

SECTION 2

On Inca roads, couriers (right) often carried quipus (far right), or recording devices.



WITNESS HISTORY AUDIO

Impressive Inca Roads

“In human memory, I believe that there is no account of a road as great as this, running through deep valleys, high mountains, banks of snow, torrents of water, living rock, and wild rivers. . . . In all places it was clean and swept free of refuse, with lodgings, storehouses, Sun temples, and posts along the route. Oh! Can anything similar be claimed for Alexander [the Great] or any of the [other] powerful kings who ruled the world. . . ?”
—Pedro Cieza de León, Spanish explorer admiring the Inca road system in the 1500s



Focus Question What characterized the cultures and civilizations that developed in the Andes?

Andean Cultures of South America

Objectives

- Examine the early cultures of the Andes.
- Understand how Inca emperors extended and maintained their empire.
- Describe the daily life of the Inca.

Terms, People, and Places

Chavín	Pachacuti Inca Yupanqui
Moche	Sapa Inca
adobe	Cuzco
Nazca	quipu
Huari	ayllu
Tiahuanaco	Inti

Note Taking

Reading Skill: Contrast Contrast the cultures of the early peoples of the Andes with that of the Inca. Use a chart like the one below to organize relevant details about each culture as you read.

Chavín	
Location	
Unique achievements	

The first cultures of South America developed in the Andean region along the western edge of the continent. This region includes a variety of climates and terrains. The narrow coastal plain is a dry, lifeless desert crossed by occasional rivers. Further inland, the snow-capped Andes Mountains rise steeply, leveling off into high plateaus that bake by day and freeze at night. East of the Andes, dense jungles stretch from Peru into Brazil.

Cultures Develop in the Andes

Thousands of years ago, people settled in fishing villages along the desert coast of Peru and Chile. Gradually they expanded inland, farming the river valleys that run up into the highland plateaus. Using careful irrigation, they grew maize, cotton, squash, and beans. On mountain slopes, they cultivated potatoes, eventually producing 700 varieties. On high plateaus, they domesticated the llama and the alpaca. Eventually, they built large ceremonial centers and developed skills in pottery and weaving.

Chavín Culture Unifies a Region Archaeologists have pieced together a chronology of various cultures that left their mark on the Andean region over the course of 2,000 years. The earliest of these was the **Chavín** (chah VEEN) culture, named for ruins at Chavín de Huantar (chah VEEN day WAHN tahr). There, in about 900 B.C., people built a huge temple complex. Archaeologists are

SECTION 2 Step-by-Step Instruction

Objectives

As you teach this section, keep students focused on the following objectives to help them answer the Section Focus Question and master core content.

- Examine the early cultures of the Andes.
- Understand how Inca emperors extended and maintained their empire.
- Describe the daily life of the Inca.

Prepare to Read

Build Background Knowledge ^{L3}

Ask students to recall what they learned about the cultures of the Maya and Aztecs. Based on their previous reading, ask students to predict how the cultures of the Andes will be similar or different.

Set a Purpose ^{L3}

- **WITNESS HISTORY** Read the selection aloud or play the audio.

AUDIO Witness History Audio CD, Impressive Inca Roads

Ask **How does Cieza de León react to the Inca road system?** (*He's very impressed by it.*) **What does his reference to Alexander the Great suggest about the advancement of Inca engineering?** (*The reference suggests that Inca engineering was highly advanced.*)

- **Focus** Point out the Section Focus Question and write it on the board. Tell students to refer to this question as they read. (*Answer appears with Section 2 Assessment answers.*)
- **Preview** Have students preview the Section Objectives and the list of Terms, People, and Places.
- **Note Taking** Have students read the section using the Guided Questioning strategy (TE, p. T20). As they read, have them fill in the charts to list the location and unique achievements of each culture discussed.

Reading and Note Taking Study Guide, p. 60

Vocabulary Builder

Use the information below and the following resources to teach the high-use word from this section.

All in One Teaching Resources, Unit 1, p. 107; Skills Handbook, p. 3

High-Use Word
network, p. 197

Definition and Sample Sentence

n. a widely distributed group of things that work together as a unit or system.
Spiders spin a **network** of threads to make a web.

Teach

Cultures Develop in the Andes

L3

Instruct

- **Introduce** Point out the map and the laughing man and spider images in the student text. Explain that cultures of the Andes left their mark in many ways, including this Moche vessel and Nazca geoglyph. Have them locate the Moche and Nazca cultures on the map.
- **Teach** Review the basic features of each early Andean culture. As you do so, ask students to locate each culture on the map in their text. Ask **What environmental challenges does living in the Andes pose?** (*how to farm at high altitudes*) **How did people meet these challenges?** (*They used careful irrigation, cultivated cold-resistant crops like potatoes, and domesticated animals such as llamas and alpacas that live at high altitudes.*)
- **Quick Activity** Ask students to make flashcards with the name of an Andean culture on one side and its time period on the other. Then ask students to quiz each other on the names and dates using the flashcards.

Independent Practice

Have students begin the Outline Map of Andean cultures by filling in the Chavín, Moche, Nazca, Huari, and Tiahuanaco cultures.

All in One Teaching Resources, Unit 1, p. 115

Monitor Progress

As students fill in their charts, circulate to make sure they list information for all the cultures discussed. For a completed version of the chart, see

Note Taking Transparencies, 73

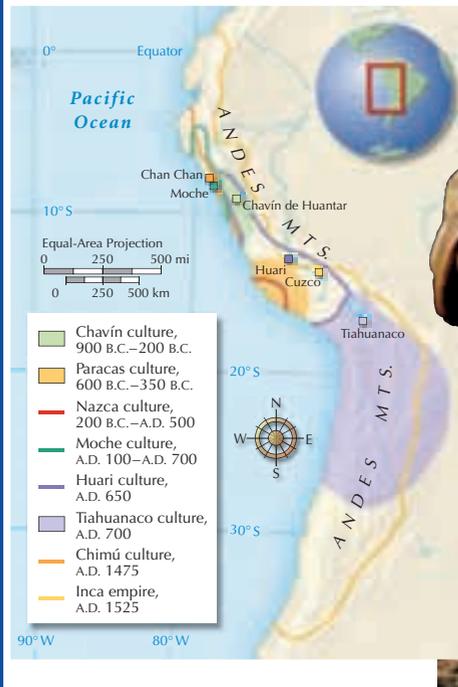
Answers

Caption Huari

✓ The Nazca created giant geoglyphs.

Cultures of the Andes

For more than 2,000 years, cultures of varying sizes developed in the Andean region. Although not all as powerful as the Inca, most left behind fascinating clues to their skills and interests—such as this Moche laughing-man vessel (top right) and Nazca spider geoglyph (bottom right). In the region of which earlier culture did the Inca build Cuzco?



not sure of the Chavín political structure, but they think the culture's religion unified people throughout northern and central Peru. Chavín arts and religion continued to influence later peoples of Peru as well.

The Moche Build a Culture Between A.D. 100 and A.D. 700, the **Moche** (MOH chay) people—named after their most famous city—forged a civilization along the arid north coast of Peru. Skilled Moche farmers developed methods for fertilizing the soil and used canals to irrigate the land. Their leaders built roads and organized networks of relay runners to carry messages, ideas that another Andean civilization, the Inca, would later adopt.

At the city of Moche, builders constructed the largest adobe structure in the ancient Americas. **Adobe** is a mixture of clay and plant fibers that becomes hard as it dries in the sun. Moche artisans perfected skills in textile production, goldworking, and woodcarving and produced ceramic vessels in lifelike imitation of people and animals.

Cultures of the Southern Andes Many other Andean cultures emerged, and some left behind intriguing clues about their lives and beliefs. Between about 200 B.C. and A.D. 600 along the southern coast of Peru, the **Nazca** (NAHS kah) people etched geoglyphs in the desert. A geoglyph is a figure or line made on Earth's surface by clearing away rocks and soil. The Nazca geoglyphs include straight lines that run for miles as well as giant birds, whales, and other animals. Most researchers think that the geoglyphs carried some sort of spiritual meaning.

The city of **Huari** (WAH ree) developed east of the Nazca culture. It controlled much of Peru's mountain and coastal areas. At the same time, a powerful city, **Tiahuanaco** (tee ah wah NAH koh), developed on the southern shores of Lake Titicaca, in modern-day Bolivia. It reigned over parts of modern-day Argentina, Chile, and Peru. Many of the same artistic styles appear at Huari and Tiahuanaco, leading scholars to think that these two southern powers shared religious or trade affiliations.

✓ **Checkpoint** What was unique about the Nazca culture of the Andes?

History Background

Quipus and Messages Inca quipus were complex and varied. They were constructed from a long rope with 48 smaller ropes attached and many even smaller ropes attached to the 48. Knots were placed in different locations on the ropes to represent 1, 10, or 100. Quipus were colored differently to represent different government interests, such as the labor tax, crop yields, or population information.

The Inca also used quipus to send messages. It is believed that they sent these messages with *chasquis*, or messengers. Chasquis served 15-day shifts, during which they lived in small roadside huts. Each runner had to know his section of road well enough to run it barefoot on a starless night. A message was relayed from one runner to the other, often moving at a rate of about 200 miles a day.

Inca Rulers Maintain a Large Empire

The most powerful of the Andean civilizations—the Inca civilization—came into being in the 1100s with the founding of its first dynasty. For the next three centuries, the Inca civilization stood out no more than any other. But in 1438, a historic change occurred. **Pachacuti Inca Yupanqui** (pahch ah KOO tee ING kuh yoo PANG kee), a skilled warrior and leader, proclaimed himself **Sapa Inca**, or emperor.

From his small kingdom at Cuzco in a high mountain valley, Pachacuti set out on a campaign of conquest. Once he subdued neighboring peoples, he enlisted them in his armies. His son, emperor Topa Inca Yupanqui, continued the expansion. With **Cuzco** as its capital, the resulting empire stretched more than 2,500 miles along the Andes, from Ecuador in the north to Chile in the south.

The Emperor Rules Over All The Sapa Inca held absolute power. Claiming to be divine, the son of the sun itself, he was also the empire’s religious leader. Gold, considered the “sweat of the sun,” served as his symbol. His queen, the Coya, carried out important religious duties and sometimes governed in his absence.

The Sapa Inca laid claim over all the land, herds, mines, and people of his empire. Thus the people had no personal property, so there was little demand for items for barter or sale. As a result, trade did not play a major role in the Inca economy. Instead, the Sapa Inca kept the people fed and public works projects staffed using a labor tax. Periodically, he would call upon men of a certain age to serve as laborers for short periods, perhaps a few months. By so doing, he could access millions of laborers at once.

Inca rulers ran an efficient government. Nobles ruled the provinces along with local chieftains whom the Inca armies had conquered. Below them, officials carried out the day-to-day business of enforcing laws and organizing labor. Specially trained officials kept records on a **quipu**, a collection of colored strings that were knotted in different ways to represent various numbers. Scholars think that the Inca, who never invented a writing system, may have used quipus to record economic, bureaucratic, religious, and other information.

Uniting the Empire To unite their empire, the Inca imposed their language, Quechua (KECH wuh), and their religion on the people they conquered. They also created one of history’s great road **networks**. At its greatest extent, it wound about 14,000 miles through mountains and deserts, passing through an area inhabited by almost 10 million people. Hundreds of bridges spanned rivers and deep gorges. Steps were cut into steep slopes and tunnels dug through hillsides. The expanse of the Inca road system was unmatched in the early Americas.

The roads allowed armies and news to move rapidly throughout the empire. At stations set regular distances apart, runners waited to carry messages. Relays of runners could carry news of a revolt swiftly from a distant province to the capital. Inca soldiers stood guard at outposts throughout the empire. Within days of an uprising, they would be on the move to crush the rebels. Ordinary people were restricted from using the roads at all.



BIOGRAPHY

Pachacuti

Growing up, Pachacuti Inca Yupanqui (1391?–1473?) did not seem destined to rule the Inca people. True, his father, Viracocha, was their king. But Viracocha had chosen another son—Urcon—as his successor.

According to Inca sagas, one day the army of a powerful neighboring people, the Chanca, threatened to sweep down on Cuzco. With the Chanca army quickly approaching, Viracocha and Urcon withdrew from Cuzco to a nearby fort. Pachacuti remained to defend the city, commanding the army and inspiring his warriors on to a stunning victory. Pachacuti then set himself up as king of Cuzco, eventually reuniting the entire Inca state under his rule. **What traits and skills must Pachacuti have needed to become emperor?**

Vocabulary Builder

network—(NET wurk) *n.* a widely distributed group of things that work together as a unit or system

Inca Rulers Maintain a Large Empire

L3

Instruct

- **Introduce** Have students read the first paragraph under Inca Rulers Maintain a Large Empire. Using the Numbered Heads strategy (TE, p. T23), ask them how a strong central leader might change a society’s future.
- **Teach** Trace the changes that the Sapa Inca wrought in the Inca society. Ask **What was the central principle of the Sapa Inca’s rule?** (*The Sapa Inca had absolute power.*) **In what ways did the Sapa Incas create an empire?** (*They created an efficient government and transportation system, they imposed the Inca language, and they created a central capital.*)
- **Quick Activity** Have students read the biography of Pachacuti. Discuss the question and invite students’ comments.

Independent Practice

- Have students complete the Outline Map of Andean cultures by locating the Inca culture and the Andes Mountains.
- All in One Teaching Resources, Unit 1, p. 115**
- Point out the final sentence of the subsection. Ask students to research briefly to learn how a 1950’s earthquake affected the Temple of the Sun. Have them compare this result to impact of the same quake on the nearby, and more recent, Church of Santo Domingo.

Monitor Progress

Circulate to check that students have accurately located the Inca on their Outline Maps. Then ask students to briefly summarize what they learned about the Inca.

Differentiated

Instruction

Solutions for All Learners

L1 Special Needs L2 Less Proficient Readers

Direct students to look at the photo of Machu Picchu in their texts. Explain that because of the altitude of the city, its beautiful surroundings in the Andes Mountains, and its unique Inca architecture, it is one of the most sought-after travel destinations in the world. Have students create a simple travel brochure providing potential tourists with reasons why they should visit this famous site.

L2 English Language Learners

Use the following resources to help students acquire basic skills.

Adapted Reading and Note Taking Study Guide

- Adapted Note Taking Study Guide, p. 60
- Adapted Section Summary, p. 61

Answer

BIOGRAPHY He must have had courage, military skills, self-confidence, and ambition.

Daily Life of the Inca

L3

Instruct

- **Introduce: Key Terms** Direct students to the photograph of Machu Picchu on this page. Ask them what the photo suggests about Inca government and society. (*The society must have been extremely well-regulated in order to accomplish such a huge feat.*)
- **Teach** Ask students to supply adjectives that describe the Inca accomplishments discussed under each black subheading. List these adjectives on the board, and then ask students to write a paragraph describing the daily life of the Inca based on their reading and list.
- **Quick Activity** Show students *The Mummies of Peru* from the **Witness History Discovery School™** video program and discuss the insight that mummies and artifacts offer into the lives of the Chiribaya.

Independent Practice

- **Viewpoints** To provide additional information about Inca life, have students read the selection *Two Views of Life Under the Inca* and answer the questions on the worksheet.

All in One Teaching Resources, Unit 1, p. 112

- Display **Color Transparency 35: Inca Goldwork**. Have students write a short paragraph describing Inca goldwork and explaining what it reveals about Inca society.

 **Color Transparencies, 35**

Monitor Progress

- As students create their descriptive paragraphs, refer them to the heading **Mastering Metalwork and Weaving** for more information.
- Check Reading and Note Taking Study Guide entries to confirm that students have accurately listed each culture and its accomplishments.

Cuzco as Capital All roads led through Cuzco. People from all the culture groups ruled by the empire lived in the city. Members of a given group lived in a particular part of the city and wore the traditional clothing and practiced the traditional crafts of their region of origin. In the heart of the city stood the great Temple of the Sun, its interior walls lined with gold. Like Inca palaces and forts, the temple was made of enormous stone blocks, each polished and carved to fit exactly in place without mortar used to secure it. Inca engineers were so precise that many of their buildings have survived severe earthquakes.

 **Checkpoint** Describe three ways that the Inca united their empire.

Daily Life of the Inca

The Inca strictly regulated the lives of millions of people within their empire. The leaders of each Inca village, called an **ayllu** (EYE loo), carried out government orders. They assigned jobs to each family and organizing the community to work the land. Government officials arranged marriages to ensure that men and women were settled at a certain age.

Farming the Land Inca farmers expanded step terraces built by earlier Andean peoples. They carved out flat strips of land on steep hillsides and built stone walls to hold the land in place. The terraces the Inca created kept rains from washing away the soil and made farming possible in places where naturally flat land was scarce.

Farmers spent part of each year working land for their community, and part working land for the emperor and the temples. The government allotted part of each harvest to specific groups of people or for particular purposes. It stored the rest in case of disasters such as famine.

Mastering Metalwork and Weaving The Inca were some of the most skilled metalworkers in the Americas. They learned to work and alloy, or blend, copper, tin, bronze, silver, and gold. While they employed copper

The Heights of Inca Stonework

Machu Picchu is the most impressive example of Inca stonework. Built high in the Andes, the large complex of buildings sits at an elevation of more than 7,000 feet. Agricultural terraces line the surrounding hillsides. *What challenges do you think the Inca faced when building in such a location?*



Answers

- ✓ They imposed their language on the peoples they ruled, they imposed their religion, and they built a network of roads uniting the empire.

Caption They would have had to carry stones for building and other supplies up steep slopes.

and bronze for useful objects, they reserved precious metals for statues of gods and goddesses, eating utensils for the nobles, and decoration.

The Inca also mastered the art of weaving, a practice passed down to them from earlier Andean peoples. They raised cotton and sheared the wool from llamas and alpacas to create colorful textiles to be worn as clothing or as adornments, such as belts and bags.

Medical Advances The Inca developed important medical practices, including surgery on the human skull. In such operations, they cleaned the area to be operated on and then gave the patient a drug to make him or her unconscious—procedures similar to the modern use of antiseptics and anesthesia. The Inca also used medical procedures to mummify the dead.

Religion and Ritual The Inca worshipped many gods linked to the forces of nature. People offered food, clothing, and drink to the guardian spirits of the home and the village. Each month had its own festival, from the great ripening and the dance of the young maize to the festival of the water. Festivals were celebrated with ceremonies, sports, and games.

A powerful class of priests served the gods. Chief among the gods was **Inti**, the sun god. His special attendants, the “Chosen Women,” were selected from each region of the empire. During years of training, they studied the mysteries of the religion, learned to prepare ritual food and drink, and made the elaborate wool garments worn by the Sapa Inca and the Coya. After their training, most Chosen Women continued to serve Inti. Others joined the Inca’s court or married nobles.

 **Checkpoint** How did the Inca excel in the arts and in medicine?

Looking Ahead

At its height, the Inca civilization was a center of learning and political power. But in 1525, the emperor Huayna Capac (WY nuh kah PAHK) died suddenly of illness. Civil war broke out over which of his sons would reign next, weakening the empire at a crucial moment—the eve of the arrival of Spanish invaders.

WITNESS HISTORY VIDEO

Watch *The Mummies of Peru* on the **Witness History Discovery School™** video program to learn about mummies from long before the time of the Inca.



Assess and Reteach

Assess Progress

L3

- Have students complete the Section Assessment.
- Administer the Section Quiz.

 **Teaching Resources, Unit 1, p. 105**

- To further assess student understanding, use  **Progress Monitoring Transparencies, 25**

Reteach

If students need more instruction, have them read the section summary.

-  **Reading and Note Taking Study Guide, p. 61** L3
-  **Adapted Reading and Note Taking Study Guide, p. 61** L1 L2
-  **Spanish Reading and Note Taking Study Guide, p. 61** L2

Extend

L4

Display **Color Transparency 38: Maya, Aztec, Inca**. Tell students to suppose that the transparency is displayed in a museum. Ask them to write a short explanatory narrative that a museum tour guide could use to discuss the graphic and its content.

 **Color Transparencies, 38**

Answer

-  The Inca created amazing metalwork and colorful textiles. They also practiced brain surgery with antiseptics and anesthesia.

Progress Monitoring Online

For: Self-quiz with vocabulary practice
Web Code: naa-0621

Terms, People, and Places

1. Place each of the key terms at the beginning of the section into one of the following categories: culture, economy, and technology.

Note Taking

2. **Reading Skill: Contrast** Use your completed chart to answer the Focus Question: What characterized the cultures and civilizations that developed in the Andes?

Comprehension and Critical Thinking

3. **Demonstrate Reasoned Judgment** Why do you think that many separate cultures developed in the Andes before the Inca?
4. **Draw Conclusions** Explain three ways in which you think the Inca system of roads strengthened the empire.
5. **Identify Points of View** From the point of view of the Inca people, what might be some advantages of having an absolute ruler? What might be some disadvantages?

Writing About History

Quick Write: Gather Details When you write a narrative essay, you often need to gather details about your topic. Suppose you want to write a narrative about the life of the Sapa Inca. Conduct research to find descriptions of the Sapa Inca’s life and illustrations of artifacts that related to his rule. You may want to research a particular Sapa Inca, such as Pachacuti.

Section 2 Assessment

1. Categories should reflect an understanding of each term, person, or place listed at the beginning of the section.
2. They were well-organized, made many advances in arts, architecture, and agriculture, and adapted well to a sometimes hostile environment.
3. The mountainous geography made transportation challenging and thus encour-

- aged separate cultures to develop with minimal interaction.
4. It extended government control, spread information and ideas, and enabled people to interact culturally.
5. advantages: central control, efficient systems, protection from enemies and disaster; disadvantages: little personal choice, possibility of a despotic ruler, need for conformity

Writing About History

Research should focus on details from the Sapa Inca’s life, including artifacts related to his rule. Students might start their search with the key words *Sapa Inca* or *Inca Emperors* or the name of a specific ruler.

For additional assessment, have students access **Progress Monitoring Online** at **Web Code naa-0621**.

Empire

Objectives

- Understand key factors that enable empires to rise and cause them to fall.
- Describe key features of the Han Dynasty, Roman Empire, and Ottoman Empire.

Build Background Knowledge L3

Ask students to name major empires they know from their studies, or read them the names of the three empires on this page. Have students say what they know about how these empires grew and declined. *(Students should recognize that empires often follow similar patterns in which effective leadership ultimately gives way to poor leadership and decay.)*

Instruct L3

- Direct students' attention to the question at the top of this page, **What factors allow empires to rise and cause them to fall?** Have volunteers identify factors within a society, such as government structures, military strategies, geographic challenges, and leadership styles that impact the success or failure of the empires listed here and discussed in the chapter. Use the information generated to help students answer the question.

Independent Practice

Concept Connector Have students fill in the Concept Connector worksheet which includes additional examples and critical thinking questions.

 **Reading and Note Taking**
Study Guide, p. 343

Monitor Progress

Circulate to make sure that students are filling in their Concept Connector worksheets accurately.

Thinking Critically

1. Sample: The most important factor in causing empires to rise is an effective military force and system of government. The most important factor in causing empires to fall is discord and failure in leadership.
2. Students' examples should be clearly tied to the originating empire. One example might be the continuing influence of the Latin language on English.

What factors allow empires to rise and cause them to fall?

Historically, a key factor in the rise of empires has been success in war. For example, through conquest and alliances, the Inca subdued neighboring groups and established a kingdom based in Cuzco. Leadership, too, is another important factor in empire-building. The Inca used military and diplomatic skills to create an extensive Andean empire. However, controlling a large territory is impossible without an effective system of government. The Inca established a chain of command that reached down to the family level.

Similarly, failures in war, weak leaders, and loss of control of conquered peoples have often caused empires to fall. Civil war among the Inca made them vulnerable to defeat by Spanish invaders. Consider how these other empires rose and fell:



Atahualpa, the last Sapa Inca

Han Dynasty

Under the Qin dynasty, China was engulfed in disarray as harsh policies provoked rebellions among the military and peasants. One rebel leader emerged victorious, founding a new dynasty—the Han—in 202 B.C. The first Han emperor set up a government aimed at benefiting the Chinese people, relaxing many strict laws and reducing taxes. He sent officials into every province of the empire to maintain the central government's authority. The Han system of government would last into the 1900s, though the dynasty itself would not. Plagued by peasant rebellions and power struggles, the Han empire split apart. The last Han emperor gave up the throne in A.D. 220.

Roman Empire

The Romans established one of the greatest empires of all time. They possessed strong leadership, an army of disciplined and dedicated soldiers, and a talent for absorbing conquered peoples and turning them into loyal citizens. Their established system of law and government brought security and peace to the Mediterranean region. Yet the mighty Roman empire eventually crumpled under the weight of several forces. Foreign invasions, combined with political, economic, and social problems, dissolved the ties that had held the empire together for more than 400 years.

Ottoman Empire

The Ottoman empire began in the early 1300s as a small Muslim state in far-western Asia, bordering the Byzantine empire. The Ottomans' initial success grew out of their location, which allowed them to plunder wealthy Byzantine cities. For 200 years, strong leaders expanded the empire until it extended from Eastern Europe through Southwest Asia and into North Africa. However, starting in the late 1500s, poor leadership, economic problems, and military unrest, as well as the strengthening of its European enemies, led to a slow Ottoman decline. After limping along for many decades, the empire collapsed completely following World War I.

The powerful Ottoman army



Thinking Critically

1. What factor do you think is most important in causing empires to rise? To fall? Explain.
2. **Connections to Today** For each empire described above, research a political or cultural aspect of the world today that represents the lasting impact of that empire.