSESSMENT

TERMS & NAMES 1. For each term or name, write a sentence explaining its significance.

- Fertile Crescent
- Mesopotamia
- city-state
- dynasty
- cultural diffusion
- polytheism
- empire
- Hammurabi

USING YOUR NOTES

2. Which of the problems you listed required the most complex solution? Explain.

Problems	Solutions
1.	1.
2.	2.
3.	3.

MAIN IDEAS

3. What were the three environmental challenges to Sumerians?
4. How did the Sumerians view the gods?
5. What areas of life did Hammurabi's Code cover?

CRITICAL THINKING & WRITING

6. **DETERMINING MAIN IDEAS** How was Sumerian culture spread throughout Mesopotamia?
7. **RECOGNIZING EFFECTS** Why is the development of a written code of laws important to a society?
8. **ANALYZING CAUSES** How did the need to interact with the environment lead to advances in civilization?
9. **WRITING ACTIVITY** **POWER AND AUTHORITY** What advantages did living in cities offer the people of ancient Mesopotamia? Do modern cities offer any of the same advantages? Write a **compare-and-contrast essay** supporting your answer with references to the text.

CONNECT TO TODAY WRITING A STATUS REPORT

Research the South East Anatolian Water Project in Turkey. The project will place dams on the Tigris and Euphrates rivers. Create a **map** and write a **status report** that summarizes the current status of the project.

Pyramids on the Nile

MAIN IDEA

SCIENCE AND TECHNOLOGY Using mathematical knowledge and engineering skills, Egyptians built magnificent monuments to honor dead rulers.

WHY IT MATTERS NOW

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

TERMS & NAMES

- delta
- Narmer
- pharaoh
- theocracy
- 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.

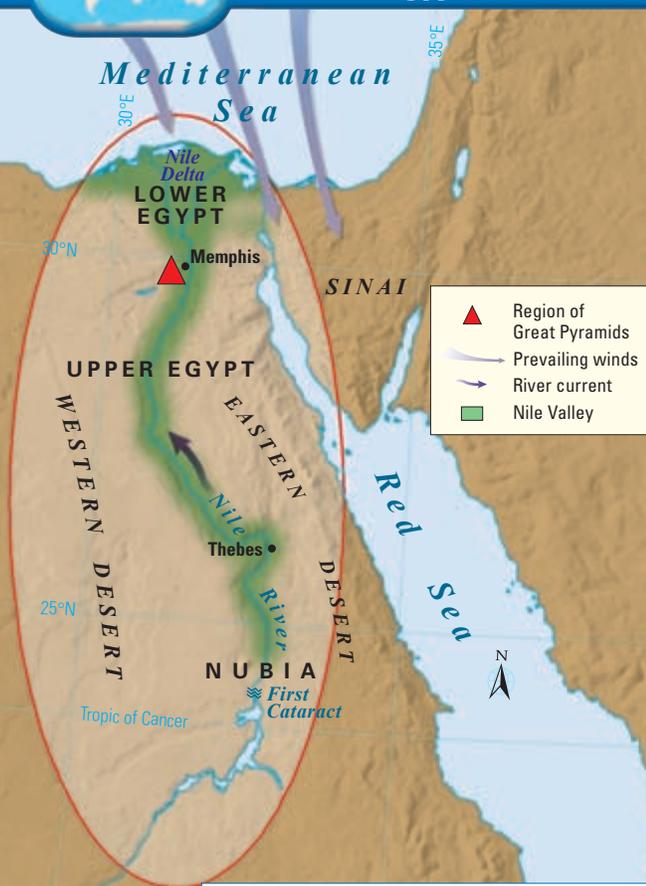
Before the scorching sun could dry out the soil, the peasants would prepare their wheat and barley fields. All fall and winter they watered their crops from a network of irrigation ditches.

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.

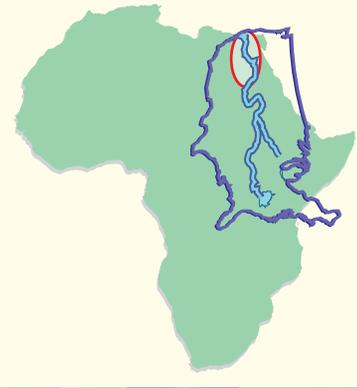


Use the graphic organizer online to take notes on Egyptian achievements.



The Mighty Nile

The Landsat image (left) shows the Nile flowing into its delta. An outline of the continental United States (below) shows the length of the Nile's course. The actual length of the Nile with all its twists and turns is more than 4,100 miles.



GEOGRAPHY SKILLBUILDER: Interpreting Maps

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



VIDEO

How Does the Nile Measure Up?



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- 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. **A**

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 (KAT•uh•rakt). 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.

MAIN IDEA

Contrasting

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

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. **B**

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.

Connect to Today

Scorpion King

In 1999 Egyptologists discovered a series of carvings on a piece of rock about 18 by 20 inches. The tableau scene has symbols that may refer to a king named Scorpion.

The rock shows a figure carrying a staff. Near the head of the figure is a scorpion. Another artifact, a macehead, also shows a king with the scorpion symbol. Both artifacts suggest that Egyptian history may go back to around 3250 B.C. Some scholars believe the Scorpion is the earliest king to begin unification of Egypt, represented by the double crown shown below.



crown of
Upper Egypt

crown of
Lower Egypt

crown of Upper
and Lower Egypt

MAIN IDEA

Making Inferences

B Why were Egypt's pharaohs unusually powerful rulers?

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.

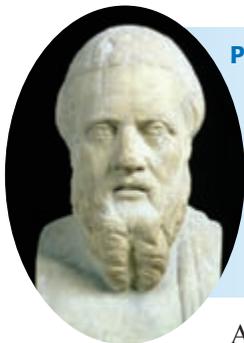
Egyptian Culture

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

MAIN IDEA

Analyzing Primary Sources

 What does this description suggest about the Egyptians' knowledge of the human body?

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 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.



▲ 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 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.

King's chamber

Air shaft

Grand gallery

Queen's chamber

Ascending passage

Escape passage

Unfinished chamber

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. **D**

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** (HY•uhr•uh•GLIHF•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.

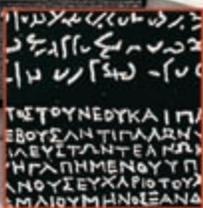
Egyptian Science and Technology Practical needs led to many Egyptian inventions. For example, the Egyptians developed a calendar to help them keep track of the time between floods and to plan their planting season. Priests observed that the same star—Sirius—appeared above the eastern horizon just before the floods came.

History *in* Depth

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

D 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. **E**

MAIN IDEA

Summarizing

E What were the main achievements of the ancient Egyptians?

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.

SECTION

2

ASSESSMENT

TERMS & NAMES 1. For each term or name, write a sentence explaining its significance.

- delta
- Narmer
- pharaoh
- theocracy
- pyramid
- mummification
- hieroglyphic
- papyrus

USING YOUR NOTES

2. Which of the Egyptian achievements do you consider the most important? Explain.



MAIN IDEAS

3. How did being surrounded by deserts benefit Egypt?
4. How did the Egyptians view the pharaoh?
5. Why did Egyptians mummify bodies?

CRITICAL THINKING & WRITING

6. **DRAWING CONCLUSIONS** Which of the three natural features that served as boundaries in ancient Egypt was most important to Egypt’s history? Explain.
7. **RECOGNIZING EFFECTS** What impact did Egyptian religious beliefs have on the lives of Egyptians?
8. **COMPARING AND CONTRASTING** How were cuneiform and hieroglyphic writing similar? different?
9. **WRITING ACTIVITY** **SCIENCE AND TECHNOLOGY** Select an Egyptian invention or achievement. Write a **paragraph** about how your selected achievement changed the Egyptians’ life.

CONNECT TO TODAY **CREATING A LANGUAGE**

Devise a **set of symbols** to create a language. Write several sentences and have classmates try to decipher the message.

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.

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



▲ 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.

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?
 See Skillbuilder Handbook, page R10.
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?

Planned Cities on the Indus

MAIN IDEA

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

WHY IT MATTERS NOW

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

TERMS & NAMES

- subcontinent
- Harappan civilization
- monsoon

SETTING THE STAGE The great civilizations of Mesopotamia and Egypt rose and fell. They left behind much physical evidence about their ways of life. This is the case in what today is the area known as Pakistan and part of India where another civilization arose about 2500 B.C. However, historians know less about its origins and the reasons for its eventual decline than they do about the origins and decline of Mesopotamia and Egypt, because the language of the culture has not been translated.

The Geography of the Indian Subcontinent

Geographers often refer to the landmass that includes India, Pakistan, and Bangladesh as the Indian **subcontinent**. A wall of the highest mountains in the world—the Hindu Kush, Karakorum, and Himalayan ranges—separates this region from the rest of the Asian continent.

Rivers, Mountains, and Plains The world's tallest mountains to the north and a large desert to the east helped protect the Indus Valley from invasion. The mountains guard an enormous flat and fertile plain formed by two rivers—the Indus and the Ganges (GAN•jeez). Each river is an important link from the interior of the subcontinent to the sea. The Indus River flows southwest from the Himalayas to the Arabian Sea. Much of the lower Indus Valley is occupied by the Thar Desert. Farming is possible only in the areas directly watered by the Indus. The Ganges drops down from the Himalayas and flows eastward across northern India. It joins the Brahmaputra River as it flows to the Bay of Bengal.

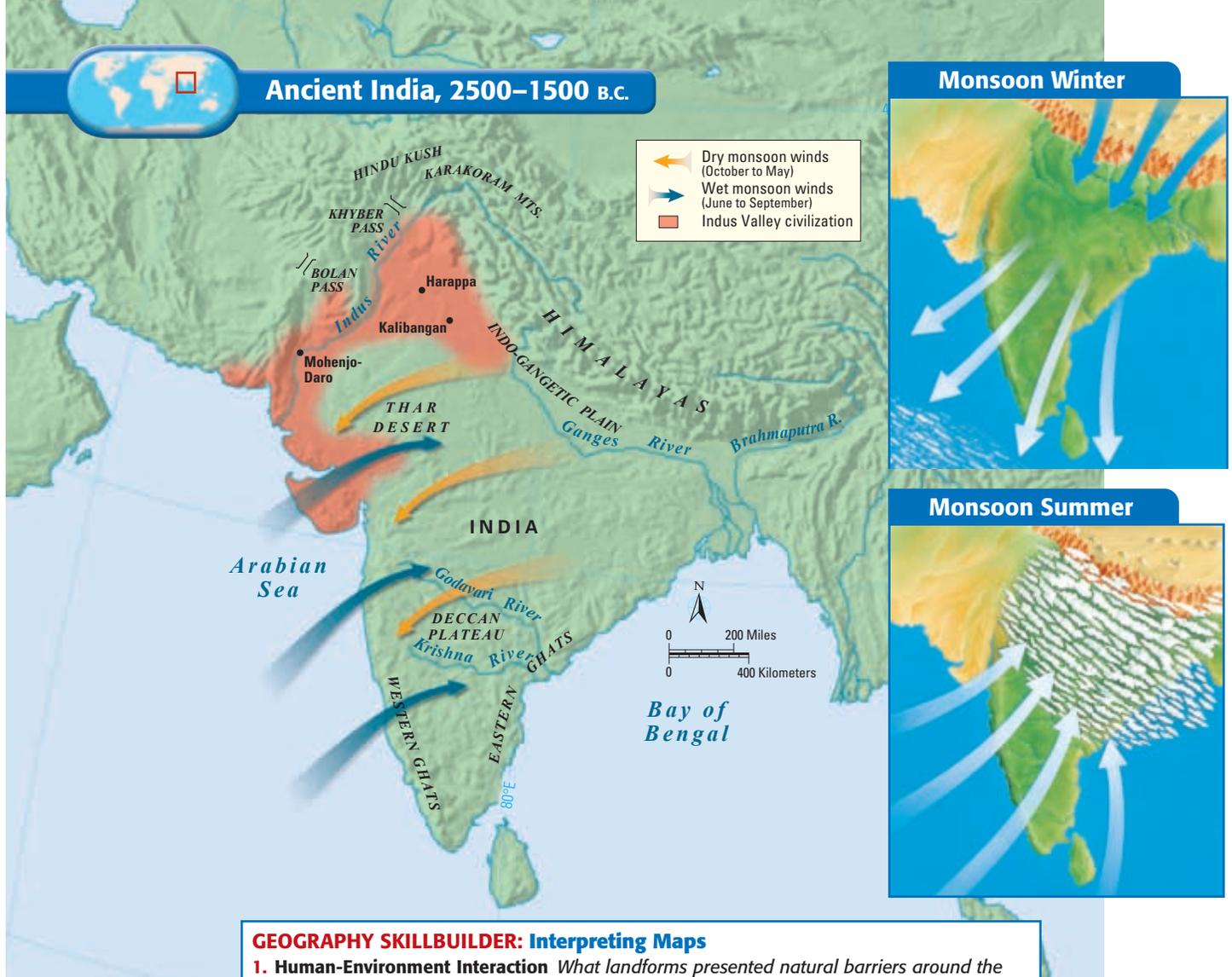
The Indus and Ganges and the lands they water make up a large area that stretches 1,700 miles across northern India and is called the Indo-Gangetic Plain. Like the Tigris, the Euphrates, and the Nile, these rivers carry not only water for irrigation, but also silt, which produces rich land for agriculture.

Below the Indo-Gangetic Plain, the southern part of the subcontinent is a peninsula that thrusts south into the Indian Ocean. The center of the peninsula is a high plateau cut by twisting rivers. This region is called the Deccan (DEK•uhn) Plateau. The plateau is framed by low mountain ranges called the Eastern and Western Ghats. These mountains keep moist air from reaching the plateau, making it a dry region. A narrow border of lush, tropical land lies along the coasts of southern India.



Use the graphic organizer online to take notes on Indus Valley civilizations.

Ancient India, 2500–1500 B.C.



GEOGRAPHY SKILLBUILDER: Interpreting Maps

- Human-Environment Interaction** What landforms presented natural barriers around the Indus Valley?
- Movement** Why do the winter monsoon winds carry so little moisture?

Monsoons Seasonal winds called **monsoons** dominate India's climate. From October to February, winter monsoons from the northeast blow dry air westward across the country. Then, from the middle of June through October, the winds shift. These monsoons blow eastward from the southwest, carrying moisture from the ocean in great rain clouds. The powerful storms bring so much moisture that flooding often happens. When the summer monsoons fail to develop, drought often causes crop disasters.

Environmental Challenges The civilization that emerged along the Indus River faced many of the same challenges as the ancient Mesopotamian and Egyptian civilizations.

- Yearly floods spread deposits of rich soil over a wide area. However, the floods along the Indus were unpredictable.
- The rivers sometimes changed course.
- The cycle of wet and dry seasons brought by the monsoon winds was unpredictable. If there was too little rain, plants withered in the fields and people went hungry. If there was too much rain, floods swept away whole villages. **A**

MAIN IDEA

Identifying Problems

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

Civilization Emerges on the Indus

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

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

Planned Cities Around 2500 B.C., while Egyptians were building pyramids, people in the Indus Valley were laying the bricks for India's first cities. They built strong levees, or earthen walls, to keep water out of their cities. When these were not enough, they constructed human-made islands to raise the cities above possible floodwaters. Archaeologists have found the ruins of more than 100 settlements along the Indus and its tributaries mostly in modern-day Pakistan. The largest cities were Kalibangan, Mohenjo-Daro, and Harappa. Indus Valley civilization is sometimes called **Harappan civilization**, because of the many archaeological discoveries made at that site.

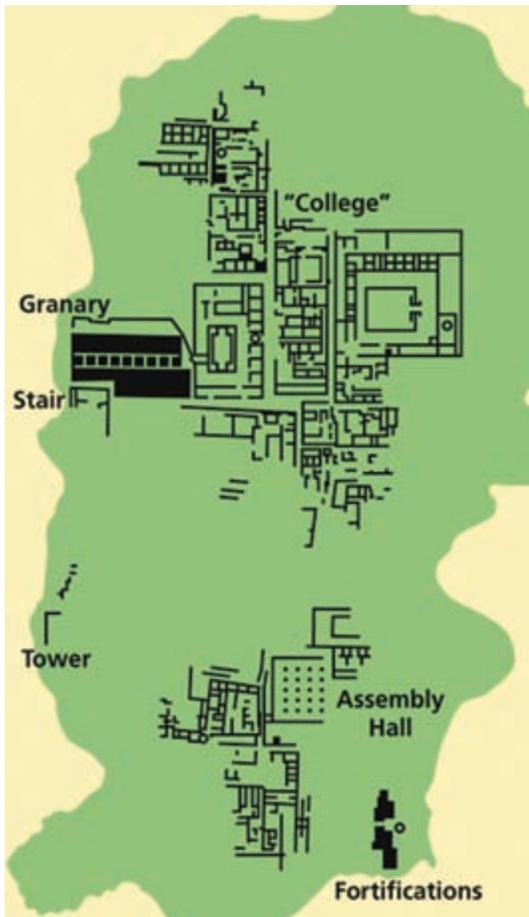
One of the most remarkable achievements of the Indus Valley people was their sophisticated city planning. The cities of the early Mesopotamians were a jumble of buildings connected by a maze of winding streets. In contrast, the people of the Indus laid out their cities on a precise grid system. Cities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

Early engineers also created sophisticated plumbing and sewage systems. These systems could rival any urban drainage systems built before the 19th century. The uniformity in the cities' planning and construction suggests that the Indus peoples had developed a strong central government.

Harappan Planning Harappa itself is a good example of this city planning. The city was partially built on mud-brick wall about three and a half miles long surrounded it. Inside was a citadel, which provided protection for the royal family and also served as a temple.

The streets in its grid system were as wide as 30 feet. Walls divided residential districts from each other. Houses varied in size. Some may have been three stories high. Narrow lanes separated rows of houses, which were laid out in block units. Houses featured bathrooms where wastewater flowed out to the street and then to sewage pits outside the city walls.

▼ A map of the citadel portion of Mohenjo-Daro shows an organized pattern of buildings and streets.



Plumbing in Mohenjo-Daro

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

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

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RESEARCH WEB LINKS Go online for more on water and waste management.

Plumbing Facts

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

- 1 In their private baths, people took showers by pouring pitchers of water over their head.
- 2 Wastes drained through clay pipes into brick sewers running below the streets. These sewers had manholes, through which sanitation workers could inspect the drains and clean out the muck.

Connect to Today

1. **Making Inferences** What does the attention the Indus people gave to the plumbing and sewer systems suggest about their culture?
 See Skillbuilder Handbook, Page R10.
2. **Comparing and Contrasting** Find out how water is supplied and wastewater disposed of in your home or community. How does the system in your home or community compare with what was used in Mohenjo-Daro?

Harappan Culture

Harappan culture spread throughout the Indus valley. Like the Egyptian and Mesopotamian civilizations you have studied, the culture was based on agriculture. Artifacts help to explain some aspects of the culture.

▼ Harappan seals show an elephant (top), an Indian rhinoceros (middle), and a zebu bull (bottom).



Language Like the other two river valley civilizations, the Harappan culture developed a written language. In contrast to cuneiform and hieroglyphics, the Harappan language has been impossible to decipher. This is because, unlike the other two languages, linguists have not found any inscriptions that are bilingual. The Harappan language is found on stamps and seals made of carved stone used for trading pottery and tools. About 400 symbols make up the language. Scientists believe the symbols, like hieroglyphs, are used both to depict an object and also as phonetic sounds. Some signs stand alone and others seem to be combined into words. **B**

Culture The Harappan cities show a remarkable uniformity in religion and culture. The housing suggests that social divisions in the society were not great. Artifacts such as clay and wooden children's toys suggest a relatively prosperous society that could afford to produce nonessential goods. Few weapons of warfare have been found, suggesting that conflict was limited.

The presence of animal images on many types of artifacts suggests that animals were an important part of the culture. Animals are seen on pottery, small statues, children's toys, and seals used to mark trade items. The images provide archaeologists with information about animals that existed in the region. However, some of the seals portray beasts with parts of several different animals—for example, the head of a man, an elephant trunk and tusks, horns of a bull, and the rump of a tiger. As in the case of the Harappan language, the meaning of these images has remained a mystery.

Role of Religion As with other cultures, the rulers of the Harappan civilization are believed to have close ties to religion. Archaeologists think that the culture was a theocracy. But no site of a temple has been found. Priests likely prayed for good harvests and safety from floods. Religious artifacts reveal links to modern Hindu culture. Figures show what may be early representations of Shiva, a major Hindu god. Other figures relate to a mother goddess, fertility images, and the worship of the bull. All of these became part of later Indian civilization.

Trade The Harappans conducted a thriving trade with peoples in the region. Gold and silver came from the north in Afghanistan. Semiprecious stones from Persia and the Deccan Plateau were crafted into jewelry. The Indus River provided an excellent means of transportation for trade goods. Brightly colored cotton cloth was a desirable trade item since few people at the time knew how to grow cotton. Overland routes moved goods from Persia to the Caspian Sea.

The Indus River provided a link to the sea. This access allowed Indus Valley inhabitants to develop trade with distant peoples, including the Mesopotamians. Seals probably used by Indus merchants to identify their goods have been found in Sumer. Ships used the Persian Gulf trade routes to bring copper, lumber, precious stones, and luxury goods to Sumer. Trading began as early as 2600 B.C. and continued until 1800 B.C.

MAIN IDEA

Clarifying

B What is the main reason Harappan language has not been deciphered?

Indus Valley Culture Ends

Around 1750 B.C., the quality of building in the Indus Valley cities declined. Gradually, the great cities fell into decay. The fate of the cities remained a mystery until the 1970s. Then, satellite images of the subcontinent of India revealed evidence of shifts in tectonic plates. The plate movement probably caused earthquakes and floods and altered the course of the Indus River.

Some cities along the rivers apparently suffered through these disasters and survived. Others were destroyed. The shifts may have caused another river, the Sarswati, to dry up. Trade on this river became impossible, and cities began to die. Harappan agriculture, too, would have been influenced by these events. It is likely that these environmental changes prevented production of large quantities of food. Furthermore, Harappan agriculture may have suffered as a result of soil that was exhausted by overuse. This too, may have forced people to leave the cities in order to survive.

Other factors had an impact on the Indus subcontinent. As Chapter 3 explains, the Aryans, a nomadic people from north of the Hindu Kush mountains, swept into the Indus Valley around 1500 B.C. Indian civilization would grow again under the influence of these nomads. At this same time, farther to the east, another civilization was arising. It was isolated from outside influences, as you will learn in Section 4.

Vocabulary

tectonic plates: moving pieces of the earth's crust



▲ The bearded figure above might be a Harappan god or perhaps a priest king.

MAIN IDEA

Analyzing Causes

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

SECTION

3

ASSESSMENT

TERMS & NAMES 1. For each term or name, write a sentence explaining its significance.

- subcontinent
- monsoon
- Harappan civilization

USING YOUR NOTES

2. What is one conclusion you can draw about the Indus Valley civilization?

Indus Valley	
Cities	fact
Language	fact
Trade	fact

MAIN IDEAS

3. What problems can monsoons cause?
4. How were the planned cities of the Indus Valley different from other early cities?
5. What reasons are suggested for the disappearance of the Indus Valley civilization?

CRITICAL THINKING & WRITING

6. **DRAWING CONCLUSIONS** What evidence suggests Indus Valley cities were run by a strong central government?
7. **SYNTHESIZING** What skills would the construction of planned cities require? Explain.
8. **MAKING INFERENCES** How were the people of the Indus Valley connected to Mesopotamia?
9. **WRITING ACTIVITY** **INTERACTION WITH ENVIRONMENT** Write a **comparison** of how Sumerians, Egyptians, and the people of the Harappan civilization made use of their environment. Then identify which group you think made better use of what they had.

MULTIMEDIA ACTIVITY CREATING A SKETCH



Use the Internet to research Harappan seals. Make some sketches of what you see. Then create a **sketch** of a seal that might have been found in a ruin in an Indus Valley civilization.

INTERNET KEYWORD
Harappan seals

River Dynasties in China

MAIN IDEA

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

WHY IT MATTERS NOW

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

TERMS & NAMES

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

SETTING THE STAGE The walls of China’s first cities were built 4,000 years ago. This was at least 1,000 years after the walls of Ur, the great pyramids of Egypt, and the planned cities of the Indus Valley were built. Unlike the other three river valley civilizations, the civilization that began along one of China’s river systems continues to thrive today.

The Geography of China



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TAKING NOTES

Use the graphic organizer online to take notes on major events in early Chinese dynasties.

Natural barriers somewhat isolated ancient China from all other civilizations. To China’s east lay the Yellow Sea, the East China Sea, and the Pacific Ocean. Mountain ranges and deserts dominate about two-thirds of China’s landmass. In west China lay the Taklimakan (TAH•kluh•muh•KAHN) Desert and the icy 15,000-foot Plateau of Tibet. To the southwest are the Himalayas. And to the north are the desolate Gobi Desert and the Mongolian Plateau.

River Systems Two major river systems flow from the mountainous west to the Pacific Ocean. The Huang He (hwahng HUH), also known as the Yellow River, is found in the north. In central China, the Chang Jiang (chang jyhang), also called Yangtze (yang•SEE), flows east to the Yellow Sea. The Huang He, whose name means “yellow river,” deposits huge amounts of yellowish silt when it overflows its banks. This silt is actually fertile soil called **loess** (LOH•uhs), which is blown by the winds from deserts to the west and north.

Environmental Challenges Like the other ancient civilizations in this chapter, China’s first civilization developed in a river valley. China, too, faced the dangers of floods—but its geographic isolation posed its own challenges.

- The Huang He’s floods could be disastrous. Sometimes floods devoured whole villages, earning the river the nickname “China’s Sorrow.”
- Because of China’s relative geographic isolation, early settlers had to supply their own goods rather than trading with outside peoples.
- China’s natural boundaries did not completely protect these settlers from outsiders. Invasions from the west and north occurred again and again in Chinese history.

China’s Heartland Only about 10 percent of China’s land is suitable for farming. Much of the land lies within the small plain between the Huang He and the

Ancient China, 2000–200 B.C.

The Huang He, or Yellow River, is named for the color of its silt. This silt nurtured early development of Chinese civilization and is still a vital resource today.

Extent of Shang Dynasty (Approximate)
Extent of Zhou Dynasty (Approximate)
Border of modern China

PACIFIC OCEAN



Yellow silt gives the Huang He a distinctive color.

GEOGRAPHY SKILLBUILDER: Interpreting Maps

- Location** Describe the location of the Huang He and Chang Jiang in terms of where they begin and end.
- Region** What area did the Shang and Zhou dynasties control?

Chang Jiang in eastern China. This plain, known as the North China Plain, is China's heartland. Throughout China's long history, its political boundaries have expanded and contracted depending on the strength or weakness of its ruling families. Yet the heartland of China remained the center of its civilization.

Civilization Emerges in Shang Times

Fossil remains show that ancestors of modern humans lived in southwest China about 1.7 million years ago. In northern China near Beijing, a *Homo erectus* skeleton was found. Known as Peking man, his remains show that people settled the river valley as much as 500,000 years ago.

The First Dynasties Even before the Sumerians settled in southern Mesopotamia, early Chinese cultures were building farming settlements along the Huang He. Around 2000 B.C., some of these settlements grew into China's first cities. According to legend, the first Chinese dynasty, the Xia (shyah) Dynasty, emerged about this time. Its leader was an engineer and mathematician named Yu. His flood-control and irrigation projects helped tame the Huang He and its tributaries so that settlements could grow. The legend of Yu reflects the level of technology of a society making the transition to civilization.

About the time the civilizations of Mesopotamia, Egypt, and the Indus Valley fell to outside invaders, a people called the Shang rose to power in northern China.

H
HISTORY

VIDEO

Omens in Ancient China

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History *in* Depth

Lady Hao's Tomb

Lady Hao was a wife of king Wu Ding, a Shang ruler, during the 1200s B.C. Her relatively small grave contained some 460 bronze artifacts, 750 jade objects, and more than 6,880 cowry shells. Also found in the tomb beside Lady Hao's coffin were the remains of 16 people and 6 dogs.

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

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INTERNET ACTIVITY Go online to create a multimedia presentation about Lady Hao's tomb and its contents.

The Shang Dynasty lasted from around 1700 B.C. to 1027 B.C. It was the first family of Chinese rulers to leave written records. The Shang kings built elaborate palaces and tombs that have been uncovered by archaeologists. The artifacts reveal much about Shang society.

Early Cities Among the oldest and most important Shang cities was Anyang (ahn•YAHNG), one of the capitals of the Shang Dynasty. Unlike the cities of the Indus Valley or Fertile Crescent, Anyang was built mainly of wood. The city stood in a forest clearing. The higher classes lived in timber-framed houses with walls of clay and straw. These houses lay inside the city walls. The peasants and craftspeople lived in huts outside the city.

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

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

MAIN IDEA

Comparing

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

The Development of Chinese Culture

In the Chinese view, people who lived outside of Chinese civilization were barbarians. Because the Chinese saw their country as the center of the civilized world, their own name for China was the Middle Kingdom.

The culture that grew up in China had strong unifying bonds. From earliest times, the group seems to have been more important than the individual. A person's chief loyalty throughout life was to the family. Beyond this, people owed obedience and respect to the ruler of the Middle Kingdom, just as they did to the elders in their family.

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

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

Religious Beliefs In China, the family was closely linked to religion. The Chinese believed that the spirits of family ancestors had the power to bring good fortune

Vocabulary

tribute: payment made to keep peace

or disaster to living members of the family. The Chinese did not regard these spirits as mighty gods. Rather, the spirits were more like troublesome or helpful neighbors who demanded attention and respect. Every family paid respect to the father's ancestors and made sacrifices in their honor.

Through the spirits of the ancestors, the Shang consulted the gods. The Shang worshiped a supreme god, Shang Di, as well as many lesser gods. Shang kings consulted the gods through the use of **oracle bones**, animal bones and tortoise shells on which priests had scratched questions for the gods. After inscribing a question on the bone, a priest applied a hot poker to it, which caused it to crack. The priests then interpreted the cracks to see how the gods had answered.

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

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

The disadvantage of the Chinese system was the enormous number of written characters to be memorized—a different one for each unit of language. A person needed to know over 1,500 characters to be barely literate. To be a true scholar, one needed to know at least 10,000 characters. For centuries, this severely limited the number of literate, educated Chinese. As a general rule, a nobleperson's children learned to write, but peasant children did not. **B**



▲ The earliest evidence of Chinese writing is seen on oracle bones like this one found in the city of Anyang.

MAIN IDEA

Recognizing Effects

B How did writing help unite China?

Chinese Writing									
The earliest writing systems in the world—including Chinese, Sumerian, and Egyptian—developed from pictographs, or simplified drawings of objects. The writing system used in China today is directly related					to the pictographic writing found on Shang oracle bones. As you can see in the chart below, the ancient pictographs can still be recognized in many modern Chinese characters.				
	ox	goat, sheep	tree	moon	earth	water	field	heaven	to pray
Ancient symbol									
Modern character	牛	羊	木	月	土	水	田	天	祝



Zhou and the Dynastic Cycle

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

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

Vocabulary
mandate: a command or instruction from a higher authority

PRIMARY SOURCE

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

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

DUKE OF SHAO, quoted in *The Chinese Heritage*

The Mandate of Heaven became central to the Chinese view of government. Floods, riots, and other calamities might be signs that the ancestral spirits were displeased with a king’s rule. In that case, the Mandate of Heaven might pass to another noble family. This was the Chinese explanation for rebellion, civil war, and the rise of a new dynasty. Historians describe the pattern of rise, decline, and replacement of dynasties as the **dynastic cycle**, shown above. 🕒

MAIN IDEA

Synthesizing

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

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

At first, the local lords lived in small walled towns and had to submit to the superior strength and control of the Zhou rulers. Gradually, however, the lords grew stronger as the towns grew into cities and expanded into the surrounding territory.

Peoples who had been hostile toward the lords gradually accepted their rule and adopted Zhou ways. As a result, the local lords became less dependent on the king. More and more, they fought among themselves and with neighboring peoples for wealth and territory.

Improvements in Technology and Trade The Zhou Dynasty produced many innovations.

- Roads and canals were built to stimulate trade and agriculture.
- Coined money was introduced, which further improved trade.
- Blast furnaces that produced cast iron were developed.

Zhou cast iron production would not be matched in Europe until the Middle Ages. The Zhou used iron to create weapons, especially dagger-axes and swords. They also used it for common agricultural tools such as sickles, knives, and spades. Iron tools made farm work easier and more productive. The ability to grow more food helped Zhou farmers support thriving cities.

A Period of Warring States The Zhou ruled from around 1027 to 256 B.C. The Zhou empire was generally peaceful and stable. Gradually, however, Zhou rule weakened. In 771 B.C., nomads from the north and west sacked the Zhou capital and murdered the Zhou monarch. A few members of the royal family escaped and set up a new capital at Luoyang.

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

Amidst the bloodshed, traditional values collapsed. The very heart of Chinese civilization—love of order, harmony, and respect for authority—had been replaced with chaos, arrogance, and defiance. As you will learn in Chapter 4, the dynastic cycle was about to bring a new start to Chinese civilization.



▲ These Chinese coins are made of bronze. Their shape resembles a digging tool such as a hoe or spade.

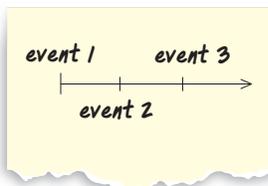
SECTION 4 ASSESSMENT

TERMS & NAMES 1. For each term or name, write a sentence explaining its significance.

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

USING YOUR NOTES

2. Which event do you think was a turning point in Chinese history?



MAIN IDEAS

3. Between which two rivers is the heartland of China found?
4. What family obligations did a Chinese person have?
5. How is the dynastic cycle connected to the Mandate of Heaven?

CRITICAL THINKING & WRITING

6. **RECOGNIZING EFFECTS** In your judgment, what are the benefits and drawbacks of the belief that the group was more important than the individual?
7. **COMPARING** How did the social classes in Shang society differ from those in Egyptian society?
8. **ANALYZING MOTIVES** Do you think that the Zhou Dynasty's downfall resulted from its method of control? Why or why not?
9. **WRITING ACTIVITY** **POWER AND AUTHORITY** Study the dynastic cycle. Then write a **letter to the editor** suggesting that the current ruler should be replaced.

CONNECT TO TODAY CREATING A POSTER

Research the Three Gorges Dam Project in China. The project will place dams on the Chang Jiang. Create a **poster** showing the locations of the dams, some statistics about them, and an explanation of the project's purpose.

Chapter 2 Assessment

TERMS & NAMES

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

1. Fertile Crescent
2. city-state
3. polytheism
4. empire
5. pharaoh
6. hieroglyphics
7. Harappan civilization
8. Mandate of Heaven

MAIN IDEAS

City-States in Mesopotamia Section 1 (pages 29–34)

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

Pyramids on the Nile Section 2 (pages 35–43)

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

Planned Cities on the Indus Section 3 (pages 44–49)

14. What does the uniformity of Indus Valley cities tell us about their government?
15. What evidence exists to show that Indus Valley civilizations traded with Sumer?

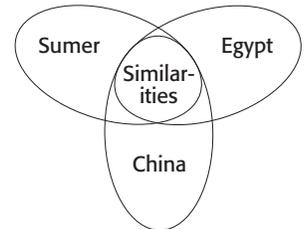
River Dynasties in China Section 4 (pages 50–55)

16. What was the great advantage of the Chinese written language?
17. Explain the dynastic cycle in China.

CRITICAL THINKING

1. USING YOUR NOTES

Create a Venn diagram to indicate differences and similarities in religious beliefs among these ancient civilizations.



2. HYPOTHESIZING

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

3. DRAWING CONCLUSIONS

SCIENCE AND TECHNOLOGY Why was it necessary to develop writing before civilization could advance?

4. MAKING INFERENCES

What reasons might be suggested for the location of civilizations along river valleys?

5. COMPARING

How was a theocracy different from a government run by warrior-kings?

VISUAL SUMMARY

Early River Valley Civilizations

	Sumer	Egypt	Indus Valley	China
Environment 	<ul style="list-style-type: none"> • Tigris and Euphrates flooding unpredictable • No natural barriers • Limited natural resources 	<ul style="list-style-type: none"> • Nile flooding predictable • Natural barriers: deserts • Nile an easy transportation link 	<ul style="list-style-type: none"> • Indus flooding unpredictable • Natural barriers: mountains, deserts • Monsoon winds 	<ul style="list-style-type: none"> • Huang He flooding unpredictable • Natural barriers: mountains, deserts • Geographically isolated
Power and Authority 	<ul style="list-style-type: none"> • Independent city-states governed by monarchs • City-states united into first empires 	<ul style="list-style-type: none"> • Pharaohs rule kingdom as gods • Pharaohs built pyramids 	<ul style="list-style-type: none"> • Strong centralized government • Planned cities 	<ul style="list-style-type: none"> • Community and family important • Sharp social divisions • Mandate of Heaven
Science and Technology 	<ul style="list-style-type: none"> • Cuneiform • Irrigation • Bronze • Wheel, sail, plow 	<ul style="list-style-type: none"> • Hieroglyphics • Pyramids • Mathematics, geometry • Medicine 	<ul style="list-style-type: none"> • Writing (not yet deciphered) • Cities built on precise grid • Plumbing and sewage systems 	<ul style="list-style-type: none"> • Writing • Silk • Coined money • Cast iron

STANDARDS-BASED ASSESSMENT

Use the quotation and your knowledge of world history to answer questions 1 and 2.

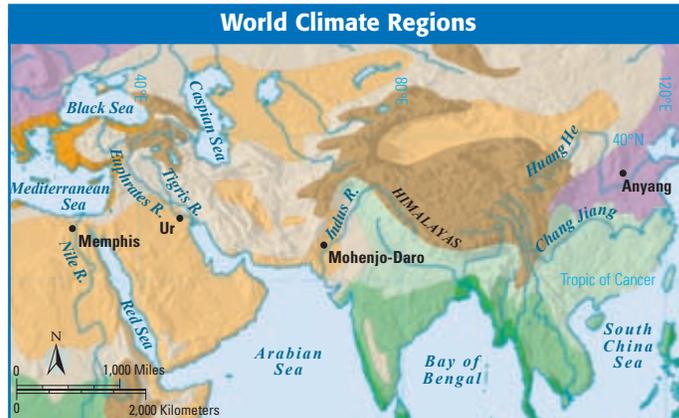
PRIMARY SOURCE

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

"Hymn to the Nile," from *Ancient Near Eastern Texts*

1. What natural phenomenon does the Lord of the Fishes represent?
 - A. volcanic action
 - B. monsoons
 - C. the annual flooding of the Nile
 - D. a major fish kill
2. Why are the people happy when the Lord of the Fishes comes to them?
 - A. The wars they fight will be over.
 - B. They will have food to eat.
 - C. Corruption will stop.
 - D. There will be a new pharaoh.

Use the map and your knowledge of world history to answer question 3.



3. How is the location of Anyang different from the other cities shown?
 - A. It is located in the Western Hemisphere.
 - B. It is not located in a river valley.
 - C. Its climate is tropical.
 - D. Its climate is not dry.

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For additional test practice, go online for:

- Diagnostic tests
- Strategies
- Tutorials

Interact *with* History

On page 28, you looked at the justice of Hammurabi's Code. Now that you have read about the development of four civilizations, think about how laws differ from place to place. How have they developed and changed over time? What similarities do you see between Hammurabi's Code and the laws you live under today? How are they different? Discuss your opinions with a small group.

FOCUS ON WRITING

INTERACTION WITH ENVIRONMENT Write four **poems**, one for each civilization in the chapter. Include some reference to how each civilization interacted with the environment. Consider the following:

- the effect of the environment on life in the area
- responses to the environment by the people

MULTIMEDIA ACTIVITY



Creating a Multimedia Presentation

Using the Internet, the library, or government resources, research the street structure of Washington, D.C., Boston, or the structure of your hometown streets. Identify their similarities and differences. Then research/work with a team to present your findings in a multimedia presentation.

- Which cities have a grid system? Which do not?
- What evidence is there of planning in the cities?
- What are the obvious similarities and differences of the two locations?

People and Ideas on the Move, 2000 B.C.–250 B.C.

Essential Question

How did migration and trade help spread goods and cultural ideas throughout the ancient world?



What You Will Learn

In this chapter you will learn about how migrations and trade led to the foundations of Hinduism, Buddhism, and Judaism.

SECTION 1 The Indo-Europeans

Main Idea Indo-Europeans migrated into Europe, India, and Southwest Asia and interacted with peoples living there.

SECTION 2 Hinduism and Buddhism Develop

Main Idea The beliefs of the Vedic Age developed into Hinduism and Buddhism.

SECTION 3 Seafaring Traders

Main Idea Trading societies extended the development of civilizations beyond the Fertile Crescent.

SECTION 4 The Origins of Judaism

Main Idea The Israelites maintained monotheistic religious beliefs that were unique in the ancient world.

Previewing Themes

INTERACTION WITH ENVIRONMENT Early peoples often migrated from their lands to find new homes that promised a better life. Once they moved, they had to deal with a new environment.

Geography *Why did so many of the ancient trade routes cross the seas?*

RELIGIOUS AND ETHICAL SYSTEMS Three major world religions developed during this time. Hinduism and Buddhism originated in India, while Judaism developed in Southwest Asia.

Geography *What routes of communication existed between the Bay of Bengal near India and Phoenicia and Jerusalem in Southwest Asia?*

ECONOMICS Traders transported their goods to other parts of the world. Among the early trading peoples were the Phoenicians, who dominated the Mediterranean. Sea traders also traveled between India and Arabia.

Geography *How was the Arabian Peninsula well situated to take part in world trade?*

EASTERN HEMISPHERE

2000 B.C.

Hittites migrate to Anatolia. (Hittite burial stone) ▶



1500 B.C.

Aryans invade India.

2000 B.C.

1500 B.C.

WESTERN HEMISPHERE

1200 B.C.

◀ Olmec civilization emerges in southeast Mexico. (Olmec giant stone head)





The Ancient World, 1500 B.C. – 250 B.C.




HISTORY King Solomon

hmhsocialstudies.com VIDEO



1100 B.C. Phoenicians begin to dominate Mediterranean trade. (Carthaginian glass bead) 

814 B.C. Carthage founded as a Phoenician trade center.

586 B.C. Jerusalem captured by Babylonians.

1000 B.C. **900 B.C.** Chavín culture arises in Peru. 

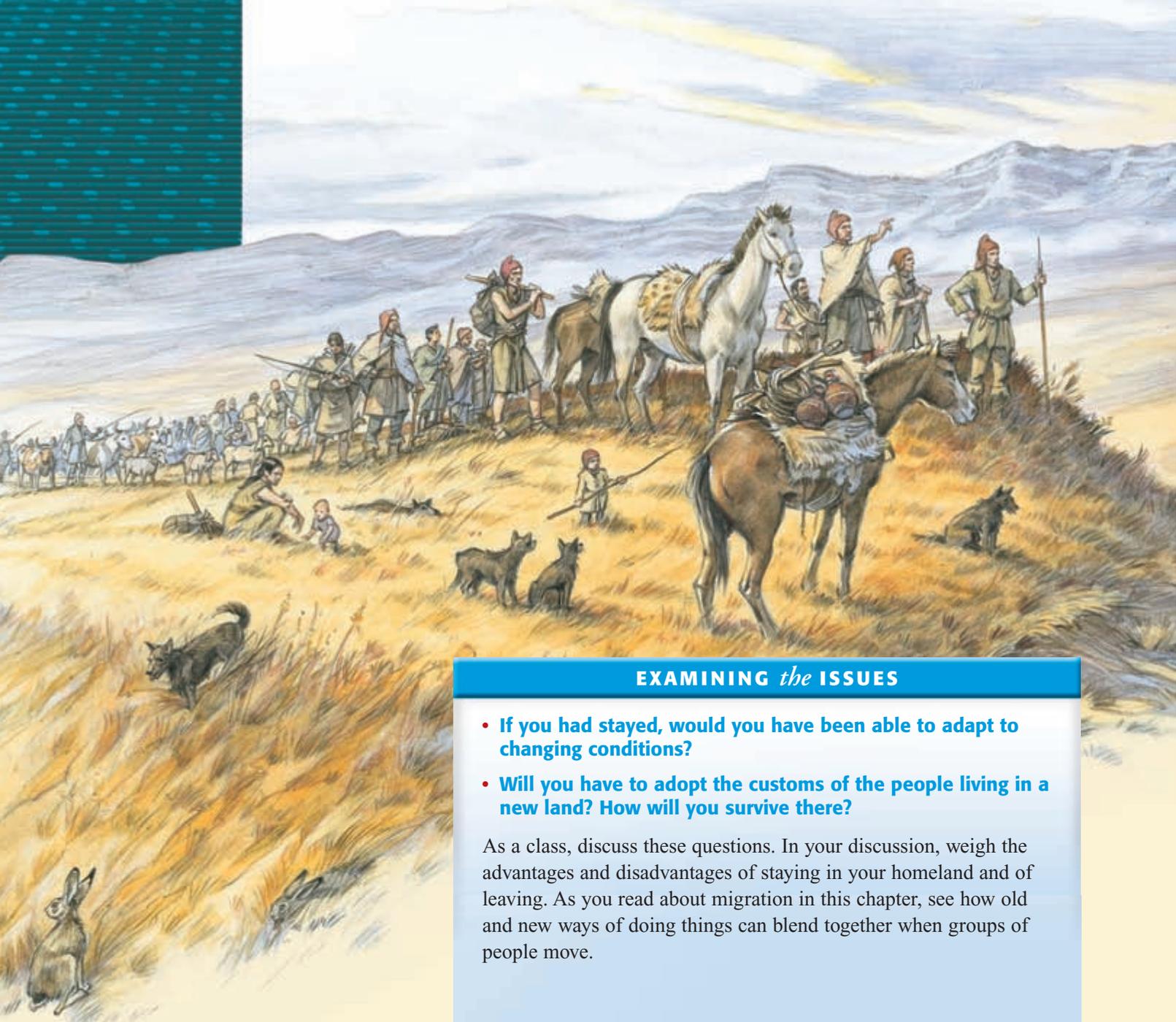
500 B.C. Zapotecs found Monte Albán. (Zapotec jade mask) 

250 B.C.

Why might you leave your homeland?

When your family, along with many others, decided to leave its homeland, you wondered whether you should go. It was hard to leave the land you love. Yet life there was becoming increasingly difficult. As your community grew larger, grazing for its many animals had become scarce. And lately, there had been rumors of coming invaders.

You have been walking and riding for days. Now you wonder whether you should have stayed. Will you find a new homeland, a better place in which to live? Will you survive the journey? Will you be welcome in a new land?



EXAMINING *the* ISSUES

- **If you had stayed, would you have been able to adapt to changing conditions?**
- **Will you have to adopt the customs of the people living in a new land? How will you survive there?**

As a class, discuss these questions. In your discussion, weigh the advantages and disadvantages of staying in your homeland and of leaving. As you read about migration in this chapter, see how old and new ways of doing things can blend together when groups of people move.

The Indo-Europeans

MAIN IDEA

INTERACTION WITH ENVIRONMENT Indo-Europeans migrated into Europe, India, and Southwest Asia and interacted with peoples living there.

WHY IT MATTERS NOW

Half the people living today speak languages that stem from the original Indo-European languages.

TERMS & NAMES

- Indo-Europeans
- steppes
- migration
- Hittites
- Anatolia
- Aryans
- Vedas
- Brahmin
- caste
- *Mahabharata*

SETTING THE STAGE In India and in Mesopotamia, civilizations first developed along lush river valleys. Even as large cities such as Mohenjo-Daro and Harappa declined, agriculture and small urban communities flourished. These wealthy river valleys attracted nomadic tribes. These peoples may have left their own homelands because of warfare or changes in the environment.

Indo-Europeans Migrate

The **Indo-Europeans** were a group of nomadic peoples who may have come from the **steppes**—dry grasslands that stretched north of the Caucasus (KAW•kuh•suhs). The Caucasus are the mountains between the Black and Caspian seas. These primarily pastoral people herded cattle, sheep, and goats. The Indo-Europeans also tamed horses and rode into battle in light, two-wheeled chariots. They lived in tribes that spoke forms of a language that we call Indo-European.

The Indo-European Language Family The languages of the Indo-Europeans were the ancestors of many of the modern languages of Europe, Southwest Asia, and South Asia. English, Spanish, Persian, and Hindi all trace their origins back to different forms of the original Indo-European language.

Historians can tell where Indo-European tribes settled by their languages. Some Slavic speakers moved north and west. Others, who spoke early Celtic, Germanic, and Italic languages, moved west through Europe. Speakers of Greek and Persian went south. The Aryans (AIR•ee•uhnz), who spoke an early form of Sanskrit, located in India.

Notice the similarities of words within the Indo-European family of languages.

Language Family Resemblances				
English	Sanskrit	Persian	Spanish	German
mother	mātár	muhdáhr	madre	Mutter
father	pitár	puhdáhr	padre	Vater
daughter	duhitár	dukhtáhr	hija	Tochter
new	návas	now	nuevo	neu
six	sát	shahsh	seis	sechs

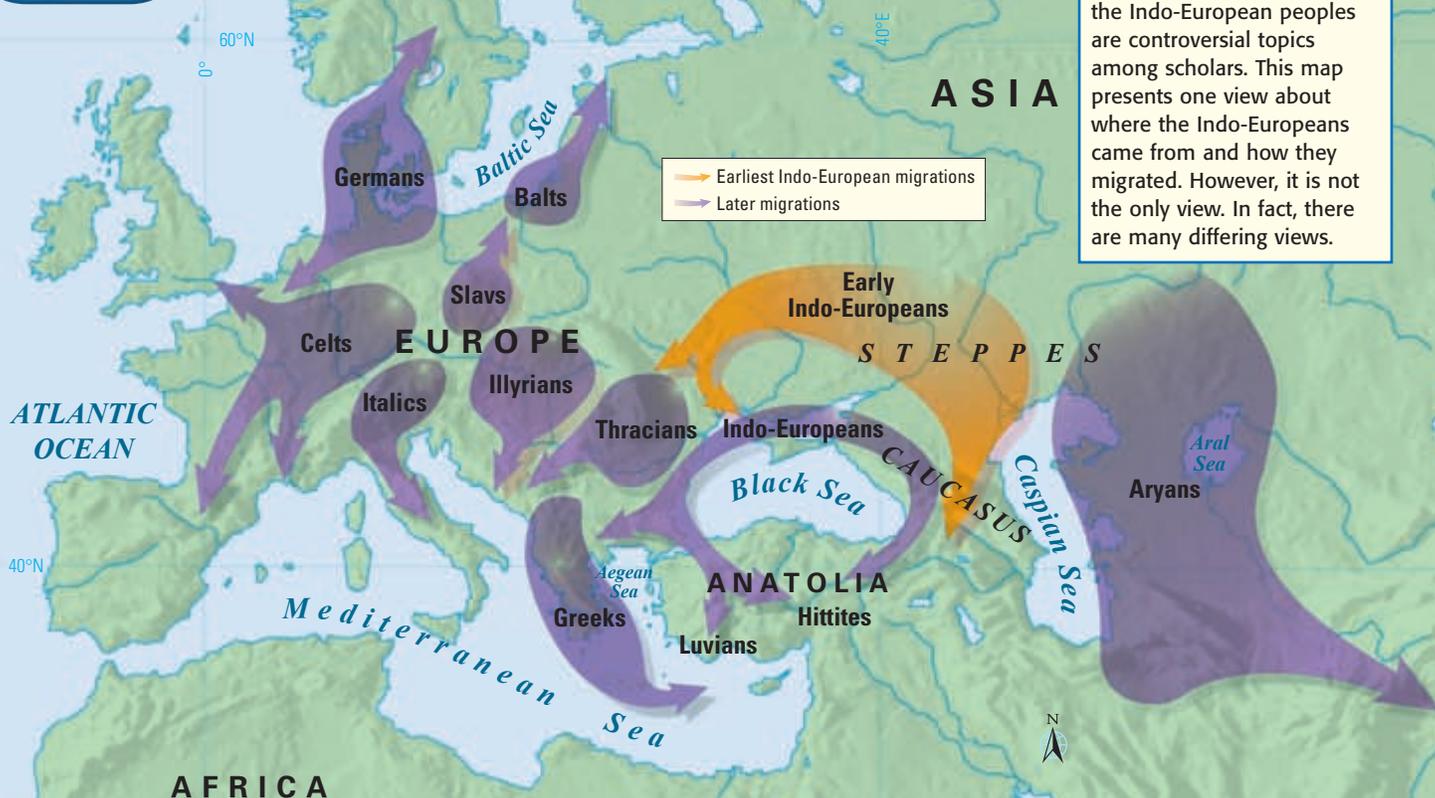


Use the graphic organizer online to take notes on some of the languages that stem from Indo-European.

Indo-European Migrations, Starting about 1700 B.C.

Diverse Views

The origins and migrations of the Indo-European peoples are controversial topics among scholars. This map presents one view about where the Indo-Europeans came from and how they migrated. However, it is not the only view. In fact, there are many differing views.



GEOGRAPHY SKILLBUILDER: Interpreting Maps

1. **Location** Which Indo-European people reached the farthest west?
2. **Movement** Describe the movement of the Indo-Europeans in their earliest migrations.

An Unexplained Migration No one knows why these people left their homelands in the steppes. Whatever the reason, Indo-European nomads began to migrate outward in all directions between 1700 and 1200 B.C. These **migrations**, movements of a people from one region to another, happened in waves over a long period of time.

The Hittite Empire

By about 2000 B.C., one group of Indo-European speakers, the **Hittites**, occupied **Anatolia** (AN•uh•TOH•lee•uh), also called Asia Minor. Anatolia is a huge peninsula in modern-day Turkey that juts out into the Black and Mediterranean seas. Anatolia is a high, rocky plateau, rich in timber and agriculture. Nearby mountains hold important mineral deposits. Separate Hittite city-states came together to form an empire there in about 1650 B.C. The city of Hattusas (hah•TOO•sahs) was its capital.

The Hittite empire went on to dominate Southwest Asia for 450 years. Hittites occupied Babylon, the chief city in the Tigris-Euphrates Valley, and struggled with Egypt for control of northern Syria. Neither the Hittites nor the Egyptians were able to get the upper hand. So, the two peoples ended their conflicts by signing a peace treaty. They each pledged to help the other fight off future invaders.

Hittites Adopt and Adapt The Hittites used their own Indo-European language with one another. However, for international use, they adopted Akkadian, the language of the Babylonians they had conquered. The Hittites borrowed ideas about literature, art, politics, and law from the Mesopotamians. The Hittites thus blended their own traditions with those of other, more advanced peoples.

Chariots and Iron Technology The Hittites excelled in the technology of war. They conquered an empire against Egyptian opposition—largely through their superior chariots and their iron weapons. The Hittite war chariot was light and easy to maneuver. The chariot had two wheels and a wooden frame covered with leather and was pulled by two or sometimes four horses. The Hittite chariot proved itself a superb fighting machine.

The Hittites used iron in their chariots, and they owed many of their military victories to the skill of their ironworkers. Ancient peoples had long known that iron was stronger than bronze. They also knew that it could hold a sharper edge. However, the process of purifying iron ore and working it into weapons and tools is complex.

Around 1500 B.C., the Hittites were the first in Southwest Asia to work with iron and harden it into weapons of war. The raw materials they needed—iron ore and wood to make charcoal—were easily available to them in the mountains of Anatolia. Knowledge of iron technology traveled widely with the Hittites—in both their trade and conquests. **A**

MAIN IDEA

Recognizing Effects

A How did environmental features in Anatolia help the Hittites advance technologically?



▲ This Hittite relief sculpture shows an archer in a chariot with his charioteer.

Despite its military might, the powerful Hittite empire fell quite suddenly around the year 1190 B.C. As part of a great wave of invasions, tribes attacked from the north and burned the Hittite capital city.

Aryans Transform India

Before 2000 B.C., the Hittites began establishing themselves in Anatolia. At the same time, some scholars believe, another Indo-European people, the **Aryans**, whose homeland was probably somewhere between the Caspian and Aral seas, crossed over the northwest mountain passes into the Indus River Valley of India. Other scholars believe the Aryans originated in India. There is no archaeological evidence to prove either hypothesis.

Though they left almost no archaeological record, their sacred literature, the **Vedas** (VAY•duhz), left a picture of Aryan life. The Vedas are four collections of prayers, magical spells, and instructions for performing rituals. The most important of the collections is the Rig Veda. The Rig Veda contains 1,028 hymns to Aryan gods. For many years, no written form of the Vedas existed. Instead, elders of one generation passed on this tradition orally to the next generation.

A Caste System Develops The Aryans fought their enemies, a people they called *dasas*. The Aryans differed from the *dasas* in many ways. Aryans were taller, lighter in skin color, and spoke a different language. Unlike the earlier inhabitants of the Indus Valley, the Aryans had not developed a writing system. They were also a pastoral people and counted their wealth in cows. The *dasas*, on the other hand, were town dwellers who lived in communities protected by walls.

Aryans were organized into four groups based on occupation: 1) **Brahmins** (priests), 2) warriors, 3) traders and landowners, and 4) peasants or traders. The group that an Aryan belonged to determined his or her role in society.

As the Aryans settled in India, they developed closer contacts with non-Aryans. To regulate those contacts, the Aryans made class restrictions more rigid. *Shudras*

> Analyzing Art

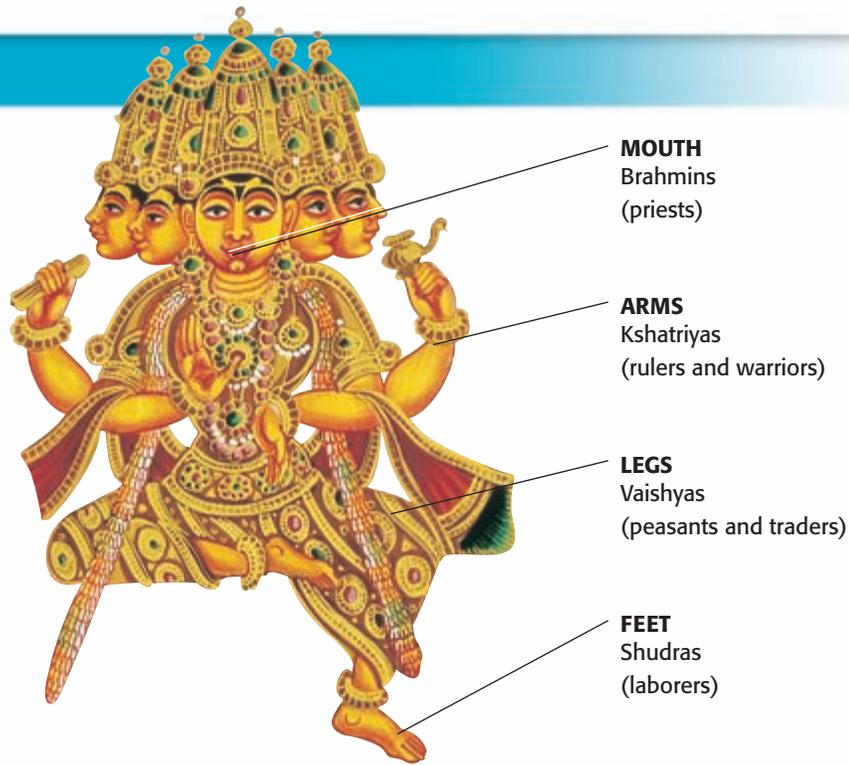
The Aryan Caste System

The four major castes emerged from Purusha (the first human being) shown at the right. Purusha is identified with the creator god Brahma. The Brahmins (priests) were his mouth, the warriors were his arms, the landowners and traders were his legs, and the laborers and peasants were his feet.

SKILLBUILDER:

Interpreting Visual Sources

Making Inferences Why might the caste of Brahmins (priests) have been associated with the mouth?



were laborers who did work that Aryans did not want to do. *Varna*, or skin color, was a distinguishing feature of this system. So the four major groups came to be known as the *varnas*. Later, in the 15th century A.D., explorers from Portugal encountered this social system and called these groups **castes** (kasts).

As time went on, the four basic castes gradually grew more complex—with hundreds of subdivisions. Classical texts state that caste should not be determined by birth. However, over time, some communities developed a system in which people were born into their caste. Their caste membership determined the work they did, whom they could marry, and the people with whom they could eat. Cleanliness and purity became all-important. Those considered the most impure because of their work (butchers, gravediggers, collectors of trash) lived outside the caste structure. They were known as “untouchables,” since even their touch endangered the ritual purity of others. **B**

Aryan Kingdoms Arise Over the next few centuries, Aryans extended their settlements east, along the Ganges and Yamuna river valleys. (See map on page 65.) Progress was slow because of difficulties clearing the jungle for farming. This task grew easier when iron came into use in India about 1000 B.C.

When the Aryans first arrived in India, chiefs were elected by the entire tribe. Around 1000 B.C., however, minor kings who wanted to set up territorial kingdoms arose among the Aryans. They struggled with one another for land and power. Out of this strife emerged a major kingdom: Magadha. Under a series of ambitious kings, Magadha began expanding in the sixth century B.C. by taking over surrounding kingdoms. By the second century B.C., Magadha had expanded south to occupy almost all of the Indian subcontinent.

One of the great epics of India, the **Mahabharata** (MAH•huh•BAH•ruh•tuh), reflects the struggles that took place in India as the Aryan kings worked to control Indian lands. One part of the *Mahabharata* is the *Bhagavad Gita*. It tells the story of a warrior prince about to go to war. His chariot driver is Krishna, a god in human form.

MAIN IDEA

Making Inferences

B How were the more physical forms of work viewed by Aryans?



◀ This painting of Krishna battling with a demon in the form of a snake was created in 1785.

One of the most famous incidents in Indian literature occurs when Krishna instructs the young warrior on the proper way to live, fight, and die:

PRIMARY SOURCE

He who thinks this Self [eternal spirit] to be a slayer, and he who thinks this Self to be slain, are both without discernment; the Soul slays not, neither is it slain. . . . But if you will not wage this lawful battle, then will you fail your own [caste] law and your honor, and incur sin. . . . The people will name you with dishonor; and to a man of fame dishonor is worse than death.

KRISHNA, speaking in the *Bhagavad Gita*

The violence and confusion of the time led many to speculate about the place of the gods and human beings in the world. As a result, religion in India gradually changed. New religions were born, which you will read about in Section 2.

SECTION

1

ASSESSMENT

TERMS & NAMES 1. For each term or name, write a sentence explaining its significance.
 • Indo-Europeans • steppes • migration • Hittites • Anatolia • Aryans • Vedas • Brahmin • caste • Mahabharata

USING YOUR NOTES

2. Why did so many languages originate from Indo-European roots?



MAIN IDEAS

3. What were some of the technological achievements of the Hittites?
4. What were some of the borrowings of the Hittites?
5. Where do some historians think the Aryans lived before they arrived in India?

CRITICAL THINKING & WRITING

6. **FORMING OPINIONS** What important contributions did the Aryans make to the culture and way of life in India in terms of religion, literature, and roles in society?
7. **DRAWING CONCLUSIONS** Look at the Hittite chariot on page-63. What made it an excellent fighting machine?
8. **COMPARING AND CONTRASTING** What were some of the differences between the Aryans and the *dasas* in India?
9. **WRITING ACTIVITY** **INTERACTION WITH ENVIRONMENT**
Write an **expository essay** in which you discuss environmental reasons why the Indo-Europeans might have migrated.

MULTIMEDIA ACTIVITY CREATING A CHART



Use the Internet to create a **chart** that shows how a word in English is expressed in other Indo-European languages. Choose languages other than the ones listed on page 61 in this section.

INTERNET KEYWORD
words in Indo-European languages



2

Hinduism and Buddhism Develop

MAIN IDEA	WHY IT MATTERS NOW	TERMS & NAMES
<p>RELIGIOUS AND ETHICAL SYSTEMS The beliefs of the Vedic Age developed into Hinduism and Buddhism.</p>	<p>Almost one-fifth of the world’s people today practice one of these two religions.</p>	<ul style="list-style-type: none"> • reincarnation • karma • Jainism • Siddhartha Gautama • enlightenment • nirvana

SETTING THE STAGE At first, the Aryans and non-Aryans followed their own forms of religion. Then as the two groups intermingled, the gods and forms of their religions also tended to blend together. This blending resulted in the worship of thousands of gods. Different ways of living and different beliefs made life more complex for both groups. This complexity led some people to question the world and their place in it. They even questioned the enormous wealth and power held by the Brahmin priests. Out of this turmoil, new religious ideas arose that have continued to influence millions of people today.

Hinduism Evolves Over Centuries



Use the graphic organizer online to take notes on the beliefs and practices of Buddhism and Hinduism.

Hinduism is a collection of religious beliefs that developed slowly over a long period of time. Some aspects of the religion can be traced back to ancient times. In a Hindu marriage today, for example, the bride and groom marry in the presence of the sacred fire as they did centuries ago. The faithful recite daily verses from the Vedas.

From time to time, scholars have tried to organize the many popular cults, gods, and traditions into one grand system of belief. However, Hinduism—unlike religions such as Buddhism, Christianity, or Islam—cannot be traced back to one founder with a single set of ideas.

Origins and Beliefs Hindus share a common worldview. They see religion as a way of liberating the soul from the illusions, disappointments, and mistakes of everyday existence. Sometime between 750 and 550 B.C., Hindu teachers tried to interpret and explain the hidden meaning of the Vedic hymns. The teachers’ comments were later written down and became known as the Upanishads (oo•PAHN•ih•shahdz).

The Upanishads are written as dialogues, or discussions, between a student and a teacher. In the course of the dialogues, the two explore how a person can achieve liberation from desires and suffering. This is described as *moksha* (MOHK•shah), a state of perfect understanding of all things. The teacher distinguishes between atman, the individual soul of a living being, and Brahman, the world soul that contains and unites all atmans. Here is how one teacher explains the unifying spirit of Brahman:

PRIMARY SOURCE

Thou art woman, Thou art man, Thou art the lad and the maiden too. Thou art the old man tottering on his staff: Once born thou comest to be, thy face turned every way! A dark-blue moth art Thou, green [parrot] with red eyes. Pregnant with lightning—seasons, seas: Thyself beginningless, all things dost Thou pervade. From Thee all worlds were born.

Svetasvatara Upanishad. IV. 3–4

When a person understands the relationship between atman and Brahman, that person achieves perfect understanding (*moksha*) and a release from life in this world. This understanding does not usually come in one lifetime. By the process of **reincarnation** (rebirth), an individual soul or spirit is born again and again until *moksha* is achieved. A soul's **karma**—good or bad deeds—follows from one reincarnation to another. Karma influences specific life circumstances, such as the caste one is born into, one's state of health, wealth or poverty, and so on.

Hinduism Changes and Develops Hinduism has gone through many changes over the last 2,500 years. The world soul, Brahman, was sometimes seen as having the personalities of three gods: Brahma, the creator; Vishnu, the protector; and Shiva, the destroyer. Vishnu also took on many forms or personalities, for example, as Krishna, the divine cowherder, and as Rama, the perfect king. Over the centuries, Brahma gradually faded into the background, while the many forms of Devi, a great Mother Goddess, grew in importance.

Hindus today are free to choose the deity they worship or to choose none at all. Most, however, follow a family tradition that may go back centuries. They are also free to choose among three different paths for achieving *moksha*. These are the path of right thinking, the path of right action, or the path of religious devotion. **A**

Hinduism and Society Hindu ideas about karma and reincarnation strengthened the caste system. If a person was born as an upper-caste male—a Brahmin, warrior, or merchant—his good fortune was said to come from good karma earned in a former life. However, a person who was born as a female, a laborer, or an untouchable might be getting the results of bad deeds in a former life. With some exceptions, only men of the top three varnas could hope to achieve *moksha* in their present life. The laws of karma worked with the same certainty as the world's other natural laws. Good karma brought good fortune and bad karma resulted in bad fortune.

Together, the beliefs of Hinduism and its caste structure dominated every aspect of a person's life. These beliefs determined what one could eat and the way in which one ate it, personal cleanliness, the people one could associate with, how one dressed, and so on. Today, even in the most ordinary activities of daily life, Hindus turn to their religion for guidance.

New Religions Arise The same period of speculation reflected in the Upanishads also led to the rise of two other religions: Jainism (JY•nihz•uhm) and Buddhism. Mahavira, the founder of **Jainism**, was born about 599 B.C. and died in 527 B.C. Mahavira believed that everything in the universe has a soul and so should not be

MAIN IDEA

Making Inferences

A How might the lack of a single founder result in Hinduism changing more over time than other religions?

▼ Vishnu grew to become a major Hindu god. He is seen here as the whole Universe in all its variety. He is blue, the color of infinity.



harmful. Jain monks carry the doctrine of nonviolence to its logical conclusion. They sweep ants off their path and wear gauze masks over their mouths to avoid breathing in an insect accidentally. In keeping with this nonviolence, followers of Jainism looked for occupations that would not harm any creature. So they have a tradition of working in trade and commerce. **B**

Because of their business activities, Jains today make up one of the wealthiest communities in India. Jains have traditionally preached tolerance of all religions. As a result, they have made few efforts to convert followers of other faiths. Because of this tolerance, Jains have not sent out missionaries. So, almost all of the nearly five million Jains in the world today live in India.

MAIN IDEA

Synthesizing

B How far might the Jain respect for life extend?

The Buddha Seeks Enlightenment

Buddhism developed out of the same period of religious questioning that shaped modern Hinduism and Jainism. The founder of Buddhism, **Siddhartha Gautama** (sihd•DAHR•tuh GOW•tuh•muh), was born into a noble family that lived in Kapilavastu, in the foothills of the Himalayas in Nepal. According to Buddhist legend, the baby exhibited the marks of a great man. A prophecy indicated that if the child stayed at home he was destined to become a world ruler. If the child left home, however, he would become a universal spiritual leader. To make sure the boy would be a great king and world ruler, his father isolated him in his palace. Separated from the world, Siddhartha married and had a son.

Siddhartha's Quest Siddhartha never ceased thinking about the world that lay outside, which he had never seen. When he was 29, he ventured outside the palace four times. First he saw an old man, next a sick man, then a corpse, and finally a wandering holy man who seemed at peace with himself. Siddhartha understood these events to mean that every living thing experiences old age, sickness, and death and that only a religious life offers a refuge from this inevitable suffering. Siddhartha decided to spend his life searching for religious truth and an end to life's suffering. So, soon after learning of his son's birth, he left the palace.

Siddhartha wandered through the forests of India for six years seeking **enlightenment**, or wisdom. He tried many ways of reaching an enlightened state. He first debated with other religious seekers. Then he fasted, eating only six grains of rice a day. Yet none of these methods brought him to the truth, and he continued to suffer. Finally, he sat in meditation under a large fig tree. After 49 days of meditation, he achieved an understanding of the cause of suffering in this world. From then on, he was known as the Buddha, meaning "the enlightened one."

Origins and Beliefs The Buddha preached his first sermon to five companions who had accompanied him on his wanderings. That first sermon became a landmark in the history of the world's religions. In it, he laid out the four main ideas that he had come to understand in his enlightenment. He called those ideas the Four Noble Truths:

History Makers



Siddhartha Gautama c. 563–483 B.C.

According to Buddhist tradition, Siddhartha Gautama's mother had dreamt of a beautiful elephant that was bright as silver. When asked to interpret the dream, Brahmin priests declared that the child to be born would either be a great monarch or a Buddha (an enlightened one).

Tradition also relates that at Gautama's birth, he exhibited the signs of a child destined for greatness. There were 32 such signs, including golden-tinged skin, webbed fingers and toes, a knob on the top of his skull, a long tongue, a tuft of hair between his eyebrows, and a thousand-spoked wheel on each foot. Some images of the Buddha display these traits.

Vocabulary

fasted: ate very little.

The Four Noble Truths	
First Noble Truth	Life is filled with suffering and sorrow.
Second Noble Truth	The cause of all suffering is people's selfish desire for the temporary pleasures of this world.
Third Noble Truth	The way to end all suffering is to end all desires.
Fourth Noble Truth	The way to overcome such desires and attain enlightenment is to follow the Eightfold Path, which is called the Middle Way between desires and self-denial.

The Eightfold Path, a guide to behavior, was like a staircase. For the Buddha, those who were seeking enlightenment had to master one step at a time. Most often, this mastery would occur over many lifetimes. Here is how he described the Middle Way and its Eightfold Path:

PRIMARY SOURCE

What is the Middle Way? . . . It is the Noble Eightfold Path—Right Views, Right Resolve, Right Speech, Right Conduct, Right Livelihood, Right Effort, Right Mindfulness, and Right Concentration. This is the Middle Way.

BUDDHA, from *Samyutta Nikaya*

By following the Eightfold Path, anyone could reach **nirvana**, the Buddha's word for release from selfishness and pain.

As in Hinduism, the Buddha accepted the idea of reincarnation. He also accepted a cyclical, or repetitive, view of history, where the world is created and destroyed over and over again. However, the Buddha rejected the many gods of Hinduism. Instead, he taught a way of enlightenment. Like many of his time, the Buddha reacted against the privileges of the Brahmin priests, and thus he rejected the caste system. The final goals of both religions—*moksha* for Hindus and *nirvana* for Buddhists—are similar. Both involve a perfect state of understanding and a break from the chain of reincarnations. 

MAIN IDEA

Comparing

 In what ways are Buddhism and Hinduism similar?



▼ Buddhist tradition says that just before he died, the Buddha lay on his right side between two trees. This reclining Buddha is made of bronze.



▲ Buddhist monks view a temple at Angkor Wat in Cambodia.

The Religious Community The five disciples who heard the Buddha’s first sermon were the first monks admitted to the *sangha*, or Buddhist religious order. At first, the *sangha* was a community of Buddhist monks and nuns. However, *sangha* eventually referred to the entire religious community. It included Buddhist laity (those who hadn’t devoted their entire life to religion). The religious community, together with the Buddha and the *dharma* (Buddhist doctrine or teachings), make up the “Three Jewels” of Buddhism.

Buddhism and Society Because of his rejection of the caste system, many of the Buddha’s early followers included laborers and craftspeople. He also gained a large following in northeast India, where the Aryans had less influence. The Buddha reluctantly admitted women to religious orders. He feared, however, that women’s presence would distract men from their religious duties.

Monks and nuns took vows (solemn promises) to live a life of poverty, to be nonviolent, and not to marry. They wandered throughout India spreading the Buddha’s teachings. Missionaries carried only a begging bowl to receive daily charity offerings from people. During the rainy season, they retreated to caves high up in the hillsides. Gradually, these seasonal retreats became permanent monasteries—some for men, others for women. One monastery, Nalanda, developed into a great university that also attracted non-Buddhists.

The teachings of the Buddha were written down shortly after his death. Buddhist sacred literature also includes commentaries, rules about monastic life, manuals on how to meditate, and legends about the Buddha’s previous reincarnations (the *Jatakas*). This sacred literature was first written down in the first century B.C.

Buddhism in India During the centuries following the Buddha’s death, missionaries were able to spread his faith over large parts of Asia. Buddhist missionaries went to Sri Lanka and Southeast Asia in the third century B.C. Buddhist ideas also traveled along Central Asian trade routes to China. However, Buddhism never gained a significant foothold in India, the country of its origin. Several theories exist about Buddhism’s gradual disappearance in India. One theory states that

Vocabulary
pilgrimages: travels to holy places.

Hinduism simply absorbed Buddhism. The two religions constantly influenced each other. Over time, the Buddha came to be identified by Hindus as one of the ten incarnations (reappearances on earth) of the god Vishnu. Hindus, therefore, felt no need to convert to Buddhism.

Nonetheless, despite the small number of Buddhists in India, the region has always been an important place of pilgrimages for Buddhists. Today, as they have for centuries, Buddhist pilgrims flock to visit spots associated with the Buddha's life. These sites include his birthplace at Kapilavastu, the fig tree near Gaya, and the site of his first sermon near Varanasi. Buddhists also visit the *stupas*, or sacred mounds, that are said to contain his relics. The pilgrims circle around the sacred object or sanctuary, moving in a clockwise direction. They also lie face down on the ground as a sign of humility and leave flowers. These three actions are important rituals in Buddhist worship.

Connect to Today

Buddhism in the West

Throughout the 20th century, large numbers of Asians have immigrated to the West, particularly to North America. Many of them brought Buddhism with them. Today, Buddhist temples are a common feature of many large cities in the West.

Since the 1950s, many non-Asians who were dissatisfied with the religions of the West have turned to Buddhism for insight into life's meaning. Today, Buddhism can claim about one million Asian and non-Asian believers in North America.

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INTERNET ACTIVITY Go online to create a bar graph to show the number of Buddhists in some American cities.

 hmsocialstudies.com

INTERACTIVE MAP

Explore the spread of Buddhism in Asia.

Trade and the Spread of Buddhism As important as missionaries were to the spread of Buddhism, traders played an even more crucial role in this process. Along with their products, traders carried Buddhism beyond India to Sri Lanka. Buddhist religion was also brought southeast along trade routes to Burma, Thailand, and the island of Sumatra. Likewise, Buddhism followed the Central Asian trade routes, called the Silk Roads, all the way to China. From China, Buddhism spread to Korea—and from Korea to Japan. The movement of trade thus succeeded in making Buddhism the most widespread religion of East Asia. Throughout human history, trade has been a powerful force for the spread of ideas. Just as trade spread Buddhism in East Asia, it helped spread cultural influences in another major region of the world: the Mediterranean basin, as you will learn in Section 3.

SECTION

2

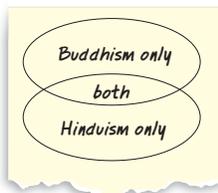
ASSESSMENT

TERMS & NAMES 1. For each term or name, write a sentence explaining its significance.

- reincarnation
- karma
- Jainism
- Siddhartha Gautama
- enlightenment
- nirvana

USING YOUR NOTES

2. What are the terms for enlightenment in each religion?



MAIN IDEAS

3. What are the Four Noble Truths of Buddhism?
4. How has Hinduism influenced social structure in India?
5. How did Buddhism spread?

CRITICAL THINKING & WRITING

6. **MAKING INFERENCES** How might the belief in reincarnation provide a form of social control?
7. **COMPARING** How are the Vedas and the Upanishads similar?
8. **MAKING INFERENCES** Look at the image of Vishnu on page 67. Why might blue represent infinity?
9. **WRITING ACTIVITY** **RELIGIOUS SYSTEMS** How did the experiences of Siddhartha Gautama influence his religious and ethical beliefs? Write a brief **biography** of his life. Include family background, accomplishments, and a list of his beliefs.

CONNECT TO TODAY CREATING A MAP

Where in the world is Hinduism the main religion? What about Buddhism? Copy an **outline map** of the world. Then color in those regions of the world where Buddhism and Hinduism are the dominant religions. Use a different color for each religion.



3

Seafaring Traders

MAIN IDEA

ECONOMICS Trading societies extended the development of civilizations beyond the Fertile Crescent region.

WHY IT MATTERS NOW

Traders spread knowledge of reading and writing, including an ancient form of the alphabet that we use today.

TERMS & NAMES

- Minoans
- Aegean Sea
- Knossos
- King Minos
- Phoenicians

SETTING THE STAGE Buddhism spread to Southeast Asia and to East Asia mainly through Buddhist traders. In the Mediterranean, the same process took place: traders in the region carried many new ideas from one society to another. They carried new ways of writing, of governing, and of worshiping their gods.

Minoans Trade in the Mediterranean



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TAKING NOTES

Use the graphic organizer online to take notes on the accomplishments of the Minoans and Phoenicians.

A powerful seafaring people, the **Minoans** (mih•NOH•uhnz) dominated trade in the eastern Mediterranean from about 2000 to 1400 B.C. They lived on Crete, a large island on the southern edge of the **Aegean Sea** (ee•JEE•uhn). The Minoans produced some of the finest painted pottery of the time. They traded that pottery, along with swords, figurines, and vessels of precious metals, over a large area.

Along with their goods, Minoans also exported their art and culture. These included a unique architecture, burial customs, and religious rituals. Minoan culture had a major influence on Greece, for example. Trading turned Crete into a “stepping stone” for cultural exchange throughout the Mediterranean world.

Unearthing a Brilliant Civilization Archaeologists in the late 19th and early 20th centuries excavated **Knossos**, the Minoan capital city. There, they found the remains of an advanced and thriving culture. It must have been a peaceful one as well, since Minoan cities did not seem to need fortifications to protect them. The archaeologists named the civilization they found in Crete *Minoa* after **King Minos**



(MY•nuhs). According to legend, Minos was a king who owned a half-human, half-bull monster called the Minotaur (MIHN•uh•TAWR). He kept the monster locked inside a labyrinth, a complicated maze from which no one could escape.

The excavation of Knossos and its painted walls produced much information about Minoans. The wall paintings, as well as the official seals and vases, show the Minoans as graceful, athletic people who loved nature and beautiful objects. They also enjoyed sports such as boxing, wrestling, and bull leaping.

Many Minoan artworks depict women and their role in religious ceremonies. The art suggests that women held a higher rank than in most neighboring cultures. A great Mother Earth Goddess seems to have ruled over the other gods of Crete. Also, priestesses took charge of some shrines, aided by male assistants.

Social History

Bull Leapers of Knossos

The wall painting to the right captures the death-defying jump of a Minoan bull leaper in mid-flight. Many works of Minoan art show young men performing incredible acrobatic leaps over the horns of angry bulls. In one case, the gymnast jumps over the bull's horns, makes a somersault off its back, and lands behind its tail.

In another gymnastic feat, some team members hang on to the horns of a bull, using their bodies to cushion its horns and to force its head low, while another team member jumps over its back.

What was the reason for this bull leaping? Was it a sport? Just a "fun" activity? An initiation for young warriors? Or a religious ritual? Most likely it was all of these things.



The Minoans sacrificed bulls and other animals to their gods. In at least one case, a young man was sacrificed. Excavation of a mountain temple revealed the bones of a 17-year-old boy on an altar, along with the skeletons of three priests. The positions of the skeletons suggest that the priests carried out the human sacrifice just before the building collapsed.

Minoan Culture's Mysterious End The Minoan civilization finally ended about 1200 B.C. The reasons for its end are unclear. Could it have been the result of some natural disaster? Did the island become overpopulated? Or was it overrun by invaders?

The civilization had withstood previous disasters. In about 1700 B.C., a great disaster, perhaps an earthquake, destroyed most Minoan towns and cities. The Minoans rebuilt the cities with equal richness. Then in 1470 B.C. a series of earthquakes rocked Crete. The quakes were followed by a violent volcanic eruption on the neighboring island of Thera. Imagine the shaking of the earth, the fiery volcanic blast, then a huge tidal wave, and finally a rain of white volcanic ash.

The disaster of 1470 B.C. was a blow from which the Minoans never fully recovered. This time, the Minoans had trouble rebuilding their cities. Nonetheless, Minoan civilization did linger on for almost 300 years. After that, invaders from Greece may have taken advantage of their weakened condition to destroy them. Some Minoans fled to the mountains to escape the ruin of the kingdom. Crete's influence as a major sea power and cultural force was over. **A**

MAIN IDEA

Summarizing

A What adjectives might describe Minoan civilization?

Phoenicians Spread Trade and Civilization

About 1100 B.C., after Crete's decline, the most powerful traders along the Mediterranean were the **Phoenicians** (fih•NIHSH•uhnz). Phoenicia was mainly the area now known as Lebanon. Phoenicians never united into a country. Instead, they founded a number of wealthy city-states around the Mediterranean that sometimes competed with one another. The first cities in Phoenicia, such as Byblos, Tyre, and Sidon, were important trading centers.

The Phoenicians were remarkable shipbuilders and seafarers. They were the first Mediterranean people to venture beyond the Strait of Gibraltar. Some scholars believe that the Phoenicians traded for tin with inhabitants of the southern coast of Britain. Some evidence exists for an even more remarkable feat—sailing around the continent of Africa by way of the Red Sea and back through the Strait of Gibraltar. Such a trip was not repeated again for 2,000 years. The Greek historian Herodotus (hĭh•RAHD•uh•tuhs) relates the feat:

PRIMARY SOURCE

The Phoenicians set out from the Red Sea and sailed the southern sea [the Indian Ocean]; whenever autumn came they would put in and sow the land, to whatever part of Libya [Africa] they might come, and there await the harvest; then, having gathered in the crop, they sailed on, so that after two years had passed, it was in the third that they rounded the Pillars of Heracles [Strait of Gibraltar] and came to Egypt. There they said (what some may believe, though I do not) that in sailing round Libya they had the sun on their right hand [in reverse position].

HERODOTUS, in *History*, Book IV (5th century B.C.)

Commercial Outposts Around the Mediterranean

The Phoenicians' most important city-states in the eastern Mediterranean were Sidon and Tyre, both known for their production of red-purple dye, and Byblos, a trading center for papyrus. (See map on page 59.) Phoenicians built colonies along the northern coast of Africa and the coasts of Sicily, Sardinia, and Spain. The colonies were about 30 miles apart—about the distance a Phoenician ship could sail in a day. The greatest Phoenician colony was at Carthage (KAHR•thĭhj), in North Africa. Settlers from Tyre founded Carthage in about 814 B.C.

The Phoenicians traded goods they got from other lands—wine, weapons, precious metals, ivory, and slaves. They also were known as superb craftspeople who worked in wood, metal, glass, and ivory. Their red-purple dye was produced from the murex, a kind of snail that lived in the waters off Sidon and Tyre. One snail, when left to rot, produced just a drop or two of a liquid of a deep red-purple color. Some 60,000 snails were needed to produce one pound of dye, which only royalty could afford.

Phoenicia's Great Legacy: The Alphabet As merchants, the Phoenicians needed a way of recording transactions clearly and quickly. So the Phoenicians developed a writing system that used symbols to represent sounds. The Phoenician system was phonetic—that is, one sign was used for one sound. In fact, the word *alphabet* comes directly from the first two letters of the Phoenician alphabet: *aleph* and *beth*. As they traveled around the Mediterranean, the Phoenicians introduced this writing system to their trading partners. The Greeks, for example, adopted the Phoenician alphabet and changed the form of some of the letters.

Alphabets—Ancient and Modern		
Phoenician	Greek	English
𐤀	A	A
𐤁	B	B
𐤂	Γ	C
𐤃	Δ	D
𐤄	E	E
𐤅		F
𐤆		G
𐤇	Z	
𐤈	H	H
𐤉	Θ	
𐤊	I	I
𐤋	K	J
𐤌	Λ	K
𐤍	M	L
𐤎	N	M
𐤏	Ξ	N
𐤐	O	O
𐤑	Π	P
𐤒		Q
𐤓	P	R
𐤔	Σ	S
𐤕	T	T
𐤖	Υ	U
𐤗	Φ	
		V
	X	W
	Ψ	X
𐤘		Y
𐤙	Ω	Z

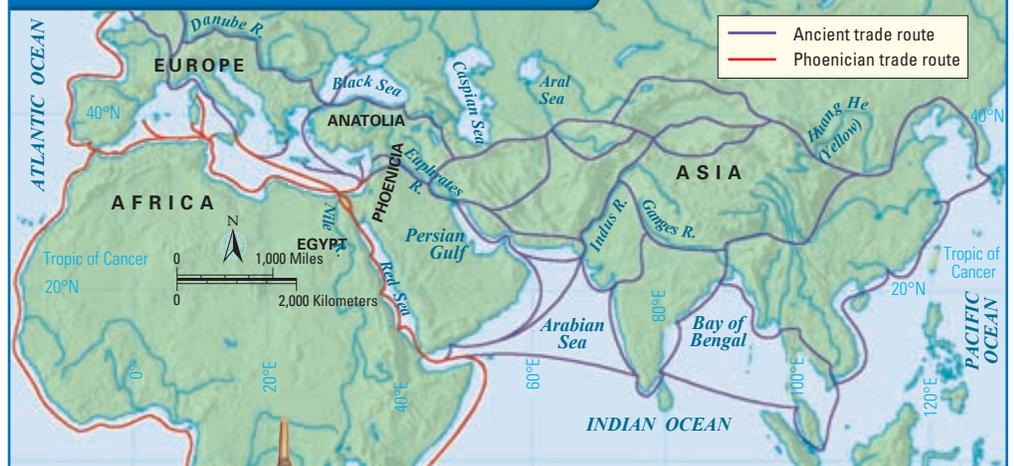
SKILLBUILDER: Interpreting Charts

- Comparing** Which letters show the most similarity across the three alphabets?
- Making Inferences** Why might one language have fewer letters in its alphabet than another?

Phoenician Trade

Phoenicia was located in a great spot for trade because it lay along well-traveled routes between Egypt and Asia. However, the Phoenicians did more than just trade with merchants who happened to pass through their region. The Phoenicians became expert sailors and went looking for opportunities to make money.

The Patterns of Ancient Trade, 2000–250 B.C.



Merchant Ships

Phoenician sailors developed the round boat, a ship that was very wide and had a rounded bottom. This shape created a large space for cargo.

Phoenician ships often were decorated with horse heads.

This wicker fence runs around the outer edge of the upper deck.

Foreigners wanted cedar, an aromatic wood that grew in Phoenicia.

These pottery jars with pointed bottoms are called amphorae. They held oil or wine.

The most desired Phoenician trade item was dyed red-purple cloth.

SKILLBUILDER: Interpreting Visuals

- 1. Drawing Conclusions** Why would traders find it helpful to tow the cedar logs instead of storing them inside the ship?
- 2. Making Inferences** What purpose does the wicker fence serve?



▲ Phoenician inscription from a sarcophagus

Few examples of Phoenician writing exist. Most writings were on papyrus, which crumbled over time. However, the Phoenician contribution to the world was enormous. With a simplified alphabet, learning was now accessible to more people.

Phoenician trade was upset when their eastern cities were captured by Assyrians in 842 B.C. However, these defeats encouraged exiles to set up city-states like Carthage to the west. The Phoenician homeland later came under the control of the Babylonians and of the Persian empire of King Cyrus I. One of their most lasting contributions remains the spread of the alphabet.

Ancient Trade Routes

Trading in ancient times also connected the Mediterranean Sea with other centers of world commerce, such as South and East Asia. Several land routes crossed Central Asia and connected to India through Afghanistan. Two sea routes began by crossing the Arabian Sea to ports on the Persian Gulf and the Red Sea. From there, traders either went overland to Egypt, Syria, and Mediterranean countries, or they continued to sail up the Red Sea. To cross the Arabian Sea, sailors learned to make use of the monsoon winds. These winds blow from the southwest during the hot months and from the northeast during the cool season.

To widen the variety of their exports, Indian traders used other monsoon winds to travel to Southeast Asia and Indonesia. Once there, they obtained spices and other products not native to India.

Though traveling was difficult in ancient times, trading networks like those of the Phoenicians ensured the exchange of products and information. Along with their goods, traders carried ideas, religious beliefs, art, and ways of living. They helped with the process of cultural diffusion as well as with moving merchandise.

Phoenician traders made crucial contributions to world civilization. At the same time, another eastern Mediterranean people, the Jews, were creating a religious tradition that has lasted more than 3,000 years. This is discussed in Section 4.

Vocabulary

monsoon: a wind that affects climate by changing direction in certain seasons.

SECTION

3

ASSESSMENT

TERMS & NAMES 1. For each term or name, write a sentence explaining its significance.

- Minoans
- Aegean Sea
- Knossos
- King Minos
- Phoenicians

USING YOUR NOTES

2. Which of these achievements do you think was the most important? Why?

Minoan	Phoenician
1.	1.
2.	2.
3.	3.

MAIN IDEAS

3. What did the excavations at Knossos reveal about Minoan culture?
4. Where did the Phoenicians settle and trade?
5. Why did the Phoenicians develop a writing system?

CRITICAL THINKING & WRITING

6. **MAKING INFERENCES** What might have caused the collapse of Minoan culture?
7. **COMPARING** What were some similarities between the Minoans and Phoenicians in terms of trade?
8. **ANALYZING PRIMARY SOURCES** Go back to Herodotus' account of a voyage around Africa on page 74. What words show his doubt? Why was he doubtful?
9. **WRITING ACTIVITY** **ECONOMICS** The Phoenicians founded many city-states. These city-states often competed. Do you think it would have made more sense to cooperate? Write a brief **essay** explaining your opinion.

CONNECT TO TODAY MAKING A DATABASE

How might a commonly or widely accepted language make business and trade easier to transact? Make a **database** of bulleted points showing the ways a widely known language (such as English) would make it easier to conduct business around the world.

The Origins of Judaism

MAIN IDEA

RELIGIOUS AND ETHICAL SYSTEMS The Israelites maintained monotheistic religious beliefs that were unique in the ancient world.

WHY IT MATTERS NOW

From this tradition, Judaism, the religion of the Jews, evolved. Judaism is one of the world's major religions.

TERMS & NAMES

- Canaan
- Torah
- Abraham
- monotheism
- covenant
- Moses
- Israel
- Judah
- tribute

SETTING THE STAGE The Phoenicians lived in a region at the eastern end of the Mediterranean Sea that was called **Canaan** (KAY•nuhn). The Phoenicians were not the only ancient people to live in the area; for example, the Philistines were another people who lived in the region. Canaan was the ancient home of the Israelites, later called the Jews, in this area. Their history, legends, and moral laws are a major influence on Western culture, and they began a tradition also shared by Christianity and Islam.

The Search for a Promised Land

Ancient Canaan's location made it a cultural crossroads of the ancient world. By land, it connected Asia and Africa and two great empires, both eager to expand. To the east lay Assyria and Babylonia and to the west Egypt. Its seaports opened onto the two most important waterways of that time: the Mediterranean and the Red seas. The Israelites settled in Canaan, which lay between the Jordan River and the Mediterranean Sea. In fact, the Israelites often used the word *Canaan* to refer to all of ancient Canaan. According to the Hebrew Bible, Canaan was the land God had promised to the Israelites.

From Ur to Egypt Most of what we know about the early history of the Israelites is contained in the first five books of the Hebrew Bible. Jews call these books the **Torah** (TAWR•uh) and consider them the most sacred writings in their tradition. Christians respect them as part of the Old Testament.

In the Torah, God chose **Abraham** (AY•bruh•HAM) to be the “father” of the Jewish people. God's words to Abraham expressed a promise of land and a pledge:

PRIMARY SOURCE

The LORD said to Abram, "Go forth from your native land and from your father's house to the land that I will show you. I will make of you a great nation, and I will bless you; I will make your name great; and you shall be a blessing."

Genesis 12:1–2 (Hebrew Bible)

Abraham was a shepherd who lived in the city of Ur, in Mesopotamia. The Book of Genesis tells that God commanded him to move his people to Canaan. Around 1800 B.C., Abraham, his family, and their herds made their way to Canaan. Then, around 1650 B.C., the descendants of Abraham moved to Egypt.



Use the graphic organizer online to take notes on the major Jewish leaders.



▲ In this 14th-century painting, Moses holds a scroll inscribed with the story of God's appearance to Moses and commandment to lead the Israelites out of Egypt.

The God of Abraham The Hebrew Bible tells how Abraham and his family migrated for many years from Mesopotamia to Canaan to Egypt and back to Canaan. All the while, God watched over them. Gods worshiped by other people were often local, and were associated with a specific place.

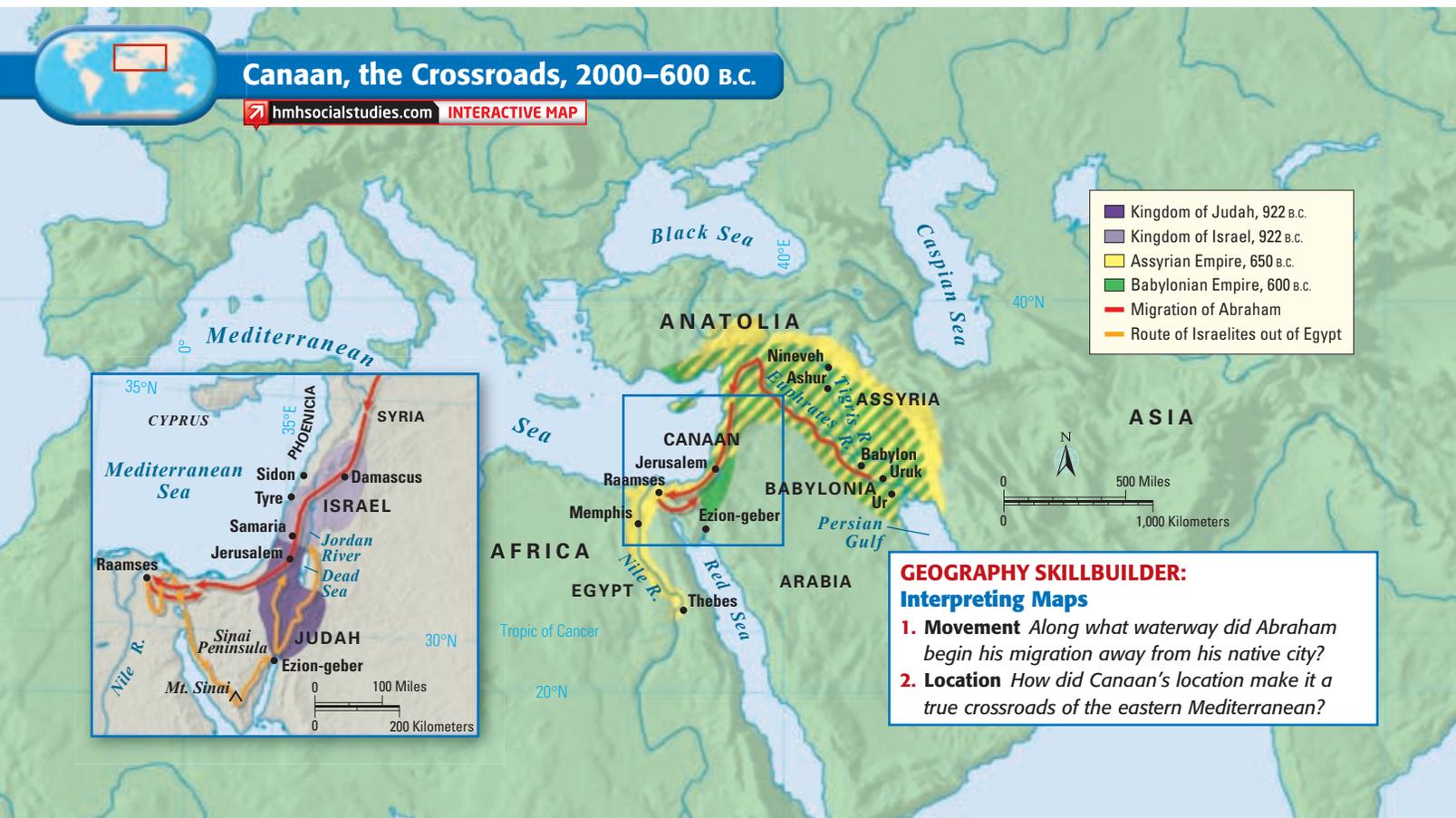
Unlike the other groups around them, who were polytheists, the Israelites were monotheists. They prayed to only one God. **Monotheism** (MAHN•uh•thee•IHZ•uhm), a belief in a single god, comes from the Greek words *mono*, meaning “one,” and *theism*, meaning “god-worship.” The Israelites proclaimed that there was only one God. In their eyes, God had power over all peoples, everywhere. To the Israelites, God was not a physical being, and no physical images were to be made of him.

The Israelites asked God for protection from their enemies, just as other people prayed to their gods to defend them. According to the Hebrew Bible, God looked after the Israelites not so much because of ritual ceremonies and sacrifices but because Abraham had promised to obey him. In return, God had promised to protect Abraham and his descendants. This mutual promise between God and the founder of the Jewish people is called a **covenant** (KUH•uh•nuhnt).

Moses and the Exodus

The Hebrew Bible says the Israelites migrated to Egypt because of a drought and threat of a famine. At first, the Israelites were given places of honor in the Egyptian kingdom. Later, however, they were forced into slavery.

“Let My People Go” The Israelites fled Egypt—perhaps between 1300 and 1200 B.C. Jews call this event “the Exodus,” and they remember it every year during the



> Analyzing Primary Sources

The Ten Commandments

The Ten Commandments are a code of moral laws believed to have been given by God to Moses, which serve as the basis for Jewish law.

PRIMARY SOURCE

1. I the LORD am your God who brought you out of the land of Egypt, the house of bondage.
2. You shall have no other gods beside Me. You shall not make for yourself a sculptured image. . . .
3. You shall not swear falsely by the name of the LORD your God. . . .
4. Observe the sabbath day and keep it holy. . . .
5. Honor your father and your mother. . . .
6. You shall not murder.
7. You shall not commit adultery.
8. You shall not steal.
9. You shall not bear false witness against your neighbor.
10. You shall not covet . . . anything that is your neighbor's.

Deuteronomy 5:6–18

DOCUMENT-BASED QUESTIONS

1. **Comparing** Do the first four commandments concern themselves more with the Jews' relationship with God or with one another?
2. **Contrasting** What do the last six commandments have in common that distinguishes them from the first four?



▲ Tradition dictates that the Torah be written on a scroll and kept at the synagogue in an ornamental chest called an ark.

festival of Passover. The Torah says that the man who led the Israelites out of slavery was **Moses**. It is told that at the time of Moses' birth, the Egyptian pharaoh felt threatened by the number of Israelites in Egypt. He thus ordered all Israelite male babies to be killed. Moses' mother hid her baby in the reeds along the banks of the Nile. There, an Egyptian princess found and adopted him. Though raised in luxury, he did not forget his Israelite birth. When God commanded him to lead the Israelites out of Egypt, he obeyed.

A New Covenant While the Israelites were traveling across the Sinai (SY•ny) Peninsula, Moses climbed to the top of Mount Sinai to pray. The Hebrew Bible says he spoke with God. When Moses came down from Mount Sinai, he brought down two stone tablets on which God had written the Ten Commandments.

These commandments and the other teachings that Moses delivered to his people became the basis for the civil and religious laws of Judaism. The Israelites believed that these laws formed a new covenant between God and the Israelites. God promised to protect them. They promised to keep God's commandments. **A**

The Land and People of the Bible The Torah reports that the Israelites traveled for 40 years in the Sinai Desert. Later books of the Hebrew Bible tell about the history of the Israelites after their migration. After the death of Moses, they returned to Canaan, where Abraham had lived. The Israelites made a change from a nomadic, tribal society to settled herders, farmers, and city dwellers. They learned new technologies from neighboring peoples in ancient Canaan.

MAIN IDEA

Contrasting

A How did the religion of the Israelites differ from many of the religions of their neighbors?

When the Israelites arrived in Canaan, they were loosely organized into twelve tribes. These tribes lived in separate territories and were self-governing. In times of emergency, the Hebrew Bible tells that God would raise up judges. They would unite the tribes and provide judicial and military leadership during a crisis. In the course of time, God chose a series of judges, one of the most prominent of whom was a woman, Deborah.

Israelite Law Deborah’s leadership was unusual for an Israelite woman. The roles of men and women were quite separate in most ancient societies. Women could not officiate at religious ceremonies. In general, an Israelite woman’s most important duty was to raise her children and provide moral leadership for them.

The Ten Commandments were part of a code of laws delivered to Moses. The code included other rules regulating social and religious behavior. In some ways, this code resembled Hammurabi’s Code with its statement “an eye for an eye and a tooth for a tooth.” To Jews this meant to pay restitution and emphasize God’s mercy. The code was later interpreted by religious teachers called prophets. These interpretations tended to emphasize greater equality before the law than did other codes of the time. The prophets constantly urged the Jews to stay true to their covenant with God.

The prophets taught that the Jews had a duty to worship God and live justly with one another. The goal was a moral life lived in accordance with God’s laws. In the words of the prophet Micah, “He has told you, O mortal what is good; and what does the Lord require of you but to do justice, and to love kindness, and to walk humbly with your God?” This emphasis on right conduct and the worship of one God is called ethical monotheism—a Jewish idea that has influenced human behavior for thousands of years through Judaism, Christianity, and Islam. **B**

MAIN IDEA

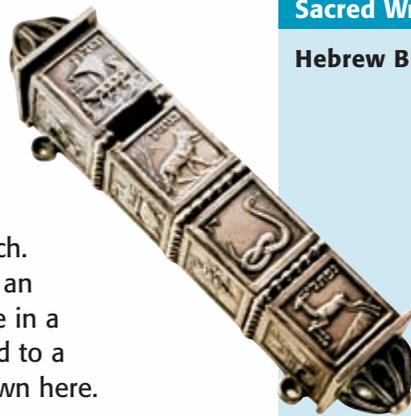
Summarizing

B What does Jewish law require of believers?

> Analyzing Key Concepts

Judaism

Judaism is the religion of the Jewish people. In Judaism, one of the most important ways for a person to please God is to study the scriptures, or sacred writings, and to live according to what they teach. Many Jews keep a scroll of an important scripture passage in a mezuzah (a holder attached to a doorpost) like the one shown here.



The Sacred Writings of Judaism

Sacred Writings	Contents
<p>Hebrew Bible</p>	<p>Torah</p> <ul style="list-style-type: none"> • first five books of the Bible • recounts origins of humanity and Judaism • contains basic laws of Judaism <p>Prophets</p> <ul style="list-style-type: none"> • stories about and writings by Jewish teachers • divided into Former Prophets and Latter Prophets • recounts Jewish history and calls for justice, kindness, right conduct, and faithfulness to God <p>Writings</p> <ul style="list-style-type: none"> • a collection of various other writings • includes psalms, poetry, history and stories, proverbs, and philosophical writings called wisdom literature
<p>Talmud</p>	<p>Mishnah</p> <ul style="list-style-type: none"> • written record of Jewish oral law <p>Gemara</p> <ul style="list-style-type: none"> • explanations and interpretations of the Mishnah

SKILLBUILDER: Interpreting Charts

- 1. Contrasting** *What is contained in the Hebrew Bible that is not in the Talmud? What is in the Talmud that is not in the Hebrew Bible?*
- 2. Hypothesizing** *What kind of poetry would you expect to find in the Hebrew Bible? Explain what you think the subjects or themes of the poems might be.*

The Kingdom of Israel

Canaan—the land that the Israelites believed had been promised them by God—combined largely harsh features such as arid desert, rocky wilderness, grassy hills, and the dry, hot valley of the Jordan River. Water was never plentiful; even the numerous limestone formations soaked up any excess rainfall. After first settling in the south-central area of ancient Canaan, the Israelites expanded south and north.

Saul and David Establish a Kingdom The judges occasionally pulled together the widely scattered tribes for a united military effort. Nonetheless, the Philistines, another people in the area, threatened the Israelites' position in ancient Canaan. The Israelites got along somewhat better with their Canaanite neighbors.

From about 1020 to 922 B.C., the Israelites united under three able kings: Saul, David, and Solomon. The new kingdom was called **Israel** (IHZ•ree•uhl). For 100 years, Israel enjoyed its greatest period of power and independence.

Saul, the first of the three kings, was chosen largely because of his success in driving out the Philistines from the central hills. Saul is portrayed in the Hebrew Bible as a tragic man, who was given to bouts of jealousy. After his death, he was succeeded by his son-in-law, David. King David, an extremely popular leader, united the tribes, established Jerusalem as the capital, and founded a dynasty.

Solomon Builds the Kingdom About the year 962 B.C., David was succeeded by his son Solomon, whose mother was Bathsheba. Solomon was the most powerful of the Israelite kings. He built a trading empire with the help of his friend Hiram, the king of the Phoenician city of Tyre. Solomon also beautified the capital city of Jerusalem. The crowning achievement of his extensive building program in Jerusalem was a great temple, which he built to glorify God. The temple was also a permanent home for the Ark of the Covenant, which contained the tablets of Moses' law.

The temple that Solomon built was not large, but it gleamed like a precious gem. Bronze pillars stood at the temple's entrance. The temple was stone on the outside, while its inner walls were made of cedar covered in gold. The main hall was richly decorated with brass and gold. Solomon also built a royal palace even more costly and more magnificent than the temple.

The Kingdom Divides Solomon's building projects required high taxes and badly strained the kingdom's finances. In addition, men were drafted to spend one month out of every three working on the temple. The expense and labor requirement caused much discontent. As a result, after Solomon's death, the Jews in the northern part of the kingdom, which was located far from the south, revolted. By 922 B.C., the kingdom had divided in two. Israel was in the north and **Judah** (JOO•duh) was in the south. Eventually, the northern kingdom was destroyed and only the kingdom of Judah remained. As a result, the Israelites came to be called Jews, and their religion, *Judaism*. 

MAIN IDEA

Drawing Conclusions

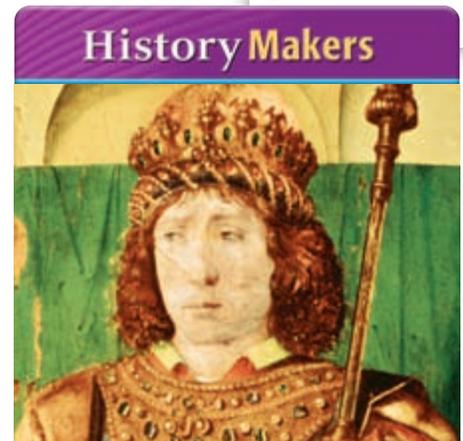
 How might geographical distance make the split of Israel and Judah more likely?



VIDEO

King Solomon

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King Solomon 962?–922? B.C.

In the Bible, Solomon prays to God for “an understanding mind,” which God grants him.

Soon after, the story goes, two women and a baby boy were brought before him. Each woman claimed the baby was hers. After hearing their testimony, Solomon declared, “Divide the living boy in two; then give half to the one and half to the other.”

One said: “Please, my lord, give her the living boy; certainly do not kill him!” However, the other woman accepted: “It shall be neither mine nor yours; divide it.”

Solomon knew that the woman who would give up the child to save it was the real mother.

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RESEARCH WEB LINKS Go online for more on King Solomon.

The next 200 years were a time of upheaval for the two kingdoms of Israel and Judah. Sometimes they fought each other; sometimes they joined together to fight common enemies. Each of the kingdoms had periods of prosperity, followed by low periods of conflict and decline.

The Babylonian Captivity

Disaster finally struck as the two kingdoms lost their independence. In 738 B.C., both Israel and Judah began paying **tribute**—peace money paid by a weaker power to a stronger—to Assyria. By paying tribute, Israel and Judah hoped to ensure that the mighty Assyrian empire would not attack. But Israel revolted and withheld tribute and in 725 B.C. the Assyrians began a relentless siege of Samaria, the capital of Israel. By 722 B.C., the whole northern kingdom had fallen to the Assyrians' ferocious assault.

The southern kingdom of Judah resisted for another 150 years before it too was destroyed. The destruction of Judah was to come at the hands of the Babylonians. After conquering Israel, the Assyrians rapidly lost power to a rising Babylonian empire. The great Babylonian king Nebuchadnezzar (nehb•uh•kuhd•NEHZ•uhr) ran the Egyptians out of Syria and Judah, and he twice attacked Jerusalem. The city finally fell in 586 B.C. Solomon's temple was destroyed in the Babylonian victory. Many of the survivors were exiled to Babylon. During the exile in Babylon, the Hebrew Bible describes how the prophet Ezekiel urged his people to keep their religion alive in a foreign land.

Then about 50 years after the fall of Judah, another change in fortune occurred: in 539 B.C., the Persian king Cyrus the Great conquered Babylon. The next year, Cyrus allowed some 40,000 exiles to return to Jerusalem to rebuild the temple. Many, however, stayed in Babylonia.

Work on the second temple was completed in 515 B.C. The walls of Jerusalem were rebuilt in 445 B.C. Soon, however, other empires dominated the region—first the Persians, then the Greeks, and then the Romans. These new empires would take control both of Judah, now called Judea, and of the destiny of the Jewish people. **D**

MAIN IDEA

Making Inferences

D The temple was rebuilt before the walls of Jerusalem. What does this fact indicate about the Jews after the Babylonian captivity?

SECTION

4

ASSESSMENT

TERMS & NAMES 1. For each term or name, write a sentence explaining its significance.

- Canaan
- Torah
- Abraham
- monotheism
- covenant
- Moses
- Israel
- Judah
- tribute

USING YOUR NOTES

2. Which of these leaders do you think was the most important? Why?

2000 B.C.

Abraham:
father of
Jewish people

MAIN IDEAS

3. Where did Abraham and his family originally come from?
4. What were some of the achievements of Solomon?
5. What was the Babylonian Captivity?

CRITICAL THINKING & WRITING

6. **DEVELOPING HISTORICAL PERSPECTIVE** What were the main problems faced by the Israelites between 1800 B.C. and 700 B.C.?
7. **ANALYZING ISSUES** What were some of the factors that made Canaan a good place for the Israelites to settle?
8. **COMPARING** In what ways are the laws delivered to Moses similar to Hammurabi's Code?
9. **WRITING ACTIVITY** **RELIGIOUS AND ETHICAL SYSTEMS** What might have been the advantages of monotheism? Write a **paragraph** in which you support your opinions.

CONNECT TO TODAY CREATING A PIE GRAPH

What are some of the important monotheistic religions in the world today? Create a **pie graph** in which you show the relative size of various monotheistic religions.

The Flood Story

The tale of a devastating flood appears among the legends of ancient peoples throughout the world. In some versions, the story of the flood serves to explain how the world came to be. In others, the flood is heaven's punishment for evil deeds committed by humans.

A PRIMARY SOURCE

The Torah

Only one man, Noah, found favor in God's eyes.

God said to Noah, "I have decided to put an end to all flesh, for the earth is filled with lawlessness because of them. . . . Make yourself an ark of gopher wood. . . . And of all that lives, of all flesh, you shall take two of each into the ark . . . ; they shall be male and female."

The rain fell on the earth forty days and forty nights. . . . At the end of forty days, Noah opened the window of the ark . . . and . . . sent out the dove. . . . The dove came back to him . . . and there in its bill was a plucked-off olive leaf! Then Noah knew that the waters had decreased on the earth. . . .

God spoke to Noah, saying "Come out of the ark. . . . Bring out with you every living thing of all flesh that is with you. . . . I now establish My covenant with you . . . never again shall there be a flood to destroy the earth. . . . I have set My [rain]bow in the clouds . . . as a sign of the covenant."

B PRIMARY SOURCE

The Epic of Gilgamesh

In this Mesopotamian legend, Utnapishtim, like Noah, escapes a worldwide flood by building an ark. Ea, the god of wisdom, warns Utnapishtim of the coming catastrophe in a dream.

O man of Shurrupak, son of Ubara-Tutu; tear down your house and build a boat, abandon possessions and look for life. . . .

I loaded into [the boat] all that I had of gold and of living things, my family, my kin, the beast of the field both wild and tame. . . .

For six days and six nights the winds blew, torrent and tempest and flood overwhelmed the world. . . . When the seventh day dawned the storm from the south subsided, the sea grew calm, the flood was stilled; I looked at the face of the world and there was silence, all mankind was turned to clay. . . . I opened a hatch and the light fell on my face. Then I bowed low, I sat down and I wept, the tears streamed down my face, for on every side was the waste of water.

C PRIMARY SOURCE

The Fish Incarnation of Vishnu

The Hindu god Vishnu, in his first earthly incarnation, took the form of Matsya, the fish, and saved humankind.

One day, as the sage Manu was praying at the river Ganges, a small fish asked for his protection. Manu put the fish in an earthen jar, but soon the fish was too big for the jar. So Manu put it into the river, but soon it outgrew the river. So Manu put the fish in the ocean. . . .

The fish told Manu there would be a great deluge [flood]. He advised Manu to build a large boat and take . . . the seeds of various kinds of plants, and one of each type of animal. When the deluge came, the fish said, he would take the ark . . . to safety.

Sure enough, when the deluge occurred, the fish was there. Manu tied the boat to the horns of the fish. . . . The fish then pulled the boat through the waters until it reached a mountain peak.

D PRIMARY SOURCE

Anonymous

This art dates from the fifth century A.D. It shows Noah and his ark in the Jewish flood story. In the picture, Noah is welcoming back the dove he had sent out from the ark at the end of 40 days. The dove is carrying in its beak an olive leaf.



Document-Based QUESTIONS

1. Based on Source A, what promise does God make to mankind?
2. What are some of the differences among the gods in Sources A, B, and C?
3. What are some of the similarities among the flood stories in Sources A, B, and C?
4. In Source D, what is the dove bringing to Noah and what might it represent?

Chapter 3 Assessment

TERMS & NAMES

For each term or name below, briefly explain its importance in the years 3500 B.C. to 259 B.C.

1. Indo-Europeans
2. caste
3. reincarnation
4. Siddhartha Gautama
5. Minoans
6. Phoenicians
7. monotheism
8. Moses

MAIN IDEAS

The Indo-Europeans Section 1 (pages 61–65)

9. What are three reasons that historians give to explain why Indo-Europeans migrated?
10. What are two technologies that helped the Hittites build their empire?
11. How were the Aryans different from the non-Aryans (*dasas*) that they encountered when migrating to India?

Hinduism and Buddhism Develop Section 2 (pages 66–71)

12. In Hinduism, how are the ideas of karma, reincarnation, and *moksha* connected?
13. Why were lower castes more likely to convert to Buddhism?

Seafaring Traders Section 3 (pages 72–76)

14. What did the Minoans export?
15. What is Phoenicia's greatest legacy to the world?

The Origins of Judaism Section 4 (pages 77–83)

16. What is ethical monotheism and why is it important?
17. What were some of the achievements of David?
18. What are two ways in which early Judaism differed from other religions of the time?

CRITICAL THINKING

1. USING YOUR NOTES

RELIGIOUS AND ETHICAL SYSTEMS In a chart, fill in information about three world religions.

Religion	Founder	Time Originated	Area Originated
Hinduism			
Buddhism			
Judaism			

2. DRAWING CONCLUSIONS

INTERACTION WITH ENVIRONMENT How important were the migrations of the Indo-European peoples? How lasting were the changes that they brought? Explain your conclusion.

3. RECOGNIZING EFFECTS

What were some of the effects of King Solomon's reign?

4. COMPARING

ECONOMICS How were the economic foundations of Minoan and Phoenician civilizations similar?

5. DEVELOPING HISTORICAL PERSPECTIVE

Why was monotheism unusual in its time and place?

VISUAL SUMMARY

Three Major Religions

	 Hinduism	 Buddhism	 Judaism
Number of Gods	Many gods, all faces of Brahman	Originally, no gods	One God
Holy Books	Vedas; Upanishads, <i>Mahabharata</i> , and others	Books on the teachings and life of the Buddha	The Torah and other books of the Hebrew Bible
Moral Law	Karma	Eightfold Path	Ten Commandments
Leaders	Brahmins	Monks	Priests, judges, kings, prophets
Final Goal	<i>Moksha</i>	Enlightenment, Nirvana	A moral life through obedience to God's law

STANDARDS-BASED ASSESSMENT

The following passage tells how the Israelites asked the prophet Samuel to appoint their king. Use the quotation and your knowledge of world history to answer questions 1 and 2.

PRIMARY SOURCE

Then all the elders of Israel gathered together and came to Samuel at Ramah, and said to him, “. . . appoint for us, then, a king to govern us, like other nations.” . . . Samuel prayed to the Lord, and the Lord said to Samuel, “Listen to the voice of the people in all that they say to you; for they have not rejected you, but they have rejected me from being king over them. Just as they have done to me, . . . so also they are doing to you. Heed their demand, but warn them solemnly.”

1 SAMUEL 8:4–8

1. What seems to be the Lord's reaction to the Israelites' demand for a king?
 - A. approval
 - B. disapproval
 - C. indifference
 - D. amusement
2. Who does this passage say was Israel's real king?
 - A. Samuel
 - B. The Lord
 - C. Moses
 - D. Solomon

Use the statue of a Hittite god and your knowledge of world history to answer question 3.



3. What does the fact that this statue is made of gold tell you about how the owner viewed it?
 - A. trivial
 - B. valuable
 - C. worthless
 - D. disposable

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For additional test practice, go online for:

- Diagnostic tests
- Strategies
- Tutorials

Interact *with* History

On page 60, you considered leaving your homeland before you knew what some of the consequences of your decision might be. Now that you've read the chapter, reconsider your decision. Would you still make the same choice, or have you changed your mind? Discuss the consequences of your decision on your life.

FOCUS ON WRITING

Write an **expository essay** describing how ironworking helped the Aryans to carry out their migrations to India, as well as their conquering and settling of territory.

Consider the effect of ironworking technology on the following:

- weapons and tools
- transportation
- conquest
- settlement

MULTIMEDIA ACTIVITY



Participating in a WebQuest

Introduction You are a member of a special committee commissioned by the Indian government to abolish the caste system.

Task Create an electronic presentation of the issues you had to consider and the problems you faced in abolishing the caste system.

Process and Procedures Assume the role of one of these committee members—religious leader, economist, historian, sociologist—to research Indian society and to present the issues. Use this chapter and the Internet as resources for your research.

Evaluation and Conclusion The caste system was officially abolished by the Indian government in 1955. How did this project contribute to your understanding of the caste system? What additional information would you like to know?

First Age of Empires,

1570 B.C.–200 B.C.

Essential Question

How did the first large empires in Africa and Asia develop between 1570 B.C. and 200 B.C.?



What You Will Learn

In this chapter you will learn about the development of the early empires in Egypt, Nubia, Assyria, Persia, and China.

SECTION 1 The Egyptian and Nubian Empires

Main Idea Two empires along the Nile, Egypt and Nubia, forged commercial, cultural, and political connections.

SECTION 2 The Assyrian Empire

Main Idea Assyria developed a military machine and established a well-organized administration.

SECTION 3 The Persian Empire

Main Idea By governing with tolerance and wisdom, the Persians established a well-ordered empire that lasted for 200 years.

SECTION 4 The Unification of China

Main Idea The social disorder of the warring states contributed to the development of three Chinese ethical systems.

Previewing Themes

EMPIRE BUILDING Groups from Africa to China sought to conquer other groups and spread their influence across vast regions. These societies built the world's first great empires.

Geography *On the map, locate the Nile, Tigris, and Euphrates rivers, where many of the early empires arose. Why do you think the empire builders fought over these regions?*

CULTURAL INTERACTION For a long period, Egypt ruled Kush and the two cultures interacted. When the Kush Empire conquered Egypt, therefore, the Kushites adopted many Egyptian cultural values and ideas.

Geography *Study the map and time line. What other cultures might have adopted Egyptian values?*

RELIGIOUS AND ETHICAL SYSTEMS After the warring states period, Chinese philosophers developed different ethical systems to restore China's social order.

Geography *How might China's location have affected the spread of the ethical systems that began there?*

**AFRICA,
SOUTHWEST
ASIA, CHINA**

1570 B.C.

Egypt's New Kingdom is established. (temple at Karnak built during era) ▶



1570 B.C.

1000 B.C.

WORLD



1500 B.C.

◀ Mycenaean culture thrives on the Greek mainland. (gold death mask of a Mycenaean king)

1200 B.C.

Minoan civilization mysteriously ends.



Ancient Empires, 700 B.C. – 221 B.C.

EUROPE

ASIA

GOBI DESERT

Black Sea

Caspian Sea

Mediterranean Sea

LOWER EGYPT

UPPER EGYPT

Abu Simbel

Napata

Meroë

Karnak

Thebes

JUDAH

Sinai Peninsula

Babylon

Persepolis

Sardis

Nineveh

Ch'ang-an (Xi'an)

Chang Jiang

Huang He

Yellow Sea

East China Sea

Indian River

Arabian Peninsula

Arabian Sea

INDIAN OCEAN

Himalayas

Indus River

Ganges River

Red Sea

Nile River

Tigris R.

Euphrates

Black Sea

Caspian Sea

Mediterranean Sea

Arabian Sea

Indian Ocean

Arabian Peninsula

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Mediterranean Sea

How will the empire help you or harm you?

As a merchant traveling with your camel caravan, your life has become increasingly difficult. Bandits and thieves roam the roads, attacking traders like you. A new military empire is advancing through your region, putting down the outlaw bands. However, the military empire is also imposing harsh laws and heavy taxes on the regions it conquers.

Armed guards from the new empire battle bandits who were planning to attack the caravan, which carries a fortune in exotic goods.

Merchants traveling in caravans, such as this one, cross the Fertile Crescent and travel the Silk Roads from China.

An armed cavalry escort protects the caravan, bringing a new sense of order and safety to merchants and travelers.

EXAMINING *the* ISSUES

- Why might a merchant welcome the expansion of a strong empire?
- How might the empire oppress the region?

In small groups, answer the questions, then report back to the class. In your discussion, remember what you've learned about military conquest and the behavior of such groups as the Sumerians, Egyptians, and Hittites. As you read about the empires in this chapter, consider how the winners treat the people under their power and how the conquered people respond.



The Egyptian and Nubian Empires

MAIN IDEA

CULTURAL INTERACTION Two empires along the Nile, Egypt and Nubia, forged commercial, cultural, and political connections.

WHY IT MATTERS NOW

Neighboring civilizations today participate in cultural exchange as well as conflict.

TERMS & NAMES

- Hyksos
- New Kingdom
- Hatshepsut
- Thutmose III
- Nubia
- Ramses II
- Kush
- Piankhi
- Meroë

SETTING THE STAGE As you learned in Chapter 2, Egyptian civilization developed along the Nile River and united into a kingdom around 3100 B.C. During the Middle Kingdom (about 2080–1640 B.C.), trade with Mesopotamia and the Indus Valley enriched Egypt. Meanwhile, up the Nile River, less than 600 miles south of the Egyptian city of Thebes, a major kingdom had developed in the region of Nubia. For centuries, the Nubian kingdom of Kush traded with Egypt. The two kingdoms particularly influenced each other culturally.

Nomadic Invaders Rule Egypt

After the prosperity of the Middle Kingdom, Egypt descended into war and violence. This was caused by a succession of weak pharaohs and power struggles among rival nobles. The weakened country fell to invaders who swept across the Isthmus of Suez in chariots, a weapon of war unknown to the Egyptians. These Asiatic invaders, called **Hyksos** (HIHK•sohs), ruled Egypt from about 1640 to 1570 B.C. The Hyksos invasion shook the Egyptians’ confidence in the desert barriers that had protected their kingdom.

Israelites Migrate to Egypt Some historians believe that another Asiatic group, the Israelites, settled in Egypt during the rule of the Hyksos. According to the Hebrew Bible, Abraham and his family first crossed the Euphrates River and came to Canaan around 1800 B.C. Then, around 1650 B.C., the descendants of Abraham moved again—this time to Egypt. Some historians believe that the Hyksos encouraged the Israelites to settle there because the two groups were racially similar. The Egyptians resented the presence of the Hyksos in their land but were powerless to remove them.

Expulsion and Slavery Around 1600 B.C., a series of warlike rulers began to restore Egypt’s power. Among those who helped drive out the Hyksos was Queen Ahhotep (ah•HOH•tehp). She took over when her husband was killed in battle. The next pharaoh, Kamose (KAH•mohs), won a great victory over the hated Hyksos. His successors drove the Hyksos completely out of Egypt and pursued them across the Sinai Peninsula into Canaan. According to some Biblical scholars, the Israelites remained in Egypt and were enslaved and forced into hard labor. They would not leave Egypt until sometime between 1500 and 1200 B.C., the time of the Exodus.



Use the graphic organizer online to take notes on important events in the history of Egypt and Nubia.

The New Kingdom of Egypt

After overthrowing the Hyksos, the pharaohs of the **New Kingdom** (about 1570–1075 B.C.) sought to strengthen Egypt by building an empire. As you may recall, an empire brings together several peoples or states under the control of one ruler. Egypt entered its third period of glory during the New Kingdom era. During this time, it was wealthier and more powerful than ever before.

Equipped with bronze weapons and two-wheeled chariots, the Egyptians became conquerors. The pharaohs of the 18th Dynasty (about 1570–1365 B.C.) set up an army including archers, charioteers, and infantry, or foot soldiers.

Hatshepsut's Prosperous Rule Among the rulers of the New Kingdom, **Hatshepsut** (hat•SHEHP•soot), who declared herself pharaoh around 1472 B.C., was unique. She took over because her stepson, the male heir to the throne, was a young child at the time. Unlike other New Kingdom rulers, Hatshepsut spent her reign encouraging trade rather than just waging war.

The trading expedition Hatshepsut ordered to the Land of Punt (poont), near present-day Somalia, was particularly successful. Hatshepsut sent a fleet of five ships down the Red Sea to Punt in search of myrrh, frankincense, and fragrant ointments used for religious ceremonies and in cosmetics. In addition to these goods, Hatshepsut's fleet brought back gold, ivory, and unusual plants and animals.

Thutmose the Empire Builder Hatshepsut's stepson, **Thutmose III** (thoot•MOH•suh), proved to be a much more warlike ruler. In his eagerness to ascend to the throne, Thutmose III may even have murdered Hatshepsut. Between the time he took power and his death around 1425 B.C., Thutmose III led a number of victorious invasions eastward into Canaan and Syria. His armies also pushed farther south into **Nubia**, a region of Africa that straddled the upper Nile River. Egypt had traded with Nubia and influenced the region since the time of the Middle Kingdom.

Egypt was now a mighty empire. It controlled lands around the Nile and far beyond. In addition, it drew boundless wealth from them. Contact with other cultures brought Egypt new ideas as well as material goods. Egypt had never before—nor has it since—commanded such power and wealth as during the reigns of the New Kingdom pharaohs.

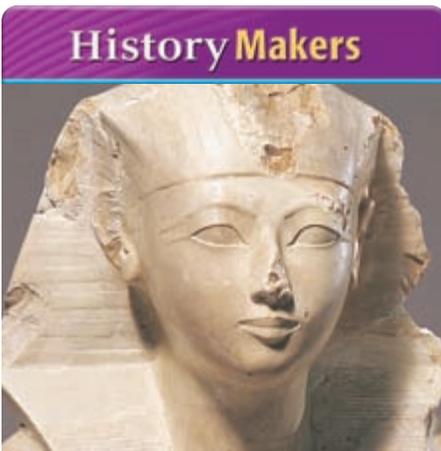
The Egyptians and the Hittites The Egyptians' conquest of parts of Syria and Canaan around 1400 B.C. brought them into conflict with the Hittites. The Hittites had moved into Asia Minor around 1900 B.C. and later expanded southward into Canaan.

After several smaller battles, the Egyptians and Hittites clashed at Kadesh around 1285 B.C. The pharaoh **Ramses II** (RAM•SEEZ) and a Hittite king later made a treaty that promised “peace and brotherhood between us forever.” Their alliance lasted for the rest of the century. **A**

An Age of Builders Like the rulers of the Old Kingdom, who built the towering pyramids, rulers of the New Kingdom

Vocabulary

A *dynasty* is a series of rulers from a single family.



History Makers

Hatshepsut reigned 1472–1458 B.C.

Hatshepsut was an excellent ruler of outstanding achievement who made Egypt more prosperous. As male pharaohs had done, Hatshepsut planned a tomb for herself in the Valley of the Kings. Carved reliefs on the walls of the temple reveal the glories of her reign.

The inscription from Hatshepsut's obelisk at Karnak trumpets her glory and her feelings about herself:

I swear as Re loves me, as my father Amon favors me, as my nostrils are filled with satisfying life, as I wear the white crown, as I appear in the red crown, . . . as I rule this land like the son of Isis.

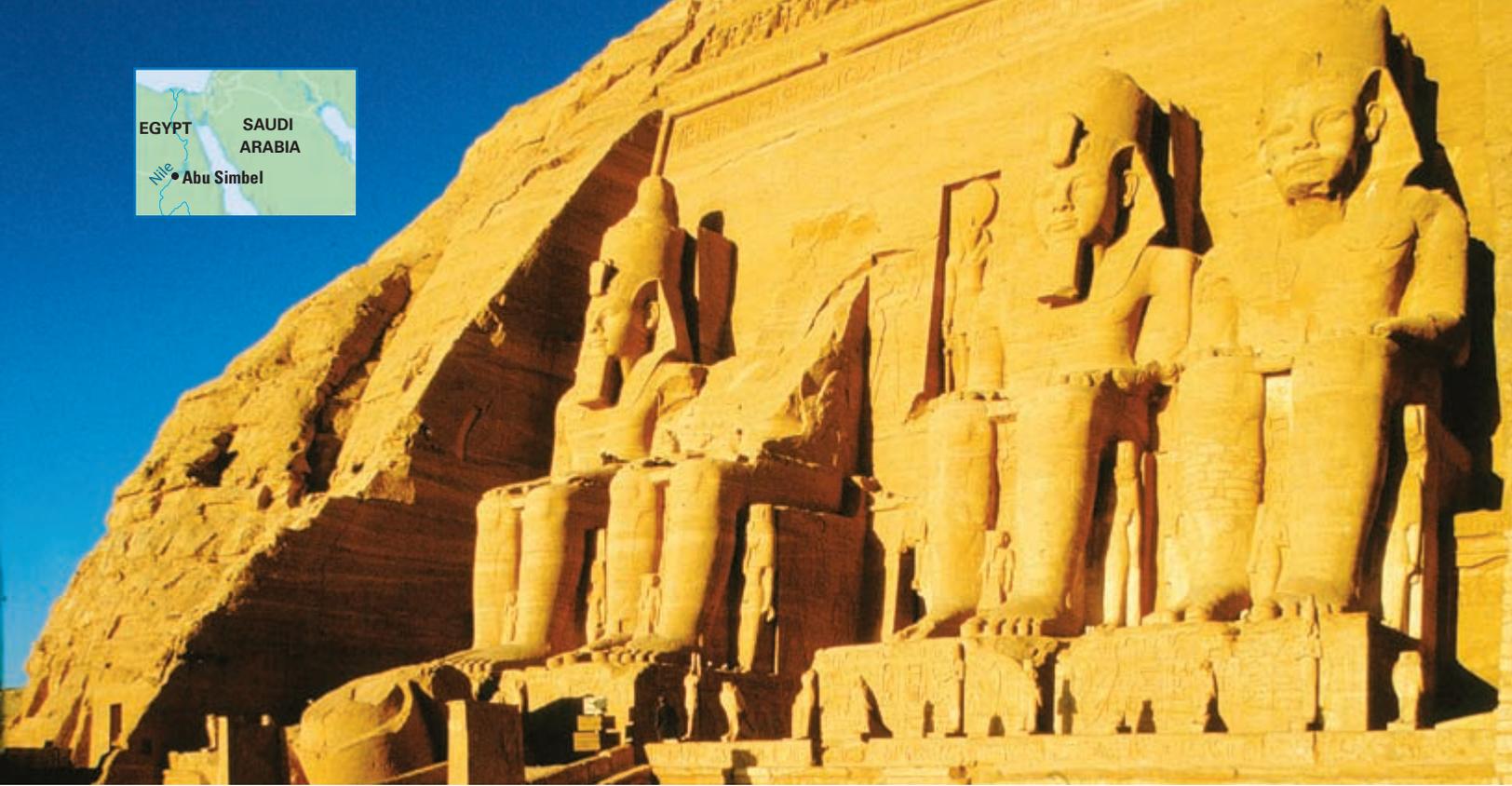
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INTERNET ACTIVITY Go online to create a photo exhibit on the trading expeditions to Punt ordered by Hatshepsut. Include pictures of murals of goods collected.

MAIN IDEA

Recognizing Effects

A What were some of the political and economic effects of Egypt's conquests?



erected grand buildings. In search of security in the afterlife—and protection from grave robbers—they hid their splendid tombs beneath desert cliffs. The site they chose was the remote Valley of the Kings near Thebes. Besides royal tombs, the pharaohs of this period also built great palaces and magnificent temples. Indeed, the royal title *pharaoh* means “great house” and comes from this time period.

Ramses II, whose reign extended from approximately 1290 to 1224 B.C., stood out among the great builders of the New Kingdom. At Karnak, he added to a monumental temple to Amon-Re (AH•muhn•RAY), Egypt’s chief god. Ramses also ordered a temple to be carved into the red sandstone cliffs above the Nile River at Abu Simbel (AH•boo SIHM•buhl). He had these temples decorated with enormous statues of himself. The ears of these statues alone measured more than three feet.

▲ Four statues of Ramses II guarded the entrance to the Great Temple at Abu Simbel.

The Empire Declines

The empire that Thutmose III had built and Ramses II had ruled slowly came apart after 1200 B.C. as other strong civilizations rose to challenge Egypt’s power. Shortly after Ramses died, the entire eastern Mediterranean suffered a wave of invasions.

Invasions by Land and Sea Both the Egyptian empire and the Hittite kingdom were attacked by invaders called the “Sea Peoples” in Egyptian texts. These invaders may have included the Philistines, who are often mentioned in the Hebrew Bible. Whoever they were, the Sea Peoples caused great destruction.

The Egyptians faced other attacks. In the east, the tribes of Canaan often rebelled against their Egyptian overlords. In the west, the vast desert no longer served as a barrier against Libyan raids on Egyptian villages.

Egypt’s Empire Fades After these invasions, Egypt never recovered its previous power. The Egyptian empire broke apart into regional units, and numerous small kingdoms arose. Each was eager to protect its independence.

Almost powerless, Egypt soon fell to its neighbors’ invasions. Eventually, Libyans crossed the desert to the Nile Delta. There they established independent dynasties. From around 950 to 730 B.C., Libyan pharaohs ruled Egypt and erected cities.

But instead of imposing their own culture, the Libyans adopted Egypt's. When the Nubians came north to seize power, they too adopted Egyptian culture.

The Kushites Conquer the Nile Region

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INTERACTIVE MAP

Explore the cataracts and fertile banks of the Nile Valley.

For centuries, Egypt dominated Nubia and the Nubian kingdom of **Kush**, which lasted for about a thousand years, between 2000 and 1000 B.C. During this time, Egyptian armies raided and even occupied Kush for a brief period. But as Egypt fell into decline during the Hyksos period, Kush began to emerge as a regional power. Nubia now established its own Kushite dynasty on the throne of Egypt.

The People of Nubia Nubia lay south of Egypt between the first cataract of the Nile, an area of churning rapids, and the division of the river into the Blue Nile and the White Nile. Despite several cataracts around which boats had to be carried, the Nile provided the best north-south trade route. Several Nubian kingdoms, including Kush, served as a trade corridor. They linked Egypt and the Mediterranean world to the interior of Africa and to the Red Sea. Goods and ideas flowed back and forth along the river for centuries. The first Nubian kingdom, Kerma, arose shortly after 2000 B.C.

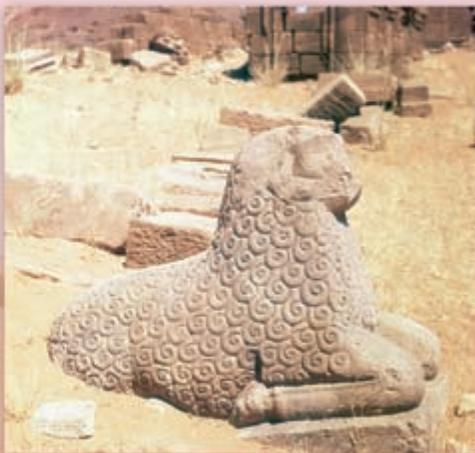
The Interaction of Egypt and Nubia With Egypt's revival during the New Kingdom, pharaohs forced Egyptian rule on Kush. Egyptian governors, priests, soldiers, and artists strongly influenced the Nubians. Indeed, Kush's capital, Napata, became the center for the spread of Egyptian culture to Kush's other African trading partners.

History *in* Depth

Egyptian Influence on Nubian Culture

Nubia was heavily influenced by Egypt. This influence is particularly apparent in Nubian religious practices and burial traditions. But even though the Nubians adopted Egyptian ways, they didn't abandon their cultural identity. In many of these religious and funeral practices, the Nubians blended Egyptian customs with their own traditions.

Pyramids Unlike the Egyptian pyramids, the pyramids of Nubia had steeply sloping sides and were probably designed with a flat top.



Temples This stone ram, representing the Egyptian god Amen, lay at the entrance to a Nubian temple dedicated to that god. Although the Nubians worshiped many Egyptian gods, Amen's temple was located near another dedicated to Apedemak, a Nubian god.



Kushite princes went to Egypt. They learned the Egyptian language and worshiped Egyptian gods. They adopted the customs and clothing styles of the Egyptian upper class. When they returned home, the Kushite nobles brought back royal rituals and hieroglyphic writing.

MAIN IDEA

Making Inferences

B Why might the Kushites have viewed themselves as guardians of Egyptian values?

With Egypt's decline, beginning about 1200 B.C., Kush regained its independence. The Kushites viewed themselves as more suitable guardians of Egyptian values than the Libyans. They sought to guard these values by conquering Egypt and ousting its Libyan rulers. **B**

Piankhi Captures the Egyptian Throne In 751 B.C., a Kushite king named **Piankhi** overthrew the Libyan dynasty that had ruled Egypt for over 200 years. He united the entire Nile Valley from the delta in the north to Napata in the south. Piankhi and his descendants became Egypt's 25th Dynasty. After his victory, Piankhi erected a monument in his homeland of Kush. On the monument, he had words inscribed that celebrated his victory. The inscription provided a catalog of the riches of the north:

PRIMARY SOURCE

Then the ships were laden with silver, gold, copper, clothing, and everything of the Northland, every product of Syria and all sweet woods of God's-Land. His Majesty sailed upstream [south], with glad heart, the shores on his either side were jubilating. West and east were jubilating in the presence of His Majesty.

PIANKHI, monument in Cairo Museum

Statues These figurines represented Nubian slaves. They were buried with Nubian kings and meant to serve them in death. The figurines reflect traditional Egyptian style. The human faces, however, reveal Nubian features.



SKILLBUILDER: Interpreting Visual Sources
Forming Opinions Why did the Nubians combine Egyptian culture with elements of their own culture?

However, Piankhi's dynasty proved short-lived. In 671 B.C., the Assyrians, a war-like people from Southwest Asia, conquered Egypt. The Kushites fought bravely, but they were forced to retreat south along the Nile. There the Kushites would experience a golden age, despite their loss of Egypt.

▼ This ring, bearing the head of a Kushite guardian god, was found inside a Meroë queen's pyramid. It dates from the late first century B.C.



The Golden Age of Meroë

After their defeat by the Assyrians, the Kushite royal family eventually moved south to **Meroë** (MEHR•oh•EE). Meroë lay closer to the Red Sea than Napata did, and so became active in the flourishing trade among Africa, Arabia, and India. (See the map on page 93.)

The Wealth of Kush Kush used the natural resources around Meroë and thrived for several hundred years. Unlike Egyptian cities along the Nile, Meroë enjoyed significant rainfall. And, unlike Egypt, Meroë boasted abundant supplies of iron ore. As a result, Meroë became a major center for the manufacture of iron weapons and tools.

In Meroë, ambitious merchants loaded iron bars, tools, and spearheads onto their donkeys. They then transported the goods to the Red Sea, where they exchanged these goods for jewelry, fine cotton cloth, silver lamps, and glass bottles. As the mineral wealth of the central Nile Valley flowed out of Meroë, luxury goods from India and Arabia flowed in.

The Decline of Meroë After four centuries of prosperity, from about 250 B.C. to A.D. 150, Meroë began to decline. Aksum, another kingdom located 400 miles to the southeast, contributed to Meroë's fall. With a seaport on the Red Sea, Aksum came to dominate North African trade. Aksum defeated Meroë around A.D. 350.

Centuries earlier, around the time the Kushite pharaoh sat on the Egyptian throne, a new empire—Assyria—had risen in the north. Like Kush, Assyria came to dominate Egypt.

SECTION

1

ASSESSMENT

TERMS & NAMES 1. For each term or name, write a sentence explaining its significance.

- Hyksos
- New Kingdom
- Hatshepsut
- Thutmose III
- Nubia
- Ramses II
- Kush
- Piankhi
- Meroë

USING YOUR NOTES

2. Which empire was invaded more often? Why?



MAIN IDEAS

3. How did the New Kingdom of Egypt become so powerful and wealthy?
4. What cultural aspects of Egyptian civilization did the Kushites adopt?
5. Why was Kush able to thrive after losing Egypt to the Assyrians?

CRITICAL THINKING & WRITING

6. **DRAWING CONCLUSIONS** What role did geography play in Egypt's rise and fall?
7. **MAKING INFERENCES** How did trade help both Egypt and Nubia maintain their dominance in the Nile region?
8. **HYPOTHESIZING** What might have happened if the Kushites had imposed their own culture on Egypt?
9. **WRITING ACTIVITY** **CULTURAL INTERACTION** How did Egypt and Nubia strengthen each other at various times in their histories? Support your ideas in a one-paragraph analysis.

CONNECT TO TODAY CREATING A TIME LINE

Research to learn about the collapse of the Soviet Union—a modern-day empire—in 1991. Create a **time line** of the events that led to the collapse.

The Assyrian Empire

MAIN IDEA

EMPIRE BUILDING Assyria developed a military machine and established a well-organized administration.

WHY IT MATTERS NOW

Some leaders still use military force to extend their rule, stamp out opposition, and gain wealth and power.

TERMS & NAMES

- Assyria
- Sennacherib
- Nineveh
- Ashurbanipal
- Medes
- Chaldeans
- Nebuchadnezzar

SETTING THE STAGE For more than two centuries, the Assyrian army advanced across Southwest Asia. It overwhelmed foes with its military strength. After the Assyrians seized control of Egypt, the Assyrian king Esarhaddon proclaimed, “I tore up the root of Kush, and not one therein escaped to submit to me.” The last Kushite pharaoh retreated to Napata, Kush’s capital city.

A Mighty Military Machine

Beginning around 850 B.C., **Assyria** (uh•SEER•ee•uh) acquired a large empire. It accomplished this by means of a highly advanced military organization and state-of-the-art weaponry. For a time, this campaign of conquest made Assyria the greatest power in Southwest Asia.

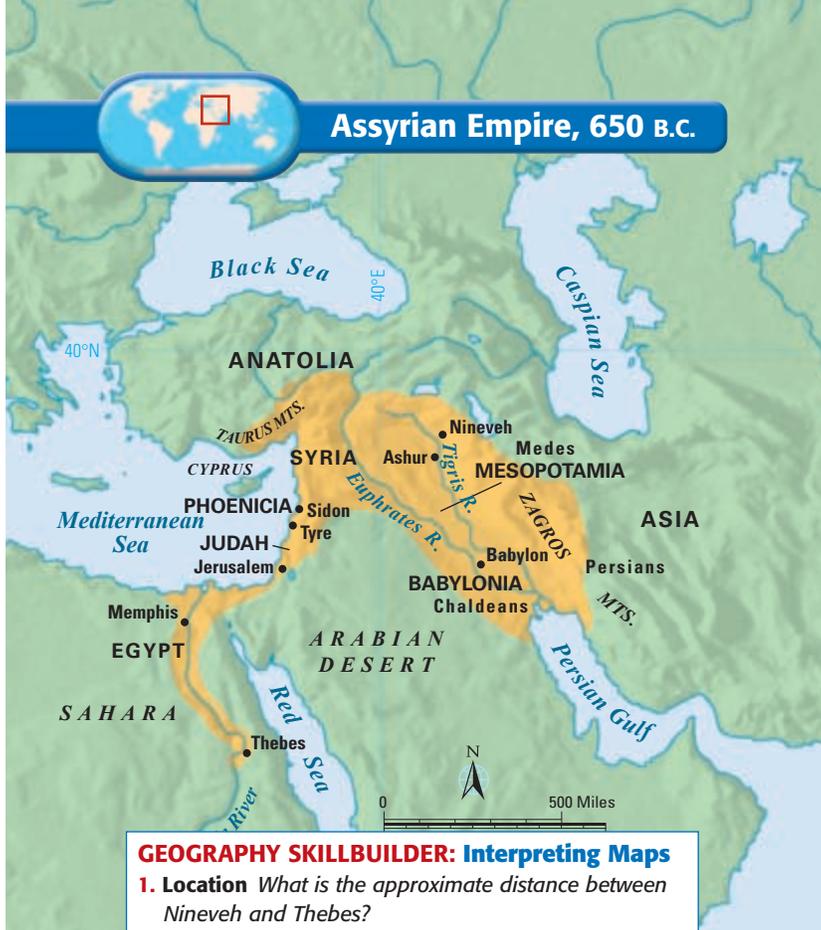
The Rise of a Warrior People The Assyrians came from the northern part of Mesopotamia. (See the map on page 96.) Their flat, exposed land made them easy for other people to attack. Invaders frequently swept down into Assyria from the nearby mountains. The Assyrians may have developed their warlike behavior in response to these invasions. Through constant warfare, Assyrian kings eventually built an empire that stretched from east and north of the Tigris River all the way to central Egypt. One of these Assyrian kings, **Sennacherib** (sih•NAK•uhr•ihb), bragged that he had destroyed 89 cities and 820 villages, burned Babylon, and ordered most of its inhabitants killed.

Military Organization and Conquest Assyria was a society that glorified military strength. Its soldiers were well equipped for conquering an empire. Making use of the ironworking technology of the time, the soldiers covered themselves in stiff leather and metal armor. They wore copper or iron helmets, padded loincloths, and leather skirts layered with metal scales. Their weapons were iron swords and iron-pointed spears.

Advance planning and technical skill allowed the Assyrians to lay siege to enemy cities. When deep water blocked their passage, engineers would span the rivers with pontoons, or floating structures used to support a bridge. Before attacking, the Assyrians dug beneath the city’s walls to weaken them. Then, with disciplined organization, foot soldiers marched shoulder to shoulder. The foot soldiers approached the city walls and shot wave upon wave of arrows. Meanwhile, another group of troops hammered the city’s gates with massive, iron-tipped battering rams.



Use the graphic organizer online to take notes on the causes of the rise and decline of Assyrian power.



Assyrian Empire, 650 B.C.

GEOGRAPHY SKILLBUILDER: Interpreting Maps

- 1. Location** What is the approximate distance between Nineveh and Thebes?
- 2. Location** What is the southernmost part of the Assyrian Empire and to what other empire did it previously belong?

When the city gates finally splintered, the Assyrians showed no mercy. They killed or enslaved their victims. To prevent their enemies from rebelling again, the Assyrians forced captives to settle far away in the empire's distant provinces and dependent states.

The Empire Expands

Between 850 and 650 B.C., the kings of Assyria defeated Syria, Israel, Judah, and Babylonia. Eventually, the Assyrians ruled lands that extended far beyond the Fertile Crescent into Anatolia and Egypt.

Assyrian Rule At its peak around 650 B.C., the Assyrian Empire included almost all of the old centers of civilization and power in

Southwest Asia. Assyrian officials governed lands closest to Assyria as provinces and made them dependent territories. Assyrian kings controlled these dependent regions by choosing their rulers or by supporting kings who aligned themselves with Assyria. The Assyrian system of having local governors report to a central authority became the fundamental model of administration, or system of government management.

In addition, the military campaigns added new territory to the empire. These additional lands brought taxes and tribute to the Assyrian treasury. If a conquered people refused to pay, the Assyrians destroyed their cities and sent the people into exile. Such methods enabled the Assyrians to effectively govern an extended empire.

Assyrian Culture Some of Assyria's most fearsome warriors earned reputations as great builders. For example, the same King Sennacherib who had burned Babylon also established Assyria's capital at **Nineveh** (NIHN•uh•vuh) along the Tigris River. This great walled city, about three miles long and a mile wide, was the largest city of its day. In the ruins of Nineveh and other Assyrian cities, archaeologists found finely carved sculptures. Two artistic subjects particularly fascinated the Assyrians: brutal military campaigns and the lion hunt.

Nineveh also held one of the ancient world's largest libraries. In this unique library, King **Ashurbanipal** (AH•shur•BAH•nuh•PAHL) collected more than 20,000 clay tablets from throughout the Fertile Crescent. The collection included the ancient Sumerian poem the *Epic of Gilgamesh* and provided historians with much information about the earliest civilizations in Southwest Asia. The library was the first to have many of the features of a modern library. For instance, the collection was organized into many rooms according to subject matter. The collection was also cataloged. Europeans would not use a library cataloging system for centuries.

> Analyzing Primary Sources

nmhsocialstudies.com INTERACTIVE

Assyrian Sculpture

This relief shows ferocious Assyrian warriors attacking a fortified city. A relief is a sculpture that has figures standing out from a flat background. The Assyrian war machine included a variety of weapons and methods of attack.

1 Ladders

Assyrian archers launched waves of arrows against opponents defending the city walls. Meanwhile, Assyrian troops threw their ladders up against the walls and began their climb into the enemy's stronghold.

2 Weapons

Troops were armed with the best weapons of the time, iron-tipped spears, as well as iron daggers and swords. They were also protected with armor and large shields.

3 Tactics

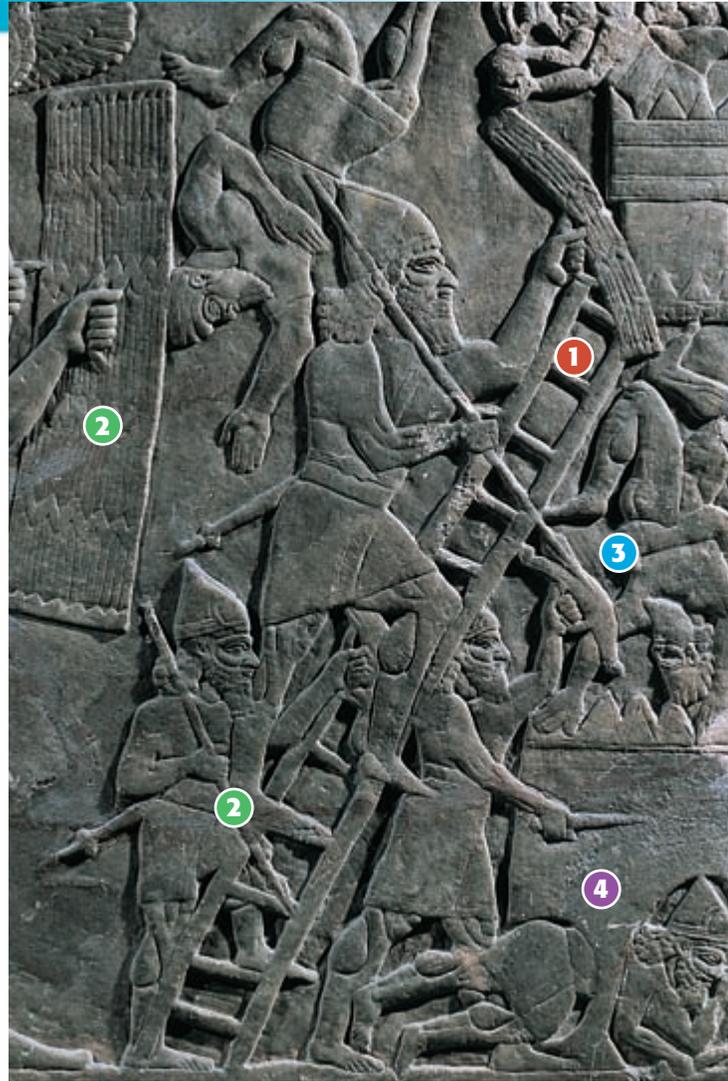
The Assyrians were savage in their treatment of defeated opponents. Those who were not slaughtered in the initial attack were often impaled or beheaded, while women and children were sometimes murdered or sold into slavery.

4 Tunnels

The Assyrian army used sappers—soldiers who dug tunnels to sap, or undermine, the foundations of the enemy's walls so that they would fall.

SKILLBUILDER: Interpreting Visual Sources

1. **Making Inferences** *What emotions might the relief have inspired in the Assyrian people?*
2. **Making Inferences** *How might the Assyrians' enemies have reacted to the sculpture?*



The Empire Crumbles

Ashurbanipal proved to be one of the last of the mighty Assyrian kings. Assyrian power had spread itself too thin. Also, the cruelty displayed by the Assyrians had earned them many enemies. Shortly after Ashurbanipal's death, Nineveh fell.

Decline and Fall In 612 B.C., a combined army of **Medes** (meedz), **Chaldeans** (kal•DEE•uhnz), and others burned and leveled Nineveh. However, because the clay writing tablets in Nineveh's library had been baked in a pottery oven, many survived the fire.

Most people in the region rejoiced at Nineveh's destruction. The Jewish prophet Nahum (NAY•huhm) gave voice to the feelings of many:

MAIN IDEA

Analyzing Primary Sources

A What was Nahum's opinion on the collapse of the Assyrian Empire?

PRIMARY SOURCE **A**

All who see you will recoil from you and will say, "Nineveh has been ravaged!" Who will console her? Where shall I look for anyone to comfort you? . . . Your shepherds are slumbering, O King of Assyria; your sheepmasters are lying inert; your people are scattered over the hills, and there is none to gather them.

NAHUM 3:7, 18 (Hebrew Bible)

Rebirth of Babylon Under the Chaldeans After defeating the Assyrians, the Chaldeans made Babylon their capital. Around 600 B.C., Babylon became the center



▲ This is an artist's rendering of the legendary hanging gardens of Babylon. Slaves watered the plants by using hidden pumps that drew water from the Euphrates River.

of a new empire, more than 1,000 years after Hammurabi had ruled there. A Chaldean king named **Nebuchadnezzar** (NEHB•uh•kuhd•NEHZ•uhr) restored the city. Perhaps the most impressive part of the restoration was the famous hanging gardens. Greek scholars later listed them as one of the seven wonders of the ancient world. According to legend, one of Nebuchadnezzar's wives missed the flowering shrubs of her mountain homeland. To please her, he had fragrant trees and shrubs planted on terraces that rose 75 feet above Babylon's flat, dry plain.

Indeed, the entire city was a wonder. Its walls were so thick that, according to one report, a four-horse chariot could wheel around on top of them. To ensure that the world knew who ruled Babylon, the king had the bricks inscribed with the words, "I am Nebuchadnezzar, King of Babylon."

The highest building in Babylon was a great, seven-tiered ziggurat more than 300 feet high. It was visible for miles. At night, priests observed the stars from the top of this tower and others in the city. Chaldean astronomers kept detailed records of how the stars and planets seemed to change position in the night sky. They also concluded that the sun, moon, Earth, and five other planets belonged to the same solar system. The Chaldeans' observations formed the basis for both astronomy and astrology.

Nebuchadnezzar's empire fell shortly after his death. The Persians who next came to power adopted many Assyrian military, political, and artistic inventions. The Persians would use the organization the Assyrians had developed to stabilize the region.

SECTION

2

ASSESSMENT

TERMS & NAMES 1. For each term or name, write a sentence explaining its significance.

- Assyria
- Sennacherib
- Nineveh
- Ashurbanipal
- Medes
- Chaldeans
- Nebuchadnezzar

USING YOUR NOTES

2. Why did the Assyrians develop into a great military power? Why did their power decline?

Assyrian Power	
Causes For Rise	Causes for Decline
Need to defend against attacks	Hated by conquered people

MAIN IDEAS

3. What methods did the Assyrians use when they attacked enemy cities?
4. What contributions to government administration and culture did the Assyrians make?
5. Why did the people in the region rejoice when the Assyrian Empire was defeated?

CRITICAL THINKING & WRITING

6. **FORMING OPINIONS** Do you think the Assyrians' almost exclusive reliance on military power was a good strategy for creating their empire? Why or why not?
7. **MAKING INFERENCES** Why might the Assyrian warrior kings have had such a great interest in writing and reading?
8. **COMPARING** In what ways were King Ashurbanipal and King Nebuchadnezzar similar?
9. **WRITING ACTIVITY** **EMPIRE BUILDING** Write a one-paragraph **essay** on how developments in technology influenced the rise and decline of the Assyrian Empire.

CONNECT TO TODAY CREATING A POSTER

Research an instance when a modern ruler used excessive force to govern or put down opposition. Create a **poster** that tells about and illustrates the ruler and the event.

The Persian Empire

MAIN IDEA

BUILDING By governing with tolerance and wisdom, the Persians established a well-ordered empire that lasted for 200 years.

WHY IT MATTERS NOW

Leaders today try to follow the Persian example of tolerance and wise government.

TERMS & NAMES

- Cyrus
- Cambyses
- Darius
- satrap
- Royal Road
- Zoroaster

SETTING THE STAGE The Medes, along with the Chaldeans and others, helped to overthrow the Assyrian Empire in 612 B.C. The Medes marched to Nineveh from their homeland in the area of present-day northern Iran. Meanwhile, the Medes' close neighbor to the south, Persia, began to expand its horizons and territorial ambitions.

The Rise of Persia

The Assyrians employed military force to control a vast empire. In contrast, the Persians based their empire on tolerance and diplomacy. They relied on a strong military to back up their policies. Ancient Persia included what today is Iran.

The Persian Homeland Indo-Europeans first migrated from Central Europe and southern Russia to the mountains and plateaus east of the Fertile Crescent around 1000 B.C. This area extended from the Caspian Sea in the north to the Persian Gulf in the south. (See the map on page 101.) In addition to fertile farmland, ancient Iran boasted a wealth of minerals. These included copper, lead, gold, silver, and gleaming blue lapis lazuli. A thriving trade in these minerals put the settlers in contact with their neighbors to the east and the west.

At first, dozens of tiny kingdoms occupied the region. Eventually two major powers emerged: the Medes and the Persians. In time, a remarkable ruler would lead Persia to dominate the Medes and found a huge empire.

Cyrus the Great Finds an Empire The rest of the world paid little attention to the Persians until 550 B.C. In that year, **Cyrus** (SY•ruhs), Persia's king, began to conquer several neighboring kingdoms. Cyrus was a military genius, leading his army from victory to victory between 550 and 539 B.C. In time, Cyrus controlled an empire that spanned 2,000 miles, from the Indus River in the east to Anatolia in the west.

Even more than his military genius, though, Cyrus's most enduring legacy was his method of governing. His kindness toward conquered peoples revealed a wise and tolerant view of empire. For example, when Cyrus's army marched into a city, his generals prevented Persian soldiers from looting and burning. Unlike other conquerors, Cyrus believed in honoring local customs and religions. Instead of destroying the local temple, Cyrus would kneel there to pray.



Use the graphic organizer online to take notes on the similarities and differences between Cyrus and Darius.

Cyrus also allowed the Jews, who had been driven from their homeland by the Babylonians, to return to Jerusalem in 538 B.C. Under Persian rule, the Jews rebuilt their city and temple. The Jews were forever grateful to Cyrus, whom they considered one of God’s anointed ones. The Jewish prophet Ezra recounts Cyrus's proclamation:

PRIMARY SOURCE

Thus said King Cyrus of Persia: The LORD God of Heaven has given me all the kingdoms of the earth and has charged me with building Him a house in Jerusalem, which is in Judah. Anyone of you of all His people—may his God be with him, and let him go up to Jerusalem that is in Judah and build the House of the LORD God of Israel, the God that is in Jerusalem.

EZRA 1: 2–3 (Hebrew Bible)

MAIN IDEA

Summarizing

A What are some examples of Cyrus’s tolerant method of governing?

Cyrus was killed as he fought nomadic invaders on the eastern border of his empire. According to the Greek historian Arrian, his simple, house-shaped tomb bore these words: “O man, I am Cyrus the son of Cambyses. I established the Persian Empire and was king of Asia. Do not begrudge me my memorial.” **A**

Persian Rule

The task of unifying conquered territories fell to rulers who followed Cyrus. They succeeded by combining Persian control with local self-government.

Cambyses and Darius Cyrus died in 530 B.C. His son **Cambyses** (kam•BY•seez), named after Cyrus’s father, expanded the Persian Empire by conquering Egypt. However, the son neglected to follow his father’s wise example. Cambyses scorned the Egyptian religion. He ordered the images of Egyptian gods to be burned. After ruling for only eight years, Cambyses died. Immediately, widespread rebellions broke out across the empire. Persian control had seemed strong a decade earlier. It now seemed surprisingly fragile.

Cambyses’s successor, **Darius** (duh•RY•uhs), a noble of the ruling dynasty, had begun his career as a member of the king’s bodyguard. An elite group of Persian soldiers, the Ten Thousand Immortals, helped Darius seize the throne around 522 B.C. Darius spent the first three years of his reign putting down revolts. He spent the next few years establishing a well-organized and efficient administration.

Having brought peace and stability to the empire, Darius turned his attention to conquest. He led his armies eastward into the mountains of present-day Afghanistan and then down into the river valleys of India. The immense Persian Empire now extended over 2,500 miles, embracing Egypt and Anatolia in the west, part of India in the east, and the Fertile Crescent in the center. Darius’s only failure was his inability to conquer Greece.

▼ Sculpted figures bring gifts to Darius. The relief sculpture, located in the ancient Persian capital of Persepolis, dates from around the sixth century B.C.

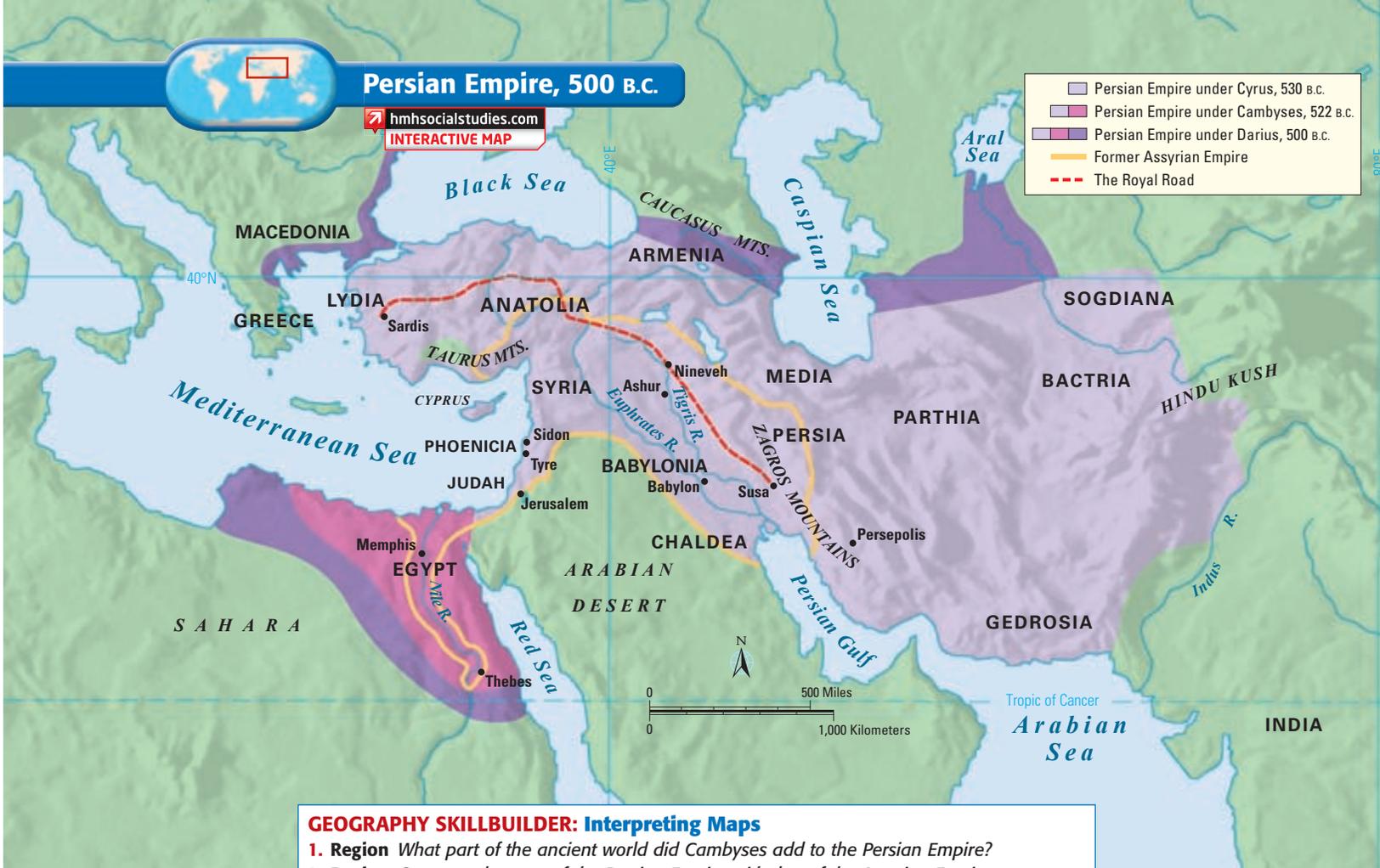




Persian Empire, 500 B.C.

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INTERACTIVE MAP

	Persian Empire under Cyrus, 530 B.C.
	Persian Empire under Cambyses, 522 B.C.
	Persian Empire under Darius, 500 B.C.
	Former Assyrian Empire
	The Royal Road



GEOGRAPHY SKILLBUILDER: Interpreting Maps

- 1. Region** What part of the ancient world did Cambyses add to the Persian Empire?
- 2. Region** Compare the map of the Persian Empire with that of the Assyrian Empire on page 96. What areas did the Persians rule that the Assyrians did not?

Provinces and Satraps Although Darius was a great warrior, his real genius lay in administration. To govern his sprawling empire, Darius divided it into 20 provinces. These provinces were roughly similar to the homelands of the different groups of people who lived within the Persian Empire. Under Persian rule, the people of each province still practiced their own religion. They also spoke their own language and followed many of their own laws. This administrative policy of many groups—sometimes called “nationalities”—living by their own laws within one empire was repeatedly practiced in Southwest Asia.

Although tolerant of the many groups within his empire, Darius still ruled with absolute power. In each province, Darius installed a governor called a **satrap** (SAY•TRAP), who ruled locally. Darius also appointed a military leader and a tax collector for each province. To ensure the loyalty of these officials, Darius sent out inspectors known as the “King’s Eyes and Ears.”

Two other tools helped Darius hold together his empire. An excellent system of roads allowed Darius to communicate quickly with the most distant parts of the empire. The famous **Royal Road**, for example, ran from Susa in Persia to Sardis in Anatolia, a distance of 1,677 miles. Darius borrowed the second tool, manufacturing metal coins, from the Lydians of Asia Minor. For the first time, coins of a standard value circulated throughout an extended empire. People no longer had to weigh and measure odd pieces of gold or silver to pay for what they bought. The network roads and the wide use of standardized coins promoted trade. Trade, in turn, helped to hold together the empire.

The Royal Road

One of the ways in which societies build and maintain empires is by establishing systems of communication and transportation. The Royal Road, built by the rulers of the Persian Empire, connected Susa in Persia to Sardis in Anatolia.

► This four-horse chariot dates from the 6th to 4th centuries B.C. It is the type of vehicle that would have traveled the Royal Road in the time of Darius. The studs on the wheels were designed to help prevent the chariot from slipping.



VIDEO
110 Guards
for Persia's
Royal Road

hmsocialstudies.com

A Ride Along the Royal Road



The Road

The road was 1,677 miles in length. There were 111 post or relay stations spaced about 15 miles apart along the road. Other roads branched off the main road to distant parts of the empire.

The Ride

Relay stations were equipped with fresh horses for the king's messengers. Royal messengers could cover the length of the Royal Road in seven days. Normal travel time along the road was longer. A caravan, for example, might take three months to travel the whole distance.

Strong road networks like the Royal Road enabled empires to expand and maintain control over people and places. Like the Persians, the Inca of South America created a road system thousands of miles long. These roads allowed the Inca to extend their rule over as many as 16 million people. Empires throughout history have shared characteristics such as efficient communication systems, effective leaders, and powerful armies.

Connect to Today

- 1. Recognizing Effects** How would the Royal Road enable a ruler to maintain power in the empire?
 See Skillbuilder Handbook, Page R6.
- 2. Comparing** What systems of communication and transportation today might be compared to the Royal Road of the Persians?

The Persian Legacy

By the time of Darius's rule, about 2,500 years had passed since the first Sumerian city-states had been built. During those years, people of the Fertile Crescent had endured war, conquest, and famine. These events gave rise to a basic question: Why should so much suffering and chaos exist in the world? A Persian prophet named **Zoroaster** (ZAWR•oh•AS•tuhr), who lived around 600 B.C., offered an answer.

Zoroaster's Teachings Zoroaster taught that the earth is a battleground where a great struggle is fought between the spirit of good and the spirit of evil. Each person, Zoroaster preached, is expected to take part in this struggle. The Zoroastrian religion teaches a belief in one god, Ahura Mazda (ah•HUR•uh•MAZ•duh). At the end of time, Ahura Mazda will judge everyone according to how well he or she fought the battle for good. Similarities to Zoroastrianism—such as the concept of Satan and a belief in angels—can be found in Judaism, Christianity, and Islam.

After the Muslim conquest of Persia in the A.D. 600s, the Zoroastrian religion declined. Some groups carried the faith eastward to India. Zoroastrianism also was an important influence in the development of Manichaeism (MAN•ih•KEE•ihz•uhm), a religious system that competed with early Christianity for believers. The followers of Mithra, a Zoroastrian god, spread westward to become a popular religion among the military legions in the Roman Empire. Today, modern Zoroastrians continue to observe the religion's traditions in several countries including Iran and India, where its followers are called Parsis. **B**

Political Order Through their tolerance and good government, the Persians brought political order to Southwest Asia. They preserved ideas from earlier civilizations and found new ways to live and rule. Their respect for other cultures helped to preserve those cultures for the future. The powerful dynasty Cyrus established in Persia lasted 200 years and grew into a huge empire. As you will learn in Section 4, great empires also arose in China and dominated that region.

MAIN IDEA

Comparing

B What ideas and world view did Zoroastrianism share with other religions?

SECTION

3

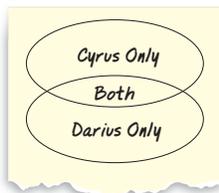
ASSESSMENT

TERMS & NAMES 1. For each term or name, write a sentence explaining its significance.

- Cyrus
- Cambyses
- Darius
- satrap
- Royal Road
- Zoroaster

USING YOUR NOTES

2. Which of the differences between Cyrus and Darius do you consider most important? Why?



MAIN IDEAS

3. How did Cyrus treat the peoples he conquered?
4. What methods and tools did Darius use to hold together his empire?
5. What did Zoroaster teach?

CRITICAL THINKING & WRITING

6. **MAKING INFERENCES** What do the words that appeared on Cyrus's tomb suggest about his character?
7. **DRAWING CONCLUSIONS** How did the Royal Road help Darius maintain control over his people?
8. **DEVELOPING HISTORICAL PERSPECTIVE** What events led to the development of Zoroastrianism?
9. **WRITING ACTIVITY** **EMPIRE BUILDING** Write an **expository essay** explaining how Darius's methods of administration gave stability to the Persian Empire. In your essay, consider such topics as the structure of the empire, the policy of tolerance, and the role of the satrap.

MULTIMEDIA ACTIVITY CREATING A CHART



Use the Internet to find information on modern Zoroastrianism. Create a **chart** to present your findings.

INTERNET KEYWORD
Zoroastrianism



The Unification of China

MAIN IDEA

RELIGIOUS AND ETHICAL SYSTEMS The social disorder of the warring states contributed to the development of three Chinese ethical systems.

WHY IT MATTERS NOW

The people, events, and ideas that shaped China's early history continue to influence China's role in today's world.

TERMS & NAMES

- Confucius
- filial piety
- bureaucracy
- Daoism
- Legalism
- *I Ching*
- yin and yang
- Qin Dynasty
- Shi Huangdi
- autocracy

SETTING THE STAGE The Zhou Dynasty, as you read in Chapter 2, lasted for at least eight centuries, from approximately 1027 to 256 B.C. For the first 300 years of their long reign, the Zhou kings controlled a large empire, including both eastern and western lands. Local rulers reported to the king, who had the ultimate power. By the latter years of the Zhou Dynasty, the lords of dependent territories began to think of themselves as independent kings. Their almost constant conflict, which is known as “the warring states period,” led to the decline of the Zhou Dynasty.

Confucius and the Social Order



Use the graphic organizer online to take notes on how the chaos of the warring states affected the philosophy, politics, and cities of China.

Toward the end of the Zhou Dynasty, China moved away from its ancient values of social order, harmony, and respect for authority. Chinese scholars and philosophers developed different solutions to restore these values.

Confucius Urges Harmony China's most influential scholar was **Confucius** (kuhn•FYOO•shuhs). Born in 551 B.C., Confucius lived in a time when the Zhou Dynasty was in decline. He led a scholarly life, studying and teaching history, music, and moral character.

Confucius was born at a time of crisis and violence in China. He had a deep desire to restore the order and moral living of earlier times to his society. Confucius believed that social order, harmony, and good government could be restored in China if society were organized around five basic relationships. These were the relationships between: (1) ruler and subject, (2) father and son, (3) husband and wife, (4) older brother and younger brother, and (5) friend and friend. A code of proper conduct regulated each of these relationships. For example, rulers should practice kindness and virtuous living. In return, subjects should be loyal and law-abiding.

Three of Confucius's five relationships were based upon the family. Confucius stressed that children should practice **filial piety**, or respect for their parents and ancestors. Filial piety, according to Confucius, meant devoting oneself to one's parents during their lifetimes. It also required honoring their memories after death through the performance of certain rituals.

In the following passage, Confucius—the “Master”—expresses his thoughts on the concept:

PRIMARY SOURCE

Ziyou [a disciple of Confucius] asked about filial piety. The Master said: “Nowadays people think they are dutiful sons when they feed their parents. Yet they also feed their dogs and horses. Unless there is respect, where is the difference?”

CONFUCIUS, *Analects* 2.7

Confucius wanted to reform Chinese society by showing rulers how to govern wisely. Impressed by Confucius’s wisdom, the duke of Lu appointed him minister of justice. According to legend, Confucius so overwhelmed people by his kindness and courtesy that almost overnight, crime vanished from Lu. When the duke’s ways changed, however, Confucius became disillusioned and resigned.

Confucius spent the remainder of his life teaching. His students later collected his words in a book called the *Analects*. A disciple named Mencius (MEHN•shee•uhs) also spread Confucius’s ideas.

Confucian Ideas About Government Confucius said that education could transform a humbly born person into a gentleman. In saying this, he laid the groundwork for the creation of a **bureaucracy**, a trained civil service, or those who run the government. According to Confucius, a gentleman had four virtues: “In his private conduct he was courteous, in serving his master he was punctilious [precise], in providing for the needs of the people he gave them even more than their due; in exacting service from the people, he was just.” Education became critically important to career advancement in the bureaucracy.

Confucianism was never a religion, but it was an ethical system, a system based on accepted principles of right and wrong. It became the foundation for Chinese government and social order. In addition, the ideas of Confucius spread beyond China and influenced civilizations throughout East Asia.

Other Ethical Systems

In addition to Confucius, other Chinese scholars and philosophers developed ethical systems with very different philosophies. Some stressed the importance of nature, others, the power of government.

Daoists Seek Harmony For a Chinese thinker named Laozi (low•dzuh), who may have lived during the sixth century B.C., only the natural order was important. The natural order involves relations among all living things. His book *Dao De Jing* (*The Way of Virtue*) expressed Laozi’s belief. He said that a universal force called the Dao (dow), meaning “the Way,” guides all things. Of all the creatures of nature,

History Makers



Confucius 551–479 B.C.

Confucius was born to a poor family. As an adult, he earned his living as a teacher. But he longed to put his principles into action by advising political leaders. Finally, at around age 50, Confucius won a

post as minister in his home state. According to legend, he set such a virtuous example that a purse lying in the middle of the street would be untouched for days.

After Confucius resigned his post as minister, he returned to teaching. He considered himself a failure because he had never held high office. Yet Confucius’s ideas have molded Chinese thought for centuries.



Laozi sixth century B.C.

Although a person named Laozi is credited with being the first philosopher of Daoism, no one knows for sure whether he really existed. Legend has it that Laozi’s mother carried him in her womb for 62

years and that he was born with white hair and wrinkled skin. Laozi’s followers claimed that he was a contemporary of Confucius.

Unlike Confucius, however, Laozi believed that government should do as little as possible and leave the people alone. Laozi thought that people could do little to influence the outcome of events. Daoism offered communion with nature as an alternative to political chaos.



RESEARCH WEB LINKS Go online for more on Confucius and Laozi.

Vocabulary

legend: a story handed down from earlier times, especially one believed to be historical

according to Laozi, only humans fail to follow the Dao. They argue about questions of right and wrong, good manners or bad. According to Laozi, such arguments are pointless. In the following, he explains the wisdom of the Dao:

PRIMARY SOURCE 

The Dao never does anything,
yet through it all things are done.

If powerful men and women
could center themselves in it,
the whole world would be transformed
by itself, in its natural rhythms.
People would be content
with their simple, everyday lives, in harmony, and free of desire.

When there is no desire,
all things are at peace.

LAOZI, *Dao De Jing*, Passage 37

MAIN IDEA

Analyzing Primary Sources

 What do you think is the Daoist attitude toward being a powerful person?

The philosophy of Laozi came to be known as **Daoism**. Its search for knowledge and understanding of nature led Daoism's followers to pursue scientific studies. Daoists made many important contributions to the sciences of alchemy, astronomy, and medicine.

Legalists Urge Harsh Rule In sharp contrast to the followers of Confucius and Laozi was a group of practical political thinkers called the Legalists. They believed that a highly efficient and powerful government was the key to restoring order in society. They got their name from their belief that government should use the law to end civil disorder and restore harmony. Hanfeizi and Li Si were among the founders of **Legalism**.

The Legalists taught that a ruler should provide rich rewards for people who carried out their duties well. Likewise, the disobedient should be harshly punished. In practice, the Legalists stressed punishment more than rewards. For example, anyone caught outside his own village without a travel permit should have his ears or nose chopped off.

The Legalists believed in controlling ideas as well as actions. They suggested that a ruler burn all writings that might encourage people to criticize government.



VIDEO

New Philosophies Emerge

hmhsocialstudies.com

Chinese Ethical Systems

Confucianism

- Social order, harmony, and good government should be based on family relationships.
- Respect for parents and elders is important to a well-ordered society.
- Education is important both to the welfare of the individual and to society.

Daoism

- The natural order is more important than the social order.
- A universal force guides all things.
- Human beings should live simply and in harmony with nature.

Legalism

- A highly efficient and powerful government is the key to social order.
- Punishments are useful to maintain social order.
- Thinkers and their ideas should be strictly controlled by the government.

SKILLBUILDER: Interpreting Charts

1. **Comparing** Which of these three systems stresses the importance of government and a well-ordered society?
2. **Synthesizing** Which of these systems seems to be most moderate and balanced? Explain.

MAIN IDEA**Summarizing**

B How did the Legalists think that a society could be made to run well?

After all, it was for the prince to govern and the people to obey. Eventually, Legalist ideas gained favor with a prince of a new dynasty that replaced the Zhou. That powerful ruler soon brought order to China. **B**

I Ching* and Yin and Yang** People with little interest in the philosophical debates of the Confucians, Daoists, and Legalists found answers to life's questions elsewhere. Some consulted a book of oracles called ***I Ching (also spelled *Yi Jing*) to solve ethical or practical problems. Readers used the book by throwing a set of coins, interpreting the results, and then reading the appropriate oracle, or prediction. The *I Ching* (*The Book of Changes*) helped people to lead a happy life by offering good advice and simple common sense.

Other people turned to the ideas of ancient thinkers, such as the concept of **yin and yang**—two powers that together represented the natural rhythms of life. Yin represents all that is cold, dark, soft, and mysterious. Yang is the opposite—warm, bright, hard, and clear. The symbol of yin and yang is a circle divided into halves, as shown in the emblem to the upper right. The circle represents the harmony of yin and yang. Both forces represent the rhythm of the universe and complement each other. Both the *I Ching* and yin and yang helped Chinese people understand how they fit into the world.



▲ Traditional yin-and-yang symbol

The Qin Dynasty Unifies China

In the third century B.C., the **Qin Dynasty** (chihn) replaced the Zhou Dynasty. It emerged from the western state of Qin. The ruler who founded the Qin Dynasty employed Legalist ideas to subdue the warring states and unify his country.

A New Emperor Takes Control In 221 B.C., after ruling for over 20 years, the Qin ruler assumed the name **Shi Huangdi** (shihr-hwahng•dee), which means “First Emperor.” The new emperor had begun his reign by halting the internal battles that had sapped China's strength. Next he turned his attention to defeating invaders and crushing resistance within China to his rule. Shi Huangdi's armies attacked the invaders north of the Huang He and south as far as what is now Vietnam. His victories doubled China's size. Shi Huangdi was determined to unify China.

Shi Huangdi acted decisively to crush political opposition at home. To destroy the power of rival warlords, he introduced a policy called “strengthening the trunk and weakening the branches.” He commanded all the noble families to live in the capital city under his suspicious gaze. This policy, according to tradition, uprooted 120,000 noble families. Seizing their land, the emperor carved China into 36 administrative districts. He sent Qin officials to control them.

To prevent criticism, Shi Huangdi and his prime minister, the Legalist philosopher Li Su, murdered hundreds of Confucian scholars. They also ordered “useless” books burned. These books were the works of Confucian thinkers and poets who disagreed with the Legalists. Practical books about medicine and farming, however, were spared. Through measures

▼ Although a tyrant, Shi Huangdi is considered the founder of unified China. The word *Qin* is the origin of *China*.



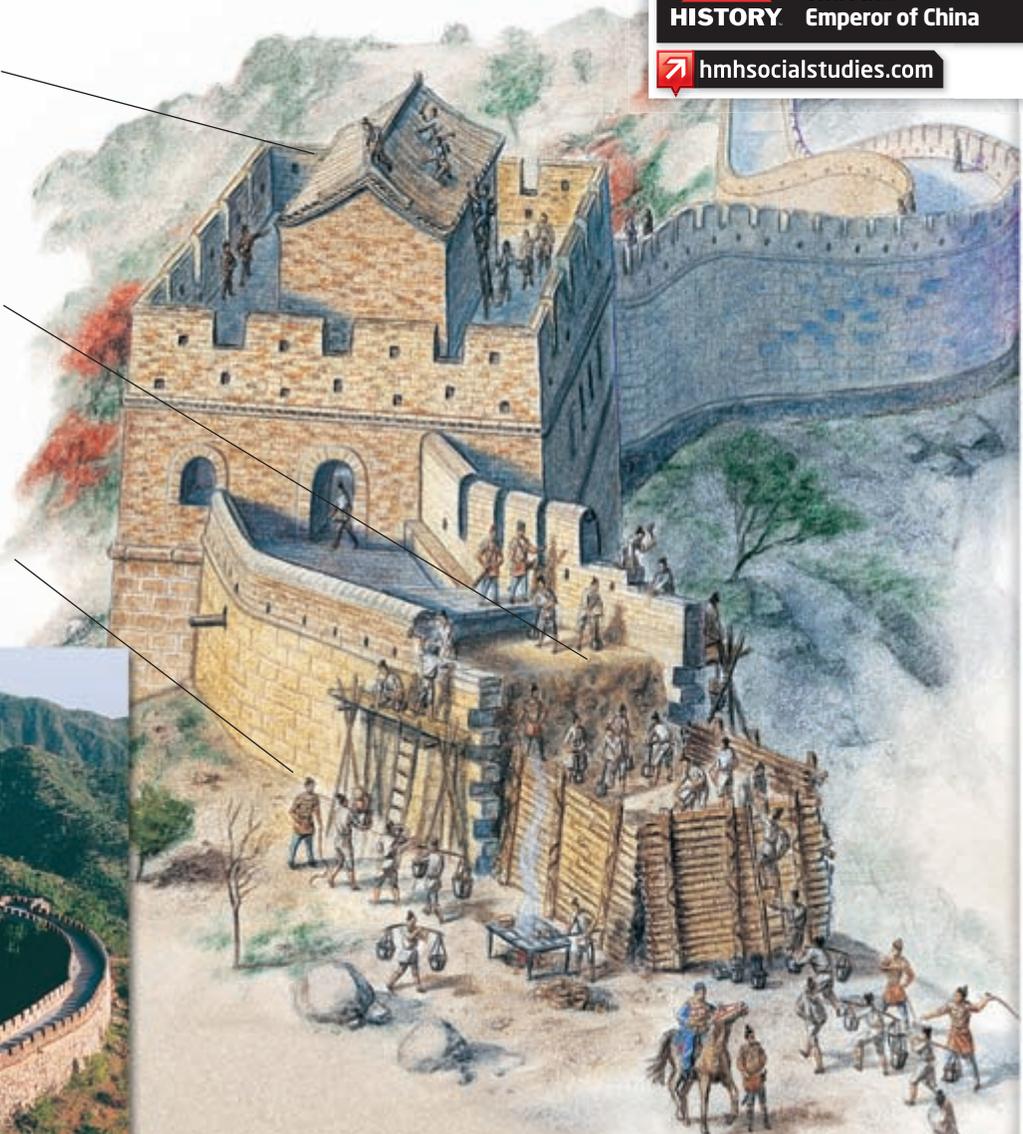
H VIDEO
HISTORY The First Emperor of China
hmhsocialstudies.com

The Great Wall of China

From the Yellow Sea in the east to the Gobi Desert in the west, the Great Wall twisted like a dragon's tail for thousands of miles. Watch towers rose every 200 to 300 yards along the wall.

In the time of Shi Huangdi, hundreds of thousands of peasants collected, hauled, and dumped millions of tons of stone, dirt, and rubble to fill the core of the Great Wall.

Slabs of cut stone on the outside of the wall enclosed a heap of pebbles and rubble on the inside. Each section of the wall rose to a height of 20 to 25 feet.



Although Shi Huangdi built the earliest unified wall, the wall as it exists today dates from the later Ming Dynasty (1368–1644).



SKILLBUILDER: Interpreting Visual Sources

- 1. Making Inferences** *What were the benefits of the watch towers along the wall?*
- 2. Drawing Conclusions** *What modern structures serve the same purpose as the watch towers?*

such as these, Shi Huangdi established an **autocracy**—a government that has unlimited power and uses it in an arbitrary manner.

A Program of Centralization Shi Huangdi's sweeping program of centralization included the building of a highway network of more than 4,000 miles. Also, he set the same standards throughout China for writing, law, currency, and weights and measures—even down to the length of cart axles. This last standard made sure that all vehicles could fit into the ruts of China's main roads.

Under Shi Huangdi's rule, irrigation projects increased farm production. Trade blossomed, thanks to the new road system. Trade pushed a new class of merchants into prominence. Despite these social advances, harsh taxes and repressive government made the Qin regime unpopular. Shi Huangdi had unified China at the expense of human freedom.

MAIN IDEA

Recognizing Effects

What were the positive and negative effects of Shi Huangdi's rule?

Great Wall of China Scholars hated Shi Huangdi for his book burning. Poor people hated him because they were forced to work on the building of a huge defensive wall. Earlier, Zhou rulers had erected smaller walls to discourage attacks by northern nomads. Shi Huangdi determined to close the gaps and extend the wall almost the length of the empire's border. Enemies would have to gallop halfway to Tibet to get around it.

The Great Wall of China arose on the backs of hundreds of thousands of peasants. The wall builders worked neither for wages nor for love of empire. They faced a terrible choice: work on the wall or die. Many of the laborers worked on the wall and died anyway, victims of the crushing labor or the harsh winter weather.

The Fall of the Qin The Qin Dynasty lasted only a short time. Though fully as cruel as his father, Shi Huangdi's son proved less able. Peasants rebelled just three years after the second Qin emperor took office. One of their leaders, a peasant from the land of Han, marched his troops into the capital city. By 202 B.C., the harsh Qin Dynasty gave way to the Han Dynasty, one of the longest in Chinese history.

While the Chinese explored the best ways to govern, ancient Greece also was experimenting with different forms of government, as you will read in Chapter 5.

SECTION

4

ASSESSMENT

TERMS & NAMES 1. For each term or name, write a sentence explaining its significance.

- Confucius • filial piety • bureaucracy • Daoism • Legalism • *I Ching* • yin and yang • Qin Dynasty • Shi Huangdi • autocracy

USING YOUR NOTES

2. Which aspect of Chinese life was most affected by the chaos created by the warring states?



MAIN IDEAS

3. How did Confucius believe that social order, harmony, and good government could be restored in China?
4. What did the Legalists see as the key to restoring order?
5. What measures did Shi Huangdi take to crush political opposition at home?

CRITICAL THINKING & WRITING

6. **HYPOTHESIZING** How would followers of the three philosophical traditions in China react to the idea that "all-men are created equal"?
7. **ANALYZING CAUSES** Why did Shi Huangdi have his critics murdered?
8. **MAKING INFERENCES** Would a ruler who followed Confucian or Daoist ideas have built the Great Wall? Why-or why not?
9. **WRITING ACTIVITY** **RELIGIOUS AND ETHICAL SYSTEMS**
Write a **comparison-contrast paragraph** in which you discuss the three Chinese ethical systems.

CONNECT TO TODAY **PREPARING AN ORAL REPORT**

Research to find out about the Great Wall today. Prepare an **oral report** in which you explain what the Great Wall looks like today and what it is used for.

Chapter 4 Assessment

TERMS & NAMES

For each term or name below, briefly explain its connection to the history of the first age of empires between 1570 and 200 B.C.

1. Ramses II
2. Kush
3. Assyria
4. Ashurbanipal
5. Cyrus
6. Royal Road
7. Zoroaster
8. Confucius
9. Daoism
10. Shi Huangdi

MAIN IDEAS

The Egyptian and Nubian Empires Section 1 (pages 89–94)

11. How did the Kushites treat Egyptian culture after they conquered Egypt?
12. When did Kush experience a golden age?

The Assyrian Empire Section 2 (pages 95–98)

13. How did Assyria acquire its empire?
14. What were the positive achievements of the Assyrian Empire?

The Persian Empire Section 3 (pages 99–103)

15. What is Cyrus's enduring legacy?
16. How far did Darius extend the Persian Empire?

The Unification of China Section 4 (pages 104–109)

17. Around what five basic relationships did Confucius believe society should be organized?
18. Why did Shi Huangdi have the Great Wall built?

CRITICAL THINKING

1. USING YOUR NOTES

EMPIRE BUILDING

Create a table and list the successes and failures of the leaders discussed in this chapter.

Leader	Successes	Failures
Thutmose III		
Sennacherib		
Cyrus		

2. DRAWING CONCLUSIONS

RELIGIOUS AND ETHICAL SYSTEMS

Religious and ethical systems in Persia and China arose in response to what similar conditions?

3. DEVELOPING HISTORICAL PERSPECTIVE

How have Cyrus's and Sennacherib's contrasting ruling styles probably affected their legacies?

4. RECOGNIZING EFFECTS

CULTURAL INTERACTION

What positive results occur when cultures interact? What negative results might there be?

5. SYNTHESIZING

What similar purpose was served by the Persians' Royal Road and by the Great Wall of China?

VISUAL SUMMARY

First Age of Empires

EMPIRE BUILDING

Egypt 1570–1075 B.C.

- Pharaohs set up a professional army.
- Pharaohs invaded territories in Africa and Southwest Asia.
- Egypt drew vast wealth from the lands it controlled.

Nubia 751 B.C.–A.D. 350

- Nubia and Egypt interacted and spread their culture through trade.
- The kings of Nubia conquered Egypt and maintained the Egyptian way of life.
- Nubia established trade among Africa, Arabia, and India.

Assyria 850–612 B.C.

- Assyria used a sophisticated military organization to conquer an empire.
- The empire engaged in brutal treatment of its conquered peoples.
- Kings used harsh taxes to control conquered peoples.

Persia 550–330 B.C.

- Persian kings were tolerant.
- Kings permitted a high degree of local self-government.
- The empire was divided into 20 provinces.

China 221–202 B.C.

- Ethical systems laid the groundwork for a strong central government.
- The Qin Dynasty defeated invaders, crushed internal resistance, and united China.
- China initiated a sweeping program of centralization.

STANDARDS-BASED ASSESSMENT

Use the quotation and your knowledge of world history to answer questions 1 and 2.

PRIMARY SOURCE

Guide the people with governmental measures and control or regulate them by the threat of punishment, and the people will try to keep out of jail, but will have no sense of honor or shame. Guide the people by virtue and control or regulate them by *li* [moral rules and customs], and the people will have a sense of honor and respect.

CONFUCIUS, *Analects* 2.3

1. Which phrase best describes Confucius's belief about human nature and lawful behavior?
 - A. People are naturally moral and can control their behavior on their own.
 - B. People are best controlled by fear.
 - C. People learn good behavior by example.
 - D. People cannot be controlled by any means.
2. Which of the following rulers might have held a similar belief?
 - A. Shi Huangdi
 - B. Cyrus
 - C. King Ashurbanipal
 - D. Ramses II

Use the relief below depicting King Ashurbanipal and his queen at a garden party and your knowledge of world history to answer question 3.



3. What characteristic of the Assyrians does this relief seem to reflect?
 - A. their love of luxury
 - B. their military might
 - C. their administrative organization
 - D. their love of learning

 hmhsocialstudies.com **TEST PRACTICE**

For additional test practice, go online for:

- Diagnostic tests
- Strategies
- Tutorials

Interact *with* History

Recall your discussion of the question on page 88: "How will the empire help you or harm you?" You thought about the advantages and disadvantages of empire before studying the rise of the first great empires. Now that you've read the chapter, rethink the advantages and disadvantages of empire. Discuss the following questions with a small group:

- Do empires benefit conquered peoples?
- Do empires impose penalties on those they conquer?
- Which outweighs the other—the benefits or the penalties?

FOCUS ON WRITING

Study page 108, which deals with the Great Wall of China. Imagine that you are one of the workers who built the Great Wall. Write three **journal entries** describing the following:

- the work you carry out on the Great Wall
- your experiences
- your impressions

MULTIMEDIA ACTIVITY



Creating a Web Site

Create a Web site on the first empires for a museum exhibit. Choose one of these empires to research: Assyria, Kush, Persia, or Qin. Consider including:

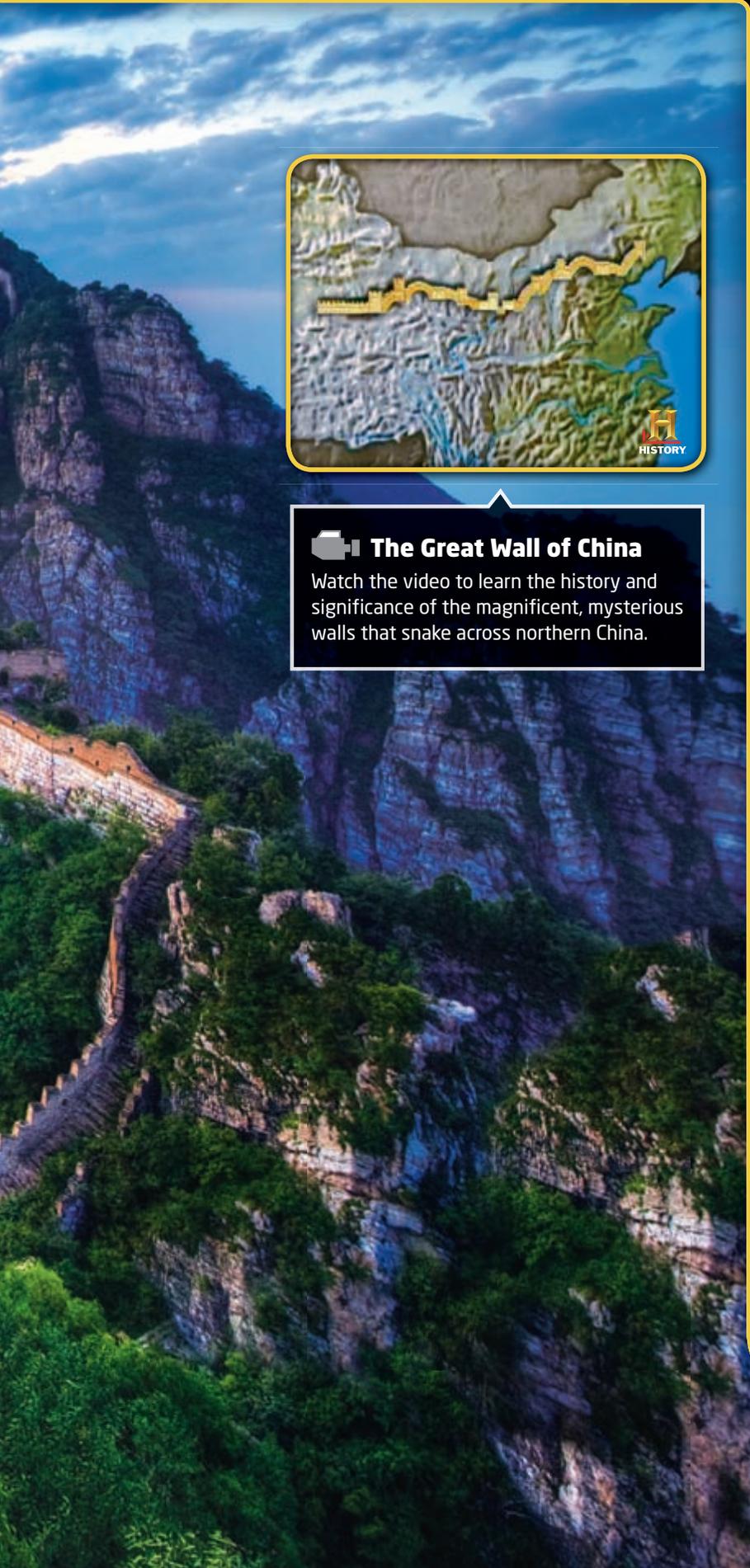
- art, artifacts, and maps
- a description of the empire with dates, location, and rulers
- information on major events and conflicts
- the rise and fall of the empire
- a discussion of the empire's legacy
- a list of Web sites used in your research

China and the Great Wall

Today, the Great Wall of China is an impressive symbol of the Asian giant's power, genius, and endurance. It wasn't always so. For much of its history, the Chinese people saw the Great Wall as a symbol of cruelty and oppression. This is just one way in which the wall differs from what we think we know. In contrast to popular notions, the wall that draws tourists to Beijing by the

millions was not built 2,000 years ago. Nor is the Great Wall a single wall. Instead, it was patched together from walls built over many centuries. And for all its grandeur, the wall failed to keep China safe from invasion.

Explore facts and fictions about the Great Wall online. You can find more information, video clips, primary sources, activities, and more at [hmhsocialstudies.com](https://www.hmhsocialstudies.com).



The Great Wall of China

Watch the video to learn the history and significance of the magnificent, mysterious walls that snake across northern China.

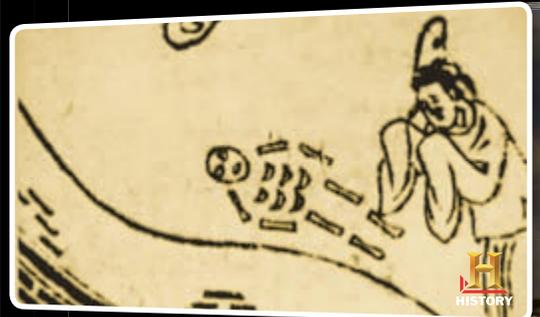


CLICK THROUGH
INTER / ACTIVITIES
hmhsocialstudies.com



A Land of Walls Within Walls

Watch the video to learn how the Great Wall fits within the ancient Chinese tradition of wall-building.



The Human Costs of Building

Watch the video to learn about the miseries that awaited the men who built the wall.



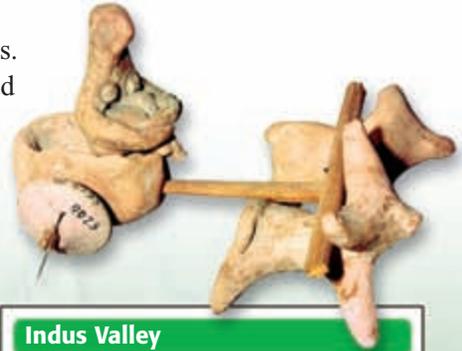
Twentieth-Century China

Watch the video to examine the role that the wall has played in modern Chinese history.

The Rise of Civilizations

Thousands of years ago, several societies in different parts of the world changed from hunting and gathering to farming. Some began to produce surpluses of food. Those surpluses helped bring about the world's first civilizations.

In Unit 1, you learned that most historians define civilization as a complex culture with these five characteristics: (1) advanced cities, (2) specialized workers, (3) complex institutions, (4) record keeping and writing, and (5) advanced technology. You also learned about several early civilizations. In the next six pages, you will explore what those ancient civilizations had in common and how they differed.



Indus Valley

The people of the Indus River valley lived in highly planned cities. Later, a new group moved into the area, creating a civilization that still influences South Asia.



Ancient Egypt

Along the Nile River, powerful rulers led a dazzling civilization that produced monuments, art, and religion that still fascinate people today.



Eastern Mediterranean

Various peoples settled in the hills and valleys of Palestine. One group—the Israelites—was unique because they worshiped only one God.

Mesopotamia

The Tigris and Euphrates rivers supported the different peoples of Mesopotamia. The first civilization there was based in city-states.



Ancient Civilizations over Time

Some of these ancient civilizations lasted only a few hundred years, but others lasted more than 3,000 years. Earlier civilizations often had influence on later ones that shared the same area. The civilizations shown here did not all develop in isolation of each other. Trade linked some. Some fought wars against each other.

		Civilizations of the Ancient World					
REGION	CIVILIZATION	3500 B.C.	3000	2500	2000	1500	1000 B.C.
Mesopotamia	Sumerian	█	█	█			
	Babylonian				█		
	Hittite					█	
Eastern Mediterranean	Phoenician						█
	Israelite						█
Egypt	Egyptian	█	█	█	█	█	█
Indus Valley	Harappan			█	█		
	Aryan						█
China	Shang/Zhou					█	█

China

The first civilization in China also arose along rivers. As in South Asia, features of this civilization still shape life in the region today.



Comparing & Contrasting

- Which civilizations arose in river valleys? What advantages did such a location provide for their continued development?
- What civilization area is the farthest away from any other civilization area? How might this distance have affected that civilization?



Characteristics of Civilizations

The civilizations you studied in Unit 1 each demonstrated the five characteristics that historians use to define a civilization.

Advanced Cities

Cities were key features of the ancient civilizations. These cities were more than just collections of people. They were also centers of political, economic, and religious life.

Specialized Workers

Surpluses of food allowed people to specialize in jobs outside of agriculture. Specialized workers such as artisans, traders, and soldiers strengthened and expanded civilization.

Complex Institutions

Complex institutions such as law codes, religion, and an economy were another characteristic of ancient civilizations. They organized, united, and helped civilizations to prosper.

Record Keeping and Writing

Each civilization developed a system of writing. Rulers could record laws. Priests could write down important religious dates and the rituals to follow. Merchants could record transactions. Eventually, people used the writing system to record their thoughts and ideas, creating literature and written history.

Advanced Technology

The civilizations developed new ways of doing work and new materials to work with, such as metals and pottery. They also developed tools like calendars to make their world more orderly.

	Indus Valley	Mesopotamia	China	Ancient Egypt	Eastern Mediterranean
Advanced Cities	<ul style="list-style-type: none"> Planned cities had neatly laid-out streets and fortified areas. 	<ul style="list-style-type: none"> Cities had central temples called ziggurats. 	<ul style="list-style-type: none"> Cities had massive earthen walls for protection. 	<ul style="list-style-type: none"> Cities had power over the surrounding lands. 	<ul style="list-style-type: none"> Phoenician cities were busy ports. Jerusalem had a large temple.
Specialized Workers	<ul style="list-style-type: none"> Artisans made various goods, which traders exchanged with other peoples. 	<ul style="list-style-type: none"> Priests, warriors, scribes, artisans, and farmers all had special tasks. 	<ul style="list-style-type: none"> Warriors defended the land. Artisans made beautiful and useful items. 	<ul style="list-style-type: none"> Rulers, officials, priests, and wealthy land-owners led society. 	<ul style="list-style-type: none"> Phoenician sailors carried goods. Israelite religious leaders had great influence.
Complex Institutions	<ul style="list-style-type: none"> Rulers organized the work of laying out the cities. 	<ul style="list-style-type: none"> Priests and then kings ran the cities. Rulers created written law codes. 	<ul style="list-style-type: none"> Rulers organized workers to build canals and city walls. 	<ul style="list-style-type: none"> Pharaohs ordered people to build elaborate tombs. Priests ran large temples. 	<ul style="list-style-type: none"> Israelites developed the belief in one God. They saw the law as a gift from God.
Record Keeping and Writing	<ul style="list-style-type: none"> The system of writing has not yet been deciphered. 	<ul style="list-style-type: none"> Cuneiform was the world's first system of writing. 	<ul style="list-style-type: none"> The writing system helped unify peoples with different languages because characters stood for ideas. 	<ul style="list-style-type: none"> Hieroglyphic writing had symbols that stood for ideas and for sounds. 	<ul style="list-style-type: none"> The Phoenician alphabet became the basis of many alphabets.
Advanced Technology	<ul style="list-style-type: none"> Engineers made sophisticated buildings and plumbing systems. 	<ul style="list-style-type: none"> Sumerians invented the wheel, the sail, and the plow, and discovered how to make bronze. 	<ul style="list-style-type: none"> The Chinese refined bronze casting technology and valuable silk cloth production. 	<ul style="list-style-type: none"> Advances were made in engineering, astronomy, and medicine. 	<ul style="list-style-type: none"> Phoenicians built ships with advances such as the steering oar and the sail.

SKILLBUILDER: Interpreting Charts

- Synthesizing** How important was religion to these civilizations?
- Analyzing Motives** How did the Chinese system of writing contribute to the spread of Chinese civilization?

Go online to listen to selected audio excerpts.

Development of Law

Laws are a complex institution of civilizations. They are designed to do many things—settle conflicts between individuals, provide citizens with guidance on proper behavior, and outline an individual’s relationship with the government. Thus, laws are important for building stable civilizations.

PRIMARY SOURCE

Hammurabi’s Code

If a son has struck his father, they shall cut off his hand.
 If a [noble] has destroyed the eye of a [noble], they shall destroy his eye.
 If he has broken another [noble’s] bone, they shall break his bone.
 If he has destroyed the eye of a commoner or broken the bone of a commoner, he shall pay one mina of silver.
 If he has destroyed the eye of a [noble’s] slave or broken the bone of a [noble’s] slave, he shall pay one-half [the slave’s] value.
 If a [noble] has knocked out the tooth of a [noble], they shall knock out his tooth.
 If he has knocked out a commoner’s tooth, he shall pay one-third mina of silver.

DOCUMENT-BASED QUESTION

Is the Code applied equally to all people? Explain your answer.

PRIMARY SOURCE

Hebrew Bible

When you reap the harvest of your land, you shall not reap all the way to the edges of the field, or gather the gleanings of your harvest. You shall not pick your vineyard bare, or gather the fallen fruit of your vineyard; you shall leave them for the poor and the stranger. . . .
 You shall not defraud your fellow. You shall not commit robbery. The wages of a laborer shall not remain with you until morning. . . .
 You shall not render an unfair decision: do not favor the poor or show deference to the rich; judge your kinsman fairly. Do not deal basely with your countrymen. . . .
 You shall not hate your kinsfolk in your heart. Reprove your kinsman but incur no guilt because of him. You shall not take vengeance or bear a grudge against your countrymen. Love your fellow as yourself.

DOCUMENT-BASED QUESTION

What principle underlies these laws? How would you describe the concepts in these laws?



PRIMARY SOURCE

Confucius

The Master said, “A young man’s duty is to behave well to his parents at home and to his elders abroad, to be cautious in giving promises and punctual in keeping them, to have kindly feelings towards everyone, but seek the intimacy of the Good.”
 The Master said, “Govern the people by regulations, keep order among them by chastisements, and they will flee from you, and lose all self-respect. Govern them by moral force, keep order among them by ritual, and they will keep their self-respect and come to you of their own accord.”

DOCUMENT-BASED QUESTION

What behavior does Confucius expect of ordinary people and of rulers?

Comparing & Contrasting

1. How is the treatment of people in Hammurabi’s Code different from the treatment of people in the Hebrew Bible and the writings of Confucius?
2. For which of the civilizations on the chart do you think laws were most important? Why?



Record Keeping and Writing

As institutions became more complex, people realized the need for record keeping. Officials tracked taxes and laws, priests recorded important rituals, and merchants totaled accounts. Record keeping provided stability for the complex institutions.

PRIMARY SOURCE

Indus Valley Seals

The system of writing used in the Indus Valley has not been deciphered. Scholars have identified about 400 symbols, but they do not know if these stand for ideas or sounds. Many of the examples are found on small seals. The seals might have been used to mark objects to show ownership. In that case, the symbols might give a person's name.



DOCUMENT-BASED QUESTION

Based on what you see on this seal, what are some possibilities for its translation?

PRIMARY SOURCE

Sumerian Cuneiform

Cuneiform originated in people's desire to keep track of goods they owned. By around 3000 B.C., Sumerians had more than 1,000 symbols. Each stood for an idea. Later, symbols stood for sounds. This system of writing was used in Mesopotamia for about 3,000 years. Different peoples adapted it for their own languages. At first, cuneiform was read from top to bottom. Later, it was read from left to right.

DOCUMENT-BASED QUESTION

What visual clue suggests that this cuneiform sample was read from left to right and not top to bottom?



PRIMARY SOURCE

Egyptian Hieroglyphics

Hieroglyphics were read in the direction that the human and animal heads faced. Usually this was from right to left. Sometimes, though, the direction could be changed to make a more pleasing appearance. Some symbols stood for ideas. Some stood for consonant sounds—vowels were not included. Some gave clues to how a word was used, such as whether a name referred to a person or a place.

DOCUMENT-BASED QUESTION

In the bottom row on the left, you can see an owl. What other symbols do you recognize?



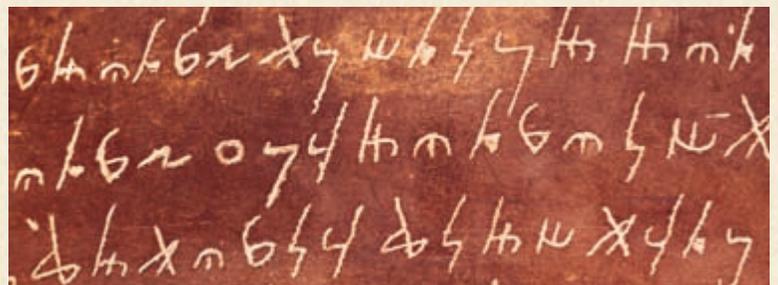
PRIMARY SOURCE

Phoenician Alphabet

The alphabet used by the ancient Phoenicians had symbols for 22 consonants. This alphabet was adapted by the Greeks, and it became the basis for writing all European languages. The Phoenician alphabet also influenced how Hebrew and Arabic were written, and it was adapted to write the languages of India and Ethiopia.

DOCUMENT-BASED QUESTION

Do any of the letters in this Phoenician sample look similar to letters we use today? If so, which ones?



Advanced Technology

New technologies gave the ancient civilizations new ways of solving problems. Some solved age-old problems—for example, the plow made it easier to till the soil. Some solved new problems. Egyptians learned how to embalm the bodies of dead rulers as part of their complex beliefs about life after death.

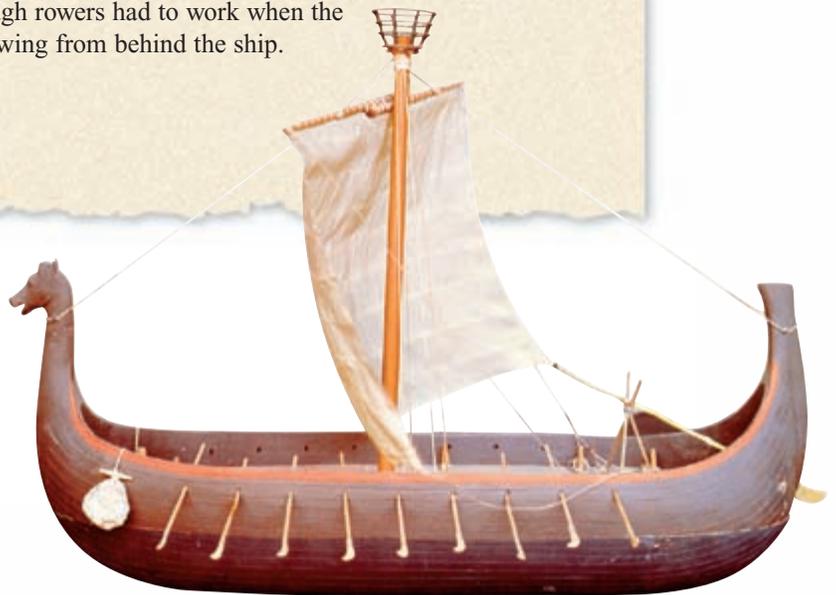
PRIMARY SOURCE

Phoenician Sailing

The Phoenicians traded throughout the Mediterranean Sea and beyond. They were the most skilled sailors of their time. The first ships relied on rowers and did not have sails. They also lacked rudders for steering. By about 700 B.C., though, the Phoenicians had made advances. They added long steering oars in the back and a single sail, which could catch the wind and move the ship forward. Captains came to rely on the sails, though rowers had to work when the weather was calm or when the wind was not blowing from behind the ship.

DOCUMENT-BASED QUESTION

What is the advantage of having a sail on the ship?



PRIMARY SOURCE

Bronze from Shang China

During the Shang Dynasty, Chinese artisans grew highly skilled at making bronze. Bronze is a mixture of copper and tin. They made bronze weapons and vessels for religious ceremonies. Bronzes were made by creating pottery molds that were carved on the inside, in reverse, to leave the desired pattern on the final object. Hot liquid bronze was poured inside. When it had cooled, the pottery molds were broken.

DOCUMENT-BASED QUESTION

What does the intricate detail of this piece suggest about Shang society?



Comparing & Contrasting

1. How do the ancient systems of writing differ from the way words are written today?
2. What role did trade play in the development of writing?
3. Which technological advances do you think were more important—Chinese skill in making bronzes or Phoenician skill in sailing? Why?

EXTENSION ACTIVITY

Technological changes have continued throughout history. Choose one area of life, such as land transportation, communication, medicine, or raising food. Using this textbook or an encyclopedia, find out what technology one of these ancient civilizations had in that area. Then identify technological changes in that area over the centuries. Create an illustrated time line to show how that technology has changed.