

An Industrial Nation



California Standards

History–Social Science

8.12 Students analyze the transformation of the American economy and the changing social and political conditions in the United States in response to the Industrial Revolution.

Analysis Skills

HI 6 Students interpret basic indications of economic performance.

English–Language Arts

Writing 8.2.0 Write documents related to career development.

Reading 8.2.0 Students read and understand grade-level appropriate materials.

FOCUS ON WRITING



A Memo You are a writer at a television network, and you have an idea for a TV drama series set in the late 1800s. Draft a memo to your boss telling her about your story idea. As you read this chapter, gather information about the people, places, and events of this time period. Then write your memo. Tell about the basic plot, the cast of characters, and the setting of your series.



UNITED STATES



1879

Thomas Edison invents the first lightbulb.

1870



WORLD

1876

German engineer Nikolaus A. Otto perfects a gasoline-powered engine.

History's Impact

▶ video series

Watch the video to understand the impact of the United States as the world's most powerful industrial nation.

**What You Will Learn...**

In this chapter you will learn about how the United States became an industrial power in the late 1800s. A new wave of immigrants provided the labor, and the combination of industry and immigration led to increased urbanization of the country. Cities like San Francisco, shown here, began to take the shape that they still have today. In fact, much of what we know as modern America developed during this important period.

**1886**

The American Federation of Labor is formed on December 8.

1890

Congress passes the Sherman Antitrust Act.

1892

On June 29 the Homestead strike begins. Carnegie Steel Company refuses to negotiate with the union.

1900

1898 French scientists Pierre and Marie Curie discover radium.

1880

1883 The island volcano of Krakatau in the Pacific Ocean erupts in one of the world's greatest natural disasters.

1890

1889 The Eiffel Tower is built in Paris.



Economics

Geography

Politics

Religion

Society and Culture

Science and Technology

Focus on Themes In this chapter, you will read about the advancements in transportation and communication made during what is called the Second Industrial Revolution. You will learn about the rise of powerful corporations. You will also read about




the immigrants who arrived in the late 1800s and will see what happened to the cities as these immigrants moved in record numbers into urban areas. Throughout the chapter, you will see how **society** was affected by the changing **economy**.

Organization of Facts and Information

Focus on Reading How are clothes organized in a department store? How are files arranged in a file cabinet? Clear organization helps us find the product we need, and it also helps us find facts and information.

Understanding Structural Patterns Writers use structural patterns to organize information in sentences or paragraphs. What's a structural pattern? It's simply a way of organizing information. Learning to recognize those patterns will make it easier for you to read and understand social studies texts.

Additional reading support can be found in the **Interactive Reader and Study Guide**

Patterns of Organization		
Pattern	Clue Words	Graphic Organizer
Cause-effect shows how one thing leads to another	as a result, therefore, because, therefore, this led to	
Chronological Order shows the sequence of events or actions.	after, before, first, then, not long after, finally	
Comparison-contrast points out our similarities and/or differences.	although, but, however, on the other hand, similarly, also	
Listing presents information in categories such as size, location or importance.	also, most important, for example, in fact	Category • Fact • Fact • Fact

To use text structure to improve your understanding, follow these steps:

1. Look for the main idea of the passage you are reading.
2. Then look for clues that signal a specific pattern.
3. Look for other important ideas and think about how the ideas connect. Is there any obvious pattern?
4. Use a graphic organizer to map the relationships among the facts and details.



ELA Reading 8.2.0 Describe and connect essential ideas, arguments, and perspectives of text using knowledge of text structure, organization, and purpose.

Key Terms and People

You Try It!

The following passages are from the chapter you are about to read. As you read each set of sentences, ask yourself what structural pattern the writer used to organize the information.

Recognizing Structural Patterns

- (A) "Great advances in communications technologies took place in the late 1800s. By 1861, telegraph wires connected the East and West coasts. Five years later, a telegraph cable on the floor of the Atlantic Ocean connected the United States and Great Britain." (p. 577)
- (B) "Many business leaders justified their business methods through their belief in social Darwinism . . . Other business leaders, however, believed that the rich had a duty to aid the poor." (p. 581)
- (C) "During the late 1800s, several factors led to a decline in the quality of working conditions. Machines run by unskilled workers were eliminating the jobs of many skilled craftspeople. These low-paid workers could be replaced easily." (p. 584)

After you read the passages, answer the questions below:

1. Reread passage A. What structural pattern did the writer use to organize this information? How can you tell?
2. Reread passage B. What structural pattern did the writer use to organize this information? How can you tell? Why do you think the writer chose this pattern?
3. Reread passage C. What structural pattern did the writer use to organize this information? How can you tell? Why do you think the writer chose this pattern?

As you read Chapter 18, think about the organization of the ideas. Ask yourself why the writer chose to organize the information in this way.

Chapter 18

Section 1

Second Industrial Revolution (p. 575)
 Bessemer process (p. 575)
 Thomas Alva Edison (p. 576)
 patents (p. 576)
 Alexander Graham Bell (p. 577)
 Henry Ford (p. 577)
 Wilbur and Orville Wright (p. 578)

Section 2

corporations (p. 579)
 Andrew Carnegie (p. 580)
 vertical integration (p. 580)
 John D. Rockefeller (p. 580)
 horizontal integration (p. 581)
 trust (p. 581)
 Leland Stanford (p. 581)
 social Darwinism (p. 581)
 monopoly (p. 582)
 Sherman Antitrust Act (p. 582)

Section 3

Frederick W. Taylor (p. 584)
 Knights of Labor (p. 585)
 Terence W. Powderly (p. 585)
 Samuel Gompers (p. 585)
 American Federation of Labor (p. 585)
 collective bargaining (p. 586)
 Mary Harris Jones (p. 586)
 Haymarket Riot (p. 586)
 Homestead Strike (p. 587)
 Pullman Strike (p. 587)

Section 4

old immigrants (p. 588)
 new immigrants (p. 588)
 steerage (p. 589)
 benevolent societies (p. 591)
 Chinese Exclusion Act (p. 593)
 Immigration Restriction League (p. 593)

Section 5

mass transit (p. 595)
 suburbs (p. 595)
 mass culture (p. 595)
 department stores (p. 596)
 settlement houses (p. 597)
 Hull House (p. 597)
 Jane Addams (p. 597)

Academic Vocabulary

In this chapter, you will learn the following academic words:
 implement (p. 577); acquire (p. 580)
 policy (p. 593)

The Second Industrial Revolution

What You Will Learn...

Main Ideas

1. Breakthroughs in steel processing led to a boom in railroad construction.
2. Advances in the use of oil and electricity improved communications and transportation.
3. A rush of inventions changed the lives of Americans.

The Big Idea

The Second Industrial Revolution led to new sources of power and advances in transportation and communication.

Key Terms and People

Second Industrial Revolution, p. 575
 Bessemer process, p. 575
 Thomas Edison, p. 576
 patents, p. 576
 Alexander Graham Bell, p. 577
 Henry Ford, p. 577
 Wilbur and Orville Wright, p. 578



HSS 8.12.1 Trace patterns of agricultural and industrial development as they relate to climate, use of natural resources, markets, and trade and locate such development on a map.

8.12.9 Name the significant inventors and their inventions and identify how they improved the quality of life (e.g., Thomas Edison, Alexander Graham Bell, Orville and Wilbur Wright).

If YOU were there...

You live in a small town but are visiting an aunt in the city in the 1890s. You are amazed when your aunt pushes a button on the wall to turn on electric lights. At home you still use kerosene lamps. You hear a clatter outside and see an electric streetcar traveling down the street. You are shocked when a telephone rings, and your aunt speaks to someone miles away!

Which of these inventions would you find most amazing?

BUILDING BACKGROUND The first Industrial Revolution in America began in the early 1800s. It changed the way products were made, from handwork to machines. It moved the workplace from cottages to factories. Later, it brought advances in transportation and communication. The Second Industrial Revolution built on these changes, introducing new technology and new sources of power.



Breakthroughs in Steel Processing

Technological advances were important to the **Second Industrial Revolution**, a period of rapid growth in U.S. manufacturing in the late 1800s. By the mid-1890s, the United States had become the world's industrial leader.

The Steel Industry

Some of the most important advances in technology happened in the steel industry. Steel is iron that has been made stronger by heat and the addition of other metals. In the mid-1850s Henry Bessemer invented the **Bessemer process**, a way to manufacture steel quickly and cheaply by blasting hot air through melted iron to quickly remove impurities. Before, turning several tons of iron ore into steel took a day or more. The Bessemer process took only 10 to 20 minutes.

The Bessemer process helped increase steel production. U.S. mills had produced 77,000 tons of steel in 1870. By 1879 production had risen to more than 1 million tons in one year.

Riding the Rails

As steel dropped in price, so did the cost of building railroads. Companies built thousands of miles of new steel track. The design of elegant passenger and sleeping cars improved passenger service. Manufacturers and farmers sent products to market faster than ever by rail. Cities where major rail lines crossed, such as Chicago, grew rapidly. Railroads also increased western growth by offering free tickets to settlers. Rail travel made the journey west faster and safer. Finally, as rail travel and shipping increased, railroads and related industries began employing more people.

Factors Affecting Industrial Growth

- Greater ability to use natural resources
- A growing population
- Transportation advances
- Rising immigration
- Inventions and innovations
- Increasing business investment
- Government policies assisting business, such as protective tariffs

READING CHECK

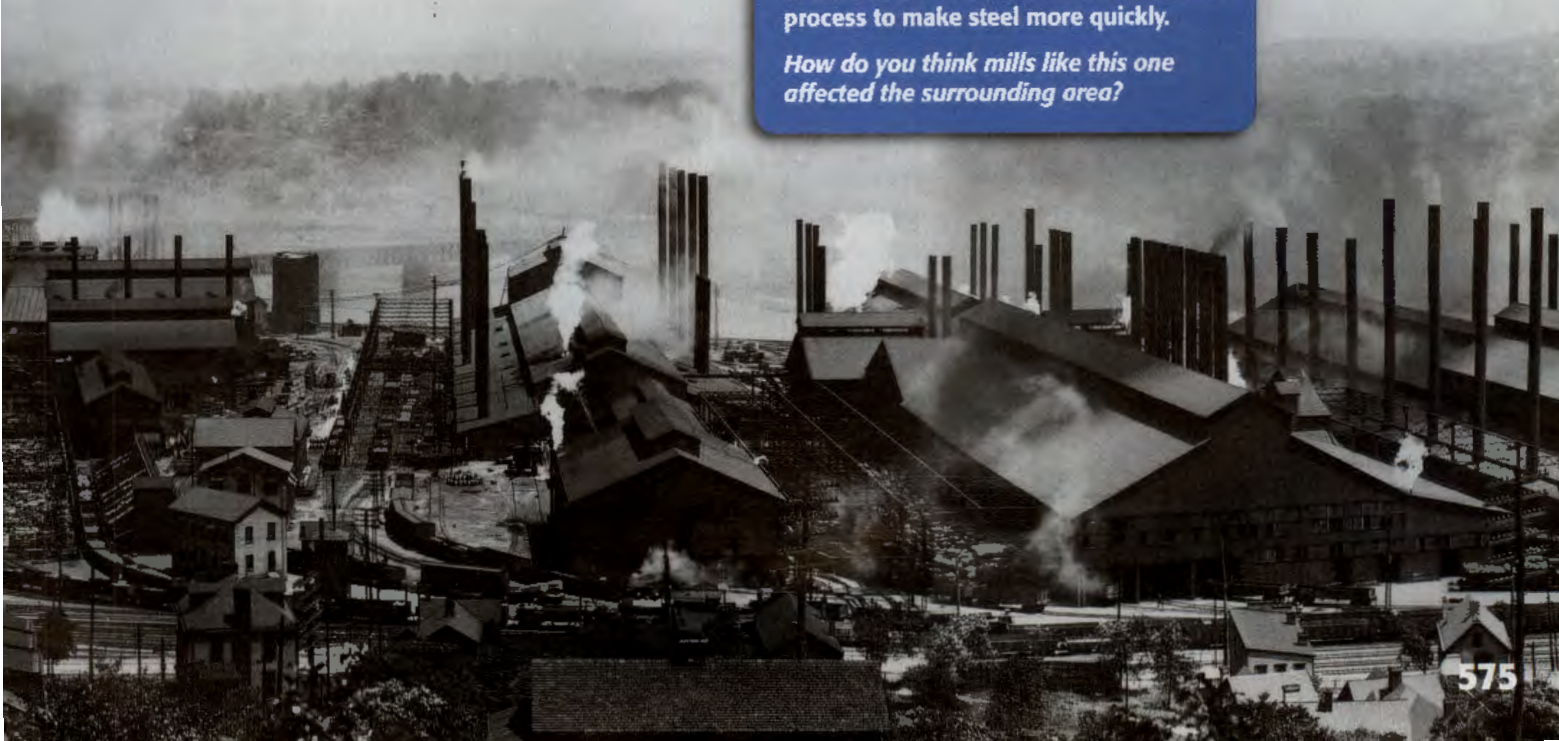
Identifying Cause and Effect

How did steel processing change in the 1850s, and how did this affect the United States?

Homestead Steel Mill

Steel mills like this one in Homestead, Pennsylvania, were the center of the new steel industry that led to advancements in rail travel. Workers used the Bessemer process to make steel more quickly.

How do you think mills like this one affected the surrounding area?



The Spirit of Innovation

1854 Henry Bessemer patents a method for making cast steel.

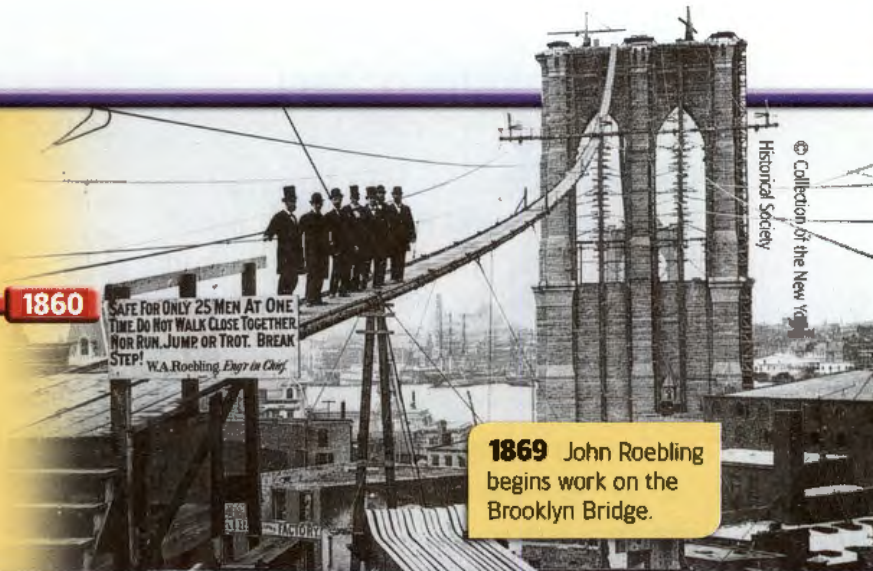
1850

1852 Elisha Otis invents the elevator safety brake, making elevators safe for people.

1860

SAFE FOR ONLY 25 MEN AT ONE TIME DO NOT WALK CLOSE TOGETHER NOR RUN, JUMP OR TROT. BREAK STEP! W.A. Roebling, Eng'r in Chief

1869 John Roebling begins work on the Brooklyn Bridge.



Use of Oil and Electricity

The Second Industrial Revolution was characterized by dramatic developments in the use and distribution of oil and electricity. These power sources fueled other changes.

Oil as a Power Source

An important technological breakthrough in the late 1800s was the use of petroleum, or oil, as a power source. People had known about oil for many years but had discovered few ways to use it. However, in the 1850s, chemists invented a way to convert crude, or unprocessed, oil into a fuel called kerosene. Kerosene could be used for cooking, heating, and lighting. Suddenly there was a demand for oil.

As demand grew, people began searching for a reliable source for oil. In 1859 Edwin L. Drake proved that it was possible to pump crude oil from the ground. Soon, wildcatters, or oil prospectors, drilled for oil in Ohio, Pennsylvania, and West Virginia. Oil became a big business as these states began producing millions of barrels per year. Oil companies built refineries to turn the crude oil into finished products like kerosene. One oil company supervisor referred to oil workers as “men who are supplying light for the world.”

Electricity Spreads

In addition to kerosene, electricity became a critical source of light and power during the Second Industrial Revolution. The possible uses of electricity interested inventors like **Thomas Edison**. His research center in Menlo Park, New Jersey, was called an invention factory. Edison explained his practical approach to science.

“I do not regard myself as a pure scientist, as so many persons have insisted that I am. I do not search for the laws of nature ... for the purpose of learning truth. I am only a professional inventor ... with the object [goal] of inventing that which will have commercial utility [use].”

—Thomas Edison, quoted in *American Made*, by Harold C. Livesay

Edison eventually held more than 1,000 **patents**, exclusive rights to make or sell inventions. Patents allowed inventors to protect their inventions from being manufactured by others.

In 1878 Edison announced that he would soon invent a practical electric light. By the end of 1879 Edison and his team of inventors had created the electric lightbulb. The public was excited. However, Edison had a problem. At the time, few homes or businesses could get electricity. Edison therefore built a power plant that began supplying electricity to dozens of New York City buildings in

FOCUS ON READING

How does this paragraph show the cause and effect structure?

1872 Elijah McCoy receives the patent for his device that oiled machine engines.



1887 Harriet Strong receives a patent for her advances in dam and reservoir construction.

1893 Frank and Charles Duryea successfully test their first gasoline-powered automobile.

1870



1876 Alexander Graham Bell invents the telephone.

1880

1879 Thomas Edison creates a durable electric lightbulb.



1890



September 1882. The *New York Times* reported that with electric lighting in the newspaper offices, “it seemed almost like writing by daylight.” However, Edison’s equipment could not send electricity over long distances. As a result, his power company, Edison Electric, provided electricity mainly to central cities.

In the late 1880s, George Westinghouse built a power system that could send electricity across many miles. As Edison and Westinghouse competed, the use of electricity spread rapidly in the nation’s cities. After a while, electricity soon lit homes and businesses and powered city factories. Electricity also was used to power streetcars in cities across the nation.

READING CHECK Drawing Conclusions

Why did people begin to pump oil from the ground?

Rush of Inventions

In the late 1800s, inventors focused on finding solutions to practical problems. Communication and transportation took the lead.

Advances in Communication

Great advances in communication technologies took place in the late 1800s. By 1861, telegraph wires connected the East and West coasts. Five years later, a telegraph cable on

the floor of the Atlantic Ocean connected the United States and Great Britain.

However, the telegraph carried only written messages and was difficult for untrained people to use. These problems were solved in March 1876, when inventor **Alexander Graham Bell** patented the telephone. Bell was a Scottish-born speech teacher who studied the science of sound. He called the telephone a “talking telegraph.”

Telephone companies raced to lay thousands of miles of phone lines. By 1880 there were about 55,000 telephones in the United States, and by 1900 there were almost 1.5 million.

Automobiles and Planes

In 1876 a German engineer invented an engine powered by gasoline, another fuel made from oil. In 1893 Charles and J. Frank Duryea used a gasoline engine to build the first practical motorcar in the United States. By the early 1900s, thousands of cars were being built in the United States.

At first, only the wealthy could buy these early cars. **Henry Ford** introduced the Model T in 1908. Ford was the first to implement the moving assembly line in manufacturing, a process that greatly reduced the cost of building a product, thus making cars more affordable.

THE IMPACT TODAY

AT&T Corporation is a direct descendant of Bell’s original company. AT&T pioneered the use of telephone cables across the oceans, satellite communications, and a radar system for the U.S. Defense Department.

ACADEMIC VOCABULARY

implement
to put in place

The Spirit of Innovation



1900

1893 George Ferris displays the first Ferris Wheel at the World's Columbian Exposition in Chicago.



1903 Orville Wright makes the first flight in a motorized airplane.

ANALYSIS SKILL

READING TIME LINES

When was the telephone invented?

New engine technology helped make another breakthrough in transportation possible—air flight. Brothers **Wilbur and Orville Wright** built a lightweight airplane that used a small, gas-powered engine. In Kitty Hawk, North Carolina, Orville Wright made the first piloted flight in a gas-powered plane on December 17, 1903. This invention would change the way that many Americans traveled in the future and would increase the demand for oil production.

READING CHECK **Comparing** What new inventions excited the public in the 1800s, and how were they used?

SUMMARY AND PREVIEW The Second Industrial Revolution led to advances in energy sources, communication, and transportation. In the next section you will learn about the growth of big business.

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Online Quiz

KEYWORD: 558 HP18

Section 1 Assessment

Reviewing Ideas, Terms, and People **HSS** 8.12.1, 8.12.9

- a. Describe** What was the **Bessemer process**?

b. Summarize How did improvements to railroads affect the economy and transportation in the United States?

c. Elaborate What do you think was the most important effect of the Bessemer process? Why?
- a. Identify** What is kerosene, and for what could it be used?

b. Explain What problem did **Thomas Edison** face regarding the use of electricity, and how did he solve it?
- a. Recall** What contribution did **Wilbur and Orville Wright** make to transportation?

b. Draw Conclusions How did **Alexander Graham Bell's** invention improve life in the United States?

c. Elaborate Why do you think there was a rush of inventions in the late 1800s?

Critical Thinking

- 4. Analyzing** Copy the chart below and use it to identify important inventors of the Second Industrial Revolution, their contributions, and why each was important.

Person	Work	Importance

FOCUS ON WRITING

- 5. Taking Notes about Inventors** In your notebook, write a list of the inventors and their inventions mentioned in this section. How might you include them in your TV series?

Big Business

If YOU were there...

It is 1895, and your town is home to a large corporation. The company's founder and owner, a wealthy man, lives in a mansion on a hill. He is a fair employer but not especially generous. Many townspeople work in his factory. You and other town leaders feel that he should contribute more to local charities and community organizations.

How could this business leader help the town more?

BUILDING BACKGROUND Advanced technology along with the use of oil and electric power helped American businesses grow. Soon the shape of the American economy changed. Some companies grew so large that they began to dominate entire industries.

Dominance of Big Business

In the late 1800s many entrepreneurs formed their businesses as **corporations**, or businesses that sell portions of ownership called **stock shares**. The leaders of these corporations were some of the most widely respected members of American society in the late 1800s. Political leaders praised prosperous businesspeople as examples of American hard work, talent, and success.

What You Will Learn...

Main Ideas

1. The rise of corporations and powerful business leaders led to the dominance of big business in the United States.
2. People and the government began to question the methods of big business.

The Big Idea

The growth of big business in the late 1800s led to the creation of monopolies.

Key Terms and People

- corporations, p. 579
- Andrew Carnegie, p. 580
- vertical integration, p. 580
- John D. Rockefeller, p. 580
- horizontal integration, p. 581
- trust, p. 581
- Leland Stanford, p. 581
- social Darwinism, p. 581
- monopoly, p. 582
- Sherman Antitrust Act, p. 582



HSS 8.12.4 Discuss entrepreneurs, industrialists, and bankers in politics, commerce, and industry (e.g., Andrew Carnegie, John D. Rockefeller, Leland Stanford).

8.12.6 Discuss child labor, working conditions, and laissez-faire policies toward big business and examine the labor movement, including its leaders (e.g., Samuel Gompers), its demand for collective bargaining, and its strikes and protests over labor conditions.

New sales techniques like those taught by John H. Patterson helped change business practices.

Corporations Generate Wealth

Successful corporations reward not only the people who found them but also investors who hold stock. Stockholders in a corporation typically get a percentage of profits based on the amount of stock they own. Although stockholders actually own the corporation, they do not run its day-to-day business. Instead, they elect a board of directors that chooses the corporation's main leaders, such as the president.

Corporations provided several important advantages over earlier business forms. Stockholders in a corporation are not responsible for business debts. If a corporation fails financially, the stockholders lose only the money that they invested. Stockholders are also usually free to sell their stock to whomever they want, whenever they want. As a result, corporations encouraged more investment in businesses. By 1900 more than 100 million shares per year were being traded on the New York Stock Exchange.

Business Leaders

Countless entrepreneurs and industrialists became wealthy, powerful, and famous because

of the business boom. **Andrew Carnegie** was one of the most admired businesspeople of the time. Born in Scotland, Carnegie came to the United States as a poor immigrant. As a teenager he took a job with a railroad company and quickly worked his way up to the position of railroad superintendent.

In 1873, he focused his efforts on steel-making. Carnegie expanded his business by buying out competitors when steel prices were low. By 1901 Carnegie's mills were producing more steel than all of Great Britain's mills combined. Carnegie's businesses succeeded largely through **vertical integration**, or ownership of businesses involved in each step of a manufacturing process. For example, to lower production costs, Carnegie **acquired** the iron ore mines, coalfields, and railroads needed to supply and support his steel mills.

John D. Rockefeller was also successful in consolidating, or combining, businesses. By age 21, while a partner in a wholesale business, he decided to start an oil-refining company. In only 10 years his Standard Oil Company was the country's largest oil refiner. Like Carnegie, Rockefeller used vertical

ACADEMIC VOCABULARY

acquire to get

Rise of

Investors purchased stock in corporations in record numbers in the late 1800s. They received stock certificates, like the one shown here, to document their part ownership in corporations. Corporations used the money raised by selling stocks to expand. Standard Oil Company financed the building of this refinery in Richmond, California, by selling stock.

Why did investors buy stock?



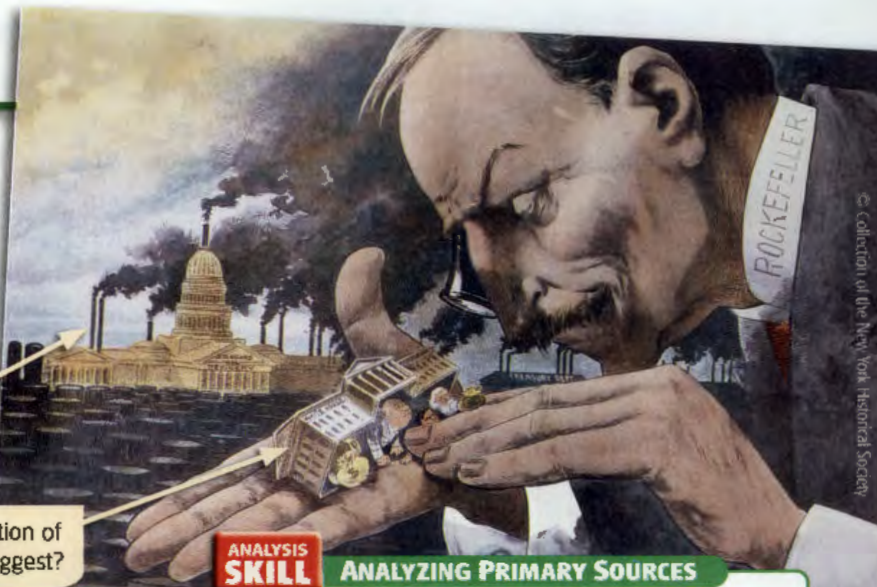
Primary Source

POLITICAL CARTOON Antitrust

The wealth and size of trusts such as Standard Oil made many Americans fear the influence of business leaders over government.

What do you think the smokestacks on the Capitol building represent?

What does the position of the White House suggest?



ANALYSIS
SKILL

ANALYZING PRIMARY SOURCES

How does the cartoonist show Rockefeller's power?

integration. For example, the company controlled most of the pipelines it used.

Rockefeller's company also developed **horizontal integration**, or owning all businesses in a certain field. By 1880 his companies controlled about 90 percent of the oil refining business in the United States. He also formed a **trust**, a legal arrangement grouping together a number of companies under a single board of directors. To earn more money, trusts often tried to get rid of competition and to control production.

Leland Stanford, another important business leader of the late 1800s, made a fortune selling equipment to miners. While governor of California, he cofounded the Central Pacific railroad. He also founded Stanford University.

Late in life, Stanford argued that industries should be owned and managed cooperatively by workers. He believed this would be the fulfillment of democracy.

READING CHECK Comparing and Contrasting

Why did Andrew Carnegie use vertical integration?

Questioning the Methods of Big Business

By the late 1800s, people and the government were becoming uncomfortable with

child labor, low wages, and poor working conditions. They began to view big business as a problem.

Social Darwinism

Critics of big business claimed that business leaders justified unfair business practices through **social Darwinism**, a view of society based on scientist Charles Darwin's theory of natural selection. Social Darwinists thought that Darwin's "survival of the fittest" theory decided which human beings would succeed in business and in life in general. But in fact, almost all business leaders ignored social Darwinist philosophy and justified prevailing business practices as providing opportunity for individual self-improvement.

Other business leaders, however, believed that the rich had a duty to aid the poor. These leaders tried to help the less fortunate through philanthropy, or the giving of money to charities. Carnegie, Rockefeller, Stanford, and other business leaders gave away large sums. Carnegie alone gave away more than \$350 million to charities, about \$60 million of which went to fund public libraries to expand access to books. By the late 1800s, various charities had received millions of dollars from philanthropists.

The Antitrust Movement

Critics of big business said that many business leaders earned their fortunes through unfair business practices. These criticisms grew stronger in the 1880s as corporations became more powerful. Large corporations often used their size and strength to drive smaller competitors out of business. Carnegie and Rockefeller, for example, pressured railroads to charge their companies lower shipping rates. Powerful trusts also arranged to sell goods and services below market value. Smaller competitors went out of business trying to match those prices. Then the trusts raised prices again.

Some people became concerned when a trust gained a **monopoly, or total ownership of a product or service**. Critics argued that monopolies reduced necessary competition. Competition, they believed, kept prices low and the quality of goods and services high.

Some Americans also worried about the political power of wealthy trusts. Labor leader John W. Hayes called trusts “the common enemy of society.” Many citizens and small businesses wanted the government to help control monopolies and trusts. People

who favored trusts responded that trusts were more efficient and gave the consumer dependable products or services.

Many members of Congress favored big business. However, elected officials could not ignore the concerns of voters. In July 1890 Congress passed the **Sherman Antitrust Act, a law that made it illegal to create monopolies or trusts that restrained trade**. It stated that any “attempt to monopolize . . . any part of the trade or commerce among the several States” was a crime. However, the act did not clearly define a trust in legal terms. The antitrust laws were therefore difficult to enforce. Corporations and trusts kept growing in size and power.

READING CHECK Analyzing How did concerns about trusts lead to the Sherman Antitrust Act?

SUMMARY AND PREVIEW In the late 1800s some corporations became monopolies that dominated industries such as oil. In the next section you will learn about how industrial workers organized to improve working conditions.

Section 2 Assessment

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Online Quiz

KEYWORD: SS8 HP18

Reviewing Ideas, Terms, and People **HSS** 8.12.4, 8.12.6

- Identify** What are **horizontal** and **vertical integration**?
 - Explain** What are the benefits of investing in **corporations**?
 - Evaluate** What do you think about the business methods of **Carnegie, Rockefeller, and Stanford**?
- Describe** What is **social Darwinism**?
 - Summarize** What concerns did critics of big business have regarding **trusts**?
 - Evaluate** Was the **Sherman Antitrust Act** successful? Why or why not?

Critical Thinking

- Contrasting** Copy the graphic organizer shown at right. Use it to contrast the views of business

leaders who favored monopolies with those of Americans who opposed monopolies.

Business Leaders' Views	vs.	Views of People Against Monopolies

FOCUS ON WRITING

- Describing Business Leaders** Add the business leaders described in this section to your notes. Think about what role they might play in your drama series.

Andrew Carnegie, John D. Rockefeller, and Leland Stanford

How would you go about building an industry?

Andrew Carnegie (1835–1919) Born in Scotland, Carnegie rose to become a multibillionaire in the steel industry. He brought new technologies to his steel mills and made them extremely efficient. In 1901 he sold Carnegie Steel Company for \$250 billion, making him the richest man in the world.

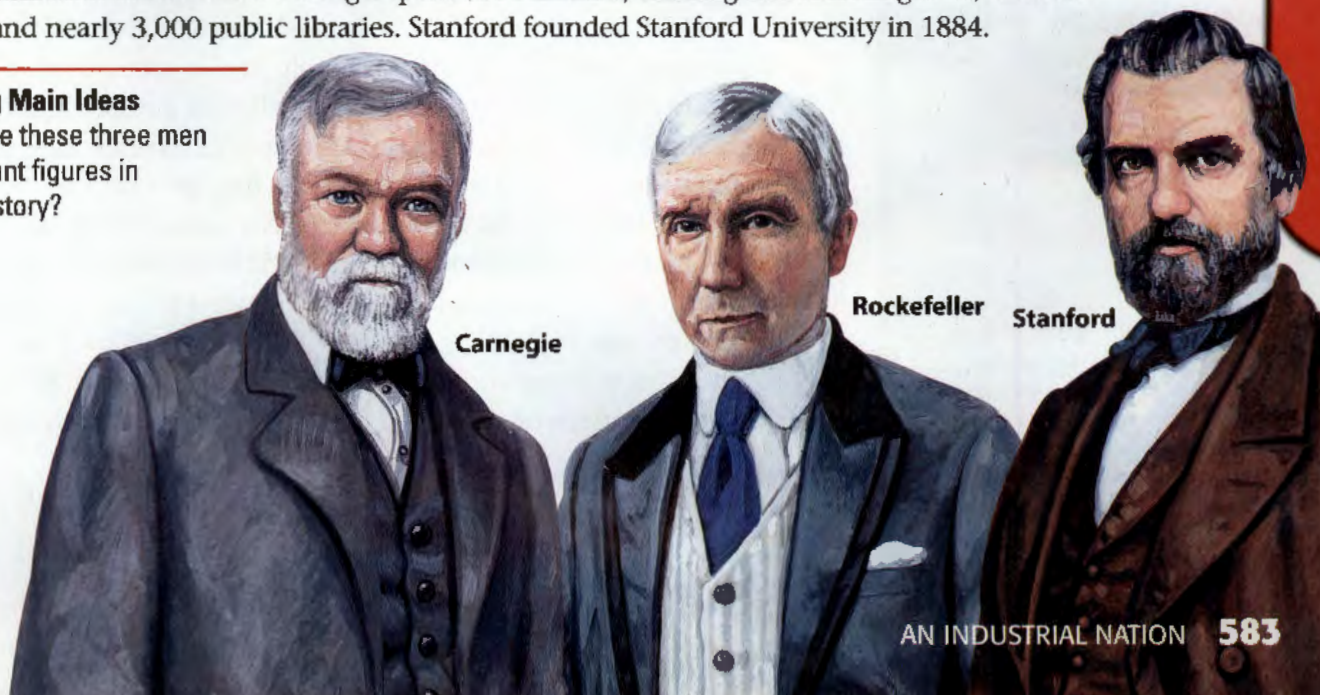
John D. Rockefeller (1839–1937) Rockefeller got his start in the oil business in Cleveland, Ohio. Rockefeller's Standard Oil Company quickly bought out its competitors throughout the United States. To better control oil production and delivery, Rockefeller also bought railroad rights, terminals, and pipelines.

Leland Stanford (1825–1893) Leland Stanford was born to a New York farming family that sent him to excellent private schools. After practicing law in Wisconsin, he made his career in California. Stanford was instrumental in building the western section of the transcontinental railroad. He then plunged into politics, serving one term as governor. His political connections helped him obtain huge state land grants and other benefits for his railroad companies. As president of Central Pacific and Southern Pacific, he oversaw the laying of thousands of miles of track throughout the West.

Why are they so important? Carnegie, Rockefeller, and Stanford helped make America the world's greatest industrial power by the end of the 1800s. They built giant industries that made goods cheaply by keeping workers' wages low. They also engaged in ruthless business practices to defeat their competition and create monopolies. The Sherman Antitrust Act was passed in reaction to the Standard Oil monopoly. Later in life, all three men became philanthropists, people devoted to charity work. Rockefeller's philanthropies gave out \$500 million in his lifetime. Carnegie spent \$350 million, funding educational grants, concert halls, and nearly 3,000 public libraries. Stanford founded Stanford University in 1884.

Finding Main Ideas

Why are these three men important figures in U.S. History?



Carnegie

Rockefeller Stanford

Industrial Workers

If YOU were there...

You run a button machine in a clothing factory in the 1890s. You work from 7:00 in the morning until 6:00 at night, every day except Sunday. Your only break is 15 minutes for lunch. Now you hear about a movement to start a workers' union to bargain with your employer. Union members will ask for an eight-hour workday. But you think your employer might fire you if you join.

Would you join the union?

Main Ideas

1. The desire to maximize profits and become more efficient led to poor working conditions.
2. Workers began to organize and demand improvements in working conditions and pay.
3. Labor strikes often turned violent and failed to accomplish their goals.

The Big Idea

Changes in the workplace led to a rise in labor unions and workers' strikes.

BUILDING BACKGROUND The rise of corporations and the establishment of monopolies gave big business a great deal of power. An antitrust movement arose to try to limit the power of trusts. Workers themselves began to organize and take action against bad working conditions and other problems.

Key Terms and People


Frederick W. Taylor, p. 584
 Knights of Labor, p. 585
 Terence V. Powderly, p. 585
 Samuel Gompers, p. 585
 American Federation of Labor, p. 585
 collective bargaining, p. 586
 Mary Harris Jones, p. 586
 Haymarket Riot, p. 586
 Homestead Strike, p. 587
 Pullman Strike, p. 587

Maximizing Profits and Efficiency

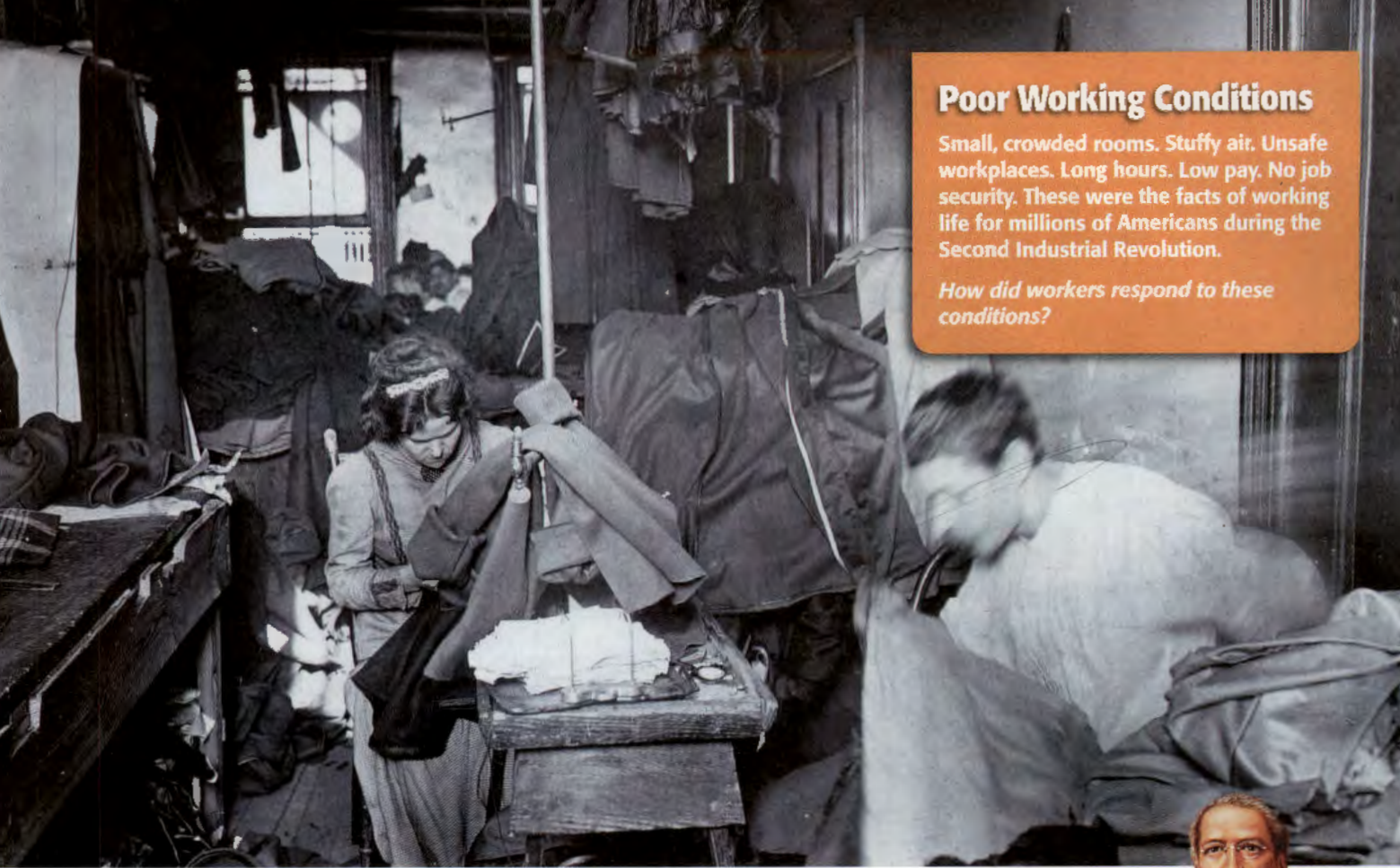
During the late 1800s, several factors led to a decline in the quality of working conditions. Machines run by unskilled workers were eliminating the jobs of many skilled craftspeople. These low-paid workers could be replaced easily. Factories began to focus on specialization, or workers repeating a single step again and again. Specialization brought costs down and caused production to rise. But it also made workers tired, bored, and more likely to be injured. Specialization allowed for Henry Ford's idea of a moving assembly line to speed production. Ford's use of the moving assembly line allowed automobiles to be made more quickly and cheaply. Automobiles soon became available to a wider segment of the population than ever before.

In 1909 **Frederick W. Taylor**, an efficiency engineer, published a popular book called *The Principles of Scientific Management*. He encouraged managers to view workers as interchangeable parts of the production process. In factories, managers influenced by Taylor paid less attention to working conditions. Injuries increased, and as conditions grew worse, workers looked for ways to bring about change.

READING CHECK **Identifying Cause and Effect** Why did companies begin to use scientific management, and how did it affect workers?



HSS 8.12.6 Discuss child labor, working conditions, and laissez-faire policies toward big business and examine the labor movement, including its leaders (e.g., Samuel Gompers), its demand for collective bargaining, and its strikes and protests over labor conditions.



Poor Working Conditions

Small, crowded rooms. Stuffy air. Unsafe workplaces. Long hours. Low pay. No job security. These were the facts of working life for millions of Americans during the Second Industrial Revolution.

How did workers respond to these conditions?

Workers Organize

Workers formed labor unions to get better wages and working conditions for all workers in a factory or industry. The first national labor union, the **Knights of Labor**, was founded in the 1870s. It pushed for an eight-hour workday, equal pay for equal work, and an end to child labor. Union members also wanted the government to regulate trusts. Unlike most unions at the time, the Knights included both skilled and unskilled workers. The Knights of Labor was originally organized much like a secret society. In 1879, **Terence V. Powderly** became leader of the Knights. He ended all secrecy, creating the first truly national labor union in the United States.

Another early labor union was the **American Federation of Labor (AFL)**, led by **Samuel Gompers**. Unlike the Knights, the American Federation of Labor organized individual national unions, such as the mineworkers' and steelworkers' unions. The

BIOGRAPHY

Samuel Gompers

1850–1924

Samuel Gompers was born in London. He came to the United States with his parents in 1863 at age 13. He worked as a cigar maker and joined a local union, eventually becoming its president. The Cigarmakers Union was reorganized and later joined the American Federation of Labor. Gompers became the AFL's first president and remained so, except for the year 1895, until his death. He campaigned for basic trade-union rights, such as the right to picket and to organize boycotts and strikes. His efforts on behalf of workers helped organized labor to gain respect.

Summarizing How did Samuel Gompers help the labor-union movement?

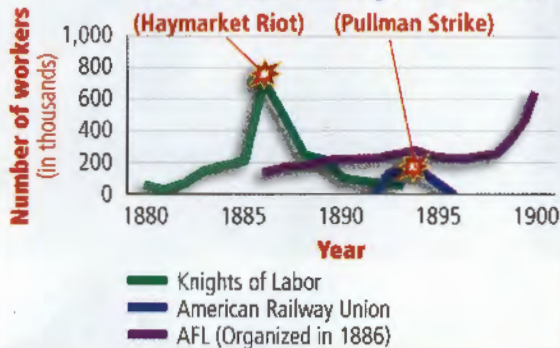


Major Labor Strikes, Late 1800s



- 1 **Haymarket Riot** In May 1886 the Haymarket Riot erupted between protesters and police in Chicago. It resulted in the decline of the Knights of Labor.
- 2 **Homestead Strike** In 1892 a strike occurred at Carnegie Steel Company in Homestead, Pennsylvania. The resulting fight left workers and Pinkerton guards dead.
- 3 **Colorado Miners' Strike** In the summer of 1893, gold miners at Cripple Creek, Colorado, went on strike for higher wages and a shorter workday.
- 4 **Pullman Strike** The Pullman strike of 1894 began with workers who made Pullman train cars. It soon spread to workers who worked on trains pulling the sleeper cars.
- 5 **California Railroad Strike** In 1894 railroad workers in Oakland went on strike in the Bay Area's first major strike. Supporting Chicago Pullman workers, they halted passenger, freight, and mail trains for months.

Union Membership, 1880–1900



ANALYSIS SKILL

ANALYZING INFORMATION

go.hrw.com
Interactive Map
KEYWORD: SS8 CH18

How did conflicts between striking workers and authorities affect union membership?

AFL also limited its membership to skilled workers. This gave the union great bargaining power but left out most workers. The AFL tried to get better wages, hours, and working conditions for laborers. By 1890 the AFL's membership was larger than that of the Knights. **With collective bargaining—all workers acted collectively, or together—workers had a much greater chance of success in negotiating with management.** Most employers opposed collective bargaining. One company president said, "I shall never give in. I would rather go out of business."

Many women took active roles in unions. For example, **Mary Harris Jones**, an Irish immigrant, worked for better conditions for miners. A fiery speaker, she organized strikes and helped educate workers.

READING CHECK **Contrasting** How did the Knights of Labor and the AFL differ?

Labor Strikes

By the late 1800s, other unions were gaining strength. Major workers' strikes swept the country and included miners in Colorado, steel workers in Pennsylvania, and railroad workers in Illinois and California. The first major labor strike began in 1886 in Chicago.

In May 1886, thousands of union members in Chicago went on strike because they wanted an eight-hour workday. Two strikers were killed in a fight with police. The next night, workers met at Haymarket Square to protest the killings. **In what became known as the Haymarket Riot, someone threw a bomb that wounded many police officers and killed eight. The police fired into the crowd, killing several people and wounding 100 others.**

THE IMPACT TODAY

In 1955 the AFL merged with the Congress of Industrial Organizations to become the AFL-CIO. Today the organization has more than 13 million members.

Eight people, some of whom were not at the riot, were arrested and convicted of conspiracy. One of them had a Knights of Labor membership card. Though Knights leadership had not supported the strike, several local chapters had. Membership in the Knights fell quickly.

Sometimes, business owners succeeded in breaking up unions. In 1892, a violent strike called the **Homestead strike** took place at Andrew Carnegie's Homestead steel factory in Pennsylvania. Union members there protested a plan to buy new machinery and cut jobs. The company refused to negotiate with the union and locked workers out of the plant. The workers responded by seizing control of the plant. Gunfire erupted on July 6, when the Pinkerton detectives—hired by the company to break the union—tried to enter the plant. A fierce battle raged for 14 hours, leaving 16 people dead. The governor called out the state militia to restore order. Continuing for four more months, the union was eventually defeated.

Another major strike happened at George Pullman's Pullman Palace Car Company in the company town of Pullman, Illinois. Most of the company workers lived there, paying high rents. During the depression that began in 1893, Pullman laid off about half of the workers and cut pay for those that were left, without lowering their rents. On May 11, 1894, workers began the **Pullman strike** which stopped traffic on many railroad lines until federal courts ordered the workers to return to their jobs. President Grover Cleveland sent federal troops to Chicago to stop the strike. Such defeats seriously damaged the labor movement for years.

READING CHECK Analyzing What were the effects of early major strikes on workers?

SUMMARY AND PREVIEW Workers formed unions to fight for better conditions and to keep their jobs. In the next section, you will learn about a new wave of immigrants in the late 1800s.

Section 3 Assessment

go.hrw.com

Online Quiz

KEYWORD: S5B HP1B

Reviewing Ideas, Terms, and People **HSS** 8.12.6

- Recall** Why did conditions in factories begin to decline?
 - Draw Conclusions** How were workers affected by specialization and scientific management?
 - Evaluate** Do you think scientific management made businesses more successful? Explain.
- Identify** What role did **Mary Harris Jones** play in the labor movement?
 - Analyze** Why did workers demand **collective bargaining**, and why did business owners oppose it?
 - Elaborate** Do you think the demands made by labor unions were reasonable? Explain your answer.
- Describe** What major labor strikes took place in the late 1800s?
 - Evaluate** Do you think President Cleveland was right to use federal troops to end the **Pullman strike**? Explain.

Critical Thinking

- Analyzing** Copy the chart below. Use it to list the major labor conflicts of the late 1800s, their causes, and their outcomes.

Date	Conflict	Causes	Outcome
May 1886			
June 1892			
May 1894			

FOCUS ON WRITING

- Taking Notes on the Labor Movement** Take notes about what life was like for workers during this time. How might you include the labor movement in your series?

A New Wave of Immigration

What You Will Learn...

Main Ideas

1. The late 1800s brought a wave of new immigrants from southern and eastern Europe and Mexico.
2. Some Americans opposed immigration and tried to enact restrictions against it.

The Big Idea

A new wave of immigration in the late 1800s brought large numbers of immigrants to the United States.

Key Terms and People

old immigrants, p. 588

new immigrants, p. 588

steerage, p. 589

benevolent societies, p. 591

Chinese Exclusion Act, p. 593

Immigration Restriction League, p. 593



HSS 8.12.7 Identify the new sources of large-scale immigration and the contributions of immigrants to the building of cities and the economy; explain the ways in which new social and economic patterns encouraged assimilation of newcomers into the mainstream amidst growing cultural diversity; and discuss the new wave of nativism.

If YOU were there...

You and your family live in northern Mexico in the 1890s. Your father is a skilled carpenter, while your mother is a wonderful cook. You can do many jobs too, though you are still in school. But there is not much work where you live. Your parents talk about moving to California, where you have cousins.

What might it be like to leave your home and move to California?

BUILDING BACKGROUND Since its beginnings, America has attracted people from many parts of the world. They came for land, jobs, religious freedom, and the chance to start new lives. In the late 1800s, rapid economic growth created jobs and opportunities that drew new groups of immigrants.

New Immigrants

During the late 1800s, immigrants continued to come to the United States by the millions. Immigration patterns, however, began to change. Immigrants who had arrived before the 1880s were now called **old immigrants**. They were mostly from Great Britain, Germany, Ireland, and Scandinavia. Most of them were Protestants, except for the Irish and some Germans who were Catholic. Many were skilled workers who spoke English. Often the old immigrants settled in the rural areas outside cities and became farmers.

After 1880, many more immigrants came to the United States, and they came from many different places. More than 5 million came during the 1880s, as had come between 1800 and 1860. Increasing numbers of these **new immigrants**, who came during and after the 1880s, were from southern and eastern Europe. Thousands of Czechs, Greeks, Hungarians, Italians, Poles, Russians, and Slovaks came to the United States looking for new opportunities and better lives. Southern Italy sent large numbers of immigrants. Immigrant Miriam Zunser hoped “for all manner of miracles [in] a strange, wonderful land!”

Many were seeking economic opportunity in the industrial boom of the late 1800s. Others were escaping political or religious persecution. Most brought new cultural practices with them. The immigrants included Eastern Orthodox Christians, Roman Catholics, and Jews.

Many immigrants were eager for the job opportunities that arose during the industrial boom of the late 1800s. Before coming to America, many had received encouraging letters from friends and relatives who had immigrated earlier. Those earlier immigrants not only sent letters to their relatives and friends back home, but often they sent money to help pay for the journey to the United States. To attract immigrants, railroad and steamship companies hired business agents who tended to paint unrealistic pictures of easy wealth and happiness in the United States.

Immigrants usually faced a difficult journey to America. Most traveled in **steerage**, an area below a ship's deck where steering mechanisms were located. In these cramped

conditions, passengers often experienced seasickness and sometimes death.

New arrivals had to go to immigration processing centers run by state and local governments. In 1892 a receiving office was opened on Ellis Island in New York Harbor. Over the next 40 years, millions of immigrants came through the Ellis Island center.

In the processing centers, officials interviewed immigrants to decide whether to let them enter the country. Officials also conducted physical examinations. They did not allow those who carried an infectious disease to enter. Most immigrants were admitted. After admission, they entered the United States to find work and build new lives.

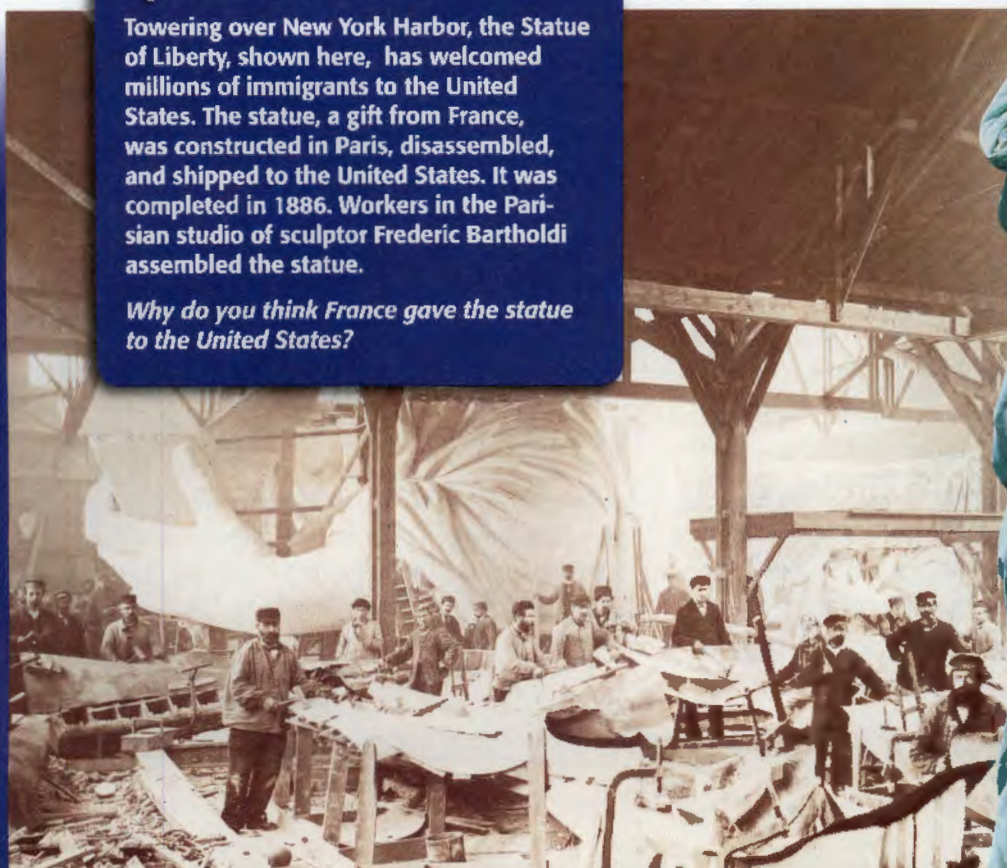
THE IMPACT TODAY

During the late 1800s and early 1900s, many Asian Indians immigrated to the United States. Some of these immigrants came from Punjab, a province in present-day India and Pakistan, and were members of the Sikh religion. Sikhs settled in California by the thousands and worked initially in the railroad and lumber industries. Today their descendants run successful farms and other businesses.

Symbol of Freedom

Towering over New York Harbor, the Statue of Liberty, shown here, has welcomed millions of immigrants to the United States. The statue, a gift from France, was constructed in Paris, disassembled, and shipped to the United States. It was completed in 1886. Workers in the Parisian studio of sculptor Frederic Bartholdi assembled the statue.

Why do you think France gave the statue to the United States?



Coming to America

ASIA

NORTH AMERICA

SOUTH AMERICA



In this photo, Japanese men and Chinese women arrive in California to begin a new life in the United States.



Augustin and Maria Lozano and their two children moved from Mexico to California. Many Mexican immigrants moved into the Southwest.

Immigrant Neighborhoods

Many immigrants moved into neighborhoods with others who came from the same country. In these neighborhoods they could hear their own language, eat familiar foods, and keep their customs.

Many immigrant groups published newspapers in their own languages and founded schools, clubs, and places of worship. These organizations helped preserve their beliefs and customs. In New York City, for example, Jewish immigrants founded a theater that gave performances in the Yiddish language.

Immigrants often opened local shops and small neighborhood banks. Business owners helped new arrivals by offering credit and giving small loans. Such aid was important for newcomers because there were few

commercial banks in most immigrant neighborhoods. In 1904 Italian immigrant Amadeo Peter Giannini started the Bank of Italy in San Francisco. This bank later became the Bank of America.

Even with neighborhood support, immigrants often found city life difficult. Many immigrants lived in tenements—poorly built, overcrowded apartments. They often had to work under exhausting conditions. One young woman described the difference between her hopes and realities in the new land.

“ [I dreamed] of the golden stairs leading to the top of the American palace where father was supposed to live. [I] went ‘home’ to ... an ugly old tenement in the heart of the Lower East Side. There were stairs to climb but they were not golden.”

—Miriam Shomer Zunsler, *Yesterday: A Memoir of a Russian Jewish Family*

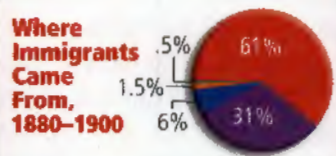
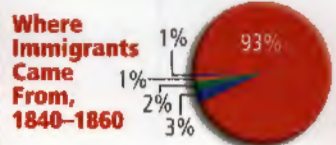


Swedish immigrant Swan August Swanson followed his father to Wisconsin to help with the family farm.



The son of Italian immigrants, Amadeo Peter Giannini (center) founded the Bank of Italy in San Francisco in 1904. Due to his guidance and perseverance, it became the largest privately owned bank in the world.

Shifting Patterns of Immigration



- Northern and western Europe
- Eastern and southern Europe
- North and South America
- Asia
- All other areas

Single men and women, as well as entire families, moved to America from all over the world. During the late 1800s, the places where people moved from began to change. The charts above show the percentages of people who moved from different places. The total number of immigrants reached a peak in the 1880s, when about 5 million people came to the United States.

How do you think different countries of origin might affect immigration?

Some immigrant communities formed **benevolent societies**. These aid organizations offered immigrants help in cases of sickness, unemployment, and death. At that time, there were few national government agencies to provide such aid.

Adjusting to a New Life

Many immigrants tried to adjust to their new country. They often encouraged their children to adopt American customs, which helped them assimilate into American society. In public schools, the immigrant children learned English using McGuffey Readers, illustrated textbooks that taught basic reading and writing and emphasized basic values such as hard work and thrift. Many immigrants successfully met the challenges of living in a new country. They built strong futures for their families in the United States.

Immigrant Workers

Many new immigrants had worked on farms in their homelands. Unfortunately, few could afford to buy land in the United States. Instead, they found jobs in cities, where, by 1900, most of the country's manufacturing took place.

Having come from rural areas, few new immigrants were skilled in manufacturing or industrial work. They often had no choice but to take low-paying, unskilled jobs in garment or steel factories and construction. Long hours were common.

Not all industrial labor took place in large factories. Some immigrants worked long hours for little pay in small shops or mills located in or near working-class neighborhoods. Often associated with the

Asian Americans Today

Today more than 12 million people in the United States are of Asian origin. They account for nearly 5 percent of the U.S. population—or about 1 in 20 Americans. Asian Americans trace their roots to various countries, including China, India, the Philippines and, like this family, Vietnam. Most Asian Americans live in the West. California has by far the largest Asian American population of any state.



ANALYSIS
SKILL

ANALYZING INFORMATION

Why have so many people immigrated to the United States?



clothing industry, these workplaces were called sweatshops because of long hours and hot, unhealthy working conditions.

Immigrants with appropriate skills sometimes found work in a wide range of occupations. Some immigrants worked as bakers, cooks, carpenters, masons, metalworkers, or skilled machinists. Other immigrants saved, shared, or borrowed money to open small businesses, such as barbershops, laundries, restaurants, or street vending carts. New immigrants often opened the same types of businesses in which other immigrants from the same country were already succeeding.

Mexican Immigrants

In the late 1800s large numbers of immigrants began arriving from Mexico. Many Mexicans

had been displaced from their homes by the Mexican-American War.

Most Mexican immigrants settled in the Southwest, where they found work on the railroads and in construction companies, steel mills, mines, and canneries. Other Mexican immigrants worked on large commercial farms in Arizona, Texas, and California.

READING CHECK

Summarizing How did new immigrants help themselves and others?

Opposition to Immigration

Anti-immigrant feelings grew along with the rise in immigration in the late 1800s. Some labor unions opposed immigration because their members feared immigrants

would take jobs away. Many business leaders, however, wanted low-paid workers because they kept labor costs low.

Other Americans called nativists feared that too many new immigrants were being allowed into the country. Many nativists held racial and ethnic prejudices. Nativists thought that the new immigrants' poverty and presumed lack of education might harm American society.

Some nativists were violent toward immigrants. Others worked to pass laws stopping or limiting immigration. For example, in 1880, about 105,000 Chinese immigrants lived in the United States. Two years later, Congress passed the **Chinese Exclusion Act**, banning Chinese people from immigrating to the United States for 10 years. This law marked the first time a nationality was banned from entering the country. Although the law violated treaties with China, the Congress continued to renew the law for decades to come. In 1892,

another law was passed restricting convicts, immigrants with certain diseases, and those likely to need public assistance.

To further lower the number of immigrants, nativists in Boston founded the **Immigration Restriction League** in 1894, which demanded that all immigrants know how to read and write before entering the country. Supporters hoped this **policy** would limit immigration from eastern and southern Europe. Despite such opposition, immigrants continued to arrive in large numbers.

ACADEMIC VOCABULARY

policy rule, course of action

READING CHECK Analyzing Why did nativists oppose immigration, and what steps did they take against it?

SUMMARY AND PREVIEW Immigrants helped build the nation's economy and cities, but they met some resistance. In the next section you will learn about life in urban America.

Section 4 Assessment

go.hrw.com
Online Quiz
KEYWORD: SS8 HP18

Reviewing Ideas, Terms, and People HSS 8.12.7 Critical Thinking

- Identify** What was Ellis Island?
 - Contrast** What differences existed between the **old immigrants** and the **new immigrants**?
- Identify** What job opportunities were available to new immigrants?
 - Summarize** How did immigrants attempt to adapt to their new lives in the United States?
 - Elaborate** Why do you think many immigrants tolerated difficult living and working conditions?
- Recall** How did the **Chinese Exclusion Act** affect the Chinese American population?
 - Explain** Why were some American business leaders supportive of the new immigrants?
 - Predict** How might the growing opposition to immigration lead to problems in the United States?

- Drawing Conclusions** Copy the graphic organizer below onto your own sheet of paper. Use it to identify the struggles of new immigrants.



FOCUS ON WRITING

- Writing about Immigrants and Their Lives** Add new immigrants to the list of potential characters for your series. Take notes about what life was like for them.

City Life

What You Will Learn...

Main Ideas

1. New technology and ideas were developed to deal with the growth of urban areas.
2. The rapid growth of cities created a variety of urban problems.

The Big Idea

Cities in the United States experienced dramatic expansion in the late 1800s.

Key Terms and People

mass transit, p. 595

suburbs, p. 595

mass culture, p. 595

department stores, p. 596

settlement houses, p. 597

Hull House, p. 597

Jane Addams, p. 597



HSS 8.12.5 Examine the location and effects of urbanization, renewed immigration, and industrialization (e.g., the effects on social fabric of cities, wealth and economic opportunity, the conservation movement).

If YOU were there...

You and a friend live in a fast-growing city around 1900. Many people in the city are immigrants who don't speak English. Many live in bad neighborhoods and run-down apartments. In college, you studied social work so that you could help improve life for others. Now you've gone to work in a new settlement house. Its organizers are still planning its programs.

What services would the settlement house offer?

BUILDING BACKGROUND Industrial growth and a new wave of immigration swelled the populations of American cities in the late 1800s. City life offered excitement and new kinds of entertainment, but urban areas also had problems with overcrowding and poor living conditions.

Growth of Urban Areas

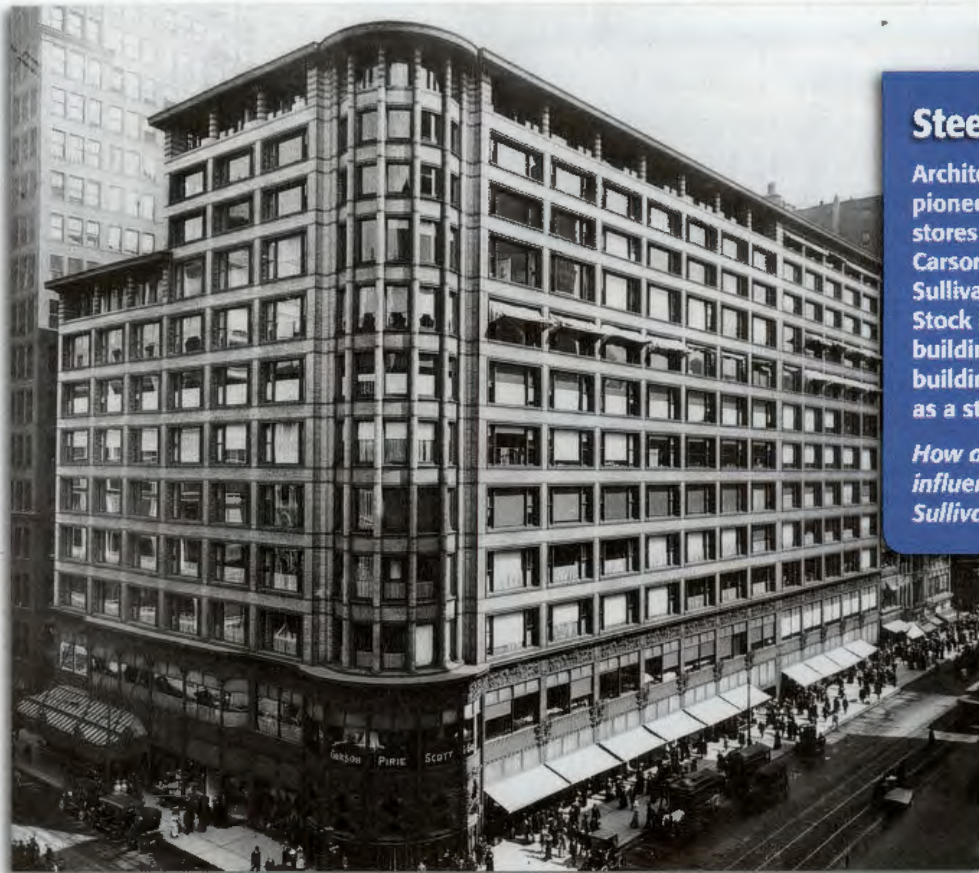
During the late 1800s, immigrants and native-born Americans moved to cities in record numbers, causing rapid urban growth. In 1850, only six U.S. cities had a population greater than 100,000. By 1900 there were more than 35 such cities.

In midwestern cities the population grew especially rapidly during these years. Chicago's population rose from 30,000 in 1850 to 1.7 million in 1900. By 1900 about 40 percent of Americans lived in urban areas.

Some city residents were businesspeople and skilled workers. But many more were poor laborers. As farm equipment replaced people in the countryside, large numbers of rural residents moved to the cities. In the 1890s African Americans from the rural South began moving to northern cities to seek jobs, as did thousands of immigrants. They hoped to escape discrimination and find better economic and educational opportunities.

New Technology

The rapid growth of cities placed a great strain on available downtown space. In the mid-1800s typical downtown city buildings were five stories tall. Larger structures had been impossible to construct,



Steel-Framed Buildings

Architect Louis Sullivan helped pioneer the design of department stores with this building, built for Carson, Pirie, and Scott Co. in 1912. Sullivan also designed the Chicago Stock Exchange building and other buildings across the country. The building was designed using steel as a strong frame.

How do you think the steel industry influenced architects such as Louis Sullivan?

because building materials were either too weak or too heavy to be used in taller buildings. However, this situation changed as stronger and cheaper steel became available. Soon architects such as Louis Sullivan of Chicago began designing multistory buildings called skyscrapers. These buildings used metal frames to support their weight. They allowed developers to use limited city space more efficiently. New devices like the safety elevator, patented by Elisha Otis in 1857, helped people quickly move up and down inside skyscrapers.

As city centers became heavily populated, attempts were made to ease traffic through **mass transit**, or public transportation designed to move lots of people. By the late 1860s New York City had elevated trains running on tracks above the streets. Chicago followed in the early 1890s.

Some cities built underground railroads that were called subways. In 1897 the first subway in the United States opened in Boston. In 1904, the first line of the New York City subway system began operation. Cable

cars, first used in the 1870s, became quite common. Electric trolleys also achieved popularity during the 1890s. These streetcars cheaply and quickly carried people in the cities to and from work.

Many middle-class Americans who could afford it moved to **suburbs**, residential neighborhoods outside of downtown areas. Mass transit networks, such as trolleys, subways, and commuter trains, made such moves possible. People could live in the suburbs and work in the cities.

New Ideas

The United States began to develop forms of **mass culture**, or leisure and cultural activities shared by many people. One factor contributing to mass culture was a boom in publishing. The invention of the Linotype, an automatic typesetting machine, greatly reduced the time and cost of printing. In 1850 there were fewer than 300 daily newspapers in the United States. Because of the use of Linotype machines, by 1900 there were more than 2,000 newspapers.

Big cities often had many newspapers. Newspaper publishers such as Joseph Pulitzer and William Randolph Hearst competed for readers by using color printing. By 1900 the daily newspaper had become a powerful cultural force in people's lives.

Giant retail shops, or department stores, also appeared in some city centers during the late 1800s. Low prices, large quantities of products, and newspaper advertising were used to bring in customers. The public was also attracted by fancy window displays.

World fairs are another example of mass culture. At the Philadelphia Centennial Exposition in 1876 and the Chicago Exposition in 1893, millions of people came to see the latest technological inventions. The demand for public entertainment also led to the creation of amusement parks, such as New York's Coney Island. People from all walks of life were able to enjoy these parks because of inexpensive train fares and entrance tickets.

As cities grew, people became aware of the need for open public space. The large-scale landscape architect Frederick Law Olmsted became nationally famous. He designed Central Park in New York City as well as many state and national parks.

READING CHECK Summarizing What forms of mass culture were available in urban areas?

Urban Problems

Despite the new public parks, skyscrapers, and mass transit, many urban areas were not ready for rapid population growth in the late 1800s. Population increases in cities often led to shortages of affordable housing.

Many families lived in tiny apartments in overcrowded tenements. Journalist Jacob Riis described these conditions: "Nine lived in two rooms, one about ten feet square that served as parlor, bedroom, and eating room, the other a small hall room made into a kitchen."

Overcrowding and lack of sanitation often led to disease and health problems. Tenements frequently were packed together in areas close to factories. Rooms had few windows to let in light or fresh air. Running water and indoor plumbing were scarce. Most cities did not have laws requiring landlords to fix their tenements or to maintain safety standards.

Fire and crime were also common problems. By the late 1800s, many major cities were



Hull House

Neighborhood children attended kindergarten at Hull House in Chicago. Their parents, who were members of the working poor, were often immigrants. Children like these had few other options for education.

How did Hull House try to improve the lives of children?

hiring full-time firefighters and peace officers. Other than these improvements, the reform work of most city governments was limited by internal corruption or lack of funds.

Due to the lack of government aid in the 1800s, many private organizations stepped in to help the poor. Some individuals set up **settlement houses**, or neighborhood centers in poor areas that offered education, recreation, and social activities. Settlement houses were staffed by professionals and volunteers.

The most famous settlement house was Chicago's **Hull House**. It was founded by **Jane Addams** and Ellen Gates Starr in 1889. Addams and Starr moved into a run-down building in a poor neighborhood and turned it into Hull House. The staff focused on the needs of immigrant families and also worked for reforms, such as child labor laws and the eight-hour workday.

READING CHECK **Drawing Conclusions**
What technologies improved city life?

SUMMARY AND PREVIEW In the late 1800s many people came to cities to find work, causing a variety of problems. In the next chapter you will learn about how a new spirit of political reform swept the nation.

Section 5 Assessment

Reviewing Ideas, Terms, and People **HSS** 8.12.5

- Define** What is **mass transit**? What made mass transit necessary?
 - Explain** Why did African Americans move to northern cities in such large numbers in the 1890s?
 - Evaluate** Which improvement to urban living do you think had the greatest impact on people's lives? Explain your answer.
- Describe** What were conditions like in tenements?
 - Summarize** What problems resulted from the rapid growth of cities?
 - Evaluate** Do you think efforts to improve urban problems were successful? Why or why not?

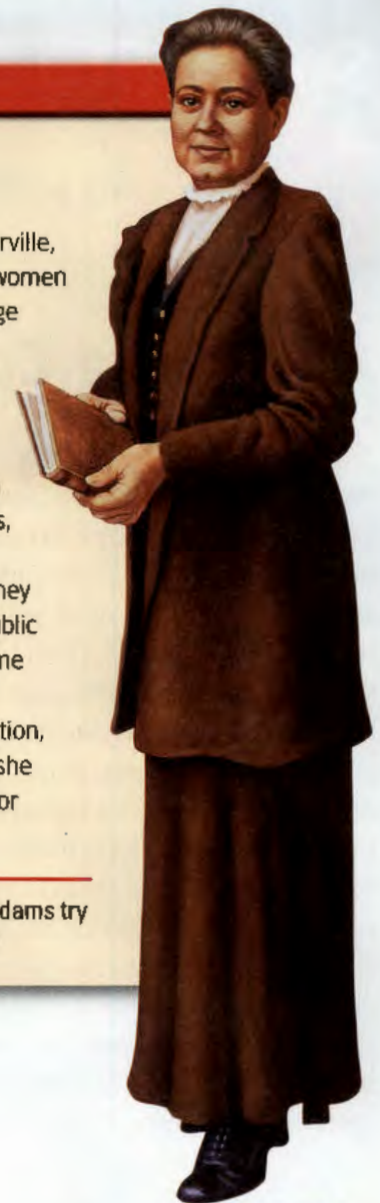
BIOGRAPHY

Jane Addams

1860–1935

Jane Addams was born in Cedarville, Illinois. Like many upper-class women of the era, she received a college education but found few jobs open to her. In 1888, on a visit to England with classmate Ellen Gates Starr, she visited a London settlement house. On their return to the United States, Addams and Starr opened a settlement house in Chicago. They started a kindergarten and a public playground. Addams also became involved in housing safety and sanitation issues, factory inspection, and immigrants' rights. In 1931 she shared the Nobel Peace Prize for her work.

Summarizing How did Jane Addams try to improve the lives of workers?



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Online Quiz

KEYWORD: SS8 HP18

Critical Thinking

- Categorizing** Copy the chart below onto your own sheet of paper. Use it to identify the problems faced by growing cities in the late 1800s and responses to those problems.

Urban Problem	Response

FOCUS ON WRITING

- Describing Setting** A city like the ones you have read about could serve as the setting of your TV series. How could you describe the city?

Social Studies Skills

Analysis

Critical Thinking

Participation

Study



HSS HI 6 Students interpret basic indicators of economic performance and conduct cost-benefit analyses of economic and political issues.

Analyzing Costs and Benefits

Define the Skill

Everything you do has both costs and benefits connected to it. *Benefits* are things that you gain from something. *Costs* are what you give up to obtain benefits. For example, if you buy a video game, the benefits of your action include the game itself and the enjoyment of playing it. The most clear cost is what you pay for the game. However, there are other costs that do not involve money. One is the time you spend playing the game. This is a cost because you give up something else, such as doing your homework or watching a TV show, when you choose to play the game.

The ability to analyze costs and benefits is a valuable life skill as well as a useful tool in the study of history. Weighing an action's benefits against its costs can help you decide whether or not to take it.

Learn the Skill

Analyzing the costs and benefits of historical events will help you to better understand and evaluate them. Follow these guidelines to do a cost-benefit analysis of an action or decision in history.

- 1 First determine what the action or decision was trying to accomplish. This step is needed in order to determine which of its effects were benefits and which were costs.
- 2 Then look for the positive or successful results of the action or decision. These are its benefits.
- 3 Consider the negative or unsuccessful effects of the action or decision. Also think about what positive things would have happened if it had *not* occurred. All these things are its costs.

- 4 Making a chart of the costs and benefits can be useful. By comparing the list of benefits to the list of costs you can better understand the action or decision and evaluate it.

For example, you learned in Chapter 18 that the United States attracted millions of new immigrants in the late 1800s. A cost-benefit analysis of the nation's immigration policies might produce a chart like this one.

Benefits	Costs
Immigrants provided workers needed by growing industries	Overcrowding and poor living conditions in U.S. cities
Immigrants made more money than they could have in their home countries	Low wages paid to immigrants kept the earnings of other workers down
Immigrants found more opportunity in America than in their home countries	Long hours of work under poor conditions for low pay
Immigrants built strong futures for their families	

Based on this chart, one might conclude that the nation's immigration policy was a good one.

Practice the Skill

Among the changes that occurred in the early 1900s was an increase in specialization and efficiency in the workplace. Use information from the chapter and the guidelines above to do a cost-benefit analysis of this development. Then write a paragraph explaining whether or not it was a wise one.

Visual Summary

Use the visual summary below to help you review the main ideas of the chapter.

**QUICK
FACTS**


Inventions and Big Business

- Bessemer process
- Lightbulb
- Automobile
- Growth of corporations



Immigration

- New immigrants from eastern and southern Europe
- Nativism
- Benevolent societies



Labor Movement

- Knights of Labor
- American Federation of Labor
- Haymarket Riot
- Homestead Strike

Reviewing Vocabulary, Terms, and People

Identify the descriptions below with the correct term or person from the chapter.

1. Labor organization that represented both skilled and unskilled laborers and was the first national labor union in the United States
2. Public transportation systems built to ease transportation in crowded cities
3. A way of making steel quickly and cheaply by blasting hot air through melted iron to quickly remove waste
4. Founded Hull House with Ellen Gates Starr in Chicago in 1889
5. Powerful business leader who helped to found the Central Pacific Railroad
6. Organizations created by immigrants to help each other in times of sickness, unemployment, or other troubles
7. A method of negotiating for better wages or working conditions in which all workers act together to ensure a better chance for success

Comprehension and Critical Thinking

SECTION 1 (Pages 574–578) HSS 8.12.1, 8.12.9

8. a. **Identify** What was the Second Industrial Revolution?
- b. **Draw Conclusions** Why were advances in transportation and communication important to the Second Industrial Revolution?
- c. **Elaborate** Which invention do you think had the greatest effect on people's lives in the late 1800s? Explain your answer.

SECTION 2 (Pages 579–582) HSS 8.12.4, 8.12.6

9. a. **Recall** What criticisms were made of business leaders and trusts?
- b. **Analyze** How did the rise of corporations and powerful business leaders lead to the growth of big business?
- c. **Evaluate** Do you think the growth of big business helped or hurt ordinary Americans? Explain your answer.

SECTION 3 (Pages 584–587) **HSS** 8.12.6

10. **a. Recall** What led to poor working conditions in factories during the Second Industrial Revolution?
- b. Make Inferences** Why did labor unions have a better chance of improving working conditions than laborers did on their own?
- c. Evaluate** Did the strikes of the 1880s and 1890s hurt or help the labor movement in the long run? Explain your answer.

SECTION 4 (Pages 588–593) **HSS** 8.12.7

11. **a. Identify** From what parts of the world did the new wave of immigrants come?
- b. Analyze** In what ways did immigration patterns in the United States change in the late 1800s?
- c. Elaborate** In your opinion, were the difficulties immigrants faced worth the benefits of life in the United States? Explain.

SECTION 5 (Pages 594–597) **HSS** 8.12.5

12. **a. Recall** Why did American cities experience such rapid growth in the late 1800s?
- b. Analyze** What problems did cities face as a result of rapid growth, and how were these problems solved?
- c. Elaborate** Would you have preferred to live in the city or in a suburb? Why?

Reviewing Themes

13. **Economics** How did the rise of big business affect consumers in the United States?
14. **Society and Culture** How did the lives of city dwellers change with the rise of mass culture?

Using the Internet

go.hrw.com
KEYWORD: 558 HP1B

15. **Activity: Creating a Time Line** Technology in some sense has been part of human history since we began to write history. All tools are, in a sense, technology. In this chapter you read about new scientific discoveries that had positive and negative effects. Enter the activity keyword. Then choose one technological innovation mentioned in the chapter and trace its development to the present day. Create an illustrated time line to present your research.

Reading Skills

Understanding the Structural Patterns of Texts Use the Reading Skills taught in this chapter to answer the question about the reading selection below.

New arrivals had to go to immigration processing centers run by state and local governments. In 1892 a receiving office was opened on Ellis Island in New York Harbor. Over the next 40 years, millions of immigrants came through the Ellis Island center. (p. 589)

16. By which structural pattern is the above passage organized?
 - a. enumeration
 - b. chronology
 - c. comparison and contrast
 - d. cause and effect

Social Studies Skills

Analyzing Cost and Benefits Use the Social Studies Skills taught in this chapter to answer the question below.

17. Write two costs and two benefits of the Pullman Strike from the point of view of the workers who participated.

FOCUS ON WRITING



18. **Writing Your Memo** Look back over your notes about the people, places, and events of the late 1800s. Decide which of these you will include in your television drama series. Then draft a one- to two-paragraph memo to your boss briefly describing the series. Remember to describe the basic plot, setting, and characters.

Standards Assessment

DIRECTIONS: Read each question and write the letter of the best response. Use the map below to answer question 1.

1



Which area on the map provided the petroleum for the oil-refining industry that arose in the United States in the mid- to late 1800s?

- A the area labeled W
- B the area labeled X
- C the area labeled Y
- D the area labeled Z

2 The person *most* responsible for making the steel industry a big business in the United States is

- A John D. Rockefeller.
- B Andrew Carnegie.
- C Henry Bessemer.
- D Leland Stanford.

3 The growth of American industry in the late 1800s was accompanied by all of the following developments *except*

- A the arrival of large numbers of immigrants.
- B the organization of workers into labor unions.
- C declining food production from U.S. farms.
- D rapid population growth in U.S. cities.

4 Which of the following is associated with providing a better life for urban immigrants in the late 1800s and early 1900s?

- A the department store
- B the suburb
- C the tenement
- D the settlement house

5 Immigrants to the United States in the late 1800s and early 1900s came *mainly* from

- A southern and eastern Europe.
- B Japan, China, and the rest of Asia.
- C Mexico and Central America.
- D northern and western Europe.

Connecting with Past Learning

6 In Grade 7 you learned about Johann Gutenberg's development of the printing press. The contribution of which American listed below was *least* like Gutenberg's?

- A Samuel Gompers
- B George Westinghouse
- C Thomas Edison
- D Alexander Graham Bell

7 The attitudes of the Immigration Restriction League in the late 1800s were *most* like those of Americans in earlier times who were part of the

- A Free-Soil Party.
- B Know-Nothing Party.
- C abolitionist movement.
- D transcendentalist movement.