# CHAPTER

# **Transformations** Around the Globe, 1800-1914

### **Previewing Main Ideas**

**EMPIRE BUILDING** During the 19th and early 20th centuries, Great Britain, other European nations, the United States, and Japan sought political and economic influence over other countries.

Geography What foreign powers were involved in China in the late 1800s?

**CULTURAL INTERACTION** Imperialism brought new religions, philosophies, and technological innovations to East Asia and Latin America. People in these areas resisted some Western ideas and adopted or adapted others.

Geography What geographic factors might explain why certain parts of China were under Japanese, Russian, and French influence?

**REVOLUTION** Both China and Japan struggled to deal with foreign influence and to modernize. Mexico underwent a revolution that brought political and economic reforms.

Geography Japan built up its navy as a step toward modernization. Why do you think Japan wanted a strong navy?

### INTEGRATED TECHNOLOGY

### **eEdition**

- Interactive Maps
- Interactive Visuals
- Interactive Primary Sources

### INTERNET RESOURCES

Go to classzone.com for:

- Research Links
- Maps Internet Activities
- Test Practice
- Primary Sources Chapter Quiz

Current Events

**EAST ASIA AND** LATIN AMERICA

### 1823

Monroe Doctrine reflects special U.S. interest in Americas.

### 1839

China and Britain clash in Opium War.



### 1853

Commodore Perry enters Tokyo harbor.

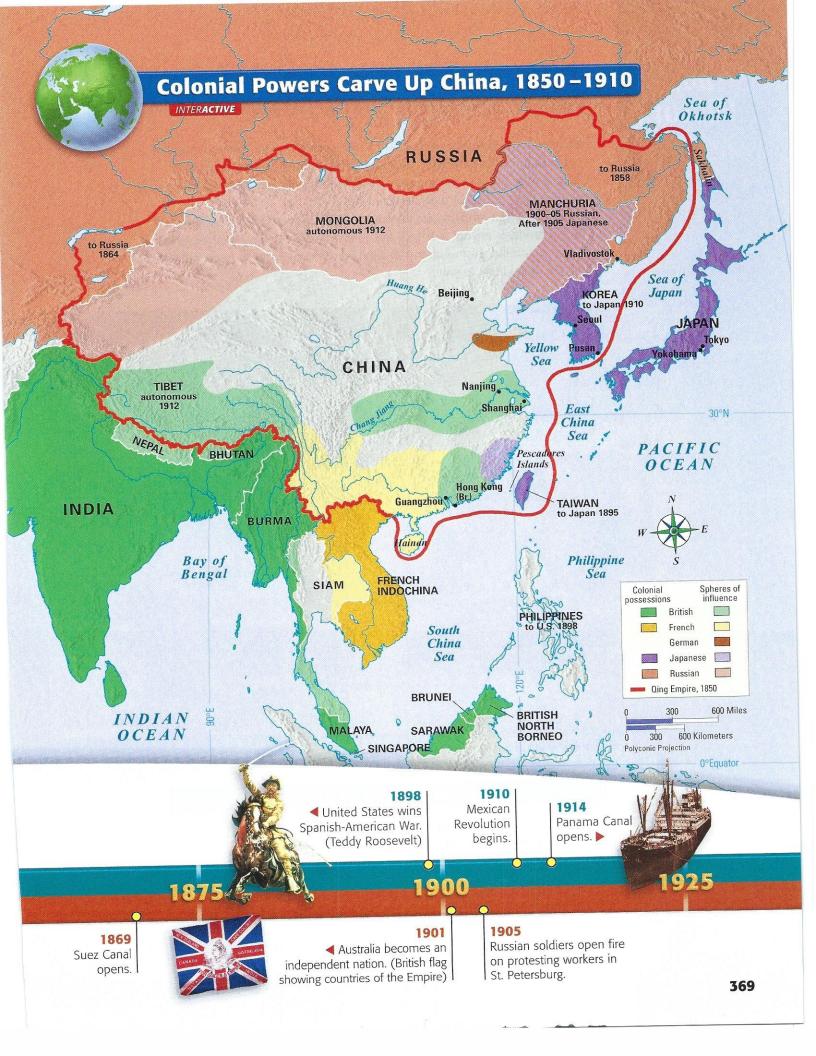
### WORLD

### 1815

Congress of Vienna creates a new balance of power in Europe.

### 1858

Great Britain establishes direct control of India.



# Interact with History

# Why might you seek out or resist foreign influence?

You are a local government official in 19th-century China. You are proud of your country, which produces everything that its people need. Like other Chinese officials, you discourage contact with foreigners. Nevertheless, people from the West are eager to trade with China.

Most foreign products are inferior to Chinese goods. However, a few foreign products are not available in China. You are curious about these items. At the same time, you wonder why foreigners are so eager to trade with China and what they hope to gain.



▲ Finely made lanterns were among the Chinese goods favored by Western merchants.

### EXAMINING the ISSUES

- How might foreign products affect the quality of life in China both positively and negatively?
- What demands might foreigners make on countries they trade with?

As a class, discuss these questions. Recall what happened in other parts of the world when different cultures came into contact for the first time. As you read this chapter, compare the decisions various governments made about foreign trade and the reasons they made those decisions.



# China Resists Outside Influence

### MAIN IDEA

### **CULTURAL INTERACTION**

Western economic pressure forced China to open to foreign trade and influence.

### WHY IT MATTERS NOW

China has become an increasingly important member of the global community.

# down on all foreigners. In 1793, however, the Qing emperor agreed to receive an ambassador from England. The Englishman brought gifts of the West's most advanced technology—clocks, globes, musical instruments, and even a hot-air balloon. The emperor was not impressed. In a letter to England's King George III, he stated that the Chinese already had everything they needed. They were not interested in the "strange objects" and gadgets that the West was offering them.

### **China and the West**

China was able to reject these offers from the West because it was largely self-sufficient. The basis of this self-sufficiency was China's healthy agricultural economy. During the 11th century, China had acquired a quick-growing strain of rice from Southeast Asia. By the time of the Qing Dynasty, the rice was being grown throughout the southern part of the country. Around the same time, the 17th and 18th centuries, Spanish and Portuguese traders brought maize, sweet potatoes, and peanuts from the Americas. These crops helped China increase the productivity of its land and more effectively feed its huge population.

China also had extensive mining and manufacturing industries. Rich salt, tin, silver, and iron mines produced great quantities of ore. The mines provided work for tens of thousands of people. The Chinese also produced beautiful silks, high-quality cottons, and fine porcelain.

**The Tea-Opium Connection** Because of their self-sufficiency, the Chinese had little interest in trading with the West. For decades, the only place they would allow foreigners to do business was at the southern port of Guangzhou (gwahng•joh). And the balance of trade at Guangzhou was clearly in China's favor. This means that China earned much more for its exports than it spent on imports.

European merchants were determined to find a product the Chinese would buy in large quantities. Eventually they found one—opium. Opium is a habit-forming narcotic made from the poppy plant. Chinese doctors had been using it to relieve pain for hundreds of years. In the late 18th century, however, British merchants smuggled opium into China for nonmedical use. It took a few decades for opium smoking to catch on, but by 1835, as many as 12 million Chinese people were addicted to the drug.

### **TERMS & NAMES**

- Opium War
- extraterritorial rights
- Taiping Rebellion
- sphere of influence
- Open Door Policy
- Boxer Rebellion

### CALIFORNIA STANDARDS

10.4.4 Describe the independence struggles of the colonized regions of the world, including the roles of leaders, such as Sun Yat-sen in China, and the roles of ideology and religion.

CST 1 Students compare the present with the past, evaluating the consequences of past events and decisions and determining the lessons that were learned.

**CST 4** Students relate current events to the physical and human characteristics of places and regions.

### **TAKING NOTES**

Identifying Problems
Use a chart to identify
the internal and external
problems faced by
China in the 1800s
and early 1900s.

Internal	External

**War Breaks Out** This growing supply of opium caused great problems for China. The Qing emperor was angry about the situation. In 1839, one of his highest advisers wrote a letter to England's Queen Victoria about the problem:

### PRIMARY SOURCE

By what right do they [British merchants] . . . use the poisonous drug to injure the Chinese people? . . . I have heard that the smoking of opium is very strictly forbidden by your country; that is because the harm caused by opium is clearly understood. Since it is not permitted to do harm to your own country, then even less should you let it be passed on to the harm of other countries.

LIN ZEXU, quoted in China's Response to the West

The pleas went unanswered, and Britain refused to stop trading opium. The result was an open clash between the British and the Chinese—the **Opium War** of 1839. The battles took place mostly at sea. China's outdated ships were no match for Britain's steam-powered gunboats. As a result, the Chinese suffered a humiliating defeat. In 1842, they signed a peace treaty, the Treaty of Nanjing. **A** 

This treaty gave Britain the island of Hong Kong. After signing another treaty in 1844, U.S. and other foreign citizens also gained **extraterritorial rights**. Under these rights, foreigners were not subject to Chinese law at Guangzhou and four other Chinese ports. Many Chinese greatly resented the foreigners and the bustling trade in opium they conducted.

# **Growing Internal Problems**

Foreigners were not the greatest of China's problems in the mid-19th century, however. The country's own population provided an overwhelming challenge. The number of Chinese grew to 430 million by 1850, a 30 percent gain in only 60 years. Yet, in the same period of time, food production barely increased. As a result, hunger was widespread, even in good years. Many people became discouraged, and opium addiction rose steadily. As their problems mounted, the Chinese began to rebel against the Qing Dynasty.

### MAIN IDEA

### **Analyzing Issues**

A What conflicting British and Chinese positions led to the Opium War?

### Connect to Today

### **Special Economic Zones**

Today, as in the late 1800s, the Chinese government limits foreign economic activity to particular areas of the country. Most of these areas, called special economic zones (SEZs), are located on the coast and waterways of southeastern China. Established in the late 1970s, the SEZs are designed to attract, but also control, foreign investment.

One of the most successful SEZs is Shanghai (pictured at right). By the late 1990s, dozens of foreign companies—including IBM of the United States, Hitachi of Japan, Siemens of Germany, and Unilever of Great Britain—had invested about \$21 billion in the building and operating of factories, stores, and other businesses. This investment had a huge impact on the economy of Shanghai. Throughout the 1990s, it grew by more than 10 percent each year.

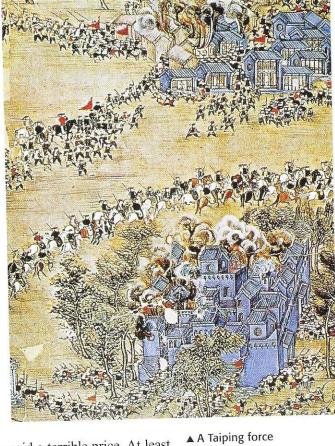


The Taiping Rebellion During the late 1830s, Hong Xiuquan (hung shee•oo•choo•ahn), a young man from Guangdong province in southern China, began recruiting followers to help him build a "Heavenly Kingdom of Great Peace." In this kingdom, all Chinese people would share China's vast wealth and no one would live in poverty. Hong's movement was called the Taiping Rebellion, from the Chinese word taiping, meaning "great peace."

By the 1850s, Hong had organized a massive peasant army of some one million people. Over time, the Taiping army took control of large areas of southeastern China. Then, in 1853, Hong captured the city of Nanjing and declared it his capital. Hong soon withdrew from everyday life and left family members and his trusted lieutenants in charge of the government of his kingdom.

The leaders of the Taiping government, however, constantly feuded among themselves. Also, Qing imperial troops and British and French forces all launched attacks against the Taiping. By 1864, this combination of internal fighting and outside assaults

had brought down the Taiping government. But China paid a terrible price. At least 20 million—and possibly twice that many—people died in the rebellion.



▲ A Taiping force surrounds and destroys an enemy village.

MAIN IDEA

Recognizing Effects

**B** What were the results of the Taiping Rebellion?

**Foreign Influence Grows** 

The Taiping Rebellion and several other smaller uprisings put tremendous internal pressure on the Chinese government. And, despite the Treaty of Nanjing, external pressure from foreign powers was increasing. At the Qing court, stormy debates raged about how best to deal with these issues. Some government leaders called for reforms patterned on Western ways. Others, however, clung to traditional ways and accepted change very reluctantly.

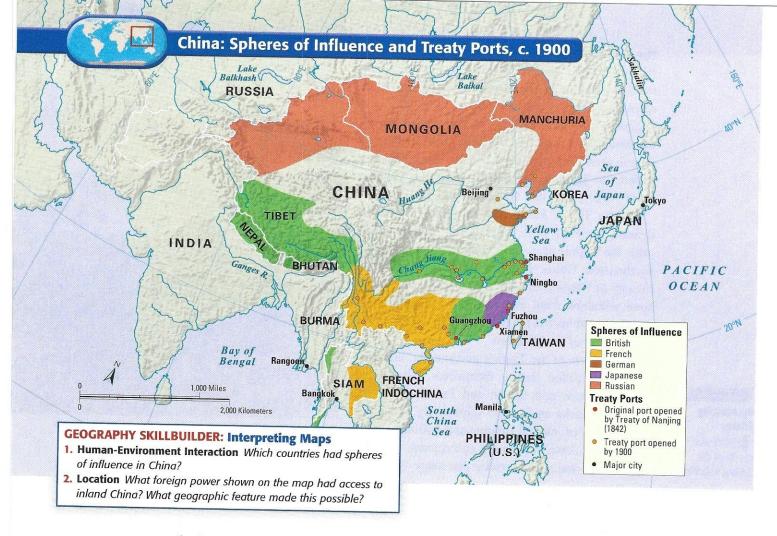
**Resistance to Change** During the last half of the 19th century, one person was in command at the Qing imperial palace. The Dowager Empress Cixi (tsoo•shee) held the reins of power in China from 1862 until 1908 with only one brief gap. Although she was committed to traditional values, the Dowager Empress did support certain reforms. In the 1860s, for example, she backed the self-strengthening movement. This program aimed to update China's educational system, diplomatic service, and military. Under this program, China set up factories to manufacture steam-powered gunboats, rifles, and ammunition. The self-strengthening movement had mixed results, however.

**Other Nations Step In** Other countries were well aware of China's continuing problems. Throughout the late 19th century, many foreign nations took advantage of the situation and attacked China. Treaty negotiations after each conflict gave these nations increasing control over China's economy. Many of Europe's major powers and Japan gained a strong foothold in China. This foothold, or **sphere of influence**, was an area in which the foreign nation controlled trade and investment. (See the map on page 374.)

The United States was a long-time trading partner with China. Americans worried that other nations would soon divide China into formal colonies and shut out American traders. To prevent this occurrence, in 1899 the United States declared

Vocabulary

A dowager is a widow who holds a title or property from her deceased husband.



the **Open Door Policy**. This proposed that China's "doors" be open to merchants of all nations. Britain and the other European nations agreed. The policy thus protected both U.S. trading rights in China, and China's freedom from colonization. But the country was still at the mercy of foreign powers.

# **An Upsurge in Chinese Nationalism**

Humiliated by their loss of power, many Chinese pressed for strong reforms. Among those demanding change was China's young emperor, Guangxu (gwahng•shoo). In June 1898, Guangxu introduced measures to modernize China. These measures called for reorganizing China's educational system, strengthening the economy, modernizing the military, and streamlining the government.

Most Qing officials saw these innovations as threats to their power. They reacted with alarm, calling the Dowager Empress back to the imperial court. On her return, she acted with great speed. She placed Guangxu under arrest and took control of the government. She then reversed his reforms. Guangxu's efforts brought about no change whátsoever. The Chinese people's frustration with their situation continued to grow.

**The Boxer Rebellion** This widespread frustration finally erupted into violence. Poor peasants and workers resented the special privileges granted to foreigners. They also resented Chinese Christians, who had adopted a foreign faith. To demonstrate their discontent, they formed a secret organization called the Society of Righteous and Harmonious Fists. They soon came to be known as the Boxers. Their campaign against the Dowager Empress's rule and foreigner privilege was called the **Boxer Rebellion**.

MAIN IDEA **Analyzing Causes** Why did the Boxer Rebellion fail?

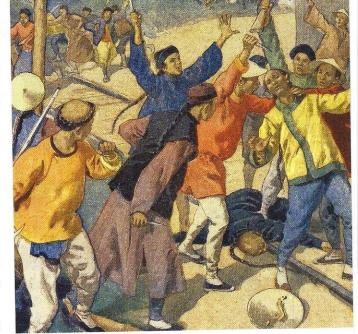
In the spring of 1900, the Boxers descended on Beijing. Shouting "Death to the foreign devils," the Boxers surrounded the European section of the city. They kept it under siege for several months. The Dowager Empress expressed support for the Boxers but did not back her words with military aid. In August, a multinational force of 19,000 troops marched on Beijing and quickly defeated the Boxers. Q

Despite the failure of the Boxer Rebellion, a strong sense of nationalism had emerged in China. The Chinese people realized that their country must resist more foreign intervention. Even more important, they felt that the government must become responsive to their needs.

The Beginnings of Reform At this point, even the Qing court realized that China needed to make

profound changes to survive. In 1905, the Dowager Empress sent a select group of Chinese officials on a world tour to study the operation of different governments. The group traveled to Japan, the United States, Britain, France, Germany, Russia, and Italy. On their return in the spring of 1906, the officials recommended that China restructure its government. They based their suggestions on the constitutional monarchy of Japan. The empress accepted this recommendation and began making reforms. Although she convened a national assembly within a year, change was slow. In 1908, the court announced that it would establish a full constitutional government by 1917.

However, the turmoil in China did not end with these progressive steps. China experienced unrest for the next four decades as it continued to face internal and external threats. China's neighbor Japan also faced pressure from the West during this time. But it responded to this influence in a much different way.



▲ A gang of Boxers attacks Chinese Christians.

**SECTION** 

### **ASSESSMENT**

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

- Opium War
- extraterritorial rights
- Taiping Rebellion
- sphere of influence
- Open Door Policy
- Boxer Rebellion

### **USING YOUR NOTES**

2. Which created the most trouble for China, internal problems or external problems? Why? (10.4.4)

Internal	Externa

### **MAIN IDEAS**

- 3. Why did the Chinese have little interest in trading with the West? (10.4.4)
- 4. What internal problems did China face prior to the Taiping Rebellion? (10.4.4)
- 5. Why did Emperor Guangxu's efforts at reform and modernization fail? (10.4.4)

### **CRITICAL THINKING & WRITING**

- 6. ANALYZING MOTIVES Why do you think European powers established spheres of influence in China rather than colonies, as they did in Africa and other parts of Asia? (10.4.4)
- 7. MAKING INFERENCES What importance did spheres of influence have for China? (10.4.4)
- 8. COMPARING AND CONTRASTING What were the similarities and differences between the Taiping Rebellion and the Boxer Rebellion? (CST 1)
- 9. WRITING ACTIVITY CULTURAL INTERACTION Write a dialogue between two of Dowager Empress Cixi's advisers-one arguing for continued isolation, the other for openness to foreign influence and trade. (Writing 2.1.c)

### INTEGRATED TECHNOLOGY INTERNET ACTIVITY

Use the Internet to find information on special economic zones in China. Use your findings to create an annotated map showing the location of these zones. (10.4.4)

INTERNET KEYWORDS special economic zones,

# Modernization in Japan

### MAIN IDEA

**CULTURAL INTERACTION** Japan followed the model of Western powers by industrializing and expanding its foreign influence.

### WHY IT MATTERS NOW

Japan's continued development of its own way of life has made it a leading world power.

### **TERMS & NAMES**

- Treaty of Kanagawa
- Russo-Japanese War
- Meiji era
- annexation

### CALIFORNIA STANDARDS

10.4.2 Discuss the locations of the colonial rule of such nations as England, France, Germany, Italy, Japan, the Netherlands, Russia, Spain, Portugal, and the United States.

CST 2 Students analyze how change happens at different rates at different times; understand that some aspects can change while others remain the same; and understand that change is complicated and affects not only technology and politics but also values and beliefs.

REP 4 Students construct and test hypotheses; collect, evaluate, and employ information from multiple primary and secondary sources; and apply it in oral and written presentations.

HI 1 Students show the connections, causal and otherwise, between particular historical events and larger social, economic, and political trends and developments.

# **Japan Ends Its Isolation**

reigned in Japan for two centuries.

The Japanese had almost no contact with the industrialized world during this time of isolation. They continued, however, to trade with China and with Dutch merchants from Indonesia. They also had diplomatic contact with Korea. However, trade was growing in importance, both inside and outside Japan.

**SETTING THE STAGE** In the early 17th century, Japan had shut itself off from

almost all contact with other nations. Under the rule of the Tokugawa shoguns,

Japanese society was very tightly ordered. The shogun parceled out land to the

daimyo, or lords. The peasants worked for and lived under the protection of their

daimyo and his small army of samurai, or warriors. This rigid feudal system

managed to keep the country free of civil war. Peace and relative prosperity

The Demand for Foreign Trade Beginning in the early 19th century, Westerners tried to convince the Japanese to open their ports to trade. British, French, Russian, and American officials occasionally anchored off the Japanese coast. Like China, however, Japan repeatedly refused to receive them. Then, in 1853, U.S. Commodore Matthew Perry took four ships into what is now Tokyo Harbor. These massive black wooden ships powered by steam astounded the Japanese. The ships' cannons also shocked them. The Tokugawa shogun realized he had no choice but to receive Perry and the letter Perry had brought from U.S. president Millard Fillmore.

Fillmore's letter politely asked the shogun to allow free trade between the United States and Japan. Perry delivered it with a threat, however. He would come back with a larger fleet in a year to receive Japan's reply. That reply was the **Treaty of Kanagawa** of 1854. Under its terms, Japan opened two ports at which U.S. ships could take on supplies. After the United States had pushed open the door, other Western powers soon followed. By 1860, Japan, like China, had granted foreigners permission to trade at several treaty ports. It had also extended extraterritorial rights to many foreign nations.

**Meiji Reform and Modernization** The Japanese were angry that the shogun had given in to the foreigners' demands. They turned to Japan's young emperor, Mutsuhito (moot•soo•HEE•toh), who seemed to symbolize the country's sense of

### **TAKING NOTES**

Analyzing Causes List the steps that Japan took toward modernization and the events that contributed to its growth as an imperialistic power.

Imperialis	SM

pride and nationalism. In 1867, the Tokugawa shogun stepped down, ending the military dictatorships that had lasted since the 12th century. Mutsuhito took control of the government. He chose the name Meiji for his reign, which means "enlightened rule." Mutsuhito's reign, which lasted 45 years, is known as the Meiji era.

The Meiji emperor realized that the best way to counter Western influence was to modernize. He sent diplomats to Europe and North America to study Western ways. The Japanese then chose what they believed to be the best that Western civilization had to offer and adapted it to their own country. They admired Germany's strong centralized government, for example. And they used its constitution as a model for their own. The Japanese also admired the discipline of the German army and the skill of the British navy. They attempted to imitate these European powers as they modernized their military. Japan adopted the American system of universal public education and required that all Japanese children attend school. Their teachers often included foreign experts. Students could go abroad to study as well.

The emperor also energetically supported following the Western path of industrialization. By the early 20th century, the Japanese economy had become as modern as any in the world. The country built its first railroad line in 1872. The track connected Tokyo, the nation's capital, with the port of Yokohama, 20 miles to the south. By 1914, Japan had more than 7,000 miles of railroad. Coal production grew from half a million tons in 1875 to more than 21 million tons in 1913. Meanwhile, large, state-supported companies built thousands of factories. Traditional Japanese industries, such as tea processing and silk production, expanded to give the country unique products to trade. Developing modern industries, such as shipbuilding, made Japan competitive with the West.

### **Imperial Japan**

Japan's race to modernize paid off. By 1890, the country had several dozen warships and 500,000 well-trained, well-armed soldiers. It had become the strongest military power in Asia.

Japan had gained military, political, and economic strength. It then sought to eliminate the extraterritorial rights of foreigners. The Japanese foreign minister assured foreigners that they could rely on fair treatment in Japan. This was because its constitution and legal codes were similar to those of European nations, he explained. His reasoning was convincing, and in 1894, foreign powers accepted the

### China and Japan Confront the West



▲ The Dowager

**Empress Cixi** 

(1862 - 1908)

### China

- Remains committed to traditional values
- Loses numerous territorial conflicts
- Grants other nations spheres of influence within China
- Finally accepts necessity for reform

### Both

- · Have wellestablished traditional values
- · Initially resist change
- Oppose Western imperialism

### Japan

- Considers modernization to be necessary
- Borrows and adapts Western ways
- · Strengthens its economic and military power
- Becomes an empire builder



▲ The Meiji Emperor Mutsuhito (1867 - 1912)

### **SKILLBUILDER: Interpreting Charts**

- 1. Contrasting According to the diagram, in what ways did China and Japan deal differently with Western influence?
- 2. Comparing What similar responses did each country share despite the different paths they followed?

abolition of extraterritorial rights for their citizens living in Japan. Japan's feeling of strength and equality with the Western nations rose.

As Japan's sense of power grew, the nation also became more imperialistic. As in Europe, national pride played a large part in Japan's imperial plans. The Japanese were determined to show the world that they were a powerful nation. A

**Japan Attacks China** The Japanese first turned their sights to their neighbor, Korea. In 1876, Japan forced Korea to open three ports to Japanese trade. But China also considered Korea to be important both as a trading partner and a military outpost. Recognizing their similar interests in Korea, Japan and China signed a hands-off agreement. In 1885, both countries pledged that they would not send their armies into Korea.

In June 1894, however, China broke that agreement. Rebellions had broken out against Korea's king. He asked China for military help in putting them down. Chinese troops marched into Korea. Japan protested and sent its troops to Korea to fight the Chinese. This Sino-Japanese War lasted just a few months. In that time, Japan drove the Chinese out of Korea, destroyed the Chinese navy, and gained a foothold in Manchuria. In 1895, China and Japan signed a peace treaty. This treaty gave Japan its first colonies, Taiwan and the neighboring Pescadores Islands. (See the map on page 369.)

**Russo-Japanese War** Japan's victory over China changed the world's balance of power. Russia and Japan emerged as the major powers—and enemies—in East Asia. The two countries soon went to war over Manchuria. In 1903, Japan offered to recognize Russia's rights in Manchuria if the Russians would agree to stay out of Korea. But the Russians refused.

In February 1904, Japan launched a surprise attack on Russian ships anchored off the coast of Manchuria. In the resulting **Russo-Japanese War**, Japan drove

### MAIN IDEA

Making Inferences

Why did Japan become imperialistic?

**Vocabulary** Sino: a prefix meaning "Chinese"

### > Analyzing Political Cartoons

### Warlike Japan

Cartoonists often use symbols to identify the countries, individuals, or even ideas featured in their cartoons. Russia has long been symbolized as a bear by cartoonists. Here, the cartoonist uses a polar bear.

Prior to the Meiji era, cartoonists usually pictured Japan as a fierce samurai. Later, however, Japan often was symbolized by a caricature of Emperor Mutsuhito. Here, the cartoonist has exaggerated the emperor's physical features to make him look like a bird of prey.

### **SKILLBUILDER:**

### **Interpreting Political Cartoons**

- 1. Clarifying How does the cartoonist signify that Japan is warlike?
- 2. Making Inferences In their fight, Russia and Japan appear to be crushing someone. Who do you think this might be?



Russian troops out of Korea and captured most of Russia's Pacific fleet. It also destroyed Russia's Baltic fleet, which had sailed all the way around Africa to participate in the war.

In 1905, Japan and Russia began peace negotiations. U.S. president Theodore Roosevelt helped draft the treaty, which the two nations signed on a ship off Portsmouth, New Hampshire. This agreement, the Treaty of Portsmouth, gave Japan the captured territories. It also forced Russia to withdraw from Manchuria and to stay out of Korea.

Japanese Occupation of Korea After defeating Russia, Japan attacked Korea with a vengeance. In 1905, it made Korea a protectorate. Japan sent in "advisers," who grabbed more and more power from the Korean government. The Korean king was unable to rally international support for his regime. In 1907, he gave up control of the country. Within two years the Korean Imperial Army was disbanded. In 1910, Japan officially imposed annexation on Korea, or brought that country under Japan's control.

The Japanese were harsh rulers. They shut down Korean newspapers and took over Korean schools. There they replaced the study of Korean language and history with Japanese subjects. They took land away from Korean farmers and gave it to Japanese settlers. They encouraged Japanese businessmen to start industries in Korea, but for-

bade Koreans from going into business. Resentment of Japan's repressive rule grew, helping to create a strong Korean nationalist movement.

The rest of the world clearly saw the brutal results of Japan's imperialism. Nevertheless, the United States and other European countries largely ignored what was happening in Korea. They were too busy with their own imperialistic aims, as you will learn in Section 3.

### Vocabulary

protectorate: a country under the partial control and protection of another nation

### MAIN IDEA

### Clarifying

**B** How did Japan treat the Koreans after it annexed the country?

# Global Impact

### **Western Views of the East**

The Japanese victory over the Russians in 1905 exploded a strong Western myth. Many Westerners believed that white people were a superior race. The overwhelming success of European colonialism and imperialism in the Americas, Africa, and Asia had reinforced this belief. But the Japanese had shown Europeans that people of other races were their equals in modern warfare.

Unfortunately, Japan's military victory led to a different form of Western racism. Influenced by the ideas of Germany's Emperor Wilhelm II, the West imagined the Japanese uniting with the Chinese and conquering Europe. The resulting racist Western fear of what was called the *yellow peril* influenced world politics for many decades.

### SECTION

### ASSESSMENT

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

- Treaty of Kanagawa
- Meiji era
- Russo-Japanese War
- annexation

### **USING YOUR NOTES**

Do you think that Japan could have become an imperialistic power if it had not modernized? Why or why not? (HI 1)



### **MAIN IDEAS**

- 3. How was the Treaty of Kanagawa similar to the treaties that China signed with various European powers? (10.4.2)
- **4.** What steps did the Meiji emperor take to modernize Japan? (10.4.2)
- 5. How did Japan begin its quest to build an empire? (10.4.2)

### CRITICAL THINKING & WRITING

- **6. ANALYZING CAUSES** What influences were most important in motivating Japan to build its empire? (10.4.2)
- 7. FORMING AND SUPPORTING OPINIONS In your view, was Japan's aggressive imperialism justified? Support your answer with information from the text. (10.4.2)
- **8. ANALYZING BIAS** How did Japan's victory in the Russo-Japanese War both explode and create stereotypes? (10.4.2)
- 9. WRITING ACTIVITY EMPIRE BUILDING In the role of a Japanese official, write a letter to the government of a Western power explaining why you think it is necessary for your country to build an empire. (Writing 2.5.a)

### CONNECT TO TODAY CREATING A SYMBOL

Conduct research to discover the name that Akihito, the present emperor of Japan, chose for his reign. Then create a **symbol** that expresses the meaning of this name.

# Japanese Woodblock Printing

Woodblock printing in Japan evolved from black-and-white prints created by Buddhists in the 700s. By the late 1700s, artists learned how to create multicolor prints.

Woodblock prints could be produced quickly and in large quantities, so they were cheaper than paintings. In the mid-1800s, a Japanese person could buy a woodblock print for about the same price as a bowl of noodles. As a result, woodblock prints like those shown here became a widespread art form. The most popular subjects included actors, beautiful women, urban life, and landscapes.

### INTEGRATED TECHNOLOGY

**RESEARCH LINKS** For more on Japanese woodblock printing, go to **classzone.com** 



### ▲ Naniwaya Okita

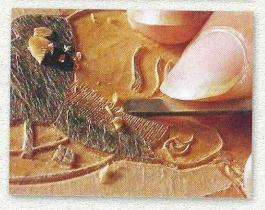
The artist Kitagawa Utamaro created many prints of attractive women. This print shows Naniwaya Okita, a famous beauty of the late 1700s. Her long face, elaborate hairstyle, and many-colored robes were all considered part of her beauty.

CALIFORNIA STANDARDS

10.3.2, CST 4







### ▲ Carving the Block

These photographs show a modern artist carving a block for the black ink. (The artist must carve a separate block for each color that will be in the final print.)

Carving the raised image requires precision and patience. For example, David Bull, the artist in the photographs, makes five cuts to create each strand of hair. One slip of the knife, and the block will be ruined.





### **▲** Printing

After the carved block is inked, the artist presses paper on it, printing a partial image. He or she repeats this stage for each new color. The artist must ensure that every color ends up in exactly the right place, so that no blocks of color extend beyond the outlines or fall short of them.

### **▲ Under the Wave off Kanagawa**

Katsushika Hokusai was one of the most famous of all Japanese printmakers. This scene is taken from his well-known series *Thirty-Six Views of Mount Fuji*. Mount Fuji, which many Japanese considered sacred, is the small peak in the background of this scene.

### Connect to Today

- 1. Making Inferences What personal qualities and skills would an artist need to be good at making woodblock prints?
- See Skillbuilder Handbook, page R10.
- 2. Forming and Supporting Opinions
  Hokusai's print of the wave, shown
  above, remains very popular today.
  Why do you think this image appeals
  to modern people?



# **U.S. Economic Imperialism**

### **MAIN IDEA**

**EMPIRE BUILDING** The United States put increasing economic and political pressure on Latin America during the 19th century.

### CALIFORNIA STANDARDS

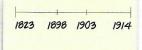
10.4.1 Describe the rise of industrial economies and their link to imperialism and colonialism (e.g., the role played by national security and strategic advantage; moral issues raised by the search for national hegemony, Social Darwinism, and the missionary impulse; material issues such as land. resources, and technology).

CST 3 Students use a variety of maps and documents to interpret human movement, including major patterns of domestic and international migration, changing environmental preferences and settlement patterns, the frictions that develop between population groups, and the diffusion of ideas, technological innovations, and goods.

HI 5 Students analyze human modifications of landscapes and examine the resulting environmental policy issues.

### **TAKING NOTES**

**Following** Chronological Order Use a time line to list the major events in U.S. involvement in Latin America.



### WHY IT MATTERS NOW

This policy set the stage for 20th-century relations between Latin America and the United States.

### **TERMS & NAMES**

- caudillo Monroe
  - Doctrine
- José Martí
- Spanish-American War
- Panama Canal
- Roosevelt Corollary

SETTING THE STAGE Latin America's long struggle to gain independence from colonial domination between the late 18th and the mid-19th centuries left the new nations in shambles. Farm fields had been neglected and were overrun with weeds. Buildings in many cities bore the scars of battle. Some cities had been left in ruins. The new nations of Latin America faced a struggle for economic and political recovery that was every bit as difficult as their struggle for independence had been.

### **Latin America After Independence**

Political independence meant little for most citizens of the new Latin American nations. The majority remained poor laborers caught up in a cycle of poverty.

Colonial Legacy Both before and after independence, most Latin Americans worked for large landowners. The employers paid their workers with vouchers that could be used only at their own supply stores. Since wages were low and prices were high, workers went into debt. Their debt accumulated and passed from one generation to the next. In this system known as peonage, "free" workers were little better than slaves.

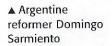
Landowners, on the other hand, only got wealthier after independence. Many new Latin American governments took over the lands owned by native peoples and by the Catholic Church. Then they put those lands up for sale. Wealthy landowners were the only people who could afford to buy them, and they snapped them up. But as one Argentinean newspaper reported, "Their greed for land does not equal their ability to use it intelligently." The unequal distribution of land and the landowners' inability to use it effectively combined to prevent social and economic development in Latin America.

Political Instability Political instability was another widespread problem in 19th-century Latin America. Many Latin American army leaders had gained fame and power during their long struggle for independence. They often continued to assert their power. They controlled the new nations as military dictators, or caudillos (kaw•DEEL•yohz). They were able to hold on to power because they were backed by the military. By the mid-1800s, nearly all the countries of Latin America were ruled by caudillos. One typical caudillo was Juan Vicente Gómez.

He was a ruthless man who ruled Venezuela for nearly 30 years after seizing power in 1908. "All Venezuela is my cattle ranch," he once boasted.

There were some exceptions, however. Reform-minded presidents, such as Argentina's Domingo Sarmiento, made strong commitments to improving education. During Sarmiento's presidency, between 1868 and 1874, the number of students in Argentina doubled. But such reformers usually did not stay in office long. More often than not, a caudillo, supported by the army, seized control of the government.

The caudillos faced little opposition. The wealthy landowners usually supported them because they opposed giving power to the lower classes. In addition, Latin Americans had gained little experience with democracy under European colonial rule. So, the dictatorship of a caudillo did not seem unusual to them. But even when caudillos were not in power, most Latin Americans still lacked a voice in the government. Voting rights—and with them, political power—were restricted to the relatively few members of the upper and middle classes who owned property or could read.



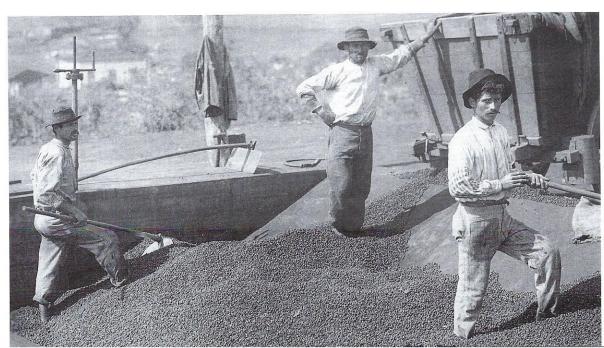
### **Economies Grow Under Foreign Influence**

When colonial rule ended in Latin America in the early 1800s, the new nations were no longer restricted to trading with colonial powers. Britain and, later, the United States became Latin America's main trading partners.

**Old Products and New Markets** Latin America's economies continued to depend on exports, no matter whom they were trading with. As during the colonial era, each country concentrated on one or two products. With advances in technology, however, Latin America's exports grew. The development of the steamship and the building of railroads in the 19th century, for example, greatly increased Latin American trade. Toward the end of the century, the invention of refrigeration helped increase Latin America's exports. The sale of beef, fruits and vegetables, and other perishable goods soared.

But foreign nations benefited far more from the increased trade than Latin America did. In exchange for their exports, Latin Americans imported European and North American manufactured goods. As a result, they had little reason to develop their own manufacturing industries. And as long as Latin America remained unindustrialized, it could not play a leading role on the world economic stage.

▼ Workers unload coffee beans at a plantation in Brazil. Until recently, Brazil's economy depended heavily on the export of coffee.



MAIN IDEA
Identifying
Problems

What difficulties did lowerclass Latin Americans continue to face after independence? **Outside Investment and Interference** Furthermore, Latin American countries used little of their export income to build roads, schools, or hospitals. Nor did they fund programs that would help them become self-sufficient. Instead, they often borrowed money at high interest rates to develop facilities for their export industries. Countries such as Britain, France, the United States, and Germany were willing lenders. The Latin American countries often were unable to pay back their loans, however. In response, foreign lenders sometimes threatened to collect the debt by force. At other times, they threatened to take over the facilities they had funded. In this way, foreign companies gained control of many Latin American industries. This began a new age of economic colonialism in Latin America.

# History Makers

José Martí 1853-1895

José Martí was only 15 in 1868 when he first began speaking out for Cuban independence. In 1871, the Spanish colonial government punished Martí's open opposition with exile. Except for a brief return to his homeland in 1878, Martí remained in exile for about 20 years. For most of this time, he lived in New York City. There he continued his career as a writer and a revolutionary. "Life on earth is a hand-to-hand combat . . . between the law of love and the law of hate," he proclaimed.

While in New York, Martí helped raise an army to fight for Cuban independence. He died on the battlefield only a month after the war began. But Martí's cry for freedom echoes in his essays and poems and in folk songs about him that are still sung throughout the world.

### INTEGRATED TECHNOLOGY

**RESEARCH LINKS** For more on José Martí, go to **classzone.com** 

### **A Latin American Empire**

Long before the United States had any economic interest in Latin American countries, it realized that it had strong links with its southern neighbors. Leaders of the United States were well aware that their country's security depended on the security of Latin America.

The Monroe Doctrine Most Latin American colonies had gained their independence by the early 1800s. But their position was not secure. Many Latin Americans feared that European countries would try to reconquer the new republics. The United States, a young nation itself, feared this too. So, in 1823, President James Monroe issued what came to be called the Monroe Doctrine. This document stated that "the American continents . . . are henceforth not to be considered as subjects for future colonization by any European powers." Until 1898, though, the United States did little to enforce the Monroe Doctrine. Cuba provided a real testing ground.

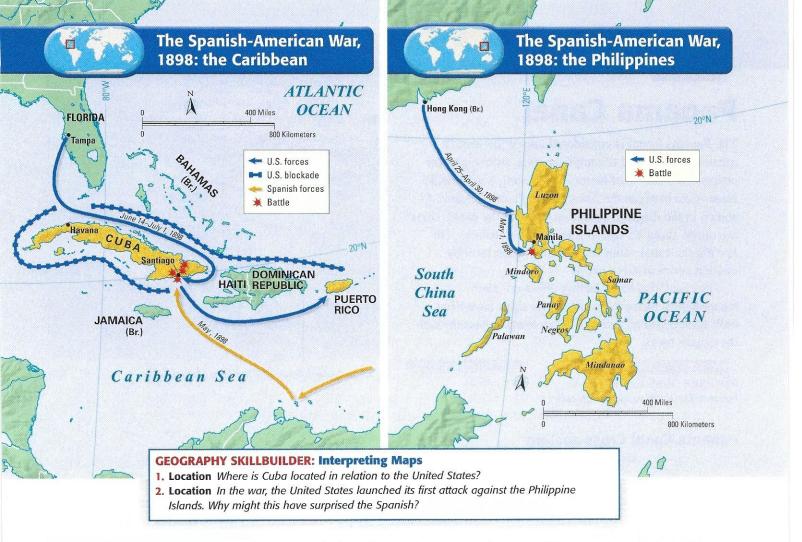
**Cuba Declares Independence** The Caribbean island of Cuba was one of Spain's last colonies in the Americas. In 1868, Cuba declared its independence and fought a ten-year war against Spain. In 1878, with the island in ruins, the Cubans gave up the fight. But some Cubans continued to seek independence from Spain. In 1895, **José Martí**, a writer who had been exiled from Cuba by the Spanish, returned to launch a second war for Cuban independence. Martí was killed early in the fighting, but the Cubans battled on.

By the mid-1890s, the United States had developed substantial business holdings in Cuba. Therefore it had an economic stake in the fate of the country. In addition, the Spanish had forced many Cuban civilians into concentration camps. Americans objected to the Spanish brutality. In 1898, the United States joined the Cuban war for independence. This conflict, which became known as the **Spanish-American War**, lasted about four months. U.S. forces launched their first attack not on Cuba but on the Philippine Islands, a Spanish colony thousands of miles away in the Pacific. Unprepared for a war on two fronts, the Spanish military quickly collapsed. (See the maps on the opposite page.) **B** 

MAIN IDEA

Analyzing Motives

**B** Why did the United States join the Cuban war for independence?



In 1901, Cuba became an independent nation, at least in name. However, the United States installed a military government and continued to exert control over Cuban affairs. This caused tremendous resentment among many Cubans, who had assumed that the United States' aim in intervening was to help Cuba become truly independent. The split that developed between the United States and Cuba at this time continues to keep these close neighbors miles apart more than a century later.

After its defeat in the Spanish-American War, Spain turned over the last of its colonies. Puerto Rico, Guam, and the Philippines became U.S. territories. Having become the dominant imperial power in Latin America, the United States next set its sights on Panama.

Connecting the Oceans Latin Americans were beginning to regard the United States as the political and economic "Colossus of the North." The United States was a colossus in geographic terms too. By the 1870s, the transcontinental railroad connected its east and west coasts. But land travel still was time-consuming and difficult. And sea travel between the coasts involved a trip of about 13,000 miles around the tip of South America. If a canal could be dug across a narrow section of Central America, however, the coast-to-coast journey would be cut in half.

The United States had been thinking about such a project since the early 19th century. In the 1880s, a French company tried—but failed—to build a canal across Panama. Despite this failure, Americans remained enthusiastic about the canal. And no one was more enthusiastic than President Theodore Roosevelt, who led the nation from 1901 to 1909. In 1903, Panama was a province of Colombia. Roosevelt offered that country \$10 million plus a yearly payment for the right to build a canal. When the Colombian government demanded more money, the United States

### Vocabulary

A *colossus* is a huge statue that towers over the surrounding area.

# Science & Technology

INTERACTIVE

# **Panama Canal**

The Panama Canal is considered one of the world's greatest engineering accomplishments. Its completion changed the course of history by opening a worldwide trade route between the Atlantic and Pacific oceans. As shown in the diagram below, on entering the canal, ships are raised about 85 feet in a series of three locks. On leaving the canal, ships are lowered to sea level by another series of three locks.

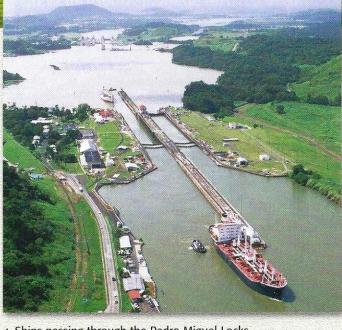
The canal also had a lasting effect on other technologies. Since the early 1900s, ships have been built to dimensions that will allow them to pass through the canal's locks.

### INTEGRATED TECHNOLOGY

**RESEARCH LINKS** For more on the Panama Canal, go to **classzone.com** 

CALIFORNIA STANDARDS

10.4.1, HI 2



▲ Ships passing through the Pedro Miguel Locks

### **Panama Canal Cross-section**





### **Canal Facts**

- The canal took ten years to build (1904–1914) and cost \$380 million.
- During the construction of the canal, workers dug up more than 200 million cubic yards of earth.
- Thousands of workers died from diseases while building the canal.
- The trip from San Francisco to New York City via the Panama Canal is about 9,000 miles shorter than the trip around South America.
- The 51-mile trip through the canal takes 8 to 10 hours.
- The canal now handles more than 13,000 ships a year from around 70 nations carrying 192 million short tons of cargo.
- Panama took control of the canal on December 31, 1999.

▲ This cross-section shows the different elevations and locks that a ship moves through on the trip through the canal.

### Connect to Today

- **1. Identifying Problems** What difficulties did workers face in constructing the canal?
- See Skillbuilder Handbook, page R5.
- 2. Evaluating Decisions In the more than 90 years since it was built, do you think that the benefits of the Panama Canal to world trade have outweighed the costs in time, money, and human life? Explain your answer.

responded by encouraging a revolution in Panama. The Panamanians had been trying to break away from Colombia for almost a century. In 1903, with help from the United States Navy, they won their country's independence. In gratitude, Panama gave the United States a ten-mile-wide zone in which to build a canal.

For the next decade, American engineers contended with floods and withering heat to build the massive waterway. However, their greatest challenge was the disease-carrying insects that infested the area. The United States began a campaign to destroy the mosquitoes that carried yellow fever and malaria, and the rats that carried bubonic plague. The effort to control these diseases was eventually successful. Even so, thousands of workers died during construction of the canal. The **Panama Canal** finally opened in 1914. Ships from around the world soon began

▼ This cartoon suggests that the Roosevelt Corollary turned the Caribbean into a U.S. wading pool.

MAIN IDEA

Analyzing Motives

C Why was the

Why was the United States so interested in building the Panama Canal?

The Roosevelt Corollary The building of the Panama Canal was only one way that the United States expanded its influence in Latin America in the early 20th century. Its presence in Cuba and its large investments in many Central and South American countries strengthened its foothold. To protect those economic interests, in 1904, President Roosevelt issued a corollary, or extension, to the Monroe Doctrine. The Roosevelt Corollary gave the United States the right to be "an international police power" in the Western Hemisphere.

to use it. Latin America had become a crossroads of world

trade. And the United States controlled the tollgate. Q

The United States used the Roosevelt Corollary many times in the following years to justify U.S. intervention in Latin America. U.S. troops occupied some countries for decades. Many Latin Americans protested this intervention, but they were powerless to stop their giant neighbor to the north. The U.S. government simply turned a deaf ear to their protests. It could not ignore the rumblings of revolution just over its border with Mexico, however. You will learn about this revolution in Section 4.



SECTION

3 ASSESSMENT

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

- caudillo
- Monroe Doctrine
- José Martí
- · Spanish-American War
- Panama Canal
- Roosevelt Corollary

### **USING YOUR NOTES**

Which event do you think was most beneficial to Latin America? Why? (10.4.1)



### **MAIN IDEAS**

- 3. Why did the gap between rich and poor in Latin America grow after independence? (10.4.1)
- 4. What economic gains and setbacks did Latin American countries experience after independence? (10.4.1)
- **5.** Why was the United States so interested in the security of Latin America? (10.4.1)

### **CRITICAL THINKING & WRITING**

- **6. ANALYZING MOTIVES** Why do you think upper-class Latin Americans favored governments run by caudillos? (10.4.1)
- **7. FORMING OPINIONS** Do you think that U.S. imperialism was more beneficial or harmful to Latin American people? Explain. (10.4.1)
- **8. CONTRASTING** How was the principle of the Roosevelt Corollary different from that of the Monroe Doctrine? (10.4.1)
- 9. WRITING ACTIVITY REVOLUTION Assume the role of a Cuban fighting for independence from Spain. Design a political poster that shows your feelings about the United States joining the struggle for independence. (Writing 2.2.b)

### CONNECT TO TODAY CREATING A DATAFILE

Conduct research to find statistics on the ships and cargo that travel through the Panama Canal. Use your findings to create a datafile for usage of the canal in a recent year. (10.4.1)



# Turmoil and Change in Mexico

### **MAIN IDEA**

**REVOLUTION** Political, economic, and social inequalities in Mexico triggered a period of revolution and reform.

### CALIFORNIA STANDARDS

**10.4.4** Describe the independence struggles of the colonized regions of the world, including the roles of leaders, such as Sun Yat-sen in China, and the roles of ideology and religion.

REP 4 Students construct and test hypotheses; collect, evaluate, and employ information from multiple primary and secondary sources; and apply it in oral and written presentations.

### **TAKING NOTES**

Comparing Use a chart to compare the major accomplishments of the Mexican leaders discussed in this section.

Leader	Major Accomplishment

### WHY IT MATTERS NOW

Mexico has moved toward political democracy and is a strong economic force in the Americas.

### **TERMS & NAMES**

- Antonio López de Santa Anna
- Benito Juárez
- La Reforma
- Porfirio Díaz
- Francisco Madero
- "Pancho" Villa
- Emiliano
   Zapata

**SETTING THE STAGE** The legacy of Spanish colonialism and long-term political instability that plagued the newly emerging South American nations caused problems for Mexico as well. Mexico, however, had a further issue to contend with—a shared border with the United States. The "Colossus of the North," as the United States was known in Latin America, wanted to extend its territory all the way west to the Pacific Ocean. But most of the lands in the American Southwest belonged to Mexico.

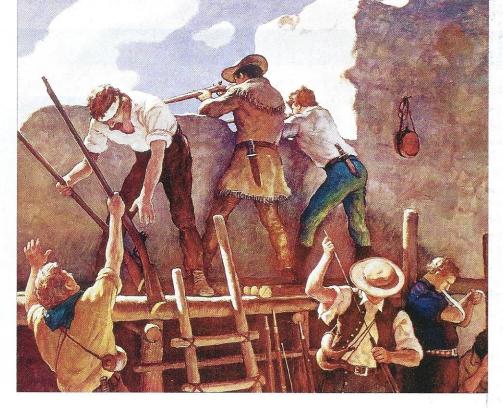
### Santa Anna and the Mexican War

During the early 19th century, no one dominated Mexican political life more than **Antonio López de Santa Anna**. Santa Anna played a leading role in Mexico's fight for independence from Spain in 1821. In 1829, he fought against Spain again as the European power tried to regain control of Mexico. Then, in 1833, Santa Anna became Mexico's president.

One of Latin America's most powerful caudillos, Santa Anna was a clever politician. He would support a measure one year and oppose it the next if he thought that would keep him in power. His policy seemed to work. Between 1833 and 1855, Santa Anna was Mexico's president four times. He gave up the presidency twice, however, to serve Mexico in a more urgent cause—leading the Mexican army in an effort to retain the territory of Texas.

▶ Mexican leader Santa Anna

The Texas Revolt In the 1820s, Mexico encouraged American citizens to move to the Mexican territory of Texas to help populate the country. Thousands of English-speaking colonists, or Anglos, answered the call. In return for inexpensive land, they pledged to follow the laws of Mexico. As the Anglo population grew, though, tensions developed between the colonists and Mexico over several issues, including slavery and religion. As a result, many Texas colonists wanted greater self-government. But when Mexico refused to grant this, Stephen Austin, a leading Anglo, encouraged a revolt against Mexico in 1835.



◆ Santa Anna's army met with strong resistance from the defenders of the Alamo.

Santa Anna led Mexican forces north to try to hold on to the rebellious territory. He won a few early battles, including a bitter fight at the Alamo, a mission in San Antonio. However, his fortunes changed at the Battle of San Jacinto. His troops were defeated and he was captured. Texan leader Sam Houston released Santa Anna after he promised to respect the independence of Texas. When Santa Anna returned to Mexico in 1836, he was quickly ousted from power.

War and the Fall of Santa Anna Santa Anna regained power, though, and fought against the United States again. In 1845, the United States annexed Texas. Outraged Mexicans considered this an act of aggression. In a dispute over the border, the United States invaded Mexico. Santa Anna's army fought valiantly, but U.S. troops defeated them after two years of war. In 1848, the two nations signed the Treaty of Guadalupe Hidalgo. The United States received the northern third of what was then Mexico, including California and the American Southwest. Santa Anna went into exile. He returned as dictator one final time, however, in 1853. After his final fall, in 1855, he remained in exile for almost 20 years. When he returned to Mexico in 1874, he was poor, blind, powerless, and essentially forgotten.

### Juárez and La Reforma

During the mid-19th century, as Santa Anna's power rose and fell, a liberal reformer, **Benito Juárez** (HWAHR•ehz), strongly influenced the politics of Mexico. Juárez was Santa Anna's complete opposite in background as well as in goals. Santa Anna came from a well-off Creole family. Juárez was a poor Zapotec Indian who was orphaned at the age of three. While Santa Anna put his own personal power first, Juárez worked primarily to serve his country. A

Juárez Rises to Power Ancestry and racial background were important elements of political power and economic success in 19th-century Mexico. For that reason, the rise of Benito Juárez was clearly due to his personal leadership qualities. Juárez was raised on a small farm in the Mexican state of Oaxaca. When he was 12, he moved to the city of Oaxaca. He started going to school at age 15, and in 1829, he entered a newly opened state-run university. He received a law degree in 1831.

MAIN IDEA

**Contrasting A** In what ways did Benito Juárez differ from Santa Anna?

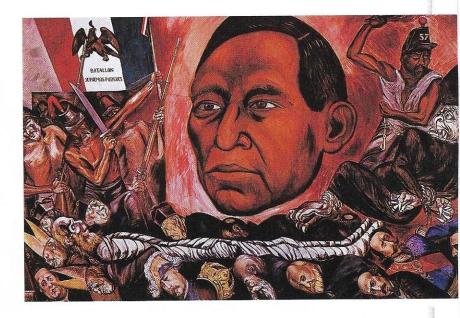
### > Analyzing Art

### Juárez: Symbol of Mexican Independence

In 1948, more than 75 years after Benito Juárez's death, Mexican mural painter José Clemente Orozco celebrated him in the fresco *Juárez, the Church and the Imperialists*. A portrait of Juárez, which accentuates his Indian features, dominates the work. The supporters of Emperor Maximilian, carrying his body, are shown below Juárez. To either side of Juárez, the soldiers of Mexican independence prepare to attack these representatives of imperialism. By constructing the fresco in this way, Orozco seemed to suggest that Juárez was both a symbol of hope and a rallying cry for Mexican independence.

### **SKILLBUILDER: Interpreting Visual Sources**

- Contrasting How is Orozco's portrayal of the imperialists different from his portrayal of the forces of independence?
- 2. Drawing Conclusions Based on this fresco, how do you think Orozco felt about Benito Juárez?



He then returned to the city of Oaxaca, where he opened a law office. Most of his clients were poor people who could not otherwise have afforded legal assistance. Juárez gained a reputation for honesty, integrity, hard work, and good judgment. He was elected to the city legislature and then rose steadily in power. Beginning in 1847, he served as governor of the state of Oaxaca.

**Juárez Works for Reform** Throughout the late 1840s and early 1850s, Juárez worked to start a liberal reform movement. He called this movement **La Reforma**. Its major goals were redistribution of land, separation of church and state, and increased educational opportunities for the poor. In 1853, however, Santa Anna sent Juárez and other leaders of *La Reforma* into exile.

Just two years later, a rebellion against Santa Anna brought down his government. Juárez and other exiled liberal leaders returned to Mexico to deal with their country's tremendous problems. As in other Latin American nations, rich landowners kept most other Mexicans in a cycle of debt and poverty. Liberal leader Ponciano Arriaga described how these circumstances led to great problems for both poor farmers and the government:

### PRIMARY SOURCE B

There are Mexican landowners who occupy . . . an extent of land greater than the areas of some of our sovereign states, greater even than that of one of several European states. In this vast area, much of which lies idle, deserted, abandoned . . . live four or five million Mexicans who know no other industry than agriculture, yet are without land or the means to work it, and who cannot emigrate in the hope of bettering their fortunes. . . . How can a hungry, naked, miserable people practice popular government? How can we proclaim the equal rights of men and leave the majority of the nation in [this condition]?

PONCIANO ARRIAGA, speech to the Constitutional Convention, 1856-1857

Not surprisingly, Arriaga's ideas and those of the other liberals in government threatened most conservative upper-class Mexicans. Many conservatives responded

### MAIN IDEA

Analyzing Primary Sources

**B** What does Ponciano Arriaga think is Mexico's greatest problem? by launching a rebellion against the liberal government in 1858. They enjoyed some early successes in battle and seized control of Mexico City. The liberals kept up the fight from their headquarters in the city of Veracruz. Eventually the liberals gained the upper hand and, after three years of bitter civil war, they defeated the rebels. Juárez became president of the reunited country after his election in 1861.

**The French Invade Mexico** The end of the civil war did not bring an end to Mexico's troubles, though. Exiled conservatives plotted with some Europeans to reconquer Mexico. In 1862, French ruler Napoleon III responded by sending a large army to Mexico. Within 18 months, France had taken over the country. Napoleon appointed Austrian Archduke Maximilian to rule Mexico as emperor. Juárez and other Mexicans fought against French rule. After five years under siege, the French decided that the struggle was too costly. In 1867, Napoleon ordered the army to withdraw from Mexico. Maximilian was captured and executed.

Juárez was reelected president of Mexico in 1867. He returned to the reforms he had proposed more than ten years earlier. He began rebuilding the country, which had

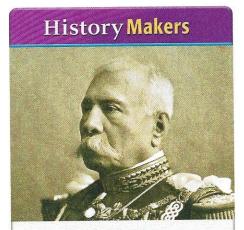
been shattered during years of war. He promoted trade with foreign countries, the opening of new roads, the building of railroads, and the establishment of a telegraph service. He set up a national education system separate from that run by the Catholic Church. In 1872, Juárez died of a heart attack. But after half a century of civil strife and chaos, he left his country a legacy of relative peace, progress, and reform.

# Porfirio Díaz and "Order and Progress"

Juárez's era of reform did not last long, however. In the mid-1870s, a new caudillo, **Porfirio Díaz**, came to power. Like Juárez, Díaz was an Indian from Oaxaca. He rose through the army and became a noted general in the civil war and the fight against the French. Díaz expected to be rewarded with a government position for the part he played in the French defeat. Juárez refused his request, however. After this, Díaz opposed Juárez. In 1876, Díaz took control of Mexico by ousting the president. He had the support of the military, whose power had been reduced during and after the Juárez years. Indians and small landholders also supported him, because they thought he would work for more radical land reform.

During the Díaz years, elections became meaningless. Díaz offered land, power, or political favors to anyone who supported him. He terrorized many who refused to support him, ordering them to be beaten or put in jail. Using such strong-arm methods, Díaz managed to remain in power until 1911. Over the years, Díaz used a political slogan adapted from a rallying cry of the Juárez era. Juárez had called for "Liberty, Order, and Progress." Díaz, however, wanted merely "Order and Progress."

Díaz's use of dictatorial powers ensured that there was order in Mexico. But the country saw progress under Díaz too. Railroads expanded, banks were built, the currency stabilized, and foreign investment grew. Mexico seemed to be a stable, prospering country. Appearances were deceiving,



### Porfirio Díaz 1830-1915

To control all the various groups in Mexican society, Porfirio Díaz adopted an approach called pan o palo-"bread or the club." The "bread" he provided took many forms. To potential political opponents, he offered positions in his government. To business leaders, he gave huge subsidies or the chance to operate as monopolies in Mexico. And he won the support of the Church and wealthy landowners simply by promising not to meddle in their affairs. Those who turned down the offer of bread and continued to oppose Díaz soon felt the blow of the club. Thousands were killed, beaten, or thrown into jail.

His use of the club, Díaz admitted, was harsh and cruel—but also necessary if Mexico was to have peace. That peace, Díaz argued, enabled the country to progress economically. "If there was cruelty," he said, "results have justified it."

however. The wealthy acquired more and more land, which they did not put to good use. As a result, food costs rose steadily. Most Mexicans remained poor farmers and workers, and they continued to grow poorer.

Recognizing
Effects

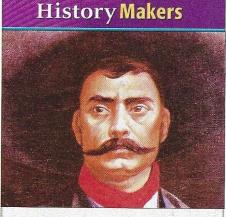
What effects
did Díaz's rule have

on Mexico?

### **Revolution and Civil War**

In the early 1900s, Mexicans from many walks of life began to protest Díaz's harsh rule. Idealistic liberals hungered for liberty. Farm laborers hungered for land. Workers hungered for fairer wages and better working conditions. Even some of Díaz's handpicked political allies spoke out for reform. A variety of political parties opposed to Díaz began to form. Among the most powerful was a party led by

Francisco Madero.



### Emiliano Zapata 1879-1919

Shortly after Francisco Madero took office, he met with Emiliano Zapata, one of his leading supporters. Madero's reluctance to quickly enact real land reform angered Zapata. He left the meeting convinced that Madero was not the man to carry through the Mexican Revolution.

A few days later, Zapata issued the Plan of Ayala. This called for the removal of Madero and the appointment of a new president. The plan also demanded that the large landowners give up a third of their land for redistribution to the peasants. Zapata's rallying cry, "Land and Liberty," grew out of the Plan of Ayala.

When Venustiano Carranza ordered Zapata's assassination, he expected Zapata's revolutionary ideas on land reform to die with him. However, they lived on and were enacted by Alvaro Obregón, a follower of Zapata, who seized power from Carranza in 1920.

### INTEGRATED TECHNOLOGY

**INTERNET ACTIVITY** Create a short biographical dictionary of leaders of the Mexican Revolution. Go to **classzone.com** for your research.

Madero Begins the Revolution Born into one of Mexico's ten richest families, Francisco Madero was educated in the United States and France. He believed in democracy and wanted to strengthen its hold in Mexico. Madero announced his candidacy for president of Mexico early in 1910. Soon afterward, Díaz had him arrested. From exile in the United States, Madero called for an armed revolution against Díaz.

The Mexican Revolution began slowly. Leaders arose in

The Mexican Revolution began slowly. Leaders arose in different parts of Mexico and gathered their own armies. In the north, Francisco "Pancho" Villa became immensely popular. He had a bold Robin Hood policy of taking money from the rich and giving it to the poor. South of Mexico City, another strong, popular leader, Emiliano Zapata, raised a powerful revolutionary army. Like Villa, Zapata came from a poor family. He was determined to see that land was returned to peasants and small farmers. He wanted the laws reformed to protect their rights. "Tierra y Libertad" ("Land and Liberty") was his battle cry. Villa, Zapata, and other armed revolutionaries won important victories against Díaz's army. By the spring of 1911, Díaz agreed to step down. He called for new elections.

Mexican Leaders Struggle for Power Madero was elected president in November 1911. However, his policies were seen as too liberal by some and not revolutionary enough by others. Some of those who had supported Madero, including Villa and Zapata, took up arms against him. In 1913, realizing that he could not hold on to power, Madero resigned. The military leader General Victoriano Huerta then took over the presidency. Shortly after, Madero was assassinated, probably on Huerta's orders.

Huerta was unpopular with many people, including Villa and Zapata. These revolutionary leaders allied themselves with Venustiano Carranza, another politician who wanted to overthrow Huerta. Their three armies advanced, seizing the Mexican countryside from Huerta's forces and approaching the capital, Mexico City. They overthrew Huerta only 15 months after he took power.

Carranza took control of the government and then turned his army on his former revolutionary allies. Both Villa and Zapata continued to fight. In 1919, however, Carranza lured

### Reforms of Mexican Constitution of 1917 Social Issues Land Religion Labor State takeover of land · Breakup of large Minimum wage Equal pay for estates owned by the Church for workers equal work Limited legal rights · Restrictions on · Right to strike foreign ownership for women · Institution of of land (spending money labor unions and bringing Government lawsuits) control of resources (oil) **SKILLBUILDER: Interpreting Charts** 1. Making Inferences Which reforms do you think landowners resented? 2. Recognizing Effects Which reforms benefited workers?

Zapata into a trap and murdered him. With Zapata's death, the civil war also came to an end. More than a million Mexicans had lost their lives.

**The New Mexican Constitution** Carranza began a revision of Mexico's constitution. It was adopted in 1917. A revolutionary document, that constitution is still in effect today. As shown in the chart above, it promoted education, land reforms, and workers' rights. Carranza did not support the final version of the constitution, however, and in 1920, he was overthrown by one of his generals, Alvaro Obregón.

Although Obregón seized power violently, he did not remain a dictator. Instead, he supported the reforms the constitution called for, particularly land reform. He also promoted public education. Mexican public schools taught a common language—Spanish—and stressed nationalism. In this way, his policies helped unite the various regions and peoples of the country. Nevertheless, Obregón was assassinated in 1928.

The next year, a new political party, the Institutional Revolutionary Party (PRI), arose. Although the PRI did not tolerate opposition, it initiated an ongoing period of peace and political stability in Mexico. While Mexico was struggling toward peace, however, the rest of the world was on the brink of war.

# Summarizing D What were Obregón's accomplishments?

**SECTION** 

### ASSESSMENT

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

Antonio López de Santa Anna
 Benito Juárez
 La Reforma
 Porfirio Díaz
 Francisco Madero
 "Pancho" Villa
 Emiliano Zapata

### **USING YOUR NOTES**

2. Which leader do you think benefited Mexico most? Why? (10.4.4)

Leader	Major Accomplishment

### MAIN IDEAS

- **3.** In what ways was Santa Anna a typical caudillo? (10.4.4)
- **4.** How did Porfirio Díaz change the direction of government in Mexico? (10.4.4)
- **5.** How were "Pancho" Villa and Emiliano Zapata different from other Mexican revolutionary leaders? (10.4.4)

### **CRITICAL THINKING & WRITING**

- **6. MAKING INFERENCES** Why might Benito Juárez's rise to power be considered surprising? (10.4.4)
- ANALYZING CAUSES Why did Villa and Zapata turn against Madero? (10.4.4)
- **8. SUPPORTING OPINIONS** The revision of Mexico's constitution is considered revolutionary. Do you agree with this characterization? Why or why not? (10.4.4)
- 9. WRITING ACTIVITY REVOLUTION Juárez's motto was "Liberty, Order, and Progress." Díaz's slogan was "Order and Progress." Write an expository essay explaining what this difference in goals meant for the people of Mexico. (Writing 2.3.b)

### **CONNECT TO TODAY** DESIGNING A CAMPAIGN POSTER

Conduct research on the Institutional Revolutionary Party (PRI) today, particularly its political platform. Use your findings to design a **campaign poster** for the PRI in an upcoming election. (10.4.4)

# **Chapter** 2 Assessment

### **TERMS & NAMES**

For each term or name below, briefly explain its connection to the changes in global power between 1800 and 1914.

- 1. Opium War
- 2. Boxer Rebellion
- 3. Meiji era
- 4. Russo-Japanese War
- 5. Monroe Doctrine
- 6. Spanish-American War
- 7. Benito Juárez
- 8. Porfirio Díaz

### **MAIN IDEAS**

### China Resists Outside Influence Section 1 (pages 371-375)

- **9.** Why was China traditionally not interested in trading with the West? (10.4.4)
- 10. Although Guangxu's effort at reform failed, what changes did it finally set in motion? (10.4.4)

### Modernization in Japan Section 2 (pages 376–381)

- **11.** What events caused Japan to end its isolation and begin to westernize? (10.4.1)
- **12.** What were the results of Japan's growing imperialism at the end of the 19th century? (10.4.1)

### **U.S. Economic Imperialism** Section 3 (pages 382–387)

- 13. How were Latin American caudillos able to achieve power and hold on to it? (10.4.4)
- **14.** What effects did the Monroe Doctrine and the Roosevelt Corollary have on Latin America? (10.4.4)

### Turmoil and Change in Mexico Section 4 (pages 388-393)

- **15.** What were the major causes of tension between the Mexicans and the American colonists who settled in Texas? (10.4.4)
- **16.** What roles did Francisco "Pancho" Villa and Emiliano Zapata play in the Mexican Revolution? (10.4.4)

### **CRITICAL THINKING**

### 1. USING YOUR NOTES

On a time line, indicate the major events of Santa Anna's military and political career in Mexico. Why do you think he was able to remain in power for so long? (10.4.4)

Fights for independence from Spain
1820s

### 2. MAKING INFERENCES

Do you think that Emperor Guangxu would have been able to put his reforms into practice if the Dowager Empress Cixi had not intervened? Why or why not? (10.4.4)

### 3. COMPARING

**CULTURAL INTERACTION** How do Japan's efforts at westernization in the late 1800s compare with Japan's cultural borrowing of earlier times? (10.4.1)

### 4. EVALUATING COURSES OF ACTION

**REVOLUTION** Consider what you have learned in this and other chapters about Latin American colonial history and about how countries undergo change. What are the pros and cons of using both military strategies and peaceful political means to improve a country's economic, social, and political conditions? (HI 1)

### **VISUAL SUMMARY**

### **Transformations Around the Globe**

### FOREIGN INFLUENCE

### China

- Fails to prevent Britain from pursuing illegal opium trade
- Deals with internal unrest during almost two decades of Taiping Rebellion
- Attempts to build self-sufficiency during 1860s in selfstrengthening movement
- Violently opposes foreigners in 1900 Boxer Rebellion
- Begins to establish constitutional government in 1908

### Japan

- Signs 1854 Treaty of Kanagawa, opening Japanese ports to foreign trade
- Modernizes based on Western models during Meiji era (1867–1912)
- Fights 1894 Sino-Japanese
   War to control Korea
- Wages 1904 Russo-Japanese War to control Manchuria
- Annexes Korea in 1910

### **Latin America**

- Depends on exports to fuel economy
- Receives much foreign investment
- Gains U.S. military support in 1898 Spanish-American War
- Becomes crossroads of world trade when U.S. completes Panama Canal in 1914

### Mexico

- Fights to hold Texas territory from U.S. colonialism (1835–1845)
- Tries to establish a national identity in the early 1850s under Benito Juárez's La Reforma
- Overcomes French occupation in 1867
- Stages the Mexican Revolution in 1910

### STANDARDS-BASED ASSESSMENT

Use the excerpt—which deals with changes made during the Meiji era in Japan-and your knowledge of world history to answer questions 1 and 2.

Additional Test Practice, pp. S1-S33

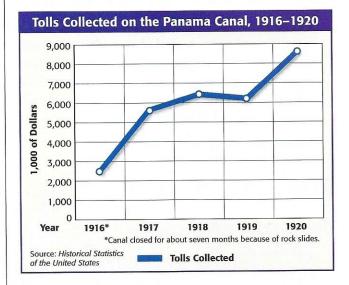
### PRIMARY SOURCE

In the second and third years of Meiji, the demand for foreign goods remarkably increased. Those who formerly looked upon them with contempt changed their minds and even dressed in foreign clothes. Our males adopted the European style. They put on fine tall hats instead of wearing large [queues] on their heads, and took to carrying sticks after discarding their swords. They dressed in coats of the English fashion and trousers of the American. They would only eat from tables and nothing would satisfy them but French cookery.

Tokyo Times, 1877

- 1. According to the excerpt, what happened in the second and third years of Meiji? (HI 1)
  - A. The Japanese ate only English food.
  - B. The Japanese wore only Japanese clothes.
  - **c.** The demand for foreign goods increased.
  - **D.** The demand for Japanese goods decreased.
- 2. Which statement best sums up the way the writer feels about the Japanese adoption of foreign ways? (REP 4)
  - A. The writer expresses no opinion of the matter.
  - **B.** The writer chooses to reserve judgment until a later date.
  - C. The writer feels that it is a good thing for Japan.
  - **D.** The writer feels that it is a bad thing for Japan.

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



- 3. In which year did tolls collected on the Panama Canal first exceed \$6 million? (10.4.2)
  - **A.** 1917
- **C.** 1919
- **B.** 1918
- **D.** 1920

### INTEGRATED TECHNOLOGY

### **TEST PRACTICE** Go to classzone.com

- Diagnostic tests
- Strategies
- Tutorials
- Additional practice

### **ALTERNATIVE ASSESSMENT**

### 1. Interact with History (CST 1)

On page 370, you considered whether you would seek out or resist foreign influence. Now that you have learned how several countries dealt with foreign influence and what the results were, would you change your recommendation? Discuss your ideas in a small group.

### WRITING ABOUT HISTORY (REP 4)

**EMPIRE BUILDING** Write a **dialogue** that might have taken place between a conservative member of the Dowager Empress Cixi's court and an official in Emperor Mutsuhito's Meiji government. In the dialogue, have the characters discuss

- · the kinds of foreign intervention their countries faced
- · the actions their leaders took to deal with this foreign intervention

### INTEGRATED TECHNOLOGY

### **Planning a Television News Special**

(10.4.4; Writing 2.3.b, d, f)

On May 5, 1862, badly outnumbered Mexican forces defeated the French at the Battle of Puebla. Mexicans still celebrate their country's triumph on the holiday Cinco de Mayo. Working in a group with two other students, plan a television news special on how Cinco de Mayo is celebrated by Mexicans today. Focus on celebrations in Mexico or in Mexican communities in cities in the United States. Consider including

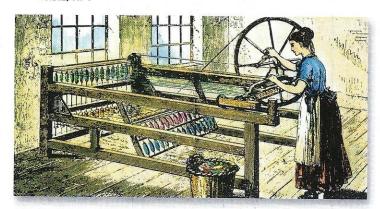
- · information on the Battle of Puebla
- an explanation of how and why Cinco de Mayo became a national holiday
- images of any special activities or traditions that have become part of the celebration
- · interviews with participants discussing how they feel about Cinco de Mayo

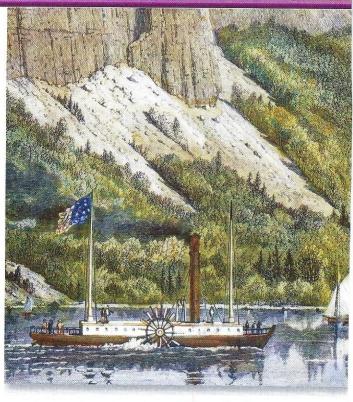
# **A Period of Change**

The period from 1700 to 1914 was a time of tremendous scientific and technological change. The great number of discoveries and inventions in Europe and the United States promoted economic, social, and cultural changes. Use the information on these six pages to study the impact of scientific and technological changes.

### CALIFORNIA STANDARDS

10.3.2, HI 1





### **▲ Spinning Jenny**

Using James Hargreaves's invention, a spinner could turn several spindles with one wheel and produce many threads. Machinemade thread was weak, so it was used only for the horizontal threads of fabric.

### ng Jenny Theory of Atoms

John Dalton theorized that atoms are the basic parts of elements and that each type of atom has a specific weight. He was one of the founders of atomic chemistry.

### **▲** Steamboat

Robert Fulton held the first commercially successful steamboat run. One advan tage of a steamboat was that it could travel against a river's current. These boats soon began to travel rivers around the world.

1733 1764 1785 1803 1807 1830

### **Flying Shuttle**

A shuttle is a holder that carries horizontal threads back and forth between the vertical threads in weaving. John Kay's mechanical flying shuttle enabled one weaver to do the work of two.

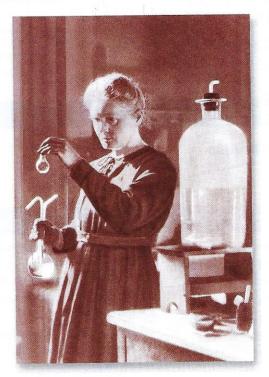
### **Power Loom**

Edmund Cartwright created the first water-powered loom. Others later improved on the speed and efficiency of looms and the quality of the fabrics.

### **▼** Steam Locomotive

In 1830, the first steam locomotive was put into operation in the United States. Besides passengers, locomotives could rapidly transport tons of raw materials from mines to factories, and manufactured goods from factories to consumers and ports.





### **Panama Canal**

The Panama Canal shortened trips between the Atlantic and Pacific oceans by thousands of miles since ships no longer had to go around South America.

### **◄** Radioactivity

Marie Curie won the Nobel prize in chemistry for her (and her late husband's) discovery of the elements polonium and radium. Their work paved the way for later discoveries in nuclear physics and chemistry.

### **Antiseptics**

Joseph Lister pioneered the use of carbolic acid to kill bacteria in operating rooms and later directly in wounds. The rate of death by infection after surgery dropped from about 50 to 15 percent.

### Radio

Guglielmo Marconi's radio sent Morse code messages by electromagnetic waves that traveled through the air. It enabled rapid communication between distant places.

### 1865 1876 1879 1895 1903 1908 1911 1914

### **▼** Telephone

Alexander Graham Bell produced the first instrument that successfully carried the sounds of speech over electric wires. The telephone's design underwent a number of changes in its early years.

### Airplane

The Wright brothers built the first machinepowered aircraft, which burned gasoline. The edge of the wing was adjusted during flight to steer.

### **Model T Ford**

By using a moving assembly line, Henry Ford produced an automobile that working people could afford to buy.

### **Light Bulb**

The light bulb that
Thomas A. Edison and
his staff made was
first used in
businesses and
public buildings that
installed small lighting
plants. Cities slowly
built the electrical
systems needed to
power lights.

# Comparing & Contrasting

- 1. How were the steamboat and the locomotive similar in their impact?
- 2. How did the scientific theory of John Dalton differ from Joseph Lister's discovery in terms of its impact on daily life?





# **Impact of Technological Change**

Use the charts below, and the documents and photograph on the next page, to learn about some of the great changes technology produced.

### CALIFORNIA STANDARDS

HI 2 Students recognize the complexity of historical causes and effects, including the limitations on determining cause and effect.

### **Technological Change**

### Industrialization

### **Economic Change**

- · Productivity increased, which led to an economic boom.
- · Cheaper goods became available.
- · A middle class emerged.
- Industries searched for overseas resources and markets, encouraging imperialism.
- Colonial economies were shaped to benefit Europe.

### **Social Change**

- Cities grew at a rapid pace.
- · Poor working and living conditions led to social unrest.
- · Diseases spread in slums.
- · Unions formed to protect workers.
- · Laws were passed to improve working conditions.
- · Immigration to North America increased.

### **Culture Change**

- · Businesses needed engineers, professionals, and clerical workers, so education was emphasized.
- The spread of public education increased literacy.
- · The publishing industry grew; book and magazine sales boomed.
- · Reform movements arose in response to unfair conditions.

### Inventions/Progress

### **Economic Change**

- · Large machines led to the development of factories.
- · Steamboats, canals, paved roads, and railroads opened travel to the interior of continents and reduced transportation costs.
- Investors formed corporations to undertake large projects.
- · Superior arms and transport helped Europeans colonize.
- Inventions such as the telephone and electric light helped business grow.

### **Social Change**

- · Steamboats and railroads made travel cheaper and easier.
- · The telegraph, telephone, and radio aided communication.
- Convenience products like canned food and ready-made clothes made daily life easier.
- The assembly line made products like cars affordable for many.
- Fewer workers were needed to produce the same amount of goods. Some workers lost jobs.

### **Culture Change**

- · People placed increasing emphasis on making homes more comfortable and convenient.
- · Improvements in one aspect of agriculture and manufacturing promoted the creation of new inventions to improve other aspects.
- Mass culture grew through the availability of phonographs and movies, and an increase in leisure time.

### **SKILLBUILDER: Interpreting Charts**

- 1. Synthesizing How might limiting working hours for children promote literacy?
- 2. Analyzing Motives Why would Europeans build transportation and communication networks in their colonies?

### PRIMARY SOURCE

### **Child Workers in Textile Factory**

Many jobs did not require skilled workers, so children were hired to do them because they could be paid lower wages than adults. Some industries also hired children because their small fingers could fit between the machinery or handle fine parts more easily than adult fingers could.



### **DOCUMENT-BASED QUESTION**

Judging by the children's appearance, how generous were the wages they received? Explain your answer.

### PRIMARY SOURCE

### INTERACTIVE

### Impact of the Telephone

In this excerpt from "Thirty Years of the Telephone," published in September 1906, John Vaughn discussed how Bell's invention affected life in the United States.

Various industries, unknown thirty years ago, but now sources of employment to many thousands of workers, depend entirely on the telephone for support. . . . The Bell Companies employ over 87,000 persons, and it may be added, pay them well. . . . These figures may be supplemented by the number of telephones in use (5,698,000), by the number of miles of wire (6,043,000) in the Bell lines, and by the number of conversations (4,479,500,000) electrically conveyed in 1905. The network of wire connects more than 33,000 cities, towns, villages, and hamlets.

### **DOCUMENT-BASED QUESTION**

What were some of the effects of the invention of the telephone?

### SECONDARY SOURCE

### INTER**ACTIVE**

### How Technology Aided Imperialism

In this excerpt from the book *Guns*, *Germs*, *and Steel*, Jared Diamond related an incident to show how technology helped Europeans conquer other lands.

In 1808 a British sailor named Charlie Savage equipped with muskets and excellent aim arrived in the Fiji Islands. [He] proceeded single-handedly to upset Fiji's balance of power. Among his many exploits, he paddled his canoe up a river to the Fijian village of Kasavu, halted less than a pistol shot's length from the village fence, and fired away at the undefended inhabitants. His victims were so numerous that . . . the stream beside the village was red with blood. Such examples of the power of guns against native peoples lacking guns could be multiplied indefinitely.

### **DOCUMENT-BASED QUESTION**

How did guns give Europeans an advantage over native peoples?

# Comparing & Contrasting

- 1. Reread the passage by John Vaughn and then compare it with the information on the chart. What could you add to the chart based on this passage?
- **2.** Does the photograph of factory workers confirm or contradict the information on the chart? Explain.



# **Impact of Scientific Change**

CALIFORNIA STANDARDS
10.3.2, HI 1, HI 3

Many scientific discoveries resulted in practical applications that affected daily life. Other discoveries increased our understanding of the way the universe works. Use the information on these two pages to explore the impact of scientific change.

# Scientific Change

### **Economic Change**

- Discovery of quinine as a malaria treatment helped people colonize tropical areas.
- Control of diseases like yellow fever and bubonic plague enabled the Panama Canal to be built.
- More accurate clocks and new astronomical discoveries led to safer navigation, which improved shipping.
- Study of electricity and magnetism led to the invention of the dynamo and motor, which aided industry.

### **Social Change**

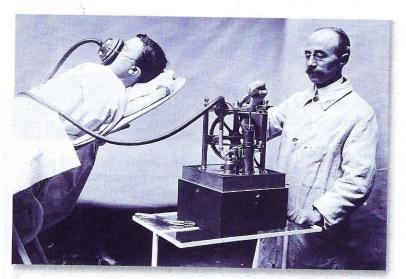
- Vulcanized rubber was used for raincoats and car tires.
- Discoveries about air, gases, and temperature resulted in better weather forecasting.
- Vaccines and treatments were found for illnesses like diphtheria and heart disease; X-rays and other new medical techniques were developed.
- Plumbing and sewers improved sanitation and public health.
- Psychiatry improved the treatment of mental illness.

### **Culture Change**

- Many scientific and technical schools were founded; governments began funding scientific research.
- Psychological discoveries began to be applied to the social sciences, such as sociology and anthropology.
- Some painters and writers created work that reflected the new psychological ideas.
- Social Darwinism, the idea that some people were more "fit" than others, was used to justify racism.

### **SKILLBUILDER: Interpreting Charts**

- 1. Drawing Conclusions How do you think such advances in public health as vaccinations and sanitation services affected the lives of ordinary people?
- 2. Analyzing Bias Who would be more likely to accept the idea of social Darwinism a European colonizer or an African in a colony? Why?



### PRIMARY SOURCE

### **Chloroform Machine**

The person with the mask is receiving the anesthetic chloroform. By removing pain, anesthetics enabled doctors to perform procedures—such as surgery—that would have been difficult for the patient to endure.

### **DOCUMENT-BASED QUESTION**

How did practical inventions, like the chloroform machine, contribute to medicine and other sciences?

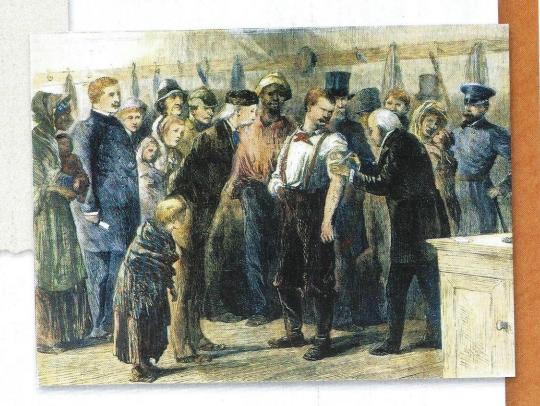
### PRIMARY SOURCE

### **Smallpox Vaccination**

This newspaper engraving shows a Board of Health doctor administering the smallpox vaccine to poor people at a police station in New York City.

# DOCUMENT-BASED OUESTION

Why would public health officials especially want to carry out vaccination programs in poor neighborhoods?



### SECONDARY SOURCE

### Impact of Scientific Research

This passage from *The Birth of the Modern* by Paul Johnson discusses the far-reaching results of Michael Faraday's experiments with electromagnetism in the 1820s.

[By 1831, Faraday] had not only the first electric motor, but, in essence, the first dynamo: He could generate power. . . . What was remarkable about his work between 1820 and 1831 was that by showing exactly how mechanical could be transformed into electrical power, he made the jump between theoretical research and its practical application a comparatively narrow one. The electrical industry was the direct result of his work, and its first product, the electric telegraph, was soon in use. The idea of cause and effect was of great importance, for both industry and governments now began to appreciate the value of fundamental research and to finance it.

### **DOCUMENT-BASED QUESTION**

How did Faraday's work affect society in the long term?

### INTER**ACTIVE**

## Comparing & Contrasting

- 1. In your opinion, was there more economic progress or social progress during the period 1700 to 1914? Use information from the charts on pages 398 and 400 to support your answer.
- 2. Consider the impact of medical advances and the idea of Social Darwinism on imperialism. How were their impacts alike?

### **EXTENSION ACTIVITY**

Research a more recent scientific or technological change, such as the development of computer chips, plastics, the Internet, or space travel. Make a chart like the one shown on page 400 listing the economic, social, and cultural changes that have resulted.

