Unit 1 Resources

**Suggested Pacing Chart**

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**Use the following tools to easily assess student learning in a variety of ways:**

- Performance Assessment
- Chapter and Unit Tests
- Section Quizzes
- Standardized Test Skills Practice Workbook
- tav.glencoe.com
- Interactive Tutor Self-Assessment CD-ROM
- MindJogger Videoquiz
- ExamView® Pro Testmaker CD-ROM
- SAT 1/II Test Practice

**Teaching Transparencies**

- Unit 1 Map Overlay Transparencies
- Cause-and-Effect Transparency 1

**internet RESOURCES**

- tav.glencoe.com
  - The American Vision
  - Visit the American Vision Web site for history overviews, activities, assessments, and updated charts and graphs.
  - www.socialstudies.glencoe.com
- Glencoe Social Studies
  - Visit the Glencoe Web site for social studies activities, updates, and links to other sites.
  - www.teachingtoday.glencoe.com
- Glencoe Teaching Today
  - Visit the new Glencoe Web site for teacher development information, teaching tips, Web resources, and educational news.
  - www.time.com
- TIME Online
  - Visit the TIME Web site for up-to-date news and special reports.
Unit 1 Resources

ASSESSMENT

Unit 1 Pretests
Unit 1 Posttests

APPLICATION AND ENRICHMENT

American Biography 1
History Simulation and Problem Solving 1

GEOGRAPHY

Geography and History Activity 1

INTERDISCIPLINARY ACTIVITIES

American Literature Reading 1
Economics and History Activity 1
Team-Teaching Interdisciplinary Strategies and Activities 1

BIBLIOGRAPHY

Readings for the Student

Readings for the Teacher

Multimedia Resources
Videocassette. Asia, 1600–1800. Landmark Films. (26 minutes)
Videocassette. Mexico Before Cortez. Social Studies School Service. (14 minutes)

Additional Glencoe Resources for This Unit:
- Glencoe Skillbuilder Interactive Workbook CD-ROM, Level 2
- Social Studies Guide to Using the Internet
- Writer’s Guidebook for High School
- Living Constitution
- American Art Prints Strategies and Activities
Three Worlds Meet
Beginnings to 1763

Why It Matters
The interactions among Native Americans, Europeans, and Africans shaped the history of the Americas. Native Americans struggled to live alongside Europeans and their ever-growing settlements and colonies. Africans tried to adapt to the new continent to which they were brought involuntarily. Studying these early cultural interactions will help you understand the centuries of history that followed. The following resources offer more information about this period in American history.

Primary Sources Library
See pages 1048–1049 for primary source readings to accompany Unit 1.

TEAM TEACHING ACTIVITY
Geography Tell students that the world in the 1400s looked very different from the way it looks today. In the 1400s the eastern part of North America was covered by thick forests. Marshland stretched along much of Europe’s Mediterranean coast and covered vast areas of northern Germany and Russia. Have interested students research the environment of each continent in the 1400s. Based on their research have them create a world vegetation map. Have them discuss their findings with the class.
“Long before they had heard the word Spaniard, they [Native Americans] had properly organized states, wisely ordered by excellent laws, religion, and custom.”

—Bartolomé de Las Casas, 1550

SERVICE-LEARNING PROJECT

Organize students into small groups. Have each group research some aspect of your local community’s history. Based on their research, have each group contribute to one large display featuring the history of your community. Have students select an appropriate title for the display. If possible, arrange for the display to be enjoyed by the community by placing it in a public building such as a library or town hall.

Refer to Building Bridges: Connecting Classroom and Community through Service-Learning in Social Studies from the National Council for the Social Studies for information about service-learning.
A rich heritage.

immigrated unwillingly as enslaved people, enhanced American culture with their own...

Baha ad-Din. Then answer the questions for Saladin’s character...

link to the world beyond their villages and...

when a sentry brought up a woman who was...

One day when I was on duty I was riding with him ahead of the Franks...

The Crusades opened western Europeans’...

★

The Turks cap...

One of the figures that emerged from the...

The Crusaders...

About the Selection

(continued)
The following videotape programs are available:

- Leif Ericsson: Voyages of a Viking
- The Aztec Empire

To order, call Glencoe at 1-800-334-7344. To find classroom resources to accompany many of these videos, check the following home pages:

A&E Television: www.aande.com
The History Channel: www.historychannel.com
# Chapter 1 Resources

## SECTION RESOURCES

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1. Explain why scientists believe that the earliest Americans migrated from Asia.  
2. Describe the early civilizations of Mesoamerica and the early cultures of North America.  
| Reproducible Lesson Plan 1–1  
Daily Lecture and Discussion Notes 1–1  
Guided Reading Activity 1–1*  
Section Quiz 1–1*  
Reading Essentials and Study Guide 1–1  
Performance Assessment Activities and Rubrics  
| Daily Focus Skills Transparency 1–1  
Interactive Tutor Self-Assessment CD-ROM  
ExamView® Pro Testmaker CD-ROM  
Presentation Plus! CD-ROM  
TeacherWorks™ CD-ROM  
Audio Program  
American Music: Cultural Traditions  
|  
| **SECTION 2** Native American Cultures  
1. Describe the cultures of Native American groups of the West, the Far North, and the Eastern Woodlands.  
2. Describe the agricultural techniques of the Woodlands Native Americans.  
| Reproducible Lesson Plan 1–2  
Daily Lecture and Discussion Notes 1–2  
Guided Reading Activity 1–2*  
Section Quiz 1–2*  
Reading Essentials and Study Guide 1–2  
Performance Assessment Activities and Rubrics  
| Daily Focus Skills Transparency 1–2  
Interactive Tutor Self-Assessment CD-ROM  
ExamView® Pro Testmaker CD-ROM  
Presentation Plus! CD-ROM  
TeacherWorks™ CD-ROM  
Audio Program  
|  
| **SECTION 3** African Cultures  
1. Describe the culture of early West African kingdoms.  
2. Describe the lifestyles of early Central and Southern African peoples.  
| Reproducible Lesson Plan 1–3  
Daily Lecture and Discussion Notes 1–3  
Guided Reading Activity 1–3*  
Section Quiz 1–3*  
Reading Essentials and Study Guide 1–3  
Performance Assessment Activities and Rubrics  
| Daily Focus Skills Transparency 1–3  
Interactive Tutor Self-Assessment CD-ROM  
ExamView® Pro Testmaker CD-ROM  
Presentation Plus! CD-ROM  
TeacherWorks™ CD-ROM  
Audio Program  
|  
| **SECTION 4** European Cultures  
1. Discuss the impact of the Crusades on Europe’s contact with the Middle East.  
2. Analyze the impact of the Renaissance on European exploration.  
| Reproducible Lesson Plan 1–4  
Daily Lecture and Discussion Notes 1–4  
Guided Reading Activity 1–4*  
Section Quiz 1–4*  
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Interactive Tutor Self-Assessment CD-ROM  
ExamView® Pro Testmaker CD-ROM  
Presentation Plus! CD-ROM  
TeacherWorks™ CD-ROM  
Audio Program  
|  
| **SECTION 5** Europe Encounters America  
1. Describe Viking and Spanish explorations of North America.  
2. Summarize Columbus’s journeys and their impact on Native Americans and Europeans.  
| Reproducible Lesson Plan 1–5  
Daily Lecture and Discussion Notes 1–5  
Guided Reading Activity 1–5*  
Section Quiz 1–5*  
Reading Essentials and Study Guide 1–5  
Performance Assessment Activities and Rubrics  
Interpreting Political Cartoons  
| Daily Focus Skills Transparency 1–5  
Interactive Tutor Self-Assessment CD-ROM  
ExamView® Pro Testmaker CD-ROM  
Presentation Plus! CD-ROM  
Skillbuilder Interactive Workbook, Level 2  
TeacherWorks™ CD-ROM  
Vocabulary PuzzleMaker CD-ROM  
Audio Program  
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*Also Available in Spanish

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**Assign the Chapter 1 Reading Essentials and Study Guide.**

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**Out of Time?**

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**0:00**

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**Reading Essentials and Study Guide.**

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**Blackline Master**  
**Poster**  
**Transparency**  
**CD-ROM**  
**DVD**  
**Music Program**  
**Audio Program**  
**Videocassette**
Chapter 1 Resources

INDEX TO NATIONAL GEOGRAPHIC MAGAZINE

The following articles relate to this chapter:
• “1491: America Before Columbus,” October 1991
• “The Anasazi,” April 1996
• “Cherokee,” May 1995
• “Living Iroquois Confederacy,” September 1987
• “Pueblo Ancestors Return Home,” November 2000

NATIONAL GEOGRAPHIC SOCIETY PRODUCTS AVAILABLE FROM GLENCOE

To order the following products for use with this chapter, contact your local Glencoe sales representative, or call Glencoe at 1-800-334-7344:
• MapPack: Continents: North America
• PictureShow: Native Americans Part 1 and Part 2 (CD-ROM)
• PicturePack: Native Americans 1: Eastern Woodlands, Plains (Transparencies)
• PicturePack: Native Americans 2: Southwest, Northwest, Arctic (Transparencies)

ADDITIONAL NATIONAL GEOGRAPHIC SOCIETY PRODUCTS

To order the following, call National Geographic at 1-800-368-2728:
• American Indians: A Brief History (Video)
• National Geographic Atlas of the World, Seventh Edition

Access National Geographic’s Web site for current events, atlas updates, activities, links, interactive features, and archives.
www.nationalgeographic.com

KEY TO ABILITY LEVELS

Teaching strategies have been coded.
L1 BASIC activities for all students
L2 AVERAGE activities for average to above-average students
L3 CHALLENGING activities for above-average students
ELL ENGLISH LANGUAGE LEARNER activities

From the Classroom of…

Karen O’Connor
San Diego Unified School District
San Diego, CA

The Influence of the East on the West

The Crusades increased contact between Western Europe and the Muslim and Byzantine civilizations. Traders followed the European armies eastward and brought back spices and silk. They also brought back the concept of paying with money instead of trading goods.

Gather students into small groups and ask them to research other areas where the contact between the East and West during this time period influenced European culture. Assign each group one of the following areas: architecture, art, literature, science, or language.

Give them one week to prepare an oral presentation. Their written reports are due one week later.

ADDITIONAL RESOURCES FROM GLENCOE

Activities that are suited to use within the block scheduling framework are identified by:

Access National Geographic’s Web site for current events, atlas updates, activities, links, interactive features, and archives.
Why It Matters
Before 1492, the cultures that arose in the Americas had almost no contact with the rest of the world. Then, in the late 1300s, momentous events began taking place that would bring the cultures of Europe and Africa into direct contact with the Americas. This contact had profound effects on the future of the world’s civilizations.

The Impact Today
The convergence of the world’s cultures in the 1400s launched an era of change that still affects our lives today.
• Many of our foods, customs, and traditions were originally introduced in the Americas as a result of this cultural contact.
• Contact among the cultures of the three continents profoundly changed the society of each.
• American society today includes elements of Native American, European, and African cultures.

Why It Matters Activity
Have students explain how they think the events of the late 1400s continue to have an impact on the lives of Americans. Students should evaluate their answers after they have completed the chapter.

The American Vision Video Program
To learn more about America before 1520, have students view the Chapter 1 video, “America Before the Americans,” from the American Vision Video Program.

MindJogger Videoquiz
Use the MindJogger Videoquiz to preview Chapter 1 content.

TWO-MINUTE LESSON LAUNCHER
Many Americans think American history begins in 1492 when Christopher Columbus landed in America. Ask students why it is important to learn about pre-Columbian historical events. Encourage students to offer examples of events prior to 1492 that helped shape American history.
The Landing of Columbus in San Salvador by Albert Bierstadt, 1893

**HISTORY Online**

Introduce students to chapter content and key terms by having them access the Chapter 1 Overview at tav.glencoe.com.

**GRAPHIC ORGANIZER ACTIVITY**

**Organizing Information** Have students outline Chapter 1, using the format shown below.

1. The Migration to America
   A. The Asian Migration to America
   B. Early Civilizations of Mesoamerica
      1. The Olmec and the Maya
      2. The Toltec and the Aztec
   C. North American Cultures
      1. The Hohokam
      2. The Anasazi

2. The Adena and Hopewell Cultures
3. The Mississippian Culture

Students should complete the outline by including all of the section titles and heads in the rest of the chapter.

**Ask:** What techniques does the painter use to convey his opinion of the landing party? (Answers may vary. Students will note that the native peoples are bowing to the landing party. They should also note that the focus of the light is on the landing party, while the land itself is shrouded in darkness. Both convey a sense of superiority and dominance of the landing party.)

Have students use a globe or world map to identify the approximate location where the events shown on the timeline occurred. Encourage students to use library and Internet resources to determine the present-day names of locations. For example, Sumer, home of the Sumerians, was located in the area that is now southern Iraq.
Section Overview
This section describes how the first inhabitants migrated to America and how they lived and developed their cultures.

Main Idea
Native Americans are descended from Asians who probably began migrating to North America approximately 15,000 to 30,000 years ago.

Key Terms and Names
radiocarbon dating, Ice Age, glacier, Beringia, nomad, agricultural revolution, maize, civilization, obsidian, Aztec, Chaco Canyon, kiva, pueblo, Cahokia

Reading Strategy
Categorizing As you read about the first people to live in North America, complete a graphic organizer similar to the one below by filling in the names of Native American groups that settled in various regions.

Reading Objectives
• Explain why scientists believe that the earliest Americans migrated from Asia.
• Describe the early civilizations of Mesoamerica and the early cultures of North America.

Section Theme
Geography and History Scientists theorize that Asian hunters migrated to North America across a land bridge exposed during the last Ice Age.

The Asian Migration to America
No one can say for certain when the first people arrived in America. The Folsom discovery proved that people were here at least 10,000 years ago, but more recent research suggests that humans arrived much earlier. Presently, scientific speculation points to a
period between 15,000 and 30,000 years ago—much earlier than what scientists believed at the time of George McJunkin’s discovery.

How long ago the first Americans appeared remains a hotly debated question. Scientists can state much more confidently, however, who these earliest people were, how they arrived in America, and what their lives were like.

To learn the origins of ancient peoples, scientists study their skulls, bones, and teeth. In recent years they have been able to examine DNA—which stands for deoxyribonucleic acid—a molecule described as the basic building material of all life on Earth. DNA recovered from the bones of people who died many thousands of years ago enables scientists to trace their ethnic, and thus their geographic, origins. From DNA and other evidence, researchers have concluded that the earliest Americans probably came from Asia.

To determine how old objects are, scientists rely on radiocarbon dating. With this method, they measure the radioactivity left in a special type of carbon called carbon 14, which can be taken from fragments of wood and bone. Radiocarbon dating works because all living things absorb carbon. Knowing the rate at which carbon 14 loses its radioactivity, experts can calculate the age of the objects the carbon came from.

Studies of the earth’s history offer other important clues. About 100,000 years ago, the earth began to cool gradually, entering what scientists call a period of glaciation. This era is often called the Ice Age. Much of the earth’s water froze into huge ice sheets, or glaciers. As ocean levels dropped, they eventually exposed an area of dry land that connected Asia with the part of North America that is now Alaska. The land was named Beringia, after Vitus Bering, a later explorer of the region. Scientists think that about 15,000 years ago, people from Asia began trekking eastward across this new land bridge to America in search of food. Others may also have come by boat even earlier, hugging the shoreline of Beringia.

These early arrivals were probably nomads, people who continually moved from place to place. In this case, the people were hunters who stalked herds of animals across Beringia. They hunted such massive prey as the wooly mammoth, as well as antelope, caribou, bison, musk ox, and wild sheep. Wild plants, birds, and fish probably made up an important part of their diet, too. These early peoples did not come all at once. Their migrations probably continued until rising seawater once again submerged the land bridge about 10,000 years ago, creating a waterway that today is called the Bering Strait.

Scientists believe that as the Ice Age ended, the nomads’ favorite prey, the wooly mammoth, began to die out, either from too much hunting or because of the changing environment. Faced with a dwindling food supply, early Americans began to make use of other types of food, including fish, shellfish, nuts, and small game.

Reading Check: How do scientists determine the origins of ancient peoples?

Early Civilizations of Mesoamerica

As time passed, early Americans learned how to plant and raise crops. This agricultural revolution occurred between 9,000 and 10,000 years ago in Mesoamerica—meso coming from the Greek word for middle. This region includes what is today central and southern Mexico and Central America.

The first crops grown in America included pumpkins, peppers, squashes, gourds, and beans. The most

Creating a Display: Have students work in small groups to create a tabletop display featuring pictures, drawings, or models that symbolize important aspects of one of the cultures described in this section. Encourage students to include items that represent the food, art, science, and religion of the culture. The display should include a title and brief description of the culture. Each item displayed should be identified by name and include a brief description.

Answers: about 500 miles (about 800 kilometers)

Geography Skills Practice

Ask: What was the capital of the Aztec empire? Tenochtitlán

Performance Assessment Activities and Rubrics

Cooperative Learning Activity

Creating a Display: Have students work in small groups to create a tabletop display featuring pictures, drawings, or models that symbolize important aspects of one of the cultures described in this section. Encourage students to include items that represent the food, art, science, and religion of the culture. The display should include a title and brief description of the culture. Each item displayed should be identified by name and include a brief description.

Use the rubric for a cooperative group management plan on pages 81–82 in the Performance Assessment Activities and Rubrics.
American Civilizations

重要作物之一是一种大粒的草，称为玉米（maize），作为今天的玉米。玉米的重要在于它可以通过在地上种植面包而不会被储存和干燥而制成面包。随着农业的发展，人们可以离开他们的游牧生活，在一个地方种植他们的庄稼，收集庄稼。通过农业的发展，第一次在中美洲形成了永久性的村庄。作物的种植也导致了许许多多新的技术，包括用于切割、挖掘和研磨的工具。需要将作物储存在那里。这些村庄在中美洲的发展中也导致了新的建设技术。随着更多的人开始在一个地方生活，更复杂的形式被政府发展，就像社会班级一样。人们学习技能并出售他们的产品获得食物和其它商品。随着这些村庄的社会变得更加复杂，中美洲最早的文明诞生了。文明是高度组织化的社会，通过贸易、政府、艺术、科学，以及文字，被标记出来。

The Olmec and the Maya 约公元前1,000年

考古学家认为在中美洲的第一个文明是由奥尔梅克建造的。奥尔梅克文化在公元前1,500年至1,200年期间，围绕韦拉克鲁斯，墨西哥，它被发现。奥尔梅克发展出一种复杂的社会，拥有大型村庄和复杂的寺庙、金字塔和神庙。他们还塑造了庄重的建筑，包括高8英尺的头，重达20吨，来自硬黑色的石头。奥尔梅克文化大约延续到公元前300年。

奥尔梅克想法散布在整个中美洲，影响其它人民。一个奥尔梅克人建造了中美洲最大的城市，称为特奥提华坎。特奥提华坎，位于墨西哥城东北约30英里处，有些科学家认为这座城市位于一座火山附近，那里有数百万的居民。特奥提华坎有重要的玻璃——黑曜石，它的锋利，强健的边缘非常适合切割和磨制工具。 }


develop complex and accurate calendars linked to the positions of the stars. They also built great temple pyramids. These pyramids formed the centerpieces of Maya cities, such as Tikal and Chichén Itzá. Marvels of engineering, some pyramids were 200 feet (61 m) high. Topping each pyramid was a temple.

The Toltec and the Aztec 尽管他们经常发生内战，奥尔梅克人继续繁荣到公元900年，当时他们的城市在尤卡坦被废弃，被放弃，原因未知。一些人类学家认为玛雅农民可能已经耗尽了地区的土壤。这将反过来导致饥荒，起义，城市的衰落。其他人认为入侵者从北面摧毁了地区。

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Visual Arts  Have students conduct research about pre-Columbian art using library, museum, and Internet resources. Ask students to focus their research on one of the cultures addressed in this section. Using their findings, have students prepare a short oral presentation. Encourage students to bring books with photographs and illustrations to pass around during their presentations. L2

Mayan cities in the highlands of what is today Guatemala flourished for several more centuries, although by the 1500s, they too were in decline. In the meantime, people known as the Toltec began building a city called Tula. The Toltec were master architects. They built large pyramids and huge palaces with pillared halls. They were among the first Native Americans to use gold and copper for art and jewelry.

About A.D. 1200, Tula fell to invaders from the north, known as the Chichimec. One group of Chichimec, called the Mexica, established the city of Tenochtitlan (tay-NAWCH-teet-LAHN) in 1325 on the site of what is today Mexico City. The Mexica took the name Aztec for themselves, from the name of their original homeland, Aztlan. Aztlan is thought to have been located somewhere in the American Southwest.

The Aztec created a mighty empire by conquering neighboring cities. Using their military power, the Aztec controlled trade in the region and demanded tribute, or payment, from the cities they conquered. They also brought some of the people they conquered to Tenochtitlan to serve as human sacrifices in their religious ceremonies. When the Europeans arrived in the 1500s, an estimated five million people were living under Aztec rule.

Reading Check Examining  How did the shift to agriculture allow early peoples to advance beyond mere survival?

North American Cultures

North of Mesoamerica, other peoples developed their own cultures and civilizations. Many anthropologists think that the agricultural technology of Mesoamerica spread north into the American Southwest and up the Mississippi River. There it transformed many of the scattered hunter-gatherers of North America into farmers.

The Hohokam  Beginning in A.D. 300 in what is now south-central Arizona, a group called the Hohokam created a civilization that featured a very elaborate system of irrigation canals. The Hohokam used the Gila and Salt Rivers as their water supply. Their canals carried water hundreds of miles to their farms.

The Hohokam grew large crops of corn, cotton, beans, and squash. They also made decorative red-on-buff pottery and turquoise pendants, and they created the world’s first etchings by using cactus juice to etch shells. Hohokam culture flourished for more than 1,000 years. In the 1300s, they began to abandon their irrigation systems, most likely due to floods. Increased competition for farmland probably led to wars and emigration. By 1500 the Hohokam had vanished from history.

The Anasazi  Between A.D. 700 and 900, the people living in villages in the Four Corners area, where Utah, Colorado, Arizona, and New Mexico now meet, came together to create a civilization. We know these people only by the name the Navajo gave them—Anasazi, or “ancient ones.”

In the harsh desert environment of the American Southwest, the Anasazi accumulated water for their crops by building networks of basins and ditches to channel rain into stone-lined depressions with high earthen banks. Between A.D. 850 and 1100, the Anasazi living in Chaco Canyon in what is now northwest New Mexico began constructing large, multi-story buildings of adobe and cut stone with connecting passageways.
and circular ceremonial rooms called kivas. Early Spanish explorers called these structures pueblos, the Spanish word for villages. The Anasazi built these pueblos at junctions where streams of rainwater, draining from the canyon, ran together. One particular pueblo in Chaco Canyon, called Pueblo Bonito, covered more than three acres. Its 600 rooms probably housed at least 1,000 people. Later, at Mesa Verde in what is today southwestern Colorado, the Anasazi built equally impressive cliff dwellings.

Beginning around A.D. 1130, Chaco Canyon experienced a devastating drought that lasted at least 50 years. This probably caused the Anasazi to abandon their pueblos. The Mesa Verde pueblos lasted for another 200 years, but when another drought struck in the 1270s, they too were abandoned. Some anthropologists think that epidemics or attacks by hunter-gatherers may have caused the Anasazi civilization to collapse.

The Adena and Hopewell Cultures About the same time that the Olmec people began to build a civilization in Mesoamerica, the people living in North America’s eastern woodlands were developing their own unique cultures. The people of the eastern woodlands developed woodworking tools, including stone axes and gouges. They built dugout canoes and made nets to snare birds. They also made clay pots by stacking up coils of clay.

Beginning about 1000 B.C., the people of the region began burying their dead under massive dome-shaped mounds of earth. The most important early mound-building culture was the Adena culture, which lasted from 1000 B.C. to about A.D. 200. The Adena culture originated in the Ohio River valley and spread east into what is now New York and New England.

As the people of the Ohio valley began to plant crops and build permanent settlements between 200 and 100 B.C., another new civilization known as the Hopewell culture rose to prominence. It featured huge, geometric earthworks to serve as ceremonial centers, observatories, and burial places. The Hopewell culture mysteriously began to decline after A.D. 400.

The Mississippian Culture Between A.D. 700 and 900, as agricultural technology and improved strains of maize and beans spread north from Mexico and up the Mississippi River, another new culture—the Mississippian—emerged. It began in the Mississippi River valley, where the rich soil of the flood plains

**CRITICAL THINKING ACTIVITY**

**Analyzing** Ask students to discuss how they think the agricultural revolution in Mesoamerica led to a more highly organized civilization. Focus the discussion on trade, government, the arts, science, and language. Encourage students to make reasonable assumptions based on the information presented in the text. L2
was perfectly suited to the intensive cultivation of maize and beans.

The Mississippians were great builders. Eight miles from what is now St. Louis, near Collinsville, Illinois, lie the remains of one of their largest cities, which anthropologists named Cahokia. At its peak between about A.D. 1050 and 1250, Cahokia covered 5 square miles (13 sq km), contained over 100 flat-topped pyramids and mounds, and was home to an estimated 16,000 people. Most of the people lived in pole-and-thatch houses that spread out over 2,000 acres (810 ha). The largest pyramid, named Monks Mound, was 100 feet (30.5 m) high, had four levels, and covered 16 acres (6.5 ha). The base of Monks Mound was larger than that of any pyramid in Egypt or Mexico. A log wall with watchtowers and gates surrounded the central plaza and larger pyramids.

From the Mississippi valley, Mississippian culture spread widely, following the Missouri, Ohio, Red, and Arkansas Rivers. Expanding east across the American South, Mississippian culture led to the rise of at least three other large cities with flat-topped mounds—at present-day Spiro, Oklahoma; Moundville, Alabama; and Etowah, Georgia.

Cahokia itself collapsed around A.D. 1300. An attack by other Native Americans may have caused its destruction, or the population may simply have become too large to feed, resulting in famine and emigration. Another possibility is that an epidemic may have devastated the population. Although Cahokia came to an end, many aspects of Mississippian civilization survived in the Southeast until the Europeans arrived in America.

### Checking for Understanding

1. Define: radiocarbon dating, Ice Age, glacier, nomad, agricultural revolution, maize, civilization, obsidian, kiva, pueblo.
2. Identify: Beringia, Aztec, Chaco Canyon, Cahokia.
3. Explain how the agricultural revolution led to the establishment of permanent settlements.

### Reviewing Themes

4. Geography and History How did Asians migrate to America?

### Critical Thinking

5. Evaluating Choose an early culture group in Mesoamerica or North America. What kind of civilization did this group develop?
6. Categorizing Use a graphic organizer like the one below to list the advances of early culture groups in North America.

<table>
<thead>
<tr>
<th>Culture Groups</th>
<th>Advances</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Analyzing Visuals

7. Picturing History Study the photographs on this page and on page 16. How did the Native Americans in each region adapt to their environments?

### Writing About History

8. Expository Writing Using library or Internet resources, find more information on one of the culture groups discussed in this section. Use the information to write an in-depth report about the culture group.

### Reteach

Have students trace a map of North America and mark key locations with the names and dates of the cultures mentioned in this section.

### Enrich

Have students research one of the cultures mentioned in this section. Have them use library and Internet resources in order to write a two-page report about the culture. Ask students to include information about some of the unanswered questions about the culture.

### Reading Check

**Answer:** Many anthropologists think Mesoamerican agricultural technology spread north into the American southwest and up the Mississippi to North America.
**1 FOCUS**

Create three columns on the board and label them: Migration Theory, Potential Problems With Theory, and Evidence Supporting Theory. Have students use the maps, the reading, and any other reference material you supply to fill in the table. Tell students that they may make assumptions about the potential problems that the travelers may have faced.

**2 TEACH**

**Writing Diary Entries** Have students choose one of the routes and write diary entries as though they were traveling with the first group of people to use the route. The entries should include one for the first day of the travel, one describing a difficulty they encountered, and one describing their arrival in North or South America. **L1**

**Practicing Map Skills** Have students look at the maps to answer the following questions. Ask: What sites support the coastal route theory? (Anangula, Ugashik, Ground Hog Bay, Hidden Falls, 49-PET-408, Namu, Borax Lake, and Mostin) What is the northernmost site where human remains have been found? (Old Crow) How old are these human remains? (more than 13,500 years old) Where do scientists think people who crossed the Pacific may have landed? (Quebrada Tacahuay in South America) **L2**

**EXTENDING THE CONTENT**

**International Park** An international Beringian park was first proposed by scientist Walter Orr Roberts in the 1960s. No action was taken on the proposal for many years. In 1989, however, American and Soviet planning teams presented the concept of an international park during a tour of Native villages in Northwest Alaska and the Chukotka Peninsula in Russia. At a summit conference on June 1, 1990, President Bush and Soviet President Gorbachev agreed to create an international park spanning the Bering Strait. The agreement called for cooperation in studying ecology, archaeology, and cultural heritage on both sides of the Strait. For more information on the proposed park visit [http://www.nps.gov/akso/beringia/index.htm](http://www.nps.gov/akso/beringia/index.htm).
**Land Bridge to America**

During the last Ice Age, the Bering Strait that now separates Alaska and Siberia was dry land. Across this so-called land bridge, bands of fur-clad hunter-gatherers from Asia trekked to the northwestern corner of America (purple arrows at left). As they followed herds of woolly mammoths and other big game animals, they slowly spread east through a corridor between two glaciers and then pushed south into the interior of the continent.

These intrepid travelers have been held up as the original Americans. They flourished on the Great Plains and the Southwest of the present-day United States. In less than a thousand years, their descendents had settled most of the hemisphere, from the Arctic Circle to the tip of South America.

The intercontinental land bridge that made this amazing journey possible was up to 1,000 miles (1,609 km) wide. Known as Beringia, it emerged when vast ice sheets absorbed the water, dropping the sea level about 300 feet (91 km) to reveal the floor of the Bering Sea. Many scientists agree that the Beringia migration began between 14,000 and 15,000 years ago. Recently, however, archaeologists have found artifacts that suggest people were in America even before the land corridor had opened. The new evidence has led to theories suggesting other possible routes to the Americas.

One theory proposes that people crossed from northeast Asia in skin-covered boats, skirting the shore and landing occasionally to hunt for food and water (red arrows at left). Continuing south along the coast, they would have reached South America quicker than by any land route (see inset map below). The Pacific crossing theory suggests that migrants from Southeast Asia went south to Australia and across the Pacific Ocean, hopping from island to island until they reached South America. Yet a third theory, the Atlantic crossing theory, suggests that America’s earliest inhabitants were from southwestern Europe (modern-day southern France and Spain). Hugging the edge of the glaciers of the North Atlantic, they may have sailed from Iceland and Greenland down to North America. A skull found in Brazil has also prompted some people to consider the possibility of an early migration from Africa.

The peopling of the Americas was probably a more complex process than migration across the Bering land bridge alone. Settlers may have arrived in many waves of migration and by a number of routes. As shown in the map at left, they may have traveled from Europe or Australia as well as from Asia.

**LEARNING FROM GEOGRAPHY**

1. What geographical event made the sea level drop to reveal the land bridge between Asia and America?
2. What other ways may settlers have made their way to the Americas?

**ANSWERS TO LEARNING FROM GEOGRAPHY**

1. the last Ice Age
2. Other possibilities include people from northeast Asia traveling by boat along the coastline to North and South America, people from Southeast Asia crossing the Pacific Ocean hopping from island to island, people from southwestern Europe crossing the North Atlantic passing by Iceland and Greenland, or people migrating from Africa.
Main Idea
The Native Americans of what is today the United States had diverse social structures and religions.

Key Terms and Names
kachina, Algonquian, Iroquoian, slash-and-burn agriculture, longhouse, wigwam, kinship group, Dekanawidah, Hiawatha

Reading Strategy
Categorizing As you read about Native Americans, complete a chart like the one below by filling in the names of the Native American groups who lived in each region.

Reading Objectives
• Describe the cultures of Native American groups of the West, the Far North, and the Eastern Woodlands.
• Describe the agricultural techniques of the Woodlands Native Americans.

Section Theme
Culture and Traditions The cultural differences between Native American groups can be explained by studying the geography where each group lived.

Answers to Graphic: the West: the Southwest—Zuni, Hopi, other Pueblo peoples, Apache, Navajo; the Pacific Coast—Tlingit, Haida, Kwakiutls, Nootkas, Chinook, Salish, Nez Perce, Yakima, Ute, Shoshone, and Pomo; the Great Plains—Fawnee, Kansas, Iowa, and Sioux; the Far North: Inuit, Aleut; the Eastern Woodlands: Northeast (Algonquian-speaking)—Wampanoag, Narragansett, Pequot, Powhatan Confederacy, Delaware, and Shawnee; Northeast (Iroquoian-speaking)—Huron, Neutral, Erie, Wenro, Seneca, Cayuga, Onondaga, Oneida, and Mohawk; Southeast—Cherokee, Tuscarora, Choctaw, Chickasaw, Natchez, and Creek

Preteaching Vocabulary
Have students look up the proper pronunciation of the Key Terms and Names.

An American Story
Did the Natchez people of the southeastern United States descend from the Toltec of Mesoamerica? A Natchez man told this story to a European explorer in the mid-1700s:

"Before we came into this land we lived yonder under the sun (pointing with his finger nearly south-west, by which I understood that he meant Mexico). . . . There our Suns [Mexican rulers were called Sun] had their abode and our nation maintained itself for a long time. . . . Our nation extended itself along the great water [Gulf of Mexico] where this large river [the Mississippi] loses itself; but as our enemies were become very numerous . . . our Suns sent some of their subjects who lived near this river, to examine whether we could return into the country through which it flowed. The country on the east side of the river being found extremely pleasant, the Great Sun, upon the return of those who had examined it, ordered all his subjects who lived in the plains, and who still defended themselves against the ancients of the country, to remove into this land, here to build a temple. . . ."

—quoted in America in 1492

The West
Although Mesoamerican civilization may have shaped Natchez society, the culture of most Native Americans developed in response to their environments. By the time the first Europeans arrived, Native Americans were fragmented into many small groups.
that had adapted to the different regions of North America. Fragmentation in the American West was especially severe because of the great variations in the region’s climate and geography.

The Southwest The descendants of the Anasazi and Hohokam lived in small groups in the arid Southwest. These groups included the Zuni, Hopi, and other Pueblo peoples. The people of the Southwest depended on corn to survive. Farmers cultivated several species of corn whose seeds could withstand the dry soil. With a long taproot, the corn grew deep, reaching moisture far below the surface. The farmers also grew squash and beans.

Among these groups, when a man married, he joined the household of his bride’s mother. Within the family, men’s and women’s work was separate. Men farmed and herded sheep. They also performed most ceremonies, made moccasins, and wove clothing and blankets. It was women’s work to take care of the house. In addition, women crafted pottery and baskets and hauled water. The women also helped the men in two occupations—farming and constructing houses.

When boys turned six, they joined the kachina cult. A kachina was a good spirit. The Pueblo people believed kachinas visited their town each year with messages from the gods. Members of the kachina cult would wear masks symbolizing the spirits, and they would dance to bring the spirits to the town.

Sometime around the 1500s, two other peoples—the Apache and the Navajo—came to the region from the far northwest of North America. Although many of the Apache remained primarily nomadic hunters, the Navajo learned farming from the Pueblo people and lived in widely dispersed settlements, where they grew corn, beans, and squash.

The Pacific Coast Many different groups, including the Tlingit, Haida, Kwakiutl, Nootka, Chinook, and Salish peoples, lived in the lands bordering the Pacific Ocean from what is now southeastern Alaska to Washington state. Although they did not practice agriculture, these groups dwelt in permanent settlements. They looked to the dense coastal forests for lumber, which they used not only to build homes and to fashion canoes, but also to create elaborate works of art, ceremonial masks, and totem poles. They were able to stay in one place because the region’s coastal waters and many rivers teemed with fish, particularly salmon. Farther inland, between the Cascade Range and the Rocky Mountains, the Nez Perce, Yakima, and other groups fished, hunted deer, and gathered roots and berries.

South of the Nez Perce’s territory, between the Sierra Nevada and Rocky Mountains, the climate was much drier. There, groups such as the Ute and Shoshone lived a nomadic life. Because the land was too arid for farming, they roamed widely in search of food that was often scarce.

West of the Ute lands in what is today central California, several groups enjoyed abundant wildlife and a mild climate. The Pomo, for example, gathered acorns, caught fish in nets and traps, and snared small game and birds. Pomo hunters, working together, would drive deer toward a spot where the village’s best archer waited, hidden and disguised in a deer-head mask. Sometimes, the hunters stampeded game into a corral, where the animals could be easily killed. When game was scarce, however, the Pomo relied upon the acorn, which they had learned to convert from a hard, bitter nut into an edible flour.

The Great Plains When Europeans arrived in America, the people of the Great Plains were nomads. Before this, up until about 1500, people living on the Great Plains practiced agriculture. Influenced by the Hopewell and Mississippian cultures, these peoples lived near the Missouri and other rivers, where they could plant corn and find wood to build their homes.

A round 1500 the peoples of the western plains abandoned their villages and became nomads, possibly because of war or drought. Those in the east—including the Pawnee, Kansas, and Iowa peoples—continued to farm as well as hunt. Peoples of the western plains, such as the Sioux, followed migrating buffalo herds on foot and lived in cone-shaped tents called tepees.

Life for the Sioux and others on the Great Plains changed dramatically after they began taming horses. The Spanish had brought horses to North America in the 1500s. Over the next few centuries, as horses either escaped or were stolen, the animals spread northward, eventually reaching the Great Plains. There the Sioux encountered and mastered them, and in the process became some of the world’s greatest mounted hunters and warriors. Sioux men achieved fame in the community through bravery in both hunting and war. Sioux warriors would take the scalps of enemies they had killed, but they could gain even greater glory through warrior societies.
Guided Reading Activity 1–2

**DIRECTIONS:**
Name Date Class

★ How did the Sioux warriors gain their greatest glory?
7. Which peoples lived in the lands bordering the Pacific from southeastern Alaska to Washington State?

★ How did Native Americans develop in response to what?
1. Fishing
2. The land was too dry to farm so they hunted migrating buffalo herds.
3. What was the name of a Pueblo good spirit?
4. Upon what did the peoples living in the Southwest depend to survive?
5. What technologies did the Inuit and Aleut depend heavily upon hunting for their livelihood? The Inuit and Aleut depended heavily upon hunting for their livelihood. They hunted seals, walruses, whales, polar bears, caribou, musk oxen, and smaller game. Over time, they invented a wide variety of devices to cope with the harsh environment, including the harpoon, the kayak, the dogsled, boots with ivory spikes for walking on ice, and special goggles to prevent snow blindness. They also were the only Native Americans to develop lamps. They used whale oil and blubber for fuel. Occupying a harsh and unforgiving land, they lived in groups—from a single family to a few hundred people—spaced widely apart.

★ How did Native Americans respond to the different climates of the American West?
6. Who brought horses to North America?
7. What were the main food sources for the Northwest?
8. What technologies did the peoples of the Pacific Coast use lumber?
9. How did the peoples of the Pacific Coast use lumber?
10. In what areas did the Aleut and Inuit live?

The culture of most Native Americans developed in response to what?
8. What was the main food source for the Northwest?
9. What was the main food source for the Northwest?
10. In what areas did the Aleut and Inuit live?

Answers: In dry areas the Native Americans found crops that would grow in the dry soil or they moved from place to place looking for food. In coastal areas, the Native Americans became experts at fishing. In mild climates where wildlife was plentiful, they hunted and trapped animals.

**Geography Skills Practice**
Ask: What group lived the farthest north? (Inuit)

**Reading Check**

**American Music:** Hits Through History: “Iroquois Round Dance”

**American Art & Architecture:** Quilled Buckskin Robe

**Reading Check**

**Answer:** In dry areas the Native Americans found crops that would grow in the dry soil or they moved from place to place looking for food. In coastal areas, the Native Americans became experts at fishing. In mild climates where wildlife was plentiful, they hunted and trapped animals.

**Reading Check**

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**Geography Skills Practice**
Ask: What group lived the farthest north? (Inuit)

**Reading Check**

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**The Eastern Woodlands**

East of the Mississippi River and south of the Great Lakes lay almost a million square miles of woodlands. This landscape supported an amazing range of plant and animal life. Almost all of the Native Americans in the Eastern Woodlands provided for themselves by combining hunting and fishing with farming. Deer were plentiful in the region, and deer meat regularly supplemented the corn, beans, and squash the people planted. Deer hide was also used for clothing.

**The Peoples of the Northeast**

Most of the peoples of the Northeast were divided into two major language groups—those who spoke Algonquian (al-GAHN-kwee-uhn) languages and those who spoke Iroquoian (ih-ROK-uh-WOH-uhn) languages. The Algonquian-speaking peoples included most of the groups living in what later became known as New England. Among these peoples were the Wampanoag in Massachusetts, the Narragansett in Rhode Island, and the Pequot in Connecticut. Farther south in what is today Virginia lived the Algonquian-speaking peoples of the Powhatan Confederacy. These groups of Native Americans in New England and Virginia were among the first to encounter English settlers.

Other Algonquian-speaking peoples included the Delaware who lived near the Delaware River and the Shawnee who lived in the Ohio River valley. Many words from the Algonquian language are still used today, including succotash, hominy, moccasin, and papoose.

Stretching west from the Hudson River across what is today New York and southern Ontario and north to Georgian Bay were the Iroquoian-speaking peoples. They included the Huron, Neutral, Erie, Seneca, Cayuga, Onondaga, Oneida, and Mohawk.

Many peoples in the Northeast, including the Algonquian of New England and the Iroquoians of New York, practiced slash-and-burn agriculture. By cutting down parts of forests and then burning the cleared land, they were left with nitrogen-rich ashes, which they then worked into the soil, making it more fertile.

The early peoples of the Northeast used several types of houses. Many villages, enclosed by wooden stockades, had large rectangular longhouses with barrel-shaped roofs covered in bark. Others built wigwams. These dwellings were either conical or dome-shaped and were made using bent poles covered with hides or bark.

All of the Iroquoian peoples, as well as the Algonquian of New England, made beads of white and purple shells that they arranged on strings and wove into belts called wampum. The designs on the wampum recorded important events, treaties, and agreements.

**GOVERNMENT**

The Iroquois League All of the Iroquoian peoples had similar cultures. They lived in longhouses in large towns, which they protected by building stockades. The people lived in large kinship groups, or extended families, headed by the elder women of each clan. Iroquois women occupied positions of power and importance in their communities. They were responsible for the planting and harvesting of crops. Up to 10 related families lived together in each longhouse.

**HISTORY**

**Science**

Invite an anthropologist from a museum or local university to visit your class to discuss how he or she researches the cultures and lifestyles of ancient civilizations that no longer exist. Ask the speaker to explain the techniques used in field research and what qualifications and education are needed to enter this field of study. Encourage students to ask questions at the end of the presentation. L2

**KEY TERMS AND NAMES**

- kachina (a good spirit of the Pueblo people)
- squash, corn, beans
- wampum (shells that were arranged on strings and wove into belts)
- Native American peoples

**HISTORY Through Art**

Native Americans hunted the abundant deer in the East by disguising themselves in cleaned deerskins and sneaking very close to their target. French artist Jacques Le Moyne created this illustration in 1591 depicting the practice. What other food sources did Eastern Woodlands peoples have? (plant dyes; clay or shell beads; animal bone, teeth, or claws; feathers; porcupine quills)

**INTERDISCIPLINARY CONNECTIONS ACTIVITY**

**3 ASSESS**

Assign Section 2 Assessment as homework or as an in-class activity.

Have students use the Interactive Tutor Self-Assessment CD-ROM.
**Pass the Popcorn** Native Americans perfected the popular American snack of popcorn at least 5,000 years ago. In order to pop a corn kernel must contain at least 14 percent water. When heated, this water turns into steam, which expands and forces the kernel to explode into its familiar shape. Native Americans developed corn with a high water content suitable for popping, as well as sweet corn to eat off the cob and feed corn for animals. According to legend, popcorn made up part of the menu at the first Thanksgiving feast in 1621.

Despite their similar cultures, war often erupted among the Iroquoian groups. In the late 1500s, five of the nations in western New York—the Seneca, Cayuga, Onondaga, Oneida, and Mohawk—formed an alliance to maintain peace. This alliance was later called the **Iroquois League** or Iroquois Confederacy. Europeans called these five nations the Iroquois, even though other nations spoke Iroquoian as well.

According to Iroquois tradition, **Dekanawidah** (Dek·uh·nuh·WEE·duh), a shaman or tribal elder, and **Hiawatha**, a chief of the Mohawk, founded the League. They were worried that war was tearing the five nations apart at a time when the more powerful Huron people threatened them all. The five nations agreed to the Great Binding Law, a constitution that defined how the confederacy worked.

Although the 50 chiefs who made up the ruling council of the Iroquois League were all men, the women who headed the kinship groups selected them. Council members were appointed for life, but the women could also get rid of an appointee if they disagreed with his actions. In this way, Iroquois women enjoyed considerable political influence.

**The Peoples of the Southeast** Almost all of the people in the Southeast lived in towns. Women did most of the farming, while the men hunted deer, bear, wildfowl, and even alligator. The Mississippian culture influenced many of the people in the Southeast. The town buildings were arranged around a central plaza. Stockades usually surrounded the towns, although moats and earthen walls were also used. The houses were built out of poles and covered with grass, mud, or thatch.

The Cherokee were the largest group in the Southeast. They lived in what is today western North Carolina and eastern Tennessee. About 20,000 Cherokee lived in some 60 towns when the Europeans arrived. The Cherokee and a nearby group of people called the Tuscarora were Iroquoian speakers. Other people in the Southeast included the Choctaw, Chickasaw, Natchez, and Creek. The Creek were a large group living in what is today Georgia and Alabama. They lived in about 50 villages that were divided into War Towns, where the war leaders lived and men trained for war, and Peace Towns, where the political leaders lived.

By the 1500s, Native Americans had created a wide array of cultures and languages. They had also developed economies and lifestyles well suited to the geography and climate in their particular corners of North America.

**Archaeologists** have found kernels of popcorn in Utah and Peru that they estimate to be over 1,000 years old. Today, almost all of the world’s popcorn is grown in the United States. According to the Popcorn Board, a nonprofit organization sponsored by U.S. Popcorn Processors, the average American eats about 15 gallons of popcorn each year.

**Reteach**
List the three geographic areas mentioned in this section on separate panels of the board. Have students create an outline using the names of the regions and cultures.

**Enrich**
Have students pose questions about the Native American cultures addressed in this section and research the answers.

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**Reading Check**

**Answer:** Some Woodlands Native Americans practiced slash-and-burn agriculture to clear the land and make it more fertile.

**CLOSE**
Ask students to explain the role of geography in the development of the various Native American cultures.

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**SECTION 2 ASSESSMENT**

1. **Checking for Understanding**
   1. **Define:** kachina, slash-and-burn agriculture, longhouse, wigwam, kinship group.
   2. **Identify:** Algonquian, Iroquoian, Dekanawidah, Hiawatha.
   3. **Explain** why five Native American groups formed the Iroquois League.

2. **Critical Thinking**
   5. **Analyzing** Why were some Native American groups more nomadic than others?
   6. **Categorizing** Use a graphic organizer like the one below to list North American regions and the ways Native Americans living in these regions obtained food.

3. **Analyzing Visuals**
   7. **Analyzing Maps** Examine the map of North American cultures on page 22. Which method of acquiring food was used over the largest geographical area of North America?

4. **Writing About History**
   8. **Descriptive Writing** Take on the role of a Sioux teenager living in North America around 1500. Write a journal entry describing a typical day in your life. Be sure to discuss where you live and how your family obtains food.

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**SECTION 2 ASSESSMENT ANSWERS**

1. Terms are in blue.
2. Algonquian (p. 23), Iroquoian (p. 23), Dekanawidah (p. 24), Hiawatha (p. 24)
3. The Iroquois League was formed in order to keep the peace.
4. Answers will vary. Students should note how customs and traditions were affected by climate, using examples from the text.
5. Native American peoples who engaged in farming were less likely to be nomadic than those who primarily hunted for food.
6. Southwest—farmed and herded sheep; Pacific Coast—fished, hunted, gathered roots and berries; Eastern Great Plains—farmed and hunted; Western Great Plains—hunted; Far North: hunted; Northeast—farmed; Southeast—farmed and hunted
7. Hunting
8. Students’ reports will vary. Journal entries should include details about daily activities, food, and clothing.
I am Dekanawidah and with the Five Nations’ Confederate Lords I plant the Tree of Great Peace. . . .

The Mohawk Lords are the foundation of the Great Peace and it shall, therefore, be against the Great Binding Law [the constitution] to pass measures in the Confederate Council after the Mohawk Lords have protested against them.

All the business of the Five Nations Confederate Council shall be conducted by the two combined bodies of Confederate Lords. . . . In all cases the procedure must be as follows: when the Mohawk and Seneca Lords have unanimously agreed upon a question, they shall report their decision to the Cayuga and Oneida Lords who shall deliberate upon the question and report a unanimous decision to the Mohawk Lords. The Mohawk Lords will then report the standing of the case to the Firekeepers [the Onondaga], who shall render a decision as they see fit in case of a disagreement by the two bodies. . . .

There shall be one War Chief for each Nation and their duties shall be to carry messages for their Lords and to take up the arms of war in case of emergency. They shall not participate in . . . the Confederate Council.

Whenver a very important matter or a great emergency is presented before the Confederate Council [that] affects the entire body of the Five Nations . . . the Lords of the Confederacy must submit the matter to the decision of their people and the decision of the people shall affect the decision of the Confederate Council.

Read to Discover

Answer: They organized into two bodies of Lords.

Reinforcing Vocabulary

Have students take turns using one of the terms in a sentence that they speak aloud.

Historical Connection

The portion of The Constitution of the Five Nations that appears in the text is only a small part of the complete document which contains more than 12,000 words.

Portfolio Writing Activity

Ask students to find and read the entire document The Constitution of the Five Nations and write a summary of the key elements. The document is available at most libraries and on the Internet.

Answers to Analyzing Literature

1. The Onondaga settle disputes within the Confederate Council.
2. The Mohawk nation appears to have the most individual power since binding laws cannot be passed if Mohawk Lords object to them.

Interdisciplinary Activity

Students’ constitutions will vary. To help make the activity more realistic, encourage students to develop descriptions of their nations. Constitutions should deal with maintaining peace, resolving differences, and defense.
Section Overview

This section describes the diverse cultures that developed in different parts of Africa. The interaction of people from West Africa and Europe resulted in changes to both the West African and European cultures.

Main Idea

Peoples in West, Central, and Southern Africa developed diverse governments and lifestyles.

Key Terms and Names

Sahara, savannah, Islam, Muslim, Soninke, mosque, Malinke, Sorko, Yoruba, matrilineal

Reading Strategy

Organizing As you read about the civilizations and peoples of West, Central, and Southern Africa, complete a graphic organizer similar to the one below by filling in the names of several groups from each region.

Reading Objectives

• Describe the culture of early West African kingdoms.
• Describe the lifestyles of early Central and Southern African peoples.

Section Theme

Global Connections The interaction of West African and European civilizations created changes in both cultures.

An African Story

In 1324 Mansa Musa, ruler of the Mali empire, made a pilgrimage to the Arabian city of Makkah (Mecca), a place holy to his religion, Islam.

Musa had encouraged scholarship and trade in his realm, establishing his empire’s leading city, Timbuktu, as a great center of learning. A man named Mahmoud Kati, a native of the city, wrote a book praising Timbuktu for “the solidity of its institutions, its political liberties, the purity of its morals, the security of persons, its consideration and compassion towards foreigners, its courtesy toward students and men of learning and the financial assistance which it provided for the latter...”

Musa was not the first African king to visit Makkah, but no one there or along his route had ever seen anything as dazzling as his traveling party. With him came 60,000 men, 12,000 of them personal servants he had enslaved. All were lavishly dressed. His vast caravan included 80 camels carrying 300 pounds of gold each.

Along the route, Musa’s generous spending brought prosperity to the towns he passed and made his name famous. More importantly, the unmistakable wealth of his empire opened the eyes of North Africans, Arabs, and Europeans to the greatness of the Mali civilization.

—adapted from Wonders of the African World

West Africa

Between the 400s and 1500s, three great empires—Ghana, Mali, and Songhai—rose and fell in West Africa. These realms grew and prospered in large measure by trading in two precious commodities—gold and salt.
Creating Study Cards

Organize students into teams of three. Have each team create a set of study cards for each member. The cards should highlight the important topics and concepts presented in this section. Allow teams to determine what each member will contribute to the process.

Use the rubric for a cooperative group management plan on pages 81–82 in the Performance Assessment Activities and Rubrics.
Guided Reading Activity 1–3

Writing a Report Have students research the development of one of the African cultures mentioned in this section and write a one-page report about the culture prior to contact with Europeans. L2

Use the rubric for a book review, research report, or position paper on pages 89–90 in the Performance Assessment Activities and Rubrics.

Makkah, also called Mecca, is the birthplace of the Prophet Mohammed, the founder of Islam. This holy city is located in what is now western Saudi Arabia. Every day Muslims face Makkah as they pray, and each year more than a million Muslims make a pilgrimage during the last month of the Islamic calendar. One of the tenets of Islam is that every person who is able should make a hajj, a pilgrimage to this holy city during his or her lifetime.

History and the Humanities

American Music: Cultural Traditions: “Yarum Praise Songs”

MEETING SPECIAL NEEDS

Kinesthetic Tell students that sugarcane became an important crop to Europeans. Explain that harvesting sugarcane requires many laborers and that Europeans enslaved African peoples to perform much of the labor. Have students create a model showing the process of growing and harvesting sugarcane. Encourage students to clearly label the model so that a person observing the model can gain a clear understanding of the process. L1

Refer to Inclusion for the High School Social Studies Classroom Strategies and Activities in the TCR.
the Taghazit salt mines, and then he expanded southward down the Niger about 200 miles (322 km) to capture the town of Jenne. According to legend, Sonni Ali’s army never lost a battle.

Sonni Ali’s son and successor proved to be an ineffectual ruler, and within a year a Songhai general named Askia Muhammad seized the throne. Askia Muhammad, a devout Muslim, revived Timbuktu as a great center of learning, encouraged more trade across the Sahara, and centralized power in the Songhai capital, Gao. Visiting Gao in 1513, a young Moroccan named Leo Africanus wrote:

“...its inhabitants are rich merchants who travel constantly about the region with their wares. A great many Blacks come to the city bringing quantities of gold with which to purchase goods imported from the Berber country [North Africa] and from Europe, but they never find enough goods on which to spend all their gold and always take half or two-thirds of it home.”

—quoted in *African Kingdoms*

Songhai remained a powerful and wealthy empire until 1591, when Moroccan troops, armed with guns and cannon, defeated Songhai’s armies. After the battle shattered its army, the Songhai empire began to decline.

**Reading Check** Describing Why did the empire of Ghana begin to decline?

**The Forest Kingdoms of Guinea**

Ghana, Mali, and Songhai arose on the wide vistas of West Africa’s savannah, an open landscape that made it easier to control large territories. The situation differed in the dense, almost impenetrable forests of West Africa’s southern coast, an area called Guinea. There, smaller states and kingdoms, such as Ife and Benin, developed.

Both the Yoruba people of Ife and the Edo people of Benin were a mixture of hunters, farmers, and traders living in small village communities. The rich farmlands and tropical climate enabled the people of the forest kingdoms to produce surplus food that was then used to support rulers, government officials, artisans, and artists. Surplus food was also traded for copper and salt from the Sahara. Ife artists produced some of the most impressive art in West Africa. They carved wood and ivory, made terra-cotta sculptures, and cast metal.

To the south and east of Ife, the Edo people developed the city-state of Benin in the eleventh or twelfth century. By 1400, Benin was a large, walled city measuring several miles across. The ruler of Benin was called the *oba*. In the mid-1400s, *Oba Ewuare* assembled a

**INTERDISCIPLINARY CONNECTIONS ACTIVITY**

**Performing Arts** Have students research the influence of African music and dance on American music. Encourage students to learn about traditional African musical instruments and rhythms. Also encourage students to experience traditional African music and dance through live and recorded performances. **L2**

**Background:** Every year on the last day of Ramadan, the faithful gather to apply a fresh coat of adobe to this mosque.

**Answer:** They were centrally located, well situated to control the trade in gold from the south and salt and other goods coming from the north.

**Ask:** When did the Muslims take control of North Africa? (in the 600s and 700s)
**CHAPTER 1**  
Section 3, 26–31

**Reading Check**

**Answer:** Unlike the open landscape of the West African savannah, the dense forests of Guinea made it difficult for armies to control large expanses of territory.

**Reading Check**

**Answer:** Food surpluses resulted from fertile soil and abundant rainfall.

**3 ASSESS**

Assign Section 3 Assessment as homework or as an in-class activity.

Have students use the Interactive Tutor Self-Assessment CD-ROM.

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**Geography Skills**

**Answers:**
1. Songhai
2. access to water

**Geography Skills Practice**

**Ask:** What was the leading city in the Mali kingdom? *(Niani)*

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**Reading Check**

**Answer:** The Mali kingdom was the leading city.

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**Critical Thinking Activity**

**Synthesizing** Using a blank outline map of Africa that includes the present-day country borders, have students create a historical map showing the land areas controlled by the Ghana, Mali, Songhai, Ife, Benin, and Kongo kingdoms. Tell students to assign a different color to each kingdom and use the color to shade the area of land controlled by each. Have students label the kingdoms and their approximate dates of existence. Remind students that some areas will overlap. L2
African slavery began to change with the arrival of Islam. Muslims in the Middle East were permitted to enslave non-Muslims. Arab traders began to trade horses, cotton, and other goods in exchange for enslaved Africans captured in war.

**The Gold Trade** The gold trade also changed slavery in West Africa. In the early 1400s, the Akan people began mining gold and trading it to the Mali empire. To increase their production, they acquired enslaved Africans from Mali traders for use in clearing the land and mining the gold.

In the 1420s, the Portuguese began exploring the west coast of Africa and trading with West African merchants. They traded European goods for African gold, ivory, pepper, and palm oil. When Portuguese merchants arrived on the coast south of the Akan region, they began to supply the Akan people with enslaved Africans in exchange for gold. They also purchased enslaved Africans to work on Portuguese sugar plantations.

**Sugar and Slavery** Europeans learned about the cultivation and processing of sugarcane from the Muslims during the 1100s. The introduction of sugar changed the diet of Europeans, who had formerly used honey and fruit juices to sweeten their foods. Demand for sugar began to rise steadily. Eventually about 20 percent of all calories consumed in Europe came from sugar.

Europeans set up sugar plantations on the Mediterranean islands of Cyprus and Sicily. These locations, unlike most of Europe, provided the specific climate and type of soil sugarcane needs to grow well.

Sugar cane cultivation requires heavy manual labor. The cane is tough and thick and has to be chopped down using heavy knives. A huge amount of sugarcane has to be cut to produce a pound of sugar. Consequently, plantation owners needed a large labor force. To get people to do the work, they either had to pay very high wages or find a way to force people to do the work without paying them. As a result, the introduction of sugarcane farming encouraged Europeans to use enslaved workers and to enter into the slave trade.

The first enslaved workers used by the Europeans on sugar farms were captured Muslims and Slavic peoples. Rising demand for sugar in the 1400s led Spain and Portugal to establish sugarcane plantations on the Canary and Madeira Islands off the west coast of Africa. They then brought in enslaved Africans to work the fields. The limited amount of land available to Europeans to plant sugarcane kept their participation in the slave trade limited during the 1400s. This would change dramatically after Europeans introduced sugarcane to America.

As the European demand for slave labor rose following the colonization of Africa, slavery in Africa completely changed. Traders took enslaved Africans from their homes and sent them across the Atlantic. For the most part, enslaved Africans shipped to America had little chance of winning their freedom. Torn from their own cultures, they had to learn a completely new way of life amid often horrifying conditions.

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**Critical Thinking**

1. Define: savannah, mosque, matrilineal.
2. Identify: Sahara, Islam, Muslim, Soninke, Malinke, Sorko, Yoruba.
3. Explain why the Songhai became a great empire.

**Reviewing Themes**

4. Global Connections: Describe how did the concept of slavery change as trade between Africa and Europe flourished in the 1500s?

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**Analyzing Visuals**

7. Examining Artifacts: Study the West African artifacts on pages 27 and 28. The skillful handiwork of these items indicates a society able to devote time to artistic pursuits in addition to necessary tasks. What two commodities were essential to the prosperity of West Africa?
**Main Idea**
The fall of Rome fragmented Europe. Between 1100 and 1400, several developments helped reunify parts of Europe and encouraged new explorations.

**Reading Strategy**
Organizing: As you read about European life in the Middle Ages, complete a graphic organizer similar to the one below by filling in the key events that brought Europe out of its long isolation.

**Reading Objectives**
- Discuss the impact of the Crusades on Europe’s contact with the Middle East.
- Analyze the impact of the Renaissance on European exploration.

**Section Theme**
Science and Technology: The Renaissance helped start a scientific revolution that enabled Europeans to explore the world.

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**European Society**
Pope Urban II’s call to arms launched nearly two centuries of armed struggle to regain the Holy Land. These expeditions were called the Crusades, from the Latin word *crux*, meaning “cross.” The Crusades helped pry western Europe out of centuries of isolation.

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**Answers to Graphic:** Key events include: the Crusades, the invention of a better plow and the horse collar, the collapse of the Mongol empire, the decline of feudalism and emergence of strong states, the Renaissance, technological advances in navigational instruments, and advances in shipbuilding and sailing techniques.

**Preteaching Vocabulary**
Have students create a simple symbol, icon, or sketch for each of the Key Terms and Names. Ask students to label each drawing.
isolation and triggered a series of events that revolutionized European society and encouraged a new desire for exploration.

For centuries, the Roman Empire had dominated much of Europe, imposing a stable social and political order. By A.D. 500, however, the Roman political and economic system had collapsed, isolating western Europe from the rest of the world. Trade declined. Cities, bridges, and roads fell into disrepair. Law and order vanished, and money was no longer used. For most people, life did not extend beyond the tiny villages where they were born, lived, and died. This period, lasting roughly from 500 to 1400, is known as the Middle Ages.

**Feudalism** With the weakening of central government, a new political system known as feudalism developed in western Europe. Under this system, a king would give estates to nobles in exchange for their loyalty and military support. Eventually, the nobles owning the estates became strong enough to assume many of the powers usually held by government. They raised their own armies, dispensed justice, and even minted coins. In return, the nobles swore an oath of loyalty and promised to provide knights, or mounted warriors, for the royal army.

By 1100 feudalism had spread throughout much of Europe. Because the system lacked a strong central government, warfare occurred frequently in feudal society. As a result, most nobles built castles, or fortified manor houses, for defense.

**The Manorial System** The wealth of a feudal lord came from the labor of the peasants who lived on his land. Since the fall of the Roman Empire, many peasants had worked for large landowners, in part because they could not obtain their own land and in part for protection.

A lord’s manor, or estate, varied in size from several hundred to several thousand acres. Each manor included the lord’s house, pastures for livestock, fields for crops, forest, and a peasant village. While feudalism describes the political relationships between nobles, manorialism describes the economic ties between nobles and peasants.

In return for protection, peasants provided various services for the lord. Chief among these were farming the lord’s land and making various payments of goods. Warfare and bandits made trade difficult, so the manor had to produce nearly everything its residents needed.

Peasants rarely left the manor. Most were serfs, people who were bound to the manor and could not leave it without permission. Serfs were not considered enslaved, however, since they could not be sold from the land where they lived and worked. Serfs typically lived in tiny, one-room houses with dirt floors, a hole in the roof for a chimney, and one or two crude pieces of furniture. Coarse bread, a few vegetables, and grain for porridge made up their usual diet. They spent most of their waking hours working. Here, an English monk describes a serf’s account of his day:

“...I work very hard. I go out at dawn, driving the oxen to the field, and I yoke them to the plough; however hard the winter I dare not stay home for fear of my master; but, having yoked the oxen and made the ploughshare and coulter fast to the plough, every day I have to plough a whole acre or more.”

—quoted in Colloquy

**An Improving Economy** The economy of western Europe, devastated since the fall of Rome, began to improve around 1000. The invention of a better plow allowed farmers to produce more food, as did the invention of the horse collar, which allowed farmers to use horses instead of oxen. Horses could pull a plow faster than an ox, enabling farmers to plant more crops each year.
CHAPTER 1
Section 4, 32–37

Reading Check

Answer: The social order in Europe during the Middle Ages revolved around strong noblemen. Under the political system known as feudalism, a king would give estates to nobles in exchange for loyalty and military support. This political system led to a manorial economic system whereby peasants provided services to nobles in exchange for protection and basic needs such as food and shelter.

Guided Reading Activity 1–4

Creating a Display  Have students choose a technological advancement mentioned in this section and create a display showing how the technology worked and how it was used. L2

Use the rubric for creating a map, display, or chart on pages 77–78 in the Performance Assessment Activities and Rubrics.

Answers: 1. Constantinople 2. the Mongol empire

Geography Skills Practice
Ask: What were Spain’s major commercial centers? (León, Toledo, Valencia, Córdoba, Cádiz, and Barcelona)

Geography Skills

1. Interpreting Maps Which city was Europe’s overland gateway to India?
2. Applying Geography Skills Which Eastern empire was crucial for organizing the movement of goods between Europe and China?

MEETING SPECIAL NEEDS

Logical/Mathematical  Have students find maps showing common overland and sea trade routes from Europe to China. Then have students use the map scales to calculate the approximate distances of common routes. Ask students to prepare a chart comparing these distances. As an extension, you could ask students to research the approximate time required to make a complete trip and add that detail to the charts. L2

Refer to Inclusion for the High School Social Studies Classroom Strategies and Activities in the TCR.

The ability of many villages to produce a surplus of food helped to revive trade in Europe and encouraged the growth of towns. Some European rulers succeeded in building strong central governments. Warfare and raids by bandits decreased, and roads were soon filled with traders carrying goods to market. The number of towns in western Europe grew tremendously between 1000 and 1200.

The Church  The Roman Catholic Church struggled mightily against the social and political fragmentation of Europe that followed the fall of Rome. In the face of civil chaos and personal insecurity, it promoted stability and order. It had its own laws and courts that dealt with cases related to the clergy, doctrine, marriage, and morals.

Disobedience to Church laws resulted in severe penalties for common persons and rulers alike—including excommunication for those who committed grave offenses. Excommunication barred people from participating in Church rites. They also lost political and legal rights.

Expanding Horizons

Pope Urban II’s call for Christians to free their religion’s holy places from the Muslims launched a period of profound change in Europe. The Crusades
helped change western European society by bringing western Europeans into contact with the Muslim and Byzantine civilizations of eastern Europe and the Middle East. The western European presence in this region heightened demand at home for Eastern luxury goods: spices, sugar, melons, tapestries, silk, and other items. Trade increased in the eastern Mediterranean area and especially benefited Italian cities such as Venice, Pisa, and Genoa.

By 1200 Italian and Arab merchants controlled much of the trade in the eastern Mediterranean. Chinese and Indian traders sold silk, spices, and other goods to Arab merchants, who then moved the goods overland to the Mediterranean coast, where they reaped huge profits selling the goods to Italian merchants.

As trade increased, merchants found that many Arab traders would only accept money in payment. European merchants therefore needed a common medium of exchange, and this led to the rise of an economy based on money. The increasing demand for gold from Africa to make gold coins during the 1200s was a direct result of Europe’s expanding trade with Asia.

The rise of the Mongol empire in the 1200s helped to increase the flow of goods from China and other parts of Asia. Mongol horsemen swept out of central Asia in the early part of the century and built one of the largest empires in world history. The Mongol conquest integrated much of Asia’s economy. It broke down trade barriers, opened borders, and secured the roads against bandits, encouraging even more trade between Asia and Europe.

By the 1300s Europe was importing vast quantities of spices, silks, and other goods from Asia. To the frustration of European merchants, however, the Mongol empire collapsed in the 1300s, and Asia again separated into dozens of independent kingdoms and empires. The flow of goods from Asia declined, and the price of spices, already very high, rose even more.

Increasingly European merchants and rulers began to look for a route to Asia that bypassed the Muslim kingdoms. If they could not reach China by land, they thought, perhaps they could reach it by sea.

**Reading Check**

**Summarizing** Describe the effects of the Crusades on Europe.

**New States, New Technology**

The wealth that could be earned by trading directly with Asia had given Europeans a compelling motive to begin exploring the world. Before the 1300s, however, western European rulers and merchants did not have the ability to look for a direct sea route to Asia.

Feudalism had created a society so fragmented and torn by war that no western European kingdom had the wealth to finance exploration and overseas trade. Western Europeans also lacked the technology to even attempt to reach China by sea. Beginning in the 1300s, however, a number of major changes took place in Europe that enabled the Europeans to begin sending ships into the Atlantic Ocean in search of a water route to China.

**GOVERNMENT**

**Strong States Emerge** Western Europeans began exploring the world in the 1400s and 1500s for several reasons. First of all, feudalism was in decline. Both the Crusades and trade with Asia had helped to weaken this system. The rise of towns and merchants had provided kings and queens with a new source of wealth they could tax. They could now use their armed forces to open up and protect trade routes and to enforce uniform trade laws and a common currency.

Some historians believe that the compass was independently invented in China and Europe at about the same time.

**INTERDISCIPLINARY CONNECTIONS ACTIVITY**

**Economics** Organize students into small groups. Have each group create a chart that compares the manorial economic system and the economic systems that existed under the strong central governments that arose between A.D. 1000 and A.D. 1200. Suggest to students that they consider economic items such as trade, taxation, money systems, and supply and demand. **L3**
Within their kingdoms. Merchants, who stood to benefit as well from increased trade, loaned money to monarchs to further finance their operations.

The revenue from trade meant that European rulers did not have to rely as much upon the nobility for support. Increasingly, western European monarchs asserted their power over the nobles. They began to unify their kingdoms and create strong central governments. By the mid-1400s, four strong states—Portugal, Spain, England, and France—had emerged in western Europe. Starting with Portugal in the early 1400s, all four began financing voyages of exploration in the hope of expanding their trade and national power.

**The Renaissance Spurs Discoveries** The political and economic changes that encouraged western Europeans to begin exploring the world would not have mattered had they not had the technology necessary to launch their expeditions. Fortunately, at about the same time that new unified kingdoms were emerging in western Europe, an intellectual revolution known as the Renaissance began as well. This period began around A.D. 1350 and lasted until around 1600.

**Renaissance** is a French word that means “rebirth.” In this case, it referred to a rebirth of interest in the culture of ancient Greece and Rome. European scholars rediscovered the works of Greek and Roman philosophers, geographers, and mathematicians. They also began to read works by Arab scholars. The Renaissance started with a renewed interest in the past, but it quickly became much more. The Renaissance not only produced spectacular works of art, it also marked a renewed commitment to learning and helped to trigger a scientific revolution.

**New Technology** If western Europeans were going to find a water route to Asia, they needed navigational instruments that would enable sailors to travel out of sight of land and still find their way home. They also required ships capable of long-distance travel across the ocean. By the early 1400s, Europeans had acquired these technologies.

By studying Arab texts, western Europeans learned about the **astrolabe**, a device invented by the ancient Greeks and refined by Arab navigators. An astrolabe uses the position of the sun to determine direction, latitude, and local time. Europeans also acquired the

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**CRITICAL THINKING ACTIVITY**

**Interpreting** Organize students into small groups. Assign each group one of the following: a bishop, a knight, a noble, or an artisan who works with metal. Have the groups research the Crusades and, from the point of view of their assigned person, write a journal entry expressing their thoughts about the call to “seize control of Christianity’s holiest sites.” Have each group share its journal entry with the entire class. As a class, discuss the different reactions to the pope’s impassioned plea. L2
compass from Arab traders. Invented in China, this device reliably showed the direction of magnetic north.

Navigational instruments were important to exploring the world, but not as essential as ships and sails capable of long-distance travel. Late in the 1400s, European shipwrights began to outfit ships with triangle-shaped lateen sails perfected by Arab traders. These sails made it possible for ships to sail against the wind. Shipwrights also stopped using a single mast with one large sail. Multiple masts with several smaller sails hoisted one above the other made ships travel much faster. In addition, moving the rudder from the side to the stern made ships easier to steer.

In the 1400s a Portuguese ship called the caravel incorporated all these improvements. A caravel was a small vessel capable of carrying about 130 tons (118 t) of cargo. Because a caravel needed little water to sail, it allowed explorers to venture up shallow inlets and to beach the ships to make repairs. Caravels and ships with similar technology finally enabled Europe to explore the world.

Reading Check Examining What political and technological developments made it possible for Europeans to begin exploring the world?

Portuguese Exploration

Sailing their caravels, Portuguese explorers became the first Europeans to find a sea route to Asia. In 1419 Prince Henry of Portugal, known as Henry the Navigator, set up a center for astronomical and geographical studies at Sagres on Portugal’s southwestern tip. He invited mapmakers, astronomers, and shipbuilders from throughout the Mediterranean world to come there to study and plan voyages of exploration.

Beginning in 1420, Portuguese captains began mapping Africa’s west coast. Portuguese explorers discovered the Azores, the Madeira Islands, and Cape Verde. In 1488 a Portuguese ship commanded by Bartolomeu Dias reached the southern tip of Africa, later named the Cape of Good Hope. Nine years later, four ships commanded by Vasco da Gama sailed from Portugal, rounded Africa, and then headed across to India and landed on India’s southwest coast. A water route to eastern Asia had been found.

Reading Check Describing How did Henry the Navigator help encourage exploration?

Answer: political: the emergence of strong states; technological: new navigational tools and innovations in shipbuilding

Reteach

Have students explain the significance of the events shown on the time line at the beginning of this section.

Enrich

Have students conduct research on one of the people, places, things, events, or concepts presented in this section. Have them develop a two-minute oral presentation for their classmates.

4 CLOSE

Have students write a paragraph analyzing the impact of the Renaissance on European exploration.

Reading Check

Answer: Henry the Navigator set up a center for astronomical and geographic studies and he invited mapmakers, astronomers, and shipbuilders to come there to study and plan voyages of exploration.
Main Idea
Columbus sought a sea route to Asia. Instead, he landed in the Americas.

Key Terms and Names
Vikings, Christopher Columbus, Claudius Ptolemy, San Salvador Island, Santo Domingo, Pope Alexander VI, line of demarcation, Amerigo Vespucci, Florida, circumnavigate, Columbian Exchange

Reading Strategy
Organizing As you read about European exploration of the Americas, complete a chart like the one below by filling in the outcome of each exploration listed in the chart.

<table>
<thead>
<tr>
<th>Exploration</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vikings</td>
<td></td>
</tr>
<tr>
<td>Columbus</td>
<td></td>
</tr>
<tr>
<td>Vespucci</td>
<td></td>
</tr>
<tr>
<td>Balboa</td>
<td></td>
</tr>
<tr>
<td>Magellan</td>
<td></td>
</tr>
</tbody>
</table>

Reading Objectives
• Describe Viking and Spanish explorations of North America.
• Summarize Columbus’s journeys and their impact on Native Americans and Europeans.

Section Theme
Global Connections Material exchanges between Europe and the Americas yielded both positive and negative results.

An American Story

In 1492 Christopher Columbus led 90 sailors on a voyage into the unknown. On September 9 Columbus noted in his log: "This day we completely lost sight of land, and many men sighed and wept for fear they would not see it again for a long time." As the voyage dragged on, the sailors grew nervous and began plotting mutiny. Columbus wrote:

“...All day long and all night long those who are awake and able to get together never cease to talk to each other in circles, complaining that they will never be able to return home... I am told... that if I persist in going onward, the best course of action will be to throw me into the sea some night.”

Then, on the morning of October 12, the Pinta’s lookout, Rodrigo de Triana, let out a joyous cry—"Tierra! Tierra!" ("Land! Land!"). At dawn a relieved and triumphant Columbus went ashore. He believed he had arrived in the Indies—Islands located southeast of China.

—adapted from The Log of Christopher Columbus

The Vikings Arrive in America

Although his historic journey set the stage for permanent European settlement in the Americas, Christopher Columbus was not the first European to arrive there. Strong archaeological evidence credits that accomplishment to the Norse, or Vikings, a people who came from Scandinavia.
Beginning in the late A.D. 700s, Viking ships, called longboats, began to venture outward from their homeland. Most headed south, some to trade with the wealthier peoples to the south and others to raid their settlements. Still others braved the violent North Atlantic Ocean and headed west.

Sometime around A.D. 1000, Leif Ericsson and 35 Vikings explored the coast of Labrador and may have stayed the winter in Newfoundland. Although the Vikings later tried to set up colonies in the region, their attempts failed, in large part because the Native Americans opposed them. Unlike later European colonists, the Vikings did not have better weapons than those of the Native Americans, who outnumbered them. It would take a new series of European expeditions, embarking in the 1400s and 1500s from points much farther south, to establish a permanent European presence in the Americas.

Reading Check: How do we know that Columbus was not the first European in the Americas? Answer: There is strong archaeological evidence that Vikings were the first Europeans in the Americas.

Spain Sends Columbus West

For more than 400 years after the Vikings abandoned their settlements in North America, there is no convincing evidence that Europeans traveled to the Americas. In the mid-1400s, the Renaissance renewed European interest in the world’s geography. With many European states eager to find a sea route to Asia, a few persons, including an Italian navigator named Christopher Columbus, became interested in sailing west across the Atlantic.

A New Geography By the 1400s most educated Europeans knew that the world was round. On the most accurate European maps of the time, however, only the Mediterranean, Europe, the Middle East, and Africa’s northern coast showed any detail. Then a book appeared that revolutionized European exploration.

Twelve centuries earlier, a Greek-educated Egyptian geographer and astronomer named Claudius Ptolemy had drawn maps of a round world, complete with 360 lines of longitude, one degree apart, projected onto a flat surface. Ptolemy’s Geography was rediscovered in 1406 and printed in 1475. It became very influential, and its basic system of lines of latitude and longitude is still used today.

European mariners also consulted the work of a twelfth century Arab geographer named al-Idrisi, who had traveled widely in the Middle East. In 1154 al-Idrisi published a geographical survey of as much of the world as was then known to Europeans and Muslims. By studying the maps of Ptolemy and al-Idrisi, Western mariners finally obtained a reliable idea of the geography of the eastern African coast and the Indian Ocean.

Columbus’s Plan Despite its usefulness, Ptolemy’s Geography had seriously underestimated the distance that each degree of longitude represented, making the earth seem much smaller than it actually was. Basing his own calculations on Ptolemy’s, Christopher Columbus predicted with wild optimism that “the end of Spain and the beginning of India are not far apart . . . and it is known that this sea is navigable in a few days’ time with favoring wind.”

Columbus sought Portuguese financial backing to make a voyage across the Atlantic to Asia. In 1484 he applied to the king of Portugal, who referred him to a committee of experts in navigation. Basing their decision on sources other than Ptolemy’s maps, the scholars reasoned correctly that Columbus had greatly underestimated the distance to Asia. Furthermore, when news arrived in 1488 that Bartolomeu Dias had successfully rounded the southern tip of Africa, the Portuguese lost all interest in supporting Columbus.

Building a Model Have students work in small groups to create a model showing lines of longitude and latitude on a Styrofoam ball. Encourage students to use library and Internet resources to help figure out how to build the model. Remind students that degrees of longitude and latitude relate to the 360 degrees of a circle with the center of the circle located in the exact middle of the sphere. Offer students a hint: they will need to cut the Styrofoam ball into fourths in order to measure the angles.

Use the rubric for a cooperative group management plan on pages 81–82 in the Performance Assessment Activities and Rubrics.
For the next few years, Columbus tried to win backing from other rulers. His brother Bartholomew, a respected mapmaker in Europe, tried and failed to secure financing for Columbus’s expedition from the rulers of England and France. Having no success with them, he spent six years trying to persuade King Ferdinand and Queen Isabella of Spain that his scheme would bring them wealth, empire, and converts to Catholicism. Finally, in 1492, after it became clear that Portugal was about to reach Asia by going east around Africa, Ferdinand agreed.

**TURNING POINT**

**The First Voyage**  Columbus and his three ships—the *Niña*, the *Pinta*, and the *Santa María*—finally left Spain in August 1492. First he sailed south to the Canary Islands to take on fresh supplies. Then he embarked on the harrowing voyage westward across the mysterious and frightening Atlantic until, unaware of where he was, he reached the Caribbean and landed in the Bahamas, probably on what is today San Salvador Island. There, for the first time, he encountered the Taíno people, a part of the Arawak. He called the people *Indians* because he thought he had reached the fabled Indies. Columbus noticed that some of the local people had a small piece of gold “hanging from a hole which they have in their nose.” After several attempts to ask where the gold had come from, he learned that “there was a king who had large vessels of it, and possessed much gold. . . .” Columbus then headed deeper into the Caribbean, determined to find this gold he had heard about. He found the island of Cuba, and he also found Hispaniola, which today is divided into the countries of Haiti and the Dominican Republic.

Columbus mistakenly concluded that Cuba was the coast of China and that Hispaniola was Japan.

Columbus and his sailors felt equal parts admiration and curiosity toward the Native Americans that they encountered in the Bahamas and Hispaniola. Columbus wrote the following of the Arawak:

“...[They are] artless and generous with what they have, to such a degree as no one would believe but he who had seen it. Of anything they have, if it be asked for, they never say no, but do rather invite the person to accept it, and show as much lovingness as though they would give their hearts.”

— quoted in 500 Nations

For their part, the Arawak must have been equally curious about the white-skinned, bearded Spanish. Columbus recorded his interpretation of their reaction to him and his men:

“...The people kept coming down to the beach, calling to us and giving thanks to God. Some brought us water, some food; others, seeing that I did not wish to go ashore, swam out to us. . . . One old man climbed into the boat, and the others, men and women, kept shouting, ‘Come and see the men who have come from Heaven; bring them food and drink.’

— quoted in The Voyage of Christopher Columbus

Like other Native Americans, the Arawak had an intense spiritual life. To Columbus, however, they appeared to have no religion. He predicted that “they would become Christians very easily.”

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**MEETING SPECIAL NEEDS**

**Visual/Spatial**  To help visual learners remember the various navigators and trips discussed in the section, have them trace and label the voyages of Christopher Columbus, Amerigo Vespucci, Juan Ponce de Leon, Vasco de Balboa, and Ferdinand Magellan on a map of the world. **L1**

Refer to *Inclusion for the High School Social Studies Classroom Strategies and Activities* in the TCR.
On Christmas Eve Columbus’s flagship, the Santa Maria, struck a reef off Hispaniola and broke apart. He built a small fort called La Navidad on the island and left 40 crew members to search for gold while he headed home with his remaining ships.

In March 1493 Columbus made a triumphant return to the Spanish court with gold, parrots, spices, and Native Americans he had brought back. The king and queen awarded him the titles “Admiral of the Ocean Sea” and “Viceroy and Governor of the Indies.” Ferdinand and Isabella listened closely as Columbus promised “as much gold as they want if their Highnesses will render me a little help. . . .”

Columbus’s Later Voyages Less than six months after Columbus returned to Spain, he headed back across the Atlantic, this time with 17 ships and over 1,200 Spanish colonists. In November 1493 he anchored off the coast of Hispaniola, only to learn that the men he had left behind had been killed and their fort destroyed. Abandoning the ruins, Columbus founded a new colony, called Isabella.

Many of the colonists were Spanish nobles. They had come expecting to get rich, and they refused to plant crops or do other manual labor. They accused Columbus of misleading them with false promises of gold, and many of them headed back to Spain to complain to the government.

Hoping to find more gold and save his reputation, Columbus began exploring the interior of Hispaniola. There he discovered enough loose gold to make mining worthwhile. He then decided to enslave the local Taínos and force them to work for the Spanish, mining gold and planting crops.

In 1496 Columbus headed back to Spain. In the meantime, his brother Bartholomew founded a new town named Santo Domingo on the south coast of Hispaniola closer to the gold mines. Santo Domingo became the first capital of Spain’s empire in America.

Columbus made a third voyage to America in 1498. After arriving on the northern coast of South America and studying the volume of fresh water at the mouth of the Orinoco River, he wrote in his journal, “I believe that this is a very great continent, which until today has been unknown.” Columbus made one final voyage in 1502. He mapped the American coastline from Guatemala to Panama before turning back.

Reading Check Describing Describe the results of Columbus’s voyages.

Spain Claims America

After Columbus had shown the way, Spanish explorers and settlers flocked to the Caribbean hoping to become wealthy through conquest and trade. By the early 1500s, the Spanish had explored the major Caribbean islands, established colonies on Hispaniola, Cuba, Jamaica, and Puerto Rico, and begun exploring the American mainland.

The Treaty of Tordesillas Before colonization could begin, however, Ferdinand and Isabella had to establish their claim to the new lands. Portugal had claimed the right to control the Atlantic route to Asia. To resolve the issue peacefully, they appealed to the pope for a decision.

Profiles in History

Christopher Columbus 1451–1506

Christopher Columbus was born in Genoa, Italy. Growing up in a bustling seaport gave Columbus a glimpse of the wider world. Although he was the eldest son, he decided to leave his family’s wool-weaving business and go to sea at the age of 14. After sailing for more than 10 years, Columbus settled in Lisbon, Portugal. His brother Bartholomew soon joined him, and the two brothers worked together as map-makers—although Columbus continued to sail as well.

In 1479 Columbus married the sister of the governor of Porto Santo in the Madeira Islands and moved to the island to live. There he witnessed the use of enslaved Africans as forced labor on the sugar plantations. He would later introduce similar practices to America.

In the 1480s Columbus served on several Portuguese expeditions to Africa, where he schooled himself in Atlantic currents and wind patterns. In the process, he developed his theory that the easiest way to reach Asia was to sail west across the Atlantic. Despite his achievements, Columbus remained unhappy. A devout Christian, he believed God had destined him to find the western route to Asia and spread the Christian faith. He died in 1506, frustrated that he had not found Asia nor been given the honors and recognition that he felt he deserved.

Profiles in History

Have students choose another explorer in this section and write a profile similar to the profile of Christopher Columbus.

INTERDISCIPLINARY CONNECTIONS ACTIVITY

Mathematics Have students use library and Internet resources to learn more about the mathematics behind latitude and longitude. Have students prepare an explanation for why the circles that make up the lines of latitude do not intersect with each other and the lines of longitude appear to radiate from the North and South Poles. L2
CHAPTER 1 Converging Cultures

In 1493, to prevent a war between the two rival Catholic nations, Pope Alexander VI established a line of demarcation, an imaginary north-to-south line running down the middle of the Atlantic. This line granted Spain control of everything west of the line and Portugal control of everything east. King John II of Portugal accepted the idea of division, but he asked for the line to be moved farther west.

The following year the two countries resolved their differences over the dividing line in the Treaty of Tordesillas, named for a town northwest of the Spanish capital, Madrid. The treaty moved the line almost 1,000 miles (1,609 km) to the west.

The Treaty of Tordesillas did two things. It confirmed Portugal’s right to control the route around Africa to India, and it also confirmed Spain’s claim to the new lands of America. Unknowingly, however, the line had been drawn so far west that it cut through part of South America, giving much of the land that is now Brazil to Portugal.

Naming America Interestingly enough, Columbus did not give his name to the new land he had encountered while trying to reach Asia. In 1499 an Italian named Amerigo Vespucci, sailing under the Spanish flag, repeated Columbus’s initial attempt to sail west to Asia. Exploring part of the coast of South America, Vespucci, like Columbus, assumed that he had reached Asia.

Vespucci made his next voyage in 1501, this time commissioned by Portugal. He sailed far south along the coast of South America, and he eventually came to the conclusion that this large land mass could not be part of Asia. Vespucci’s descriptions of America were published and widely read in Europe. In 1507 a German scholar named Martin Waldseemüller published a study in which he proposed that the new continent be named America for “Amerigo the discoverer.”

Continuing Spanish Expeditions Even though Europe now knew that the Americas were not a part of Asia, explorers continued to chart the region. In 1513 the Spanish governor of Puerto Rico, Juan Ponce de Leon, sailed north. According to a traditional story, he was searching for a wondrous fountain that was said to magically restore youth, although historians have disputed whether or not

Food production increased on both sides of the ocean as a direct result of the exchange of cultivated plants and livestock. Increased food production led to population growth in Europe and among European colonists in America. One of the reasons food production increased in Europe, and later in Asia, was the introduction of crops from America that flourished where traditional European crops could not. For example, the climate, topography, and soil conditions in Ireland were not conducive to growing wheat or rice, but white potatoes from America thrived. The introduction of livestock and poultry from Europe, Africa, and Asia provided new sources of nourishment for Native Americans and colonists living in America. In addition to using animals as sources of food, they were used to help plow fields and provide fertilizer.

European contact with the Americas marked the start of an extensive exchange of plants and animals between the two areas of the world. Dramatic changes resulted from the exchange of plant life, leading to a revolution in the diets of peoples in both hemispheres.

Maize (corn), potatoes, many kinds of beans, tomatoes, and pumpkins were among the products the Eastern Hemisphere received from the Americas. Meanwhile, the Eastern Hemisphere introduced rice, wheat, barley, oats, melons, coffee, bananas, and many other plants to the Western Hemisphere.

Animals
The Spanish reintroduced horses to the Americas. Horses native to the Americas had died out during the Ice Age. Their reintroduction transformed Native American societies.

Plants
By about 1600, American maize and sweet potatoes were staple crops in China. They contributed to a worldwide population explosion beginning in this period.

CRITICAL THINKING ACTIVITY
Examining Organize the class into groups of four students. Have the groups conduct research to learn about how Christopher and Bartholomew Columbus sought to convince the Portuguese and the Spanish to provide funding for the voyage across the Atlantic. Have each group select either the failed attempt to convince the Portuguese or the successful effort to gain the financial backing of King Ferdinand and Queen Isabella. Tell the groups to write a dialogue between the Columbus brothers and the potential financial backers. Have group members present their dialogues to the class. L3
this was really his motivation. In any event, De Leon did discover a land full of blooming wildflowers and fragrant plants. Before leaving, he gave it the name Florida, which means “land of flowers.” Spanish explorers continued to search for a passage to China and India by sailing west. In 1510 Vasco de Balboa, a planter from Hispaniola trying to escape his creditors, stowed away on a ship heading to the American mainland. There he found a colony on the Isthmus of Panama. After hearing tales from Native Americans of a “south sea” that led to an empire of gold, Balboa hacked his way across steamy, disease-ridden jungles and swamps until he reached the opposite coast. There, in 1513, Balboa became the first European to reach the Pacific coast of America.

In 1520 Ferdinand Magellan, a Portuguese mariner working for Spain, discovered the strait later named for him at the southernmost tip of South America. One of the plants he transported back to Spain was a hardwood tree known as brazilwood. The core of the tree produced a bright red dye used by clothmakers. The color became favored among the wealthiest Europeans. The French especially valued the dye and French traders were soon competing with the Portuguese to supply the demand. Largely due to the brazilwood trade, the Portuguese government established permanent settlements in present-day Brazil to deter the French from making claims on the land.

From America to Europe Native Americans taught the Europeans local farming methods and introduced them to new crops. Corn, which colonists soon adopted as a basic food, traveled back to Spain on Columbus’s very first journey and then spread to the rest of Europe. Other American foods, such as squash, pumpkins, beans, sweet potatoes, tomatoes, chili peppers, peanuts, chocolate, and potatoes also made their way to Europe, as did tobacco and chewing gum.

The Columbian Exchange
The arrival of European colonists in the Americas set in motion a series of complex interactions between peoples and environments. These interactions, called the Columbian Exchange, permanently altered the world’s ecosystems and changed nearly every culture around the world.

From America to Europe Native Americans taught the Europeans local farming methods and introduced them to new crops. Corn, which colonists soon adopted as a basic food, traveled back to Spain on Columbus’s very first journey and then spread to the rest of Europe. Other American foods, such as squash, pumpkins, beans, sweet potatoes, tomatoes, chili peppers, peanuts, chocolate, and potatoes also made their way to Europe, as did tobacco and chewing gum.

Unforeseen Consequences
Europeans also unwittingly brought many diseases to the Americas, including measles, mumps, chicken pox, and typhus. The consequences were devastating to Native Americans. Some Native American groups suffered a 90 percent population loss in the first century after European contact. This catastrophe reduced the labor supply available to Europeans, who then turned to enslaving Africans. Thus slavery in the Western Hemisphere is traceable in part to the Columbian Exchange.

Creating a Display Have students create a display of the food component of the Columbian Exchange. Have students use actual foods or pictures of foods to show both sides of the exchange. L1 ELL

Use the rubric for creating a map, display, or chart on pages 77–78 in the Performance Assessment Activities and Rubrics.
Perhaps the most important discovery for Europeans was the potato. European farmers learned that if they planted potatoes instead of rye, about four times as many people could live off the same amount of land. Europeans also adopted many devices invented by Native Americans, including the canoe, the snowshoe, the hammock, the poncho, the toboggan, and the parka.

**From Europe to America** The Europeans introduced Native Americans to wheat, oats, barley, rye, rice, coffee, dandelions, onions, bananas, and oranges and other new citrus fruits, none of which existed in America. Europeans also brought over domestic livestock such as chickens, cattle, pigs, sheep, and horses. In addition, they introduced Native Americans to a range of technologies, including new types of metalworking, new techniques of shipbuilding, and new forms of weapons, including firearms.

No beneficial European import, however, could ever offset the dreadful effects of an invisible one—the bacteria and viruses that caused such diseases as influenza, measles, chicken pox, mumps, typhus, and smallpox. Native Americans had never experienced these diseases and had no immunity. Exposure led to catastrophic epidemics in which millions of Native Americans died.

The movement of disease, however, was not one-way. Native American illnesses made their way to Europe as well, where they infected millions of people. Unlike European diseases, Native American illnesses did not lead to a catastrophic collapse of the European population.

No one in Columbus’s time could have imagined the course of events in the Americas that have led to the present day. Some people feel that the tragic epidemics and military conquests that devastated the Native Americans and the subsequent introduction of slavery overshadow the positive effects of the exchange Columbus initiated. The human drama that unfolded over the next few centuries, however, also led ultimately to the founding of the United States. Despite tragic events along the way, the people of the United States managed to build a nation that honors the worth of the individual and protects the rights and freedoms of its citizens and others around the globe. This too is one of the legacies of Christopher Columbus.
Why Learn This Skill?

When you read a time line, you see not only when an event took place but also what events took place before and after it. A time line can help you develop the skill of chronological thinking. Developing a strong sense of chronology—when events took place and in what order they took place—will help you examine relationships among the events. It will also help you understand what events caused or were the result of other events.

Learning the Skill

A time line is a kind of chart that lists events that occurred between specific dates. The number of years between these dates is called the time span. For example, a time line that begins in 1400 and ends in 1500 would have a time span of 100 years. A time line that begins in 1490 and ends in 1500 would have a 10-year time span.

Time lines are usually divided into smaller segments, or time intervals. If you look at the two time lines below, you will see that the first time line has a 30-year time span divided into 10-year time intervals, and the second time line has a 6-year time span divided into 2-year time intervals.

### Reading a Time Line

<table>
<thead>
<tr>
<th>The Americas</th>
<th>The World</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000-1100s</td>
<td>1095</td>
</tr>
<tr>
<td>Vikings arrive</td>
<td>Pope Urban II launches Crusades</td>
</tr>
<tr>
<td>1200s</td>
<td>1271</td>
</tr>
<tr>
<td>1270s Drought forces Anasazi to abandon pueblos</td>
<td>Marco Polo journeys to China</td>
</tr>
<tr>
<td>1300s</td>
<td>1324</td>
</tr>
<tr>
<td>c. 1300 Cahokia collapses; fighting breaks out among Iroquois</td>
<td>Mansa Musa makes pilgrimage to Makkah</td>
</tr>
<tr>
<td>1400s</td>
<td>1475</td>
</tr>
<tr>
<td>1492 Columbus arrives</td>
<td>Ptolemy’s Geography is republished</td>
</tr>
</tbody>
</table>

### Why Learn This Skill?

When you read a time line, you see not only when an event took place but also what events took place before and after it. A time line can help you develop the skill of chronological thinking. Developing a strong sense of chronology—when events took place and in what order they took place—will help you examine relationships among the events. It will also help you understand what events caused or were the result of other events.

### Practicing the Skill

Sometimes a time line shows events that occurred during the same time period but in two different parts of the world. The time line above shows some events in the Americas and in the rest of the world during the same time span. Study the time line, and then answer the questions.

1. What time span and intervals appear on this time line?
2. What two important events took place around A.D. 1300 in North America?
3. About how many years before Ptolemy’s Geography was republished did the Vikings reach North America?
4. When did Pope Urban II begin the Crusades?

### Skills Assessment

Complete the Practicing Skills questions on page 47 and the Chapter 1 Skill Reinforcement Activity to assess your mastery of this skill.

### Answers to Practicing the Skill

1. A.D. 1000 to A.D. 1500; 100-year intervals
2. Cahokia collapses and fighting breaks out among the Iroquois
3. Ptolemy’s Geography was published in western Europe 474 years after the Vikings reached North America.
4. 1095

### Applying the Skill

Students’ answers will vary. Ask students to provide a page reference for each selected event.

**TEACH**

**Reading a Time Line** This skill emphasizes the importance of chronological thinking to the study of history. By learning to put things in chronological order, students gain an appreciation for relationships among the events.

Have students choose an event that occurred in the 1200s. Ask them to identify all the events shown on the time line that occurred in the 1200s and indicate if they happened before or after the first event mentioned.

### Additional Practice

**Reinforcing Skills Activity 1**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1050</td>
<td>Pope Urban II launches Crusades</td>
</tr>
<tr>
<td>1271</td>
<td>Marco Polo journeys to China</td>
</tr>
<tr>
<td>1324</td>
<td>Mansa Musa makes pilgrimage to Makkah</td>
</tr>
<tr>
<td>1475</td>
<td>Ptolemy’s Geography is republished</td>
</tr>
</tbody>
</table>

**Answer Key**

1. A.D. 1000 to A.D. 1500; 100-year intervals
2. Cahokia collapses and fighting breaks out among the Iroquois
3. Ptolemy’s Geography was published in western Europe 474 years after the Vikings reached North America.
Reviewing Key Terms
Students’ answers will vary. The pages where the words appear in the text are shown in parentheses.
1. radiocarbon dating (p. 13);
2. Ice Age (p. 13); 3. glacier (p. 13);
4. nomad (p. 13); 5. agricultural revolution (p. 13);
6. maize (p. 14);
7. civilization (p. 14); 8. obsidian (p. 14); 9. kiva (p. 16);
10. pueblo (p. 16); 11. kachina (p. 21); 12. slash-and-burn agriculture (p. 23);
13. longhouse (p. 23); 14. wigwam (p. 23); 15. kinship group (p. 23);
16. savannah (p. 27); 17. mosque (p. 28); 18. matrilineal (p. 30);
19. feudalism (p. 33); 20. manorialism (p. 33); 21. serf (p. 33); 22. Renaissance (p. 36); 23. astrolabe (p. 36);
24. caravel (p. 37); 25. line of demarcation (p. 42); 26. circumnavigate (p. 43); 27. Columbian Exchange (p. 43)

Reviewing Key Facts
28. Identify: Dekanawidah, Hiawatha, Henry the Navigator, Bartolomeu Dias, Vasco da Gama, Christopher Columbus, Claudius Ptolemy, Pope Alexander VI, Amerigo Vespucci.
29. How and why did Asians migrate to the Americas during the Ice Age?
30. How do scientists determine the age of ancient artifacts?
31. Why did some Native American groups settle in villages while other Native American groups were nomads?
32. How and why did the arrival of camels affect the trans-Saharan trade in West Africa?
33. How did the religion of Islam spread throughout West Africa?
34. What were four major factors that encouraged European exploration in the 1400s and 1500s?
35. Why were Europeans searching for a sea route to Asia?
36. What new inventions increased agricultural yields in Europe in the Middle Ages?
36. Inventions included the horse collar and a better plow.

Critical Thinking
37. In dry areas the Native Americans found crops that would grow in the dry soil or they moved from place to place looking for food. In the damp coastal areas that did not support farming, the Native Americans became expert fishers. In mild climates where wildlife was plentiful, they hunted and trapped animals.

38. Students’ opinions will vary. Students should be able to clearly defend their positions.

39. Students’ time lines will vary. Students should be able to provide a reference for each of their time line entries.

Practicing Skills
40. a. 500 years; b. about 17 years (1475–1492)