



Chapter 9 Resources

Timesaving Tools

TeacherWorks™ All-In-One Planner and Resource Center



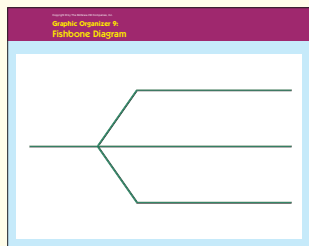
- **Interactive Teacher Edition** Access your Teacher Wraparound Edition and your classroom resources with a few easy clicks.
- **Interactive Lesson Planner** Planning has never been easier! Organize your week, month, semester, or year with all the lesson helps you need to make teaching creative, timely, and relevant.



Use Glencoe's **Presentation Plus!** multimedia teacher tool to easily present dynamic lessons that visually excite your students. Using Microsoft PowerPoint® you can customize the presentations to create your own personalized lessons.

TEACHING TRANSPARENCIES

Graphic Organizer 9

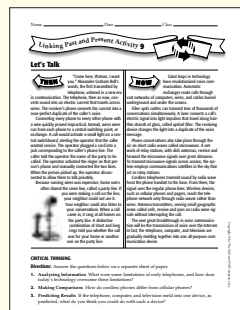


Why It Matters Chapter Transparency 9

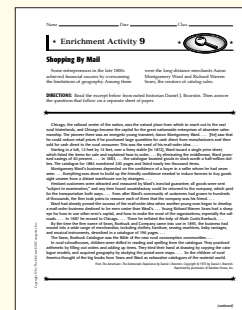


APPLICATION AND ENRICHMENT

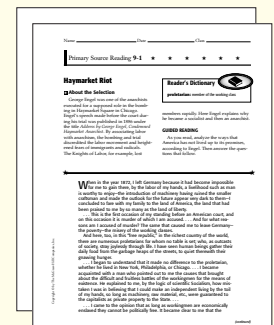
Linking Past and Present Activity 9



Enrichment Activity 9

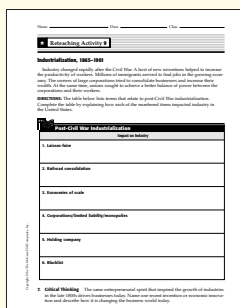


Primary Source Reading 9

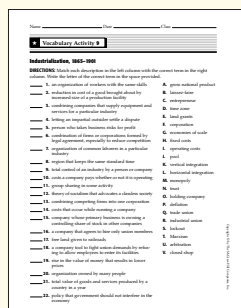


REVIEW AND REINFORCEMENT

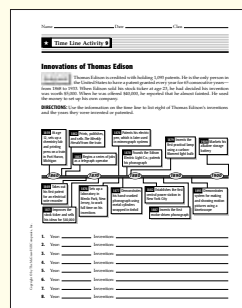
Reteaching Activity 9



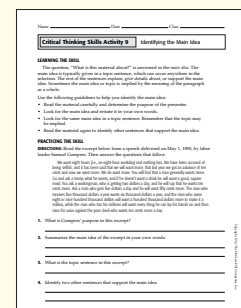
Vocabulary Activity 9



Time Line Activity 9



Critical Thinking Skills Activity 9



Meeting NCSS Standards

- The following standards are highlighted in Chapter 9:
- Section 1** **VII** Production, Distribution, and Consumption: A, B
 - Section 2** **IV** Individual Development and Identity: G
 - Section 3** **VII** Production, Distribution, and Consumption: A, B, D, E
 - Section 4** **IV** Individual Development and Identity: A, C

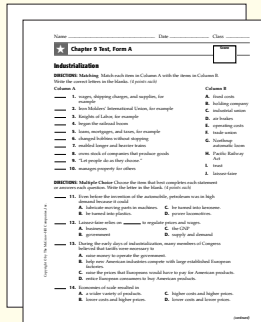
Local Standards

Chapter 9 Resources

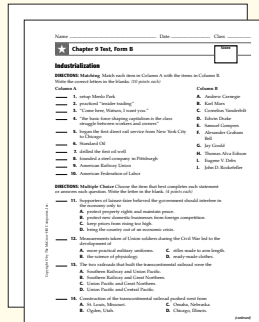


ASSESSMENT AND EVALUATION

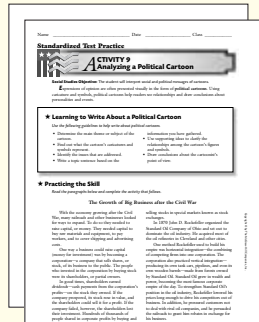
Chapter 9 Test Form A



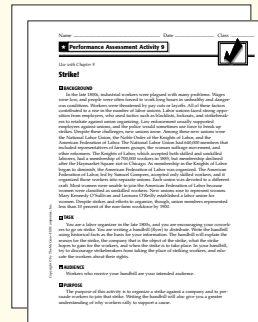
Chapter 9 Test Form B



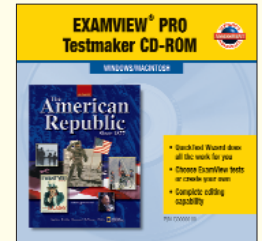
Standardized Test Practice Workbook Activity 9



Performance Assessment Activities and Rubrics 9



ExamView® Pro Testmaker CD-ROM



MULTIMEDIA

- Vocabulary PuzzleMaker CD-ROM**
- Interactive Tutor Self-Assessment CD-ROM**
- ExamView® Pro Testmaker CD-ROM**
- Audio Program**
- American History Primary Source Documents Library CD-ROM**
- MindJogger Videoquiz**
- Presentation Plus! CD-ROM**
- TeacherWorks™ CD-ROM**
- Interactive Student Edition CD-ROM**
- Glencoe Skillbuilder Interactive Workbook CD-ROM, Level 2**
- The American Republic Since 1877 Video Program**
- American Music: Hits Through History**
- American Music: Cultural Traditions**

SPANISH RESOURCES

The following Spanish language materials are available in the Spanish Resources Binder:

- **Spanish Guided Reading Activities**
- **Spanish Reteaching Activities**
- **Spanish Quizzes and Tests**
- **Spanish Vocabulary Activities**
- **Spanish Summaries**
- **The Declaration of Independence and United States Constitution Spanish Translation**



THE HISTORY CHANNEL.®

The following videotape programs are available from Glencoe as supplements to Chapter 9:

- **Legacy of King Coal, Empires of American Industry** (ISBN 0-76-700621-6)
- **Dow and Jones: Wizards of Wall Street** (ISBN 0-76-700203-2)

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

A&E Television: www.aande.com

The History Channel: www.historychannel.com



Use our Web site for additional resources. All essential content is covered in the Student Edition.

You and your students can visit tx.tarvol2.glencoe.com, the Web site companion to the *American Republic Since 1877*. This innovative integration of electronic and print media offers your students a wealth of opportunities. The student text directs students to the Web site for the following options:

- **Chapter Overviews**
- **Student Web Activities**
- **Self-Check Quizzes**
- **Textbook Updates**

Answers to the student Web activities are provided for you in the **Web Activity Lesson Plans**. Additional Web resources and Interactive Tutor Puzzles are also available.



Chapter 9 Resources

SECTION RESOURCES

Daily Objectives	Reproducible Resources	Multimedia Resources
<p>SECTION 1 The Rise of Industry</p> <p>1. Identify the effects of expanding population on industry.</p> <p>2. Explain the effects of technological innovations such as the telephone and telegraph on American development.</p>	<ul style="list-style-type: none"> Reproducible Lesson Plan 9–1 Daily Lecture and Discussion Notes 9–1 Guided Reading Activity 9–1* Section Quiz 9–1* Reading Essentials and Study Guide 9–1 Performance Assessment Activities and Rubrics 	<ul style="list-style-type: none"> Daily Focus Skills Transparency 9–1 Interactive Tutor Self-Assessment CD-ROM ExamView® Pro Testmaker CD-ROM Presentation Plus! CD-ROM TeacherWorks™ CD-ROM Audio Program Skillbuilder Interactive Workbook, Level 2 ABCNews Interactive™ Historic America Electronic Field Trips
<p>SECTION 2 The Railroads</p> <p>1. Discuss ways in which the railroads spurred industrial growth.</p> <p>2. Analyze how the railroads were financed and how they grew.</p>	<ul style="list-style-type: none"> Reproducible Lesson Plan 9–2 Daily Lecture and Discussion Notes 9–2 Guided Reading Activity 9–2* Section Quiz 9–2* Reading Essentials and Study Guide 9–2 Performance Assessment Activities and Rubrics 	<ul style="list-style-type: none"> Daily Focus Skills Transparency 9–2 Interactive Tutor Self-Assessment CD-ROM ExamView® Pro Testmaker CD-ROM Presentation Plus! CD-ROM TeacherWorks™ CD-ROM Audio Program
<p>SECTION 3 Big Business</p> <p>1. Analyze how large corporations came to dominate American business.</p> <p>2. Evaluate how Andrew Carnegie’s innovations transformed the steel industry.</p>	<ul style="list-style-type: none"> Reproducible Lesson Plan 9–3 Daily Lecture and Discussion Notes 9–3 Guided Reading Activity 9–3* Section Quiz 9–3* Reading Essentials and Study Guide 9–3 Performance Assessment Activities and Rubrics Interpreting Political Cartoons 	<ul style="list-style-type: none"> Daily Focus Skills Transparency 9–3 American Art & Architecture Interactive Tutor Self-Assessment CD-ROM ExamView® Pro Testmaker CD-ROM Presentation Plus! CD-ROM TeacherWorks™ CD-ROM Audio Program
<p>SECTION 4 Unions</p> <p>1. Describe industrial working conditions in the United States in the late 1800s.</p> <p>2. List the barriers to labor union growth.</p>	<ul style="list-style-type: none"> Reproducible Lesson Plan 9–4 Daily Lecture and Discussion Notes 9–4 Guided Reading Activity 9–4* Section Quiz 9–4* Reading Essentials and Study Guide 9–4 Performance Assessment Activities and Rubrics 	<ul style="list-style-type: none"> Daily Focus Skills Transparency 9–4 Interactive Tutor Self-Assessment CD-ROM ExamView® Pro Testmaker CD-ROM Presentation Plus! CD-ROM TeacherWorks™ CD-ROM Vocabulary PuzzleMaker CD-ROM Audio Program



OUT OF TIME?

Assign the Chapter 9 Reading Essentials and Study Guide.

*Also Available in Spanish

- Blackline Master
- Transparency
- CD-ROM
- DVD
- Poster
- Music Program
- Audio Program
- Videocassette

Chapter 9 Resources



NATIONAL GEOGRAPHIC Teacher's Corner

INDEX TO NATIONAL GEOGRAPHIC MAGAZINE

The following articles relate to this chapter.

- "Geronimo," October 1992
- "New Life for Ellis Island," September 1990
- "Pittsburgh—Stronger than Steel," December 1991

NATIONAL GEOGRAPHIC SOCIETY PRODUCTS AVAILABLE FROM GLENCOE

To order the following products for use with this chapter, contact your local Glencoe sales representative, or call Glencoe at 1-800-334-7344:

- *PictureShow: Native Americans, 1 and 2* (CD-ROM, Transparencies)
- *PictureShow: Immigration* (CD-ROM)
- *PicturePack: Immigration* (Transparencies)

ADDITIONAL NATIONAL GEOGRAPHIC SOCIETY PRODUCTS

To order the following, call National Geographic at 1-800-368-2728:

- *Full Steam Ahead: The Race to Build a Transcontinental Railroad*
- *Historical Atlas of the United States* (Atlas)
- *Immigration: The Triumph of Hope*
- *Native Americans* (Poster Set)

NGS ONLINE

Access National Geographic's Web site for current events, atlas updates, activities, links, interactive features, and archives.

www.nationalgeographic.com

KEY TO ABILITY LEVELS

Teaching strategies have been coded.

- L1** BASIC activities for all students
- L2** AVERAGE activities for average to above-average students
- L3** CHALLENGING activities for above-average students
- ELL** ENGLISH LANGUAGE LEARNER activities

From the Classroom of...



Tom Beaman
Reynolds High School
Troutdale, OR

Strategic Inventions

The rise of the United States to an industrial power started after the Civil War. The period between 1865 and 1901 saw rapid industrialization.

Give students a list of 10 to 15 items invented during this time period that contributed to the growth of industry in the United States. Consider items such as the light bulb, the elevator brake, the ice machine, the telephone, the electric streetcar, and the gasoline-powered car.

Students should research the background of one item's invention. They should then comment on how it contributed to the growth of industry.

ADDITIONAL RESOURCES FROM GLENCOE

- American Music: Cultural Traditions
- American Art & Architecture
- Outline Map Resource Book
- U.S. Desk Map
- Building Geography Skills for Life
- Inclusion for the High School Social Studies Classroom Strategies and Activities
- Teaching Strategies for the American History Classroom (Including Block Scheduling Pacing Guides)



Block Schedule

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

Industrialization

1865–1901



Performance Assessment

Refer to Activity 9 in the Performance Assessment Activities and Rubrics booklet.

Why It Matters Activity

Ask students to explain how the industrialization of the United States in the late 1800s affects their shopping habits in the 2000s. Students should evaluate their answers after they have completed the chapter. **US:** 24B; **ELA:** Gr9/10: 16E; Gr11: 15E

GLENCOE TECHNOLOGY

The American Republic Since 1877 Video Program

To learn more about the industrial expansion of the United States, have students view the Chapter 9 video, “Building America,” from the *American Republic Since 1877 Video Program*.

Available in DVD and VHS

MindJogger Videoquiz

Use the *MindJogger Videoquiz* to preview Chapter 9 content.

Available in VHS

Why It Matters

The rise of the United States as an industrial power began after the Civil War. Many factors promoted industry, including cheap labor, new inventions and technology, and plentiful raw materials. Railroads rapidly expanded. Government policies encouraged growth, and large corporations became an important part of the economy. As industry expanded, workers tried to form unions to fight for better wages and working conditions.

The Impact Today

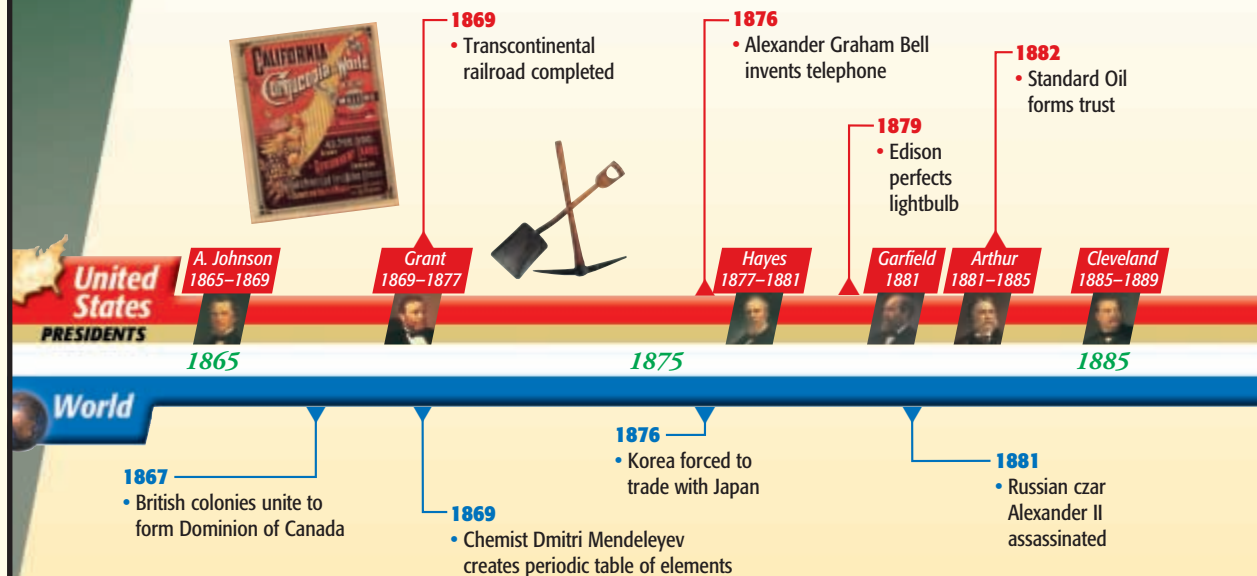
Trends which began in this era can still be seen today.

- Corporations continue to play an important role.
- Technology continues to change American life.
- Unions remain powerful in many industries.



The American Republic Since 1877 Video

The Chapter 9 video, “Building America,” examines industrial expansion in the United States in the late 1800s.



TWO-MINUTE LESSON LAUNCHER

Ask students to imagine that they will be choosing outstanding modern inventions, such as machines, processes, materials, medicinal drugs, and new treatments, to exhibit at a technical fair being held in your community. Have students list the inventions that might be included in such an exhibit. **US:** 25D; **ELA:** Gr9/10/11: 7B

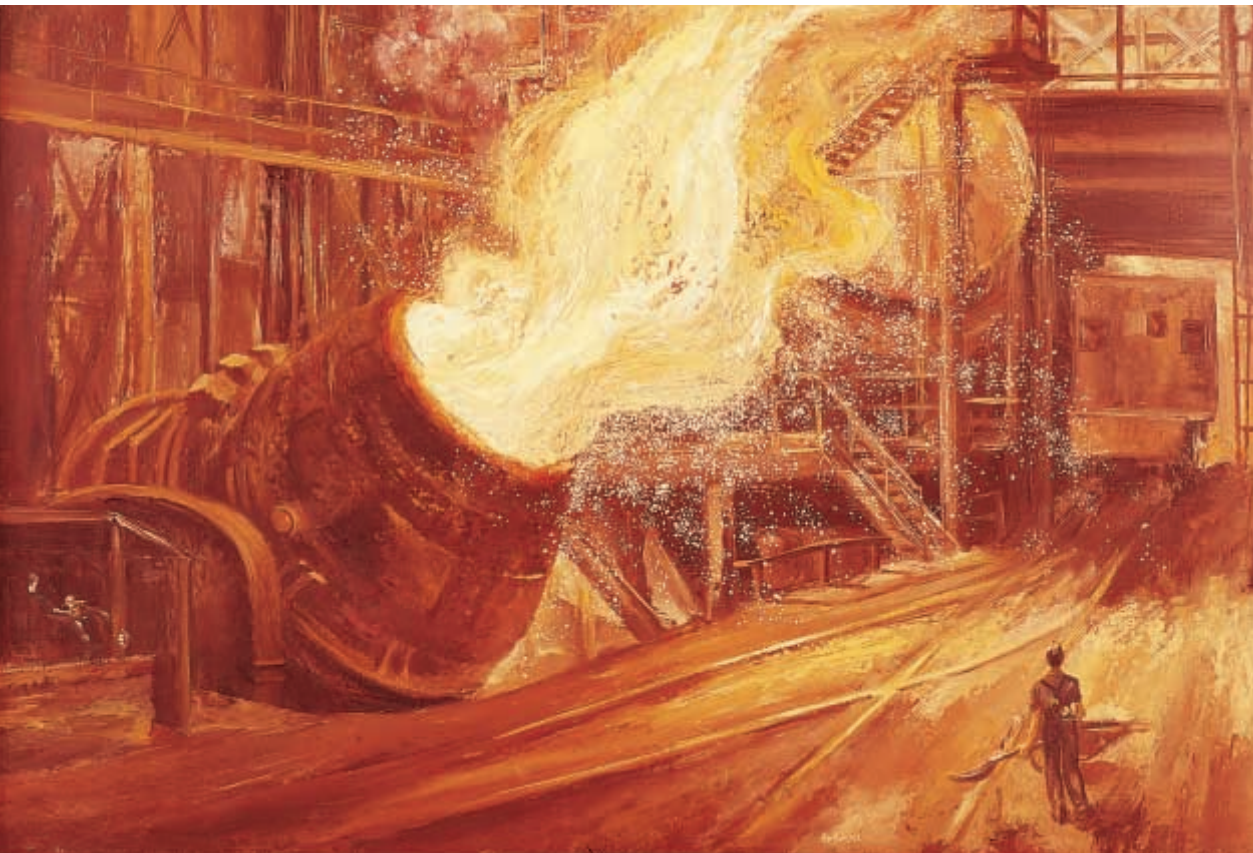
Introducing CHAPTER 9

HISTORY Online

Introduce students to chapter content and key terms by having them access the **Chapter 9 Overview** at tx.tarvol2.glencoe.com.

More About the Art

Aaron Bohrod (1907–1992) was well known during his lifetime as a painter, sculptor, printmaker, ceramist, and illustrator. Many of his paintings exhibit social realism and attention to detail.

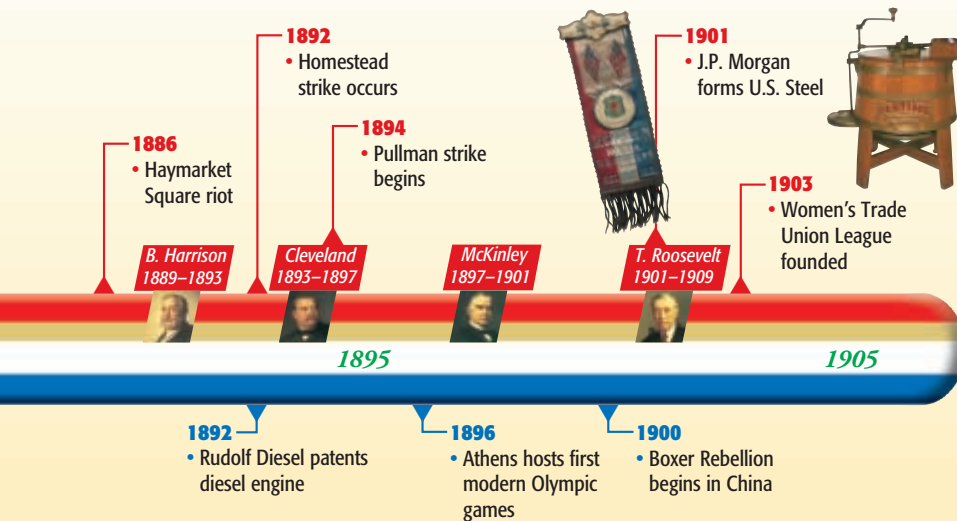


This painting by twentieth-century artist Aaron Bohrod captures the dynamism of an industrializing nation. Bohrod titled his work *The Big Blow: the Bessemer Process*.

TIME LINE

ACTIVITY

Have students write a paragraph about how the events listed on the time line have affected their lives within the last year. Invite students to share their experiences with the class. **US: 25D;**
ELA: Gr9/10/11: 1A



HISTORY Online

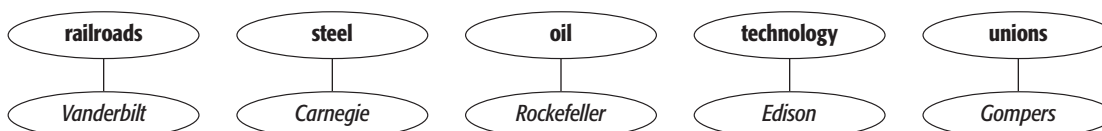
Chapter Overview

Visit the *American Republic Since 1877* Web site at tx.tarvol2.glencoe.com and click on **Chapter Overviews—Chapter 9** to preview chapter information.

GRAPHIC ORGANIZER ACTIVITY

Organizing Information Have students use a graphic organizer similar to the one shown below to link these areas of industrialization to key names in this chapter. **US: 25D**

Industrialization



CHAPTER 9

Section 1, 308–312

1 FOCUS

Section Overview

This section focuses on how American industry grew and brought changes to society.

BELLINGER Skillbuilder Activity

Project transparency and have students answer the question.

Available as a blackline master.

Daily Focus Skills Transparency 9-1

Unit 5 **Chapter 9** **DAILY FOCUS SKILLS TRANSPARENCY 9-1**

Interpreting a Circle Graph

IMMIGRANTS TO THE UNITED STATES, 1870-1910

Directions: Answer the following question based on the graph.

Between 1870 and 1910, approximately 20 million immigrants arrived in the United States. Which decade had the largest number of immigrants?

A 1870s
B 1880s
C 1890s
D 1900s

Guide to Reading

Answers to Graphic: abundance of raw materials, oil production, population increase, free enterprise system, large free trade area, new inventions

Preteaching Vocabulary

Have students scan the section and write a sentence using each of the Key Terms and Names in context.

US: 25A; **ELA:** Gr9/10/11: 6A

SECTION 1 The Rise of Industry

Guide to Reading

Main Idea

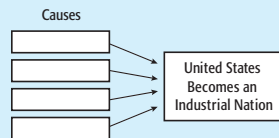
American industry grew rapidly after the Civil War, bringing revolutionary changes to American society.

Key Terms and Names

gross national product, Edwin Drake, laissez-faire, entrepreneur, Morrill Tariff, Alexander Graham Bell, Thomas Alva Edison

1 Reading Strategy

Organizing As you read about the changes brought about by industrialization, complete a graphic organizer similar to the one below listing the causes of industrialization.



Reading Objectives

- Identify the effects of expanding population on industry.
- Explain the effects of technological innovations such as the telephone and telegraph on American development.

Section Theme

Economic Factors The free enterprise system nurtured the growth of American industry.

Preview of Events



★ An American Story ★



Thomas Edison

On October 21, 1879, Thomas Alva Edison and his team of workers were too excited to sleep. For weeks they had worked to create an electric incandescent lamp, or lightbulb, that would burn for more than a few minutes. For much of the 1800s, inventors had struggled to develop a form of lighting that would be cheaper, safer, and brighter than traditional methods such as candles, whale oil, kerosene, and gas. If Edison and his team could do it, they would change the world. Finally, after weeks of dedicated effort, they turned night into day. Edison later recalled:

“We sat and looked and the lamp continued to burn and the longer it burned the more fascinated we were. None of us could go to bed and there was no sleep for over 40 hours; we sat and just watched it with anxiety growing into elation. It lasted about 45 hours and then I said, ‘If it will burn 40 hours now I know I can make it burn a hundred.’”

—quoted in *Eyewitness to America*

The United States Industrializes

Although the Industrial Revolution began in the United States in the early 1800s, the nation was still largely a farming country when the Civil War erupted. Out of a population of more than 30 million, only 1.3 million Americans worked in industry in 1860. After the Civil War, industry rapidly expanded, and millions of Americans left their farms to work in mines and factories.

By the early 1900s, Americans had transformed the United States into the world’s leading industrial nation. By 1914 the nation’s **gross national product** (GNP)—the total

SECTION RESOURCES

Reproducible Masters

- Reproducible Lesson Plan 9–1
- Daily Lecture and Discussion Notes 9–1
- Guided Reading Activity 9–1
- Section Quiz 9–1
- Reading Essentials and Study Guide 9–1

Transparencies

- Daily Focus Skills Transparency 9–1

Multimedia

- Interactive Tutor Self-Assessment CD-ROM
- ExamView® Pro Testmaker CD-ROM
- Presentation Plus! CD-ROM
- TeacherWorks™ CD-ROM
- Audio Program
- ABCNews Interactive™ Historic America Electronic Field Trips

Student Edition TEKS

ELA: Page 308: Gr9/10/11: 4D, 6A, 7D, 7F, 8B; Page 309: Gr9/10/11: 10B, 19B, 20B

value of all goods and services produced by a country—was eight times greater than it had been when the Civil War ended.

Natural Resources An abundance of raw materials was one reason for the nation's industrial success. The United States contained vast natural resources upon which industry in the 1800s depended, including water, timber, coal, iron, and copper. The presence of these resources meant that American companies could obtain them cheaply and did not have to import them from other countries. Many of the nation's resources were located in the mountains of the American West. The settlement of this region after the Civil War helped to accelerate industrialization, as did the construction of the transcontinental railroad.

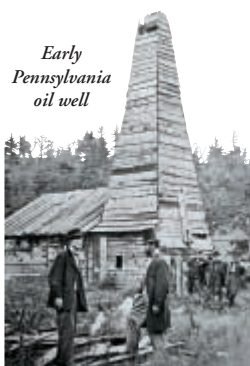
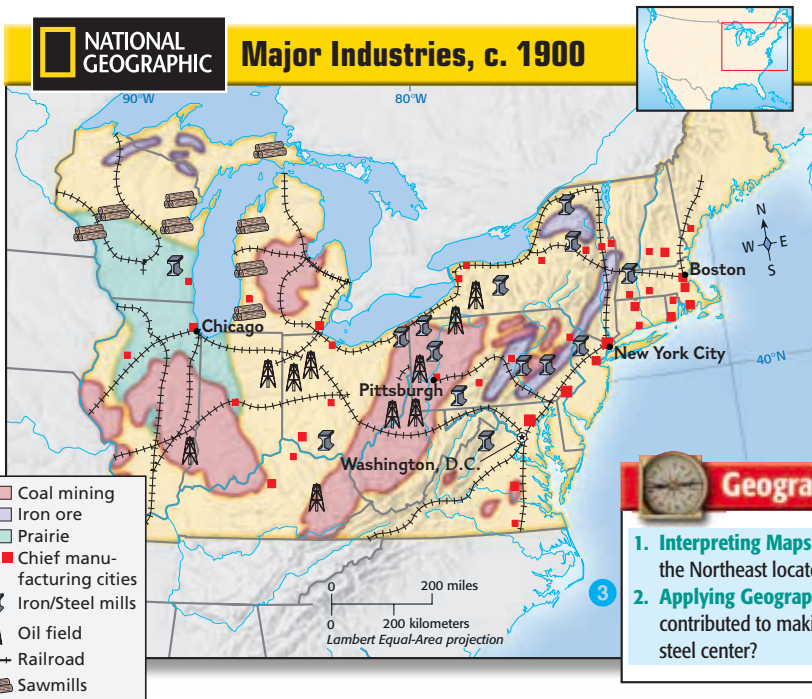
At the same time, a new resource, petroleum, began to be exploited. Even before the invention of the automobile, petroleum was in high demand because it could be turned into kerosene. Kerosene was used in lanterns and stoves. The American oil industry was built on the demand for kerosene. It began in western Pennsylvania, where residents had long noticed oil bubbling to the surface of area springs and streams. In 1859 Edwin Drake drilled

the first oil well near Titusville, Pennsylvania. By 1900 oil fields from Pennsylvania to Texas had been opened. As oil production rose, it fueled economic expansion.

A Large Workforce The human resources available to American industry were as important as natural resources in enabling the nation to industrialize rapidly. Between 1860 and 1910, the population of the United States almost tripled. This population provided industry with a large workforce and also created greater demand for the consumer goods that factories produced.

Population growth stemmed from two causes—large families and a flood of immigrants. American industry began to grow at a time when social and economic conditions in China and eastern Europe convinced many people to leave their nations and move to the United States in search of a better life. Between 1870 and 1910, roughly 20 million immigrants arrived in the United States. These multitudes added to the growing industrial workforce, helping factories increase their production and furthering demand for industrial products.

Reading Check Explaining How did oil production affect the American economy?



Geography Skills

- Interpreting Maps** Where were most industrial cities in the Northeast located?
- Applying Geography Skills** What natural resources contributed to making Pittsburgh, Pennsylvania, a major steel center?

2 TEACH

Daily Lecture and Discussion Notes 9-1

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Daily Lecture and Discussion Notes
Chapter 9, Section 1

Did You Know? Alexander Graham Bell taught deaf children. He once told his family that he preferred to be remembered as a teacher rather than as the inventor of the telephone. Bell's father, Alexander Melville Bell, taught deaf-mutes to speak and wrote text-books on correct speech. As a boy, Alexander Graham Bell and his brothers helped their father in public demonstrations of Visible Speech, a code of symbols that indicated what position of the throat, tongue, and lips were used in making sounds.

- The United States Industrializes** (pages 308–309)
A. With the end of the Civil War, American industry expanded and millions of people left



Geography Skills

Answers:

- on rail lines
- iron ore and coal

Geography Skills Practice

Ask: Which states had sawmills?
(Michigan and Wisconsin)



Reading Check

Answer: fueled economic expansion

Writing a Magazine Article

Have students write a magazine article about one of the new inventions mentioned in this section. Instruct students to write the article as it might have appeared at the time the invention was introduced. **L1 US: 22B, 22C, 24A–D, 25A–D; ELA: Gr9/10/11: 1A, 1B**

Use the rubric for creating a magazine, newspaper, Web site article, or help wanted ad on pages 75–76 in the *Performance Assessment Activities and Rubrics*.



Student Edition TEKS

US HISTORY: Page 308: 1B, 2B, 22A, 24B, 24H, 25A, 25C; Page 309: 2B, 8B, 11A, 22A

COOPERATIVE LEARNING ACTIVITY

Starting a Business Organize students into groups of four. The groups will be entrepreneurs in the industrial climate of the late 1800s. Have each group decide what product or service it wants to provide. Assign to each student in the group one of the following research topics: what human and mineral resources they will use in their business, which of the newest scientific methods and inventions they plan to use, how they want to ship their product or sell their services, and what public policies and private investment practices they plan to follow. Have the group as a whole review and revise one another's work. **US: 8B, 14D, 22C, 24A–D, 26B; ELA: Gr9/10/11: 13B, 13C**

Use the rubric for a cooperative group management plan on pages 71–72 in the *Performance Assessment Activities and Rubrics*.

CHAPTER 9

Section 1, 308–312

Guided Reading Activity 9-1

Name _____ Date _____ Class _____

Guided Reading Activity 9-1

DIRECTIONS: Recording Who, What, Where, Why, and How Read the section and answer the questions below. Refer to your textbook to write the answers.

1. By when had Americans transformed the United States into the world's leading industrial nation?
2. How did the American gross national product (GNP) change between the end of the Civil War and 1914?
3. How did the railroads help the nation develop?
4. Upon what was the American oil industry built?
5. How did the population increase between 1860 and 1910 help develop the nation's industrial?
6. How many immigrants arrived in the United States between 1870 and 1910?

Reading Check

Answer: Laissez-faire relies on supply and demand rather than the government to regulate prices and wages.

Creating a Time Line Have students research one of the inventions featured on the time line that appears on pages 310 and 311. Instruct students to create a time line for significant events related to the chosen invention. For example, a time line for the telephone might include the dates for the invention of the telephone keypad, the cordless telephone, and the cell phone. Encourage students to use library and Internet resources for this project. **L2 US: 1B, 22A, 24A–D, 25C, 25D; ELA: Gr9/10/11: 4A–D, 4F, 13B, 13C; Gr9: 7D–I; Gr10/11: 7D–H**

Use the rubric for creating a map, display, or chart on pages 65–66 in the *Performance Assessment Activities and Rubrics*.

American Inventions

1850

1852
Elisha Otis,
elevator brake



1865
Thaddeus Lowe,
ice machine

1865

1864
George Pullman,
rail sleeping car

1876
Alexander Graham
Bell, telephone



1874
Stephen Dudley Field,
electric streetcar



Free Enterprise

Another important factor that enabled the United States to industrialize rapidly was the free enterprise system. In the late 1800s, many Americans embraced the idea of **laissez-faire** (leh-say-FAR), literally “let do,” a French phrase meaning “let people do as they choose.” Supporters of laissez-faire believe the government should not interfere in the economy other than to protect private property rights and maintain peace. These supporters argue that if the government regulates the economy, it increases costs and eventually hurts society more than it helps.

Laissez-faire relies on supply and demand rather than the government to regulate prices and wages. Supporters claim that a free market with competing companies leads to greater efficiency and creates more wealth for everyone. Laissez-faire advocates also support low taxes to ensure that private individuals, not the government, will make most of the decisions about how the nation’s wealth is spent. They also believe that the government’s debt should be kept limited since money the government borrows from banks is not available to be loaned to individuals for their own uses.

In the United States, the profit motive attracted people of high ability and ambition into business. American **entrepreneurs**—people who risk their capital in organizing and running a business—appreciated the challenges and rewards of building a business and making profits for themselves.

In the late 1800s, the prospect of making money in manufacturing and transportation attracted many entrepreneurs. The savings that New Englanders accumulated through trade, fishing, whaling, textile mills, and shoe manufacturing helped build hundreds

of factories and thousands of miles of railroad track. An equally important source of private capital was Europe, especially Great Britain. Foreign investors saw more opportunity for profit and growth in the United States than at home, and their money also helped to fund the nation’s industrial buildup.

Reading Check Explaining What does it mean when a government has a laissez-faire economic policy?

Government’s Role in Industrialism

In many respects, the United States practiced laissez-faire economics in the late 1800s. State and federal governments kept taxes and spending low and did not impose costly regulations on industry. Nor did they try to control wages and prices. In other ways, the government went beyond laissez-faire and adopted policies intended to help industry, although these policies frequently produced results other than what had been intended.

Since the early 1800s, the struggle between the northeastern states and the southern states had shaped the economic debate in the United States. Northern leaders wanted high tariffs to protect American industry from foreign competition. They also sought federal subsidies for companies building roads, canals, and railroads to the west. Southern leaders opposed subsidizing internal improvements, and they favored low tariffs to promote trade and to keep the cost of imported manufactured goods low.

The Civil War ended this debate. When the South seceded, the Republicans were left in control of Congress. They quickly passed the **Morrill Tariff**,

MEETING SPECIAL NEEDS

Interpersonal Have each student list the electrical equipment he or she uses during a typical week. Then ask students to identify two adults, one between 40 and 50 years old, and a second between 60 and 70 years old. Have the adults check off the electrical appliances they used as teenagers. Have students discuss what the lists reflect about the recent explosion of inventions. **L1**

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

Student Edition TEKS

ELA: Page 310: Gr9/10/11: 6A, 8B, 10B; **Page 311:** Gr9/10/11: 10B

3 ASSESS

Assign Section 1 Assessment as homework or as an in-class activity. **US:** 25D; **ELA:** Gr9: 7I; Gr10/11: 7H

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

Reading Essentials and Study Guide 9–1

Name _____ Date _____ Class _____

Study Guide
Chapter 9, Section 1
For use with textbook pages 308–312

THE RISE OF INDUSTRY

KEY TERMS AND NAMES

gross national product: the total value of all goods and services produced by a country (page 308)
Edwin Drake: drilled first oil well in Pennsylvania in 1859 (page 309)
laissez-faire: belief that government should not interfere in a nation's economy (page 310)
entrepreneurs: people who risk their capital in organizing and running a business (page 310)
Morrill Tariff: a tariff passed by the Republican Congress after the Civil War (page 310)
Alexander Graham Bell: inventor of the telephone (page 311)
Thomas Alva Edison: inventor of many devices, including the phonograph and the light bulb (page 312)

Section Quiz 9–1

Name _____ Date _____ Class _____

Chapter 9 Score _____

Section Quiz 9–1

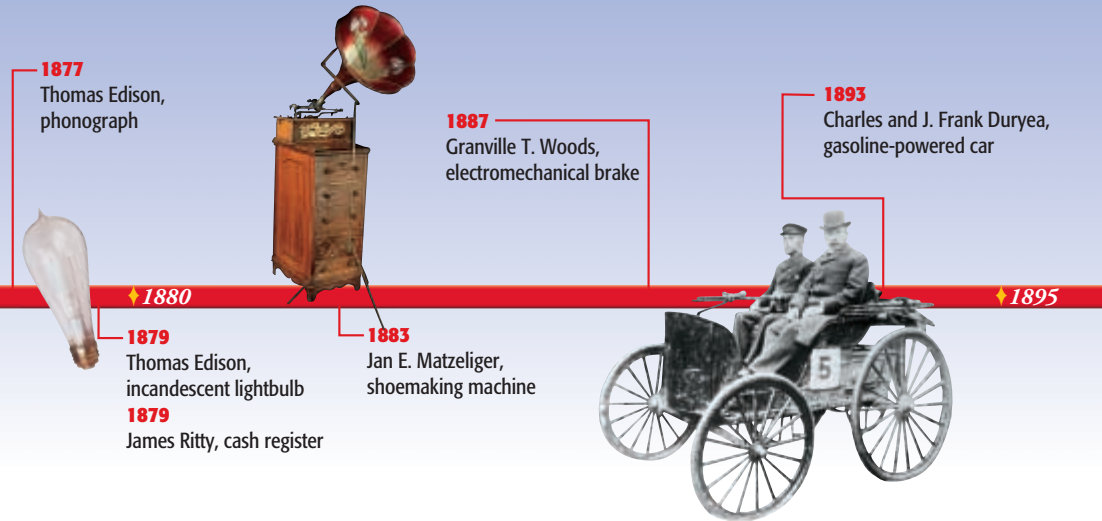
DIRECTIONS: Matching Match each item in Column A with the items in Column B. Write the correct letters in the blanks. (12 points each)

Column A	Column B
1. people who risk their capital in organizing and running a business	A. Morrill Tariff
2. the total value of all goods and services produced by a country	B. laissez-faire
3. act that reversed years of declining tariffs	C. gross national product
4. "let do," a French phrase meaning "let people do as they choose"	D. petroleum
5. resource that could be turned into kerosene	E. entrepreneurs

DIRECTIONS: Multiple Choice In the blank at the left, write the letter of the choice that

Reading Check

Answer: Students' answers will vary. Students might mention that while higher tariffs hurt consumers, they spurred industrialization.



reversing years of declining tariffs. By the end of the Civil War, tariffs had risen sharply. Congress also gave vast tracts of western land and millions of dollars in loans to western railroads. The government also sold public lands with mineral resources for much less than their market value. Historians still dispute whether these policies helped to industrialize the country.

Supporters of laissez-faire generally favor free trade and oppose subsidies, believing that tariffs and subsidies drive up prices and protect inefficient companies. They point out that one reason the United States industrialized so rapidly in the 1800s was because it was one of the largest free trade areas in the world. Unlike Europe, which was divided into dozens of states, each with tariffs, the entire United States was open to trade. The Constitution bans states from imposing tariffs, and there were few federal regulations to impede the movement of goods across the country. Similarly, the United States practiced free trade in labor, placing very few restrictions on immigration.

High tariffs, however, contradicted laissez-faire ideas and hurt many Americans. When the United States raised tariffs against foreign goods, other countries raised their tariffs against American goods. This hurt American companies trying to sell goods overseas, and in particular, it hurt farmers who sold their products to Europe. Ironically, the problems farmers faced may have helped speed up industrialization, as many rural Americans decided to leave their farms and take jobs in the new factories.

Despite the problems tariffs created for trade, many business leaders and members of Congress believed they were necessary. Much of Western Europe had already industrialized, and few believed

that the new American industries could compete with the large established European factories unless tariffs were put in place to protect them. By the early 1900s, many American industries were large and highly competitive. Business leaders increasingly began to push for free trade because they believed they could compete internationally and win.

Reading Check Analyzing Do you think government policies at this time helped or hindered industrialization? Why?

New Inventions

A flood of important inventions helped increase the nation's productive capacity and improved the network of transportation and communications that was vital to the nation's industrial growth. New inventions led to the founding of new corporations, which produced new wealth and new jobs.

TECHNOLOGY

Bell and the Telephone One of the most dramatic inventions in the late 1800s came in the field of communications. In 1874 a young Scottish-American inventor named **Alexander Graham Bell** suggested the idea of a telephone to his assistant, Thomas Watson. Watson recalled, "He had an idea by which he believed it would be possible to talk by telegraph." Bell intended to make an electrical current of varying intensity transmit sound.

Bell worked until 1876 before he succeeded in transmitting his voice. Picking up the crude telephone, he called to the next room, "Come here, Watson, I want you." Watson heard and came. The telephone

INTERDISCIPLINARY CONNECTIONS ACTIVITY

Science Invite a science teacher or a representative of a telephone company to demonstrate the science behind the invention of the telephone and discuss the science involved in cellular communications. Encourage students to ask questions. After the presentation, discuss how the standard telephone and cellular telephone have changed the way people communicate with one another. List the advantages and disadvantages of telephone communications. **L2 US:** 22A; **ELA:** Gr9/10/11: 4A–D; Gr9/10: 16E; Gr11: 15E

Student Edition TEKS

US HISTORY: Page 310: 1B, 2B, 22A, 25A; Page 311: 1B, 2B, 22A, 24B

CHAPTER 9

Section 1, 308–312



VIDEOCASSETTE
Historic America Electronic Field Trips

View Tape 2, Chapter 5: "Thomas Edison's Lab."

Reteach

Have students identify the effects of expanding population on industry. **US:** 8B, 14D, 24B

Enrich

Have interested students write a report on the various uses of petroleum, including kerosene, diesel fuel, and gasoline. **US:** 22A, 24A–D, 25A–D; **ELA:** Gr9/10/11: 1A, 1B, 4A–D, 4F, 13B, 13C; Gr9: 7D–H; Gr10/11: 7D–G

Reading Check

Answer: revolutionized business by opening up entirely new markets for inventions and goods to sell

4 CLOSE

Have students explain the effects of technological innovations such as the telephone and telegraph on American industrial development. **US:** 22A, 23A; **ELA:** Gr9/10: 16E; Gr11: 15E

Social Studies TAKS tested at Grades 10/11: 1 Obj 3: US22A(11), US22C(11) 2 Obj 3: WG18A(10), US22A(11) 3 Obj 5: WH25C(10), US24B(11)

1 revolutionized both business and personal communication. In 1877 Bell and others organized the Bell Telephone Company, which eventually became the American Telephone and Telegraph Company (AT&T).

Edison and Electricity Perhaps the most famous inventor of the late 1800s was **Thomas Alva Edison**. A great innovator, Edison worked tirelessly to invent new products and to improve devices created by others. His laboratory at Menlo Park, New Jersey, staffed by skilled assistants, became the forerunner of the modern research laboratory. Edison stood as a symbol for the emerging age of technology.

2 Edison first achieved international fame in 1877 with the invention of the phonograph. Two years later, Edison perfected the lightbulb and the electric generator. His laboratory then went on to invent or improve several other major devices, including the battery, the dictaphone, the mimeograph (an early copying machine), and the motion picture.

1 In 1882 the Edison Electric Illuminating Company launched a new industry and began the transformation of American society when it began to supply electric power to customers in New York City. In 1889 several of Edison's companies merged to form the Edison General Electric Company, which today is known as GE.

Technology's Impact As knowledge about technology grew, almost everyone in the United States felt its effects. Shortly after the Civil War, Thaddeus Lowe invented the ice machine, the basis of the refrigerator.

In the early 1870s, Gustavus Swift hired an engineer to develop a refrigerated railroad car. In 1877 Swift shipped the first refrigerated load of fresh meat. The widespread use of refrigeration allowed food to be kept fresh longer and reduced the risk of disease from food poisoning.

The textile industry had long depended on machines to turn fibers into cloth. By the mid-1800s, the introduction of the Northrop automatic loom allowed cloth to be made at an even faster rate. Bobbins, which previously had been changed by hand, were now changed automatically without stopping the loom.

Great changes also took place in the clothing industry. Standard sizes, developed from measurements taken of Union soldiers during the Civil War, were used in the manufacture of ready-made clothes. Power-driven sewing machines and cloth cutters rapidly moved the clothing business from small tailor shops to large factories.

Similar changes took place in shoemaking. New processes and inventions made increased production possible in the shoe industry. Large factories could mass-produce shoes more cheaply and efficiently than local cobblers and could pass these savings on to their customers in the form of lower prices. By 1900 local cobblers had nearly disappeared. Prices of many other products also dropped as the United States industrialized.

Reading Check **Explaining** How did the use of electric power affect the economic development of the United States?

TAKS Practice

SECTION 1 ASSESSMENT

Checking for Understanding

- Define:** gross national product, laissez-faire, entrepreneur.
- Identify:** Edwin Drake, Morrill Tariff, Alexander Graham Bell, Thomas Alva Edison.
- Explain** how an abundance of natural resources contributed to economic growth in the United States in the late 1800s.

Reviewing Themes

- Economic Factors** How did the principles of the free enterprise system, laissez-faire, and profit motive encourage the rise of industry?

Critical Thinking

- Synthesizing** What role did the federal government play in increasing industrialization in the United States after the Civil War?
- Organizing** Use a graphic organizer similar to the one below to indicate how the inventions listed affected the nature of American work and business.

Invention	Effects
telephone	
lightbulb	
automatic loom	

Analyzing Visuals

- Applying Time Lines** Copy the time line on pages 310 and 311 onto a separate sheet of paper. Add other inventions you have learned about to the time line in proper chronological order. Be sure to include the date for each invention.

Writing About History

- Descriptive Writing** Imagine you are a young person living in this country in the late 1800s. Choose one of the inventions discussed in the section, and write a journal entry describing its impact on your life. Use standard grammar, spelling, sentence structure, and punctuation.

SECTION 1 ASSESSMENT ANSWERS

- Terms are in blue. **US:** 25A
- Edwin Drake (p. 309), Morrill Tariff (p. 310), Alexander Graham Bell (p. 311), Thomas Alva Edison (p. 312)
- Americans did not have to import resources from other countries, saving resources for internal growth.
- They put development in the hands of entrepreneurs, not the government. **US:** 2B
- Congress subsidized railroads; sold lands below market value **US:** 2B
- telephone: better communications; lightbulb: cheap lighting; automatic loom: made cloth faster **US:** 22C, 25C
- possible answers: 1859, first oil well dug; 1882, Edison Electric Illuminating Company supplies electric power to New York City; 1877, first refrigerated railroad car; 1893, Northrup automatic loom **US:** 1B, 24B
- Students' journal entries will vary. **US:** 25B, 25D

Student Edition TEKS

ELA: Page 312: Gr9/10/11: 1A, 1B, 4A, 4B, 4D, 4F, 6A, 7B–D, 10A, 10B, 19B, 20B; Gr9: 7I; Gr10/11: 7H;
Page 313: Gr9: 7H; Gr10/11: 7G

Critical Thinking SKILLBUILDER

Making Inferences

Why Learn This Skill?

Just as you are about to leave home to catch your school bus, you hear a radio report. Firefighters are battling a blaze near the bus garage. Your bus is late. Although no one told you, you know that the fire disrupted the bus schedule. You have made an *inference*. From the limited facts available, you formed a conclusion. You knew that the fire was near the garage and that firetrucks often create traffic jams. By combining facts and general knowledge, you inferred that the firetrucks delayed your bus.

Learning the Skill

Learning how to make inferences will help you draw conclusions about particular situations. To make accurate inferences, follow these steps:

1. Read or listen carefully for stated facts and ideas.
2. Review what you already know about the same topic or situation.
3. Use logic and common sense to form a conclusion about the topic.
4. If possible, find information that proves or disproves your inference.

Practicing the Skill

Read the following passage about George Eastman, and then answer the questions that follow.

George Eastman had to quit school at the age of 13 to support his mother and two older sisters. He worked as an office boy and later as the bookkeeper for a bank.

An eager amateur photographer, Eastman disliked the complicated process of working with wet photographic plates. After resigning from his bank job in 1881, Eastman began a company, Kodak, where he manufactured dry photographic plates.

Eastman also pioneered new employer-employee relations within his company. He gave one-third of the company profits to Kodak employees in the form of wage dividends, stock options, savings and loans plans, and pension and benefit programs. Eastman later donated much of his vast wealth to charity.



Early camera

1. What facts are stated about Eastman's early life?
2. Using this information, what inference can you make about Eastman's childhood?
3. What facts are stated about Eastman's treatment of his employees?
4. Based on this information, what inferences can you make about Eastman's attitude toward his employees?

Skills Assessment

Complete the Practicing Skills questions on page 333 and the Chapter 9 Skill Reinforcement Activity to assess your mastery of this skill.

Applying the Skill

Making Inferences Preview the biography of Mary Harris "Mother" Jones on page 328, and then answer these questions.

1. What kind of work did Jones's husband do before he died?
2. Using this information, what inference can you make about Mary Jones?
3. How did Jones travel to West Virginia while working as an organizer for the United Mine Workers? How old was she at the time?
4. Based on these facts, what inference can you make about how the people in the mining camps felt about Jones?



Glencoe's **Skillbuilder Interactive Workbook CD-ROM, Level 2**, provides instruction and practice in key social studies skills.

TEACH

Making Inferences Point out to students that we make inferences daily. Their accuracy is based on previous knowledge and experiences, fact-gathering, and using logic.

Read students an encyclopedia entry on Thomas Alva Edison. Have students list the facts in the article. Then ask them to make inferences about Edison's life and the company he founded.

US: 24A, 24B; **ELA:** Gr9/10/11: 4C, 13B; Gr9: 7H; Gr10/11: 7G

Additional Practice

Reinforcing Skills Activity 9

Name _____ Date _____ Class _____

Reinforcing Skills Activity 9

Making Inferences

LEARNING THE SKILL

When you make inferences, you "read between the lines," or draw conclusions that are not stated directly. To help draw inferences, first read carefully for stated facts and ideas. Summarize the information and list the important facts. Then apply related information that you may already know to make inferences. Use your knowledge and insight to develop some conclusions about the facts.

PRACTICING THE SKILL

DIRECTIONS: The excerpt below is taken from a personal memo written by Andrew Carnegie in 1868. Read the excerpt, and then answer the questions below in the space provided.

Men must have an idyl—the amount of wealth is one of the worst signs of idleness. No idler more odious than the work of money. Whoever engages in it must push necessarily there. You should like to work to choose the life of the most worthy in the world.

GLENCOE TECHNOLOGY



CD-ROM

Glencoe Skillbuilder Interactive Workbook CD-ROM, Level 2

This interactive CD-ROM reinforces student mastery of essential social studies skills.

ANSWERS TO PRACTICING THE SKILL

1. He quit school at 13 to support his mother and sisters; worked as an office boy and later as a bookkeeper.
2. His childhood was more like adult life than childhood.
3. He gave one-third of company profits to employees.
4. He appreciated their contributions.

Applying the Skill

1. He was a union organizer.
2. His work inspired hers.
3. She traveled on foot or atop a farm wagon. She was 67 years old.
4. Students' answers will vary.



Student Edition TEKS

US HISTORY: Page 312: 1B, 2B, 22A, 22C, 24B, 25A–D; Page 313: 19A, 24A, 24B

CHAPTER 9

Section 2, 314–318

SECTION 2 The Railroads

1 FOCUS

Section Overview

This section focuses on how the growth of railroads affected the growth of industries.

BELLRINGER Skillbuilder Activity

Project transparency and have students answer the question.

Available as a blackline master.

Daily Focus Skills Transparency 9–2

Unit 5 Chapter 9 DAILY FOCUS SKILLS TRANSPARENCY 9-2

Interpreting Diagrams

LOCAL TIME (PRIOR TO TIME ZONES)

Directions: Answer the following question based on the diagram.

Before the 1880s, each community set its clocks by the sun's position at high noon. Local time interfered with train scheduling, however, so the American Railway Association divided the country into four time zones in 1883. Before time zones were set, if the travel time from Chicago to St. Paul was five hours, and a train left Chicago at 12:00 p.m., when would it arrive in St. Paul?

F 5:00 p.m.
G 6:45 p.m.
H 5:45 p.m.
J 5:15 p.m.

Guide to Reading

Answers to Graphic: development of time zones, sped long-distance transportation, longer and heavier trains used, rate per mile declined, united America's regions, promoted a national market

Preteaching Vocabulary

Have students write short sentences to describe each of the Key Names.

US: 25A; ELA: Gr9/10/11: 6A

Student Edition TEKS

ELA: Page 314: Gr9/10/11: 4D, 6A, 7D, 7F; Page 315: Gr9/10/11: 8B, 19B, 20B

Guide to Reading

Main Idea

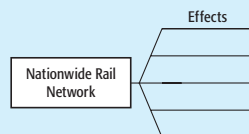
After the Civil War, the rapid construction of railroads accelerated the nation's industrialization and linked the country together.

Key Terms and Names

Pacific Railway Act, Grenville Dodge, Leland Stanford, Cornelius Vanderbilt, time zone, land grant, Jay Gould, Crédit Mobilier, James J. Hill

1 Reading Strategy

Organizing As you read about the development of a nationwide rail network, complete a graphic organizer similar to the one below listing the effects of this rail network on the nation.



Reading Objectives

- Discuss ways in which the railroads spurred industrial growth.
- Analyze how the railroads were financed and how they grew.

Section Theme

Individual Action The railroads provided new ways for some Americans to amass wealth.

Preview of Events



★ An American Story ★

At Promontory Summit, Utah, on May 10, 1869, hundreds of spectators gathered to watch a historic event. Dignitaries from the East and the West met to hammer gold and silver spikes into the final rails that would join two great railroad lines—the Union Pacific and Central Pacific—and span the entire country.

Telegraph offices around the country stood ready to receive news that the last spike had been driven. When the news arrived, bells pealed across the nation, and even the Liberty Bell was rung. In Chicago a seven-mile procession paraded through the streets, and the pealings of church bells resonated throughout the nation's small towns. General Grenville Dodge, who had overseen part of the construction, observed:



Grenville Dodge

“The trains pulled up facing each other, each crowded with workmen who sought advantageous positions to witness the ceremonies. . . . The officers and invited guests formed on each side of the track. . . . Prayer was offered; a number of spikes were driven in the two adjoining rails . . . and thus the two roads were welded into one great trunk line from the Atlantic to the Pacific.”

—quoted in *Mine Eyes Have Seen*

Linking the Nation

In 1865 the United States had about 35,000 miles of railroad track, almost all of it east of the Mississippi River. After the Civil War, railroad construction expanded dramatically, linking the distant regions of the nation in a transportation network. By 1900 the United States, now a booming industrial power, boasted over 200,000 miles of track.

SECTION RESOURCES

Reproducible Masters

- Reproducible Lesson Plan 9–2
- Daily Lecture and Discussion Notes 9–2
- Guided Reading Activity 9–2
- Section Quiz 9–2
- Reading Essentials and Study Guide 9–2
- Performance Assessment Activities and Rubrics

Transparencies

- Daily Focus Skills Transparency 9–2

Multimedia

- Interactive Tutor Self-Assessment CD-ROM
- ExamView® Pro Testmaker CD-ROM
- Presentation Plus! CD-ROM
- TeacherWorks™ CD-ROM
- Audio Program

2 TEACH

Daily Lecture and Discussion Notes 9–2

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Daily Lecture and Discussion Notes
Chapter 9, Section 2

Did You Know? Working conditions for railroad laborers were very harsh. In 1866 about 5,000 Chinese railroad workers went on strike. They demanded higher wages and a shorter workday. The railroad company surrounded the Chinese workers on strike with strikebreakers and starved them, forcing most of them to return to work.

L. Linking the Nation (pages 314–316)
A. After the Civil War, railroad construction dramatically expanded. In 1862 President Abraham Lincoln signed the Pacific Railway Act, which provided for the construction of a transcontinental railroad by the Union Pacific and Central Pacific railroad companies.

1 The railroad boom began in 1862 when President Abraham Lincoln signed the **Pacific Railway Act**. This act provided for the construction of a transcontinental railroad by two corporations, the Union Pacific and the Central Pacific railroad companies. To encourage rapid construction, the government offered each company land along its right-of-way. Fervish competition between the two companies developed, as each sought to obtain as much public land and money as possible.

1 **The Union Pacific and Grenville Dodge** Under the direction of engineer **Grenville Dodge**, a former Union general, the Union Pacific began pushing westward from Omaha, Nebraska, in 1865.

The laborers faced blizzards in the mountains, scorching heat in the desert, and sometimes angry Native Americans. Labor, money, and engineering problems plagued the supervisors of the project. As Dodge observed:

“At one time we were using at least ten thousand animals, and most of the time from eight to ten thousand laborers. . . . To supply one mile of track with material and supplies required about forty cars. . . . Everything—rails, ties, bridging, fastenings, all

railway supplies, fuel for locomotives and trains, and supplies for men and animals on the entire work—had to be transported from the Missouri River.”

—quoted in *The Growth of the American Republic*

The railroad workers included Civil War veterans, new immigrants from Ireland recruited especially for the task, frustrated miners and farmers, cooks, adventurers, and ex-convicts. At the height of the project, the Union Pacific employed about 10,000 workers. While most of the laborers camped along the line, about one-fourth of them slept three-deep in bunk beds on rolling boarding cars. Camp life was rough, dirty, and dangerous, with lots of gambling, hard drinking, and fighting.

1 **The Big Four and the Central Pacific** The Central Pacific Railroad began as the dream of engineer Theodore Dehone Judah, who convinced the California legislature to organize a state railroad convention to support his idea. He sold stock in his fledgling Central Pacific Railroad Company to four Sacramento merchants: grocer Leland Stanford, shop owner Charley Crocker, and hardware store owners Mark Hopkins and Collis P. Huntington.

These so-called “Big Four” eventually made huge fortunes from their investment. **Leland Stanford**

Picturing History

Engineering Victory The Union Pacific and Central Pacific were joined near Ogden, Utah. The last spike driven was made of gold. It was quickly removed and kept as a symbol. **What did the event mean for the nation’s commerce?**



COOPERATIVE LEARNING ACTIVITY

Creating a Display Organize students into small groups. Assign each group one the following topics: the development of the steam locomotive in the United States, the use of custom Pullman cars, or the architecture of railroad terminals. Have each group research its topic and prepare a display based on the research. **US:** 8A, 24A–D, 25A–D, 26A; **ELA:** Gr9/10/11: 4A–D, 4F, 13B, 13C; Gr9: 7D–H; Gr10/11: 7D–G

Use the rubric for a cooperative group management plan on pages 71–72 in the *Performance Assessment Activities and Rubrics*.

Picturing History

Answer: The country now had the means to ship raw materials and finished goods coast to coast.

Ask: **Who do you think the men who are shaking hands are?** (representatives of the Union Pacific and the Central Pacific railroads)

Creating a Thematic Map Tell students that before railroads stretched across the country, communities determined their own times. Have students discuss why railroads needed to standardize times. Then have students create a time zone map of the continental United States and Canada that could be posted in a train depot. **L1 US:** 8A, 8B, 24B; **ELA:** Gr9/10: 16E; Gr11: 15E

Use the rubric for creating a map, display, or chart on pages 65–66 in the *Performance Assessment Activities and Rubrics*.

Student Edition TEKS

US HISTORY: Page 314: 1B, 2B, 22A, 24B, 25A, 25C; Page 315: 2B, 20A, 22A

CHAPTER 9

Section 2, 314–318

Guided Reading Activity 9–2

Name _____ Date _____ Class _____

★ Guided Reading Activity 9–2

DIRECTIONS: Identifying Supporting Details Read each main idea. Use your textbook to supply the details that support or explain each main idea.

■ **Main Idea:** After the Civil War, railroad construction expanded dramatically, and by 1900 the United States boasted over 200,000 miles of track.

1. **Detail:** The railroad boom began in 1862 when President Lincoln signed the _____.

2. **Detail:** The _____ had four primary investors known as the _____.

3. **Detail:** Because of a _____ in California, the Central Pacific Railroad hired about 10,000 workers from _____.

■ **Main Idea:** The expansion of the railroads spurred America's industrial growth.

4. **Detail:** Railroad companies spent extraordinary amounts of money on _____.

✓ Reading Check

Answer: a shortage of laborers in California

World History Connection

Background: A passenger train traveling the Trans-Siberian route takes eight days to complete the journey from Moscow to Vladivostok.

Answer: Towns would prosper during and after the construction.

Ask: How different do you think the conditions were for workers on the Trans-Siberian line compared to the transcontinental railroad in the United States? (Students' answers will vary. They might mention that weather conditions might have been worse in Siberia.) **US: 24B**

HISTORY Online

Objectives and answers to the student activity can be found in the **Web Activity Lesson Plan** at tx.tarvol2.glencoe.com.

Student Edition TEKS

ELA: Page 316: Gr9/10/11: 6A, 10B; **Page 317:** Gr9/10/11: 6A, 10B, 19B, 20B; Gr9: 7G; Gr10/11: 7F

🇺🇸 **Social Studies TAKS** tested at Grades 10/11: ① Obj 3: US2B(11), US22A(11) ② Obj 5: WH26C(10), US24B(11)

became governor of California and later served as a United States senator after founding Stanford University in 1885.

Because of a shortage of labor in California, the Central Pacific Railroad hired about 10,000 workers from China. All the equipment—rails, cars, locomotives, and machinery—was shipped from the East, either around Cape Horn at the tip of South America or over the Isthmus of Panama in Central America.

✓ **Reading Check** **Examining** Why were many workers on the Central Pacific Railroad recruited from China?

Railroads Spur Growth

1 The transcontinental railroad was the first of many lines that began to crisscross the nation after the Civil War. This expansion spurred American industrial growth. By linking the nation, railroads helped increase the size of markets for many products. Huge consumers themselves, the railroads also stimulated the economy by spending extraordinary amounts of money on steel, coal, timber, and other necessities.

1 **Linking Other Lines** In the early 1800s, most railroads had been built to promote specific cities or to serve local needs. By 1865 hundreds of small

unconnected lines existed. The challenge for eastern capitalists was to create a single rail transportation system from this maze of small companies.

Railroad consolidation proceeded rapidly from 1865 to 1900. Large rail lines took over about 400 small railroads, and by 1890 the Pennsylvania Railroad was a consolidation of 73 smaller companies. Eventually seven

1 giant systems with terminals in major cities and scores of branches reaching into the countryside controlled most rail traffic.

1 One of the most famous and successful railroad consolidators was **Cornelius Vanderbilt**, a former boat captain who had built the largest steamboat fleet in America. By 1869 Vanderbilt had purchased and merged three short New York railroads to form the New York Central, running from New York City to Buffalo. Within four years he had extended his control over lines all the way to Chicago, which enabled him to offer the first direct rail service between New York City and Chicago. In 1871 Vanderbilt began construction of New York's Grand Central terminal.

The Benefits of a National System Before the 1880s each community set its clocks by the sun's position in the sky at high noon. At noon in Chicago, for example, it was 12:50 P.M. in Washington, D.C., 12:09 P.M. in Louisville, Kentucky, and 11:41 A.M. in St. Paul, Minnesota. Local time interfered with train scheduling and at times even threatened passenger safety. When two trains traveled on the same track, collisions could result from scheduling errors caused by variations in time.

To make rail service safer and more reliable, in 1883 the American Railway Association divided the country into four **time zones** in regions where the same time was kept. The federal government ratified this change in 1918.

1 Large integrated railroad systems benefited the nation. They were able to shift cars from one section of the country to another according to seasonal needs and in order to speed long-distance transportation. At the same time, new locomotive technology and the introduction of air brakes enabled railroads to put longer and heavier trains on their lines. The new rail systems, along with more powerful locomotives,

World History Connection



The Trans-Siberian Railroad

🇺🇸 **TAKS Practice**

2 Nearly 50 years after Americans completed their transcontinental railroad, the Russians hammered the final spike into their own cross-country rail line. Begun in 1891 and completed in 1916, the Trans-Siberian Railroad was the longest in the world, running nearly 5,800 miles (9,330 km) from Moscow in the west to Vladivostok on the Sea of Japan in the east. Like the American railroads, the Trans-Siberian line opened up the way for trade and settlement throughout Russia's frontier—an arctic, windswept land known as Siberia.

How might the construction of a railroad affect towns along the line?



316 CHAPTER 9 Industrialization

MEETING SPECIAL NEEDS

Kinesthetic Encourage students to use library and Internet resources to find drawings and diagrams of Edwin Drake's oil well. Then have students make a model of the well. Allow students to choose the construction material they wish to use. For students who need additional guidance, suggest making the model using 1-inch by 1-inch pinewood trim and 1.5-inch flat pine molding on a plywood base. Models should have labels explaining the parts and how they worked. **L3**

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



Student Web Activity Visit the *American Republic Since 1877* Web site at tx.tarvol2.glencoe.com and click on **Student Web Activities—Chapter 9** for an activity on industrialization.

Geography Skills

Answers:

1. Great Plains
2. Pacific

Geography Skills Practice
Ask: What was the only California city that you could reach by train in 1870? (San Francisco)

Reading Check

Answer: to make rail service safer and more reliable

Reading Check

Answer: land grants

3 ASSESS

Assign Section 2 Assessment as homework or as an in-class activity. **US: 25D; ELA: Gr9: 7i; Gr10/11: 7H**

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

Reading Essentials and Study Guide 9–2

Name _____ Date _____ Class _____

Study Guide
Chapter 9, Section 2
For use with textbook pages 314–318

THE RAILROADS

KEY TERMS AND NAMES

Pacific Railway Act the law that provided for the construction of a transcontinental railroad (page 315)

Grenville Dodge engineer that helped direct the building of the Union Pacific Railroad (page 315)

Leland Stanford one of the “Big Four” who made a huge fortune by investing in the Central Pacific Railroad Company (page 315)

Cornelius Vanderbilt consolidated three railroads to form the New York Central (page 316)

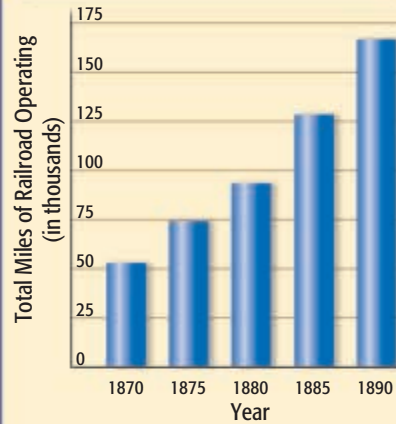
time zone the division of the United States into regions where the same time was kept (page 316)

NATIONAL GEOGRAPHIC

Railroads, 1870 and 1890



Miles of Track, 1870–1890



Source: Historical Statistics of the United States: Colonial Times to 1970.

Geography Skills

1. **Interpreting Maps** What part of the United States saw the greatest expansion in rail lines by 1890?
2. **Applying Geography Skills** In which time zone did the Central Pacific originate?

1 made railroad operation so efficient that the average rate per mile for a ton of freight dropped from two cents in 1860 to three-fourths of a cent in 1900.

The nationwide rail network also helped unite Americans in different regions. Looking back at a quarter century of railroad travel, the *Omaha Daily Republican* observed in 1883 that railroads had “made the people of the country homogeneous, breaking through the peculiarities and provincialisms which marked separate and unmingling sections.” This was, perhaps, an overstatement, but it recognized a significant contribution that railroads made to the nation.

Reading Check Explaining Why did the American Railway Association divide the country into four time zones?

The Land Grant System

Building and operating railroad lines, especially across the vast unsettled regions of the West, often required more money than most private investors could raise on their own. To encourage railroad construction, the federal government gave **land grants** to many railroad companies. Railroads would then

sell the land to settlers, real estate companies, and other businesses to raise the money they needed to build the railroad.

In the 1850s, the federal government granted individual states over 28 million acres of public lands to give to the railroads. After the Pacific Railway Acts of 1862 and 1864, the government gave the land directly to the railroad companies.

During the 1850s and 1860s, the federal land grant system awarded railroad companies over 120 million acres of land, an area larger than New England, New York, and Pennsylvania combined. Several railroad companies, including the Union Pacific and the Central Pacific, earned enough money from the government’s generous land grants to cover much of the cost of building their lines.

Reading Check Summarizing How did the government help finance railroads?

Robber Barons

The great wealth many railroad entrepreneurs acquired in the late 1800s led to accusations that they had built their fortunes by swindling investors and

INTERDISCIPLINARY CONNECTIONS ACTIVITY

Language Arts Tell students that most large industries have their own specialized terms that are used on the job. Have interested students create a lexicon of terms used by railroad workers. Tell them that the lexicon should include the term, its pronunciation, and good, working definitions. For at least two of the terms, students should also include a drawing or diagram for further explanation. **L2 US: 24A, 25D; ELA: Gr9/10/11: 6A**

Student Edition TEKS

US HISTORY: Page 316: 2B, 22A, 25A; Page 317: 2B, 8B, 22A, 24A, 24B, 24H, 25A

CHAPTER 9

Section 2, 314–318

Section Quiz 9-2

Name _____ Date _____ Class _____

★ Chapter 9 Score _____

Section Quiz 9-2
DIRECTIONS: Matching Match each item in Column A with the items in Column B. Write the correct letters in the blanks. (10 points each)

Column A	Column B
1. one of the most famous and successful railroad consolidators	A. time zones
2. regions where the same time is kept	B. James J. Hill
3. used information he received as a railroad owner to manipulate stock prices to his benefit	C. land grants
4. built the Great Northern Railroad	D. Cornelius Vanderbilt
5. given to the railroad companies by the government to encourage railroad construction	E. Jay Gould

DIRECTIONS: Multiple Choice In the blank at the left, write the letter of the choice that



Time Tales Opponents of standard time called local time “God’s time” because it was based on the laws of nature—the sun’s position in the sky. Not until 1918 was Congress able to pass a law that standardized time zones.

Reteach

Have students analyze how the railroads were financed. **US: 2B**

Enrich

Have students research and write a report on one of the railroad tycoons. **US: 24A–D, 25A–D; ELA: Gr9/10/11: 13B, 13C; Gr9: 7D–H; Gr10/11: 7D–G**

Reading Check

Answer: shipped goods both ways, operated without aid, and was a financial success

4 CLOSE

Have students discuss ways in which the railroads spurred industrial growth. **US: 2B; ELA: Gr9/10: 16E; Gr11: 15E**

taxpayers, bribing government officials, and cheating on their contracts and debts. The person with probably the worst reputation for this kind of activity was **Jay Gould**, who often practiced “insider trading.” He used information he received as a railroad owner to manipulate stock prices to his benefit.

Bribery occurred frequently in this era, partly because the state and federal governments were so deeply entangled in funding the railroads. Railroad investors quickly discovered that they could make more money by acquiring government land grants than by operating the railroad. As a result, many investors bribed members of Congress and the state legislatures to vote for more grants.

The Crédit Mobilier Scandal The corruption in the railroad industry became public in 1872 when the Crédit Mobilier scandal erupted. **Crédit Mobilier** was a construction company set up by several stockholders of the Union Pacific, including Oakes Ames, a member of Congress. Acting for both the Union Pacific and Crédit Mobilier, the investors signed contracts with themselves. Crédit Mobilier greatly overcharged Union Pacific for the work it did, and since the same investors controlled both companies, the railroad agreed to pay the inflated bills.

By the time the Union Pacific railroad was completed, the investors had made several million dollars, but the railroad itself had used up its federal grants and was almost bankrupt. To convince Congress to give the railroad more grants, Ames gave other members of Congress shares in the Union Pacific at a price well below their market value.

During the election campaign of 1872, a disgruntled associate of Ames sent a letter to the *New York*

Sun listing the members of Congress who had accepted shares. The scandal led to an investigation that implicated several members of Congress, including Speaker of the House James G. Blaine and James Garfield, who later became president. It also revealed that Vice President Schuyler Colfax had accepted stock from the railroad.

The Great Northern The Crédit Mobilier scandal provided sensational newspaper headlines. It created the impression that all railroad entrepreneurs were robber barons—people who loot an industry and give nothing back—but the term was not always deserved.

One railroad entrepreneur who was clearly not a robber baron was **James J. Hill**. Hill built and operated the Great Northern Railroad from St. Paul, Minnesota, to Everett, Washington, without any federal land grants or subsidies. He built the Great Northern across good land, carefully planning his route to pass by towns in the region. To increase business, he offered low fares to settlers who homesteaded along his route. He then identified American products that were in demand in China, including cotton, textiles, and flour, and arranged to haul those goods to Washington for shipment to Asia. This enabled the railroad to earn money by hauling goods both east and west, instead of simply sending lumber and farm products east and coming back empty, as many other railroads did. Operating without government subsidies or land grants, the Great Northern became the most successful transcontinental railroad and the only one that was not eventually forced into bankruptcy.

Reading Check Describing How was the Great Northern different from other railroads of the time?

TAKS Practice

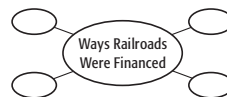
SECTION 2 ASSESSMENT

Checking for Understanding

- Define:** *time zone, land grant.*
- Identify:** Pacific Railway Act, Grenville Dodge, Leland Stanford, Cornelius Vanderbilt, Jay Gould, Crédit Mobilier, James J. Hill.
- Explain** the provisions of the Pacific Railway Act.

Critical Thinking

- Synthesizing** How did railroad expansion in the United States lead to industrial growth?
- Organizing** Use a graphic organizer similar to the one below to list the different ways that railroads were financed.



Analyzing Visuals

- Examining Maps and Graphs** Study the map and the graph on page 317. Then make up a quiz of at least five questions based on the information presented.

Writing About History

- Persuasive Writing** Take on the role of an employee of a major railroad corporation. Your job assignment is to write an advertisement to recruit workers for your corporation. After writing the advertisement, present it to your class.

Reviewing Themes

- Individual Action** How did Grenville Dodge contribute to the economic growth of the United States in the late 1800s?

SECTION 2 ASSESSMENT ANSWERS

- Terms are in blue. **US: 25A**
- Pacific Railway Act (*p. 315*), Grenville Dodge (*p. 315*), Leland Stanford (*p. 315*), Cornelius Vanderbilt (*p. 316*), Jay Gould (*p. 318*), Crédit Mobilier (*p. 318*), James J. Hill (*p. 318*)
- provided for the construction of the transcontinental railroad
- supervised the Union Pacific’s westward expansion
- increased size of markets, spent great amounts of money on resources **US: 2B**
- land grants, private investment, gifts of public lands to railroads, money generated from running the railroads **US: 25C**
- Students’ quizzes will vary. Students should include answers for their quiz questions. **US: 8B, 24A**
- Students’ advertisements will vary. Advertisements should include a list of benefits. **US: 25D**

Student Edition TEKS

ELA: Page 318: Gr9/10/11: 1A, 1B, 4A, 4B, 4D, 4F, 6A, 7B–D, 10A, 10B, 19B, 20B; Gr9: 7I; Gr10/11: 7H;
Page 319: Gr9/10/11: 4D, 6A, 7D, 7F, 8B

SECTION 3 Big Business

Guide to Reading

Main Idea

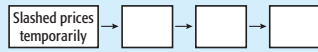
After the Civil War, big business assumed a more prominent role in American life.

Key Terms and Names

corporation, stockholder, stock, economies of scale, fixed costs, operating costs, pool, Andrew Carnegie, Bessemer process, vertical integration, horizontal integration, monopoly, trust, holding company

1 Reading Strategy

Organizing As you read about the rise of corporations in the United States, complete a graphic organizer similar to the one below to describe the steps large business owners took to weaken or eliminate competition.



Reading Objectives

- **Analyze** how large corporations came to dominate American business.
- **Evaluate** how Andrew Carnegie's innovations transformed the steel industry.

Section Theme

Economic Factors Large national corporations formed in the United States in the mid-1800s and contributed to greater production.

Preview of Events



★ An American Story ★



Cartoon of John D. Rockefeller

In the 1860s, the oil industry in the United States was highly competitive. One highly efficient company was Standard Oil, owned by John D. Rockefeller and his associates. Because his company shipped so much oil, Rockefeller was able to negotiate rebates, or refunds, from railroads that wanted his business. This gave his company an advantage, and he began to pressure other oil companies to sell out to him.

Oil producer Franklin Tarbell pledged never to surrender. Tarbell's daughter Ida later recalled her father's indignation over Rockefeller's maneuvers:

“It was as if somebody had tried to crowd me off the road. . . . There were rules, you couldn't use the road unless you obeyed those rules. . . . The railroads—so said my father—ran through the valley by the consent of the people; they had given them a right of way. The road on which I trotted was a right of way. One man had the same right as another, but the railroads had given to one something they would not give to another. . . . The strong wrested from the railroads the privilege of preying upon the weak.”

—quoted in *All in the Day's Work*

The Rise of Big Business

Before the Civil War, the personal wealth of a few people operating in partnership financed most businesses, including many early factories. Most manufacturing enterprises were very small. By 1900 everything had changed. Big businesses dominated the economy, operating vast complexes of factories, warehouses, offices, and distribution facilities.

CHAPTER 9

Section 3, 319–323

1 FOCUS

Section Overview

This section focuses on how big business became important in American life.

BELLINGER Skillbuilder Activity

Project transparency and have students answer the question.

Available as a blackline master.

Daily Focus Skills Transparency 9–3

Guide to Reading

Answers to Graphic: pools, vertical and horizontal integration, holding companies, trusts

Preteaching Vocabulary

Have students use a standard dictionary to look up the Key Terms in this section to gain a better understanding of them. **US: 25A; ELA: Gr9/10/11: 6A**

SECTION RESOURCES

Reproducible Masters

- Reproducible Lesson Plan 9–3
- Daily Lecture and Discussion Notes 9–3
- Guided Reading Activity 9–3
- Section Quiz 9–3
- Reading Essentials and Study Guide 9–3

Transparencies

- Daily Focus Skills Transparency 9–3

American Art & Architecture

Multimedia

- Interactive Tutor Self-Assessment CD-ROM
- ExamView® Pro Testmaker CD-ROM
- Presentation Plus! CD-ROM
- TeacherWorks™ CD-ROM
- Audio Program

Student Edition TEKS

US HISTORY: Page 318: 2B, 8B, 24A, 25A, 25C, 25D; **Page 319:** 1B, 2B, 19B, 24B, 25A, 25C

CHAPTER 9

Section 3, 319–323

2 TEACH

Daily Lecture and Discussion Notes 9–3

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Daily Lecture and Discussion Notes

Chapter 9, Section 3

Did You Know In 1872, Montgomery Ward and his partner began their mail-order business in a living-table loft. They had \$2,400 in capital to start their business. Their first catalog consisted of a single sheet listing a few items. When Montgomery Ward died in 1913, the annual sales of Montgomery Ward had risen to \$46 million.

I. The Rise of Big Business (pages 319–320)

- A. By 1900 big business dominated the economy of the United States.
- B. A corporation is an organization owned by many people but treated by law as though it was a single person. **Stockholders**, the people who own the corporation, own shares.

Reading Check

Answer: general incorporation laws and economies of scale

Creating a Profile Encourage students to use library and Internet resources to learn about a local philanthropist—past or present. Instruct students to prepare a short fact sheet for the person they select. **LI US:** 24A–D, 25A–D; **ELA:** Gr9/10/11: 1A, 1B, 4A–D, 13B, 13C; Gr9: 7D–I; Gr10/11: 7D–H

FYI

In 1898, although Carnegie Steel's output had risen threefold over the previous few years, the number of workers needed to produce the steel had decreased by 400. The use of electricity to drive automatic machinery was largely responsible for the decline in the workforce.

History and the Humanities



American Art & Architecture:
Smoking Room of the John D.
Rockefeller House

Student Edition TEKS

ELA: Page 320: Gr9/10/11: 6A, 10B; Page 321: Gr9/10/11: 6A, 8B, 10B, 19B, 20B

Social Studies TAKS tested at Grades 10/11: 1 Obj 3: US2B(11) 2 Obj 3: US2B(11); Obj 5: WH25C(10), US24B(11)

ECONOMICS

The Role of Corporations Big business would not have been possible without the corporation. A **corporation** is an organization owned by many people but treated by law as though it were a single person. A corporation can own property, pay taxes, make contracts, and sue and be sued. The people who own the corporation are called **stockholders** because they own shares of ownership called **stock**. Issuing stock allows a corporation to raise large amounts of money for big projects while spreading out the financial risk.

Before the 1830s, there were few corporations in the United States because entrepreneurs had to convince a state legislature to issue them a charter. Beginning in the 1830s, however, states began passing general incorporation laws, allowing companies to become corporations and issue stock without charters from the legislature.

Economies of Scale With the money they raised from the sale of stock, corporations could invest in new technologies, hire a large workforce, and purchase many machines, greatly increasing their efficiency. This enabled them to achieve what is called **economies of scale**, in which corporations make goods more cheaply because they produce so much so quickly using large manufacturing facilities.

All businesses have two kinds of costs, fixed costs and operating (or variable) costs. **Fixed costs** are costs a company has to pay, whether or not it is operating. For example, a company would have to pay its loans, mortgages, and taxes, regardless of whether it was operating. **Operating costs** are costs that occur when running a company, such as paying wages and shipping charges and buying raw materials and other supplies.

The small manufacturing companies that had been typical before the Civil War usually had very low fixed costs but very high operating costs. If sales dropped, it was cheaper to shut down and wait for better economic conditions. By comparison, big companies had very high fixed costs because it took so much money to build and maintain a factory. Compared to their fixed costs, big businesses had low operating costs. Wages and transportation costs were such a small part of a corporation's costs that it made sense to keep operating, even in a recession.

In these circumstances, big corporations had several advantages. They could produce goods more cheaply and efficiently. They could continue to operate in poor economic times by cutting prices to increase sales, rather than shutting down. Many were

also able to negotiate rebates from the railroads, thus lowering their operating costs even further.

Small businesses with high operating costs found it difficult to compete against large corporations, and many were forced out of business. At the time, many people criticized corporations for cutting prices and negotiating rebates. They believed the corporations were behaving unethically by using their wealth to drive small companies out of business. In many cases, the changing nature of business organization and the new importance of fixed costs that caused competition to become so severe forced many small companies out of business.

Reading Check Describing What factors led to the rise of big business in the United States?

The Consolidation of Industry

Many corporate leaders did not like the intense competition that had been forced on them. Although falling prices benefited consumers, they cut into profits. To stop prices from falling, many companies organized **pools**, or agreements to maintain prices at a certain level.

American courts and legislatures were suspicious of pools because they interfered with competition and property rights. As a result, companies that formed pools had no legal protection and could not enforce their agreements in court. Pools generally did not last long. They broke apart whenever one member cut prices to steal the market share from another, which then allowed competition to resume. By the 1870s, competition had reduced many industries to a few large and highly efficient corporations.

Andrew Carnegie and Steel The remarkable life of **Andrew Carnegie** illustrates many of the different factors that led to industrialism and the rise of big business in the United States. He was born in Scotland, the son of a poor hand weaver who emigrated to the United States in 1848. At a young age, Carnegie worked as a bobbin boy in a textile factory earning \$1.20 per week. At 14 he became a messenger in a telegraph office, then served as private secretary to Thomas Scott, a superintendent and later president of the Pennsylvania Railroad. Carnegie's energy impressed Scott, and when Scott was promoted, Carnegie succeeded him as superintendent.

As a railroad supervisor, Carnegie knew that he could make a lot of money by investing in companies that served the railroad industry. He bought shares in iron mills and factories that made sleeping cars and

COOPERATIVE LEARNING ACTIVITY

Making a Flowchart Have students work together in small groups to make a flowchart showing how steel is made. Charts should begin with the raw materials (iron ore, limestone, and coal) and end with the finished products, such as slabs, blooms, and billets of steel, that are produced by the steel mill. Some students may do the research while others design and execute the chart. The finished charts may be displayed in your classroom or school library. **US:** 24A–D, 25A–D, 26A; **ELA:** Gr9/10/11: 4A–D; Gr9: 7D–I; Gr10/11: 7D–H

Use the rubric for a cooperative group management plan on pages 71–72 in the **Performance Assessment Activities and Rubrics**.

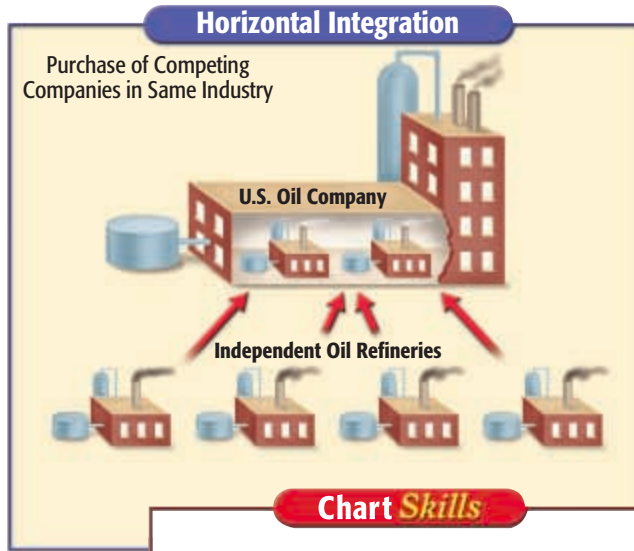


Chart Skills

Horizontal and vertical integration were the two most common business combinations in the late 1800s.

Evaluating Which combination do you think would yield the most efficient business? Why?

locomotives. He also invested in a company that built railroad bridges. In his early 30s, he was earning \$50,000 per year, and he decided to quit his job with the railroad to concentrate on his own business affairs.

As part of his business activities, Carnegie frequently traveled to Europe to sell railroad bonds. On one trip, he met the English inventor, Sir Henry Bessemer, who had invented a new process for making high quality steel efficiently and cheaply. After meeting Bessemer, Carnegie decided to concentrate his investments in the steel industry. He opened a steel company in Pittsburgh in 1875 and quickly adapted his steel mills to use the **Bessemer process**. Carnegie often boasted about how cheaply he could produce steel:

“Two pounds of iron stone mined upon Lake Superior and transported nine hundred miles to Pittsburgh; one pound and one-half of coal mined and manufactured into coke, and transported to Pittsburgh; one-half pound of lime, mined and transported to Pittsburgh; a small amount of manganese ore mined in Virginia and brought to Pittsburgh—and these four pounds of materials manufactured into one pound of steel, for which the consumer pays one cent.”

—quoted in *The Growth of the American Republic*

Vertical and Horizontal Integration To increase manufacturing efficiency even further, Carnegie took the next step in building a big business. He did this by beginning the **vertical integration** of the steel industry. A vertically integrated company owns all of

the different businesses on which it depends for its operation. Instead of paying companies for coal, lime, and iron, Carnegie’s company bought coal mines, limestone quarries, and iron ore fields. Vertical integration saved companies money while enabling big companies to become even bigger.

Successful business leaders like Carnegie also pushed for **horizontal integration**, or combining many firms engaged in the same type of business into one large corporation. Horizontal integration took place frequently as companies competed. When a company began to lose market share, it would often sell out to competitors to create a larger organization. By 1880, for example, a series of buyouts had enabled Rockefeller’s Standard Oil to gain control of approximately 90 percent of the oil refining industry in the United States. When a single company achieves control of an entire market, it becomes a **monopoly**. Many Americans feared monopolies because they believed that a company with a monopoly could charge whatever it wanted for its products. Others, however, supported monopolies. They believed that monopolies had to keep prices low because raising prices would encourage competitors to reappear and offer the products for a lower price. In some industries companies had a virtual monopoly in the United States but were competing on a global scale. Standard Oil, for example, came very close to having a monopoly in the United States, but competition with other

Guided Reading Activity 9–3

Name _____ Date _____ Class _____

★ Guided Reading Activity 9-3

DIRECTIONS: Using **Headings and Subheadings** Locate each heading below in your textbook. Then use the information under the correct subheading to help you write each answer.

- I. **The Rise of Big Business**
 - A. Why did the number of American corporations increase beginning in the 1830s? _____
 - B. How did corporations achieve economies of scale? _____
 - C. Rather than unethical behavior on the part of corporations, what was likely the cause of small companies going out of business? _____
- II. **The Consolidation of Industry**
 - A. How did corporations keep prices from falling? _____

Chart Skills

Answer: Answers may vary. Both could be highly efficient if well managed. Some students may favor vertical integration since they may argue that horizontal integration reduces competition and may lead to less efficient giant business.

Chart Skills Practice

Ask: What potential problems exist if one large business buys all its competitors? (*The resulting monopoly can charge high prices; it has less reason to be highly efficient.*)

Discussing a Topic Have students compare the game of Monopoly with the monopolies built by Rockefeller and other magnates. **L1 US: 2B, 24B**

FYI

Much like Standard Oil, the Organization of Petroleum Exporting Countries (OPEC) tries to maintain stability in the oil industry to ensure profits. Since 1970 OPEC has controlled approximately one-third to one-half of the world’s oil supply. In 2001 member nations included Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela.

MEETING SPECIAL NEEDS

Visual/Spatial Have interested students research how by-products of oil such as kerosene, paint, or paraffin are produced. Ask students to show the process by creating a poster or flowchart that includes drawings and explanatory labels. Display the posters and flowcharts and have students answer questions about the process. **L3 US: 24A, 25D; ELA: Gr9/10/11: 21B, 21C**

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

Student Edition TEKS

US HISTORY: Page 320: 2B, 19B, 25A; Page 321: 2B, 19A, 25A

CHAPTER 9

Section 3, 319–323

3 ASSESS

Assign Section 3 Assessment as homework or as an in-class activity. **US: 25D**

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

Reading Essentials and Study Guide 9–3

Name _____ Date _____ Class _____

Study Guide

Chapter 9, Section 3

For use with textbook pages 319–323

BIG BUSINESS

KEY TERMS AND NAMES

- corporation** an organization owned by many people but treated by law as though it were a single person (page 320)
- stockholders** people who own a corporation through shares of ownership (page 320)
- stock** shares of ownership (page 320)
- economies of scale** ability of large manufacturing facilities to produce more goods more cheaply (page 320)
- fixed costs** costs a company has to pay whether it is operating or not (page 320)
- operating costs** costs that occur when running a company (page 320)
- pool** agreement among companies to maintain prices at a certain level (page 320)

Section Quiz 9–3

Name _____ Date _____ Class _____

★ Chapter 9 Score _____

Section Quiz 9-3

DIRECTIONS: Matching Match each item in Column A with the items in Column B. Write the correct letters in the blanks. (10 points each)

- | | |
|---|---|
| <p>Column A</p> <ol style="list-style-type: none"> 1. process for making high-quality steel efficiently and cheaply 2. agreements to maintain prices at a certain level 3. when a company owns all the different businesses on which it depends for its operation 4. became one of the most successful retail chains in American history 5. when a single company achieves control of an entire market | <p>Column B</p> <ol style="list-style-type: none"> A. Woolworth's B. pools C. Bessemer process D. monopoly E. vertical integration |
|---|---|

NATIONAL GEOGRAPHIC MOMENT in HISTORY

Before the advent of the electric vacuum cleaner, the ritual of spring-cleaning involved moving furniture aside and taking carpets and rugs outdoors to beat the dust out of them.

Reading Check

Answer: pools, vertical and horizontal integration, monopolies, trusts, and holding companies

Student Edition TEKS

ELA: Page 322: Gr9/10/11: 10B;
Page 323: Gr9/10/11: 1A, 1B, 4A, 4B, 4D, 4F, 6A, 7B–D, 10A, 10B, 19B, 20B; Gr9: 7I; Gr10/11: 7H

NATIONAL GEOGRAPHIC MOMENT in HISTORY

LABOR SAVERS

American inventiveness and the nation's growing industrial might combined to provide turn-of-the-century consumers with an ever-increasing array of products. Here, a homemaker wields an early electric vacuum cleaner. Mass-produced household devices had a tremendous impact on the lifestyles and buying habits of millions of middle-class Americans. In cities, huge shopping emporiums replaced the cozy dry goods stores of the 1800s. Even rural customers could buy an almost endless variety of merchandise from mail-order catalogues such as Sears, Roebuck and Montgomery Ward.



oil companies throughout the world forced the Standard Oil Company to keep its prices low.

Trusts By the late 1800s, many Americans had grown suspicious of large corporations and feared the power of monopolies. To preserve competition and prevent horizontal integration, many states made it illegal for one company to own stock in another without specific permission from the state legislature. In 1882 Standard Oil formed the first **trust**, a new way of merging businesses that did not violate the laws against owning other companies. A trust is a legal concept that allows one person to manage another person's property. The person who manages another person's property is called a trustee.

Instead of buying a company outright, which was often illegal, Standard Oil had stockholders give their stocks to a group of Standard Oil trustees. In exchange, the stockholders received shares in the trust, which entitled them to receive a portion of the trust's profits. Since the trustees did not own the stock but were merely managing it for someone else,

they were not violating the law. This arrangement enabled the trustees to control a group of companies as if they were one large merged company.

Holding Companies Beginning in 1889 the state of New Jersey further accelerated the rise of big business with a new general incorporation law. This law allowed corporations chartered in New Jersey to own stock in other businesses without any need for special legislative action. Many companies immediately used the New Jersey law to create a new organization called a **holding company**. A holding company does not produce anything itself. Instead, it owns the stock of companies that do produce goods. The holding company controls all of the companies it owns, effectively merging them into one large enterprise. By 1904 the United States had 318 holding companies. Together these giant corporations controlled over 5,300 factories and were worth more than \$7 billion.

Reading Check Explaining What techniques did corporations use to consolidate their industries?

INTERDISCIPLINARY CONNECTIONS ACTIVITY

Economics Invite a representative from the Small Business Administration to speak to the class about the impact of small businesses on the community. Ask the speaker to address the basics of how one goes about setting up a small business. As a class, discuss the various ways that businesses can be financed. **L2 ELA:** Gr9/10: 16E; Gr11: 15E

Selling the Product

1 The vast array of products that American industries churned out led retailers to look for new ways to market and sell goods. N.W. Ayer and Son of Philadelphia, for example, developed bold new formats for advertising. Large display ads with illustrations replaced the small-type line ads that had been standard in newspapers. By 1900 retailers were spending over \$90 million a year on advertising in newspapers and magazines sold across the nation. Advertising attracted readers to the newest retail business, the department store.

In 1877 advertisements billed John Wanamaker's new Philadelphia department store, the Grand Depot, as the "largest space in the world devoted to retail selling on a single floor." When Wanamaker's opened, only a handful of department stores existed in the United States; soon hundreds sprang up. Department stores changed the idea of shopping by bringing a huge array of different products together in a large, elegant building. They created an atmosphere that made shopping seem glamorous and exciting.

1 Chain stores, a group of similar stores owned by the same company, first appeared in the mid-1800s. In contrast to department stores, which offered many services, chain stores focused on thrift, offering low prices instead of elaborate service and decor. Woolworth's, a chain store that opened in 1879, became one of the most successful retail chains in American history.

To reach the millions of people who lived in rural areas in the late 1800s—far from chain stores or department stores—retailers began issuing

Fact
Fiction
Folklore

The New York Stock Exchange In 1792 business-people met in New York City to establish a stock exchange—a marketplace for buying and selling stock in companies. At first, the new stock exchange was located under a buttonwood tree on Wall Street.

The organization took its present name, the New York Stock Exchange, in 1863. Huge amounts of the capital required for the nation's industrialization after the Civil War passed through the New York Stock Exchange.

As stock trading grew, investors across the nation needed financial news. In 1882 Henry Charles Dow and Edward D. Jones founded Dow Jones & Company. This new company sent bulletins on the day's business to Wall Street's financial houses. The day's last delivery contained a news sheet, which became the *Wall Street Journal* in July 1889.



mail-order catalogs. Two of the largest mail-order retailers were Montgomery Ward and Sears, Roebuck. Their huge catalogs, widely distributed through the mail, used attractive illustrations and friendly descriptions to advertise thousands of items for sale.

Reading Check **Identifying** What innovations did retailers introduce in the late 1800s to sell goods to consumers?

TAKS Practice

SECTION 3 ASSESSMENT

Checking for Understanding

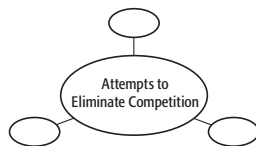
- Define:** corporation, economies of scale, fixed costs, operating costs, pool, vertical integration, horizontal integration, monopoly, trust, holding company.
- Identify:** stockholder, stock, Andrew Carnegie, Bessemer process.
- List** the new methods of advertising and selling that helped push consumer goods in the late 1800s.

Reviewing Themes

- Economic Factors** What factors allowed corporations to develop in the United States in the late 1800s?

Critical Thinking

- Forming an Opinion** Do you think an individual today can rise from "rags to riches" like Andrew Carnegie did? Why or why not?
- Organizing** Use a graphic organizer like the one below to list ways business leaders in the late 1800s tried to eliminate competition.



Analyzing Visuals

- Analyzing Photographs** Study the photograph on page 322 of a woman using an early electric vacuum cleaner. How would you compare this to today's vacuum cleaners? How do you think new mass-produced appliances such as this one affected the lives of women in this era?

Writing About History

- Expository Writing** Write a newspaper editorial in which you explain why entrepreneurs such as John D. Rockefeller and Andrew Carnegie were a positive or a negative force on the U.S. economy in the late 1800s.

SECTION 3 ASSESSMENT ANSWERS

- Terms are in blue. **US: 25A**
- stockholder (p. 320), stock (p. 320), Andrew Carnegie (p. 320), Bessemer process (p. 321) **US: 19B**
- large display ads in newspapers, department stores, chain stores, mail-order catalogs
- general incorporation laws
- Students' answers will vary. **US: 19B, 24G**
- pools, trusts, monopolies, vertical and horizontal integration **US: 2B, 25C**
- today's are lighter; gave women more leisure time **US: 23B**
- Editorials should use clear arguments. **US: 25D**

Fact Fiction Folklore

Today *The Wall Street Journal* has the largest daily circulation of any newspaper in the United States.

Reteach

Have students evaluate how Andrew Carnegie's innovations transformed the steel industry. **US: 19B, 22C; ELA: Gr9/10/11: 4A–D, 4F**

Enrich

Ask students to create a Venn diagram comparing and contrasting the types of businesses from which people purchased goods in the 1880s and from which they purchase goods today. **US: 8B, 24B, 24H; ELA: Gr9/10/11: 7D**

Reading Check

Answer: large display ads in newspapers, department stores, chain stores, and mail-order catalogs

4 CLOSE

Have students analyze how large corporations came to dominate American business. **US: 2B**

Student Edition TEKS

US HISTORY: Page 322: 2B, 25A;
Page 323: 2B, 19B, 23B, 24G, 25A, 25C, 25D

You're *the* Historian

1 FOCUS

In 1870 the Standard Oil Company of Ohio was one of 26 oil refineries in Cleveland. Although it was the largest refinery in Cleveland, it processed only 2 or 3 percent of all the crude oil produced in the United States. Over the next 10 years, John D. Rockefeller gained control of over 90 percent of the oil refining in the U.S. through mergers, elimination of competition, and the use of rebates to lower shipping costs. In 1899 George Rice complained to the U.S. Industrial Commission.



John D. Rockefeller

Investigating Standard Oil

1 By the 1880s, the Standard Oil Company, under the direction of John D. Rockefeller and his associates, had gained control of more than 90 percent of the oil refining business in the United States. Did Standard Oil use unfair tactics? The United States Industrial Commission investigated, calling Rockefeller himself to testify. Rockefeller said his success was due to the efficiency of his company. George Rice, an independent refiner from Marietta, Ohio, told the Industrial Commission that Standard Oil's advantage was criminal collusion with the railroads. Was he right? You're the historian.

Read the following excerpts from the Industrial Commission hearings of 1899. Then complete the questions and activities on the next page.



Standard Oil stock

From John D. Rockefeller's testimony

Question: To what advantages, or favors, or methods of management do you ascribe chiefly the success of the Standard Oil Company?

Answer [Rockefeller]: I ascribe the success of the Standard to its consistent policy to make the volume of its business large through the merits and cheapness of its products. It has spared no expense in finding, securing, and utilizing the best and cheapest methods of manufacture. It has sought for the best superintendents and workmen and paid the best wages. It has not hesitated to sacrifice old machinery and old plants for new and better ones. It has placed its manufactories at the points where they could supply markets at the least expense. It has not only sought markets for its principal products, but for all possible by-products, sparing no expense in introducing them to the public.

It has not hesitated to invest millions of dollars in methods of cheapening the gathering and distribution of oils by pipe lines, special cars, tank steamers, and tank wagons. . . .

Question: What are, in your judgment, the chief advantages from industrial combinations—(a) financially to stockholders; (b) to the public?

Answer: All the advantages which can be derived from a cooperation of person and aggregation of capital. . . . It is too late to argue about advantages of industrial combinations. They are a necessity. And if Americans are to have the privilege of extending their business in all the States of the Union, and into foreign countries as well, they are a necessity on a large scale, and require the agency of more than one corporation. Their chief advantages are:

1. Command of necessary capital.
2. Extension of limits of business.
3. Increase the number of persons interested in the business.
4. Economy in the business.
5. Improvements and economies which are derived from knowledge of many interested persons of wide experience.
6. Power to give the public improved products at less prices and still make a profit from stockholders.
7. Permanent work and good wages for laborers.

Cartoon criticizing Standard Oil



2 TEACH

Discussing an Issue Ask students to look at the current economic environment and discuss the pros and cons of the chief advantages listed by John D. Rockefeller as they relate to another industry, such as the airlines, computers, cell phones, or health care. **L2 US: 2B, 24B; ELA: Gr9/10: 16E; Gr11: 15E**



Board of Trustees Even though it is now illegal to operate a business as a trust, many corporations continue to refer to the group who directs the business as the "board of trustees."

EXTENDING THE CONTENT

Point of View Historians disagree about some of the issues surrounding the business practices employed by John D. Rockefeller and the Standard Oil Trust. For example, while it was common practice for the railroads to offer rebates to big shippers in a variety of industries, some historical accounts indicate that in addition to rebates, Rockefeller got inside information from the railroads about the business activities of his competitors. Discrepancies can also be found in historical accounts of the business practices of George Rice. Some accounts characterize Rice as a reputable businessman, while others paint him as a charlatan and con man.

3 ASSESS

Have students answer the Understanding the Issue questions. **US: 25D**

Understanding the Issue

1. According to Rockefeller's testimony, consumers would benefit from companies similar to Standard Oil because they would get a better product at a lower price. In addition, these companies claimed to offer permanent work and good wages for laborers.
2. George Rice believed that Standard Oil was successful because it paid so little to ship its oil compared to what other refiners paid for freight. He also believed that Standard Oil cut its prices drastically to entice competitors' customers so that it could later eliminate the competition.
3. Students' answers will vary. They should be able to defend their positions.

Activities

1. Students' answers will vary. You may want students to work in pairs to conduct the necessary research.
2. Students' answers will vary. Recommend that students look in financial newspapers for examples.

4 CLOSE

Ask students to explain how two people can view the same circumstances so differently.

Student Edition TEKS

US HISTORY: Page 324: 2B; Page 325: 2B, 24A, 24D, 24E, 24G, 25D



Oil derricks



From George Rice's testimony

I am a citizen of the United States. . . . Producer of petroleum for more than 30 years, and a refiner of same for 20 years, but my refinery has been shut down during the past 3 years, owing to the powerful and all-prevailing machinations of the Standard Oil Trust, in criminal collusion and conspiracy with the railroads to destroy my business of 20 years of patent industry, toil, and money in building up, wholly by and through unlawful freight discriminations. I have been driven from pillar to post, from one railway line to another, for 20 years, in the absolutely vain endeavor to get equal and just freight rates with the Standard Oil Trust, so as to be able to run my refinery at anything approaching a profit, but which I have been utterly

unable to do. I have had to consequently shut down, with my business absolutely ruined and my refinery idle. This has been a very sad, bitter, and ruinous experience for me to endure, but I have endeavored to the best of my circumstances and ability to combat it the utmost I could for many a long waiting year, expecting relief through the honest and proper execution of our laws, which have as yet, however, never come. . . .

Outside of rebates or freight discriminations I had no show with the Standard Oil trust, because of their unlawfully acquired monopoly, by which they could temporarily cut only my customers' prices, and below cost, leaving the balance of the town, nine-tenths, uncut. This they can easily do without any appreciable harm to

their general trade, and thus effectually wipe out all competition, as fully set forth. Standard Oil prices generally were so high that I could sell my goods 2 to 3 cents a gallon below their prices and make a nice profit, but these savage attacks and cuts upon my customers' goods, and their consequent loss, plainly showed them their power for evil, and the uselessness to contend against such odds, and they would buy no more of my oil. . . .

Understanding the Issue

1. What potential advantages could companies like Standard Oil offer consumers?
2. What did George Rice believe to be the reason Standard Oil was so successful?
3. How would you assess the credibility of the two accounts?

Activities

1. **Investigate** Today many industries, unions, and special interest groups lobby Congress for favorable legislation. What are the most powerful groups? How do they operate?
2. **Check the News** Are there any companies that recently have been investigated for unfair or monopolistic practices? Collect headlines and news articles and create a bulletin board display.



CHAPTER 9 Industrialization 325

PORTFOLIO ACTIVITY

Writing an Essay Have students write an essay expressing their point of view on the controversy described in this passage. Instruct them to include enough background information in the essay so that someone who is not familiar with this topic will be able to understand the main ideas. Students may consult one of the popular weekly newsmagazines to see examples of well-written essays. Be sure they express their opinions in the essay. **US:** 24A–D, 25A–D; **ELA:** Gr9/10/11: 1A, 1B, 4A–D, 4F, 8A, 8B

CHAPTER 9

Section 4, 326–331

SECTION 4 Unions

1 FOCUS

Section Overview

This section focuses on the formation of labor unions during the late 1800s.

BELLINGER Skillbuilder Activity

Project transparency and have students answer the question.

Available as a blackline master.

Daily Focus Skills Transparency 9–4

Guide to Reading

Answers to Graphic: 1877: Great Railroad Strike involves 80,000 workers in 11 states, government troops break up strike, millions of dollars in damage and more than 100 people killed; 1886: Haymarket Riot kills 11 people and greatly weakens the Knights of Labor; 1894: Pullman Strike against railroads nearly paralyzes economy, federal troops force an end to strike, and the ARU collapses

Preteaching Vocabulary

Have students skim this section to glean the meaning or significance of each of the Key Terms and Names.

US: 25A

Student Edition TEKS

ELA: Page 326: Gr9/10/11: 4D, 6A, 7D–F, 8B; Page 327: Gr9/10/11: 6A, 10B, 19B, 20B

Guide to Reading

Main Idea

In an attempt to improve their working conditions, industrial workers came together to form unions in the late 1800s.

Key Terms and Names

deflation, trade union, industrial union, blacklist, lockout, Marxism, Knights of Labor, arbitration, closed shop

1 Reading Strategy

Sequencing As you read about the increase of American labor unions in the late 1800s, complete a time line similar to the one below by filling in the incidents of labor unrest discussed and the results of each incident.



Reading Objectives

- Describe industrial working conditions in the United States in the late 1800s.
- List the barriers to labor union growth.

Section Theme

Individual Action People like Samuel Gompers and Mother Jones strove to balance the power of corporations with the needs of workers.

Preview of Events



★ An American Story ★



Avondale Mine disaster

On September 6, 1869, hundreds of miners' wives and children heard the repeated shrill blasts of the Avondale Mine's whistle, which signaled an accident. The families ran to the mine's entry and beheld a terrifying sight: hot smoke billowing from the mine shaft. The owners of the Avondale Coal Mine in Luzerne County, Pennsylvania, had not built a second entrance. Without an escape route, the 179 miners trapped below soon died. Songs to commemorate the disaster later gave voice to the silenced victims:

“And as their souls ascended
To God who gave them breath
They plead against the company
Whose greed had caused their death”

Following the deaths at Avondale, John Siney, an Irish immigrant and union leader, urged his fellow miners to unionize:

“Men, if you must die with your boots on, die for your families, your homes, your country, but do not longer consent to die like rats in a trap. . . .”

—quoted in *Labor's Untold Story*

Working in the United States

Life for workers in industrial America was difficult. As machines replaced skilled labor, work became monotonous. Workers had to perform highly specific, repetitive tasks and could take little pride in their work. In addition, working conditions were

SECTION RESOURCES

Reproducible Masters

- Reproducible Lesson Plan 9–4
- Daily Lecture and Discussion Notes 9–4
- Guided Reading Activity 9–4
- Section Quiz 9–4
- Reading Essentials and Study Guide 9–4
- Performance Assessment Activities and Rubrics

Transparencies

- Daily Focus Skills Transparency 9–4

Multimedia

- Interactive Tutor Self-Assessment CD-ROM
- ExamView® Pro Testmaker CD-ROM
- Presentation Plus! CD-ROM
- TeacherWorks™ CD-ROM
- Audio Program

2 TEACH

Daily Lecture and Discussion Notes 9–4

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Daily Lecture and Discussion Notes
Chapter 9, Section 4

Did You Know? During the Pullman strike in July 1894, railroad workers in Chicago went on strike in sympathy with the employees of the Pullman Palace Car Company. Among the incidents of the strike, strikers burned 600 freight cars in the Chicago railroad yards. The Governor of Illinois, John Peter Althoff, was a friend of labor unions and refused to call out the militia to stop the strike. Over the objections of Governor Althoff, President Grover Cleveland and his attorney general ordered 2,000 troops to the Chicago area to end the Pullman strike.

I. Working in the United States (pages 326–327)

often unhealthy and dangerous. Workers breathed in lint, dust, and toxic fumes. Heavy machines lacking safety devices caused a high number of injuries.

Despite the difficult working conditions, industrialism brought about a dramatic rise in the standard of living. While only a few entrepreneurs became rich, real wages earned by the average worker rose by about 50 percent between 1860 and 1890.

Despite the rise in the standard of living, the uneven division of income between the wealthy and the working class caused resentment among workers. In 1900 the average industrial worker made approximately 22¢ per hour and worked an average of 59 hours per week.

At the same time, an economic phenomenon of the late 1800s made relations between workers and employers even more difficult. Between 1865 and 1897, the United States experienced **deflation**, or a rise in the value of money. Throughout the late 1800s, deflation caused prices to fall, which increased the buying power of workers' wages. Although companies cut wages regularly in the late 1800s, prices fell even faster, so that wages were actually still going up in buying power. Most workers, however, believed that the companies wanted to pay them less money for the same work, and it made them angry. Eventually, many workers decided that the only way to improve their working conditions was to organize unions.

had more control over how they organized their time on the shop floor. Common laborers had few skills and received lower wages.

In the 1830s, as industrialism began to spread, craft workers began to form **trade unions**—unions limited to people with specific skills. By the early 1870s, there were over 30 national trade unions in the United States. Among the largest and most successful were the Iron Molders' International Union, the International Typographical Union, and the Knights of St. Crispin—the shoemakers' union.

Industry Opposes Unions Employers were often forced to recognize and negotiate with trade unions because they represented workers whose skills they needed. However, employers generally regarded unions as illegitimate conspiracies that interfered with their property rights. Owners of large corporations particularly opposed **industrial unions**, which united all craft workers and common laborers in a particular industry.

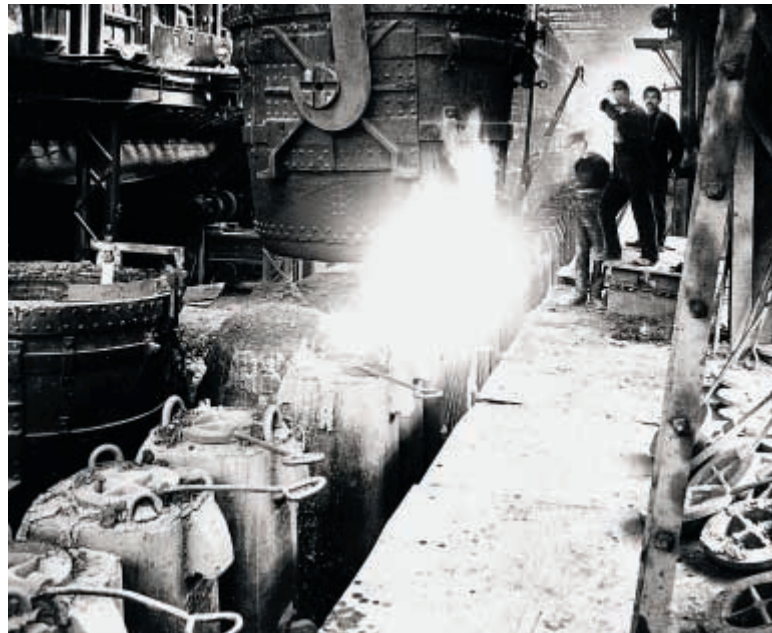
Companies used several techniques to prevent unions from forming. They required workers to take

Reading Check

Describing What aspects of industrial life caused frustration for workers in the late 1800s?

Early Unions

There were two basic types of industrial workers in the United States in the 1800s—craft workers and common laborers. Craft workers had special skills and training. They included machinists, iron molders, stonecutters, glassblowers, shoemakers, printers, carpenters, and many others. Craft workers generally received higher wages and



Picturing History

Unsafe Working Conditions Workers in the late 1800s often faced unsafe working conditions. Many began to join labor unions in an attempt to improve these conditions. **What unsafe conditions does this photograph of a steel mill show?**

Analyzing Information Read the following quote by George Pullman: "Last year [1892], I made only 4.5 percent profit and this year it will be less than 4 percent. I am entitled to make more money than that. My workers will have to take a pay cut." **Ask: Was Pullman justified in asking his workers to take a cut in pay and, if so, why?** Discuss why present-day companies ask employees to take pay cuts. **L1 US: 2B, 24B; ELA: Gr9: 7H; Gr9/10: 16E; Gr10/11: 7G; Gr11: 15E**

Picturing History

Answer: Workers are dangerously close to molten steel.
Ask: What problems resulted from unsafe working conditions? (injuries, deaths, and illnesses)

Reading Check

Answer: working conditions, low pay, highly specific and repetitive tasks

COOPERATIVE LEARNING ACTIVITY

Organizing a Union Organize students into two groups. Designate one group as the employers and have them decide what they would tell their employees to keep them from joining a union. Ask the other group to be union organizers, and have them decide what they would tell workers about the advantages of joining a union. Have each group develop a list of talking points. Have several members of each group present their arguments to the class. Discuss the long-range economic and social effects of labor unions. **US: 2B, 22C, 26A; ELA: Gr9/10/11: 4D, 4F; Gr9/10: 16E; Gr11: 15E**

Use the rubric for a cooperative group management plan on pages 71–72 in the **Performance Assessment Activities and Rubrics**.

Student Edition TEKS

US HISTORY: Page 326: 1B, 2B, 24B, 25C; Page 327: 2B, 22C, 23B, 25A

CHAPTER 9

Section 4, 326–331

Guided Reading Activity 9–4

Name _____ Date _____ Class _____

Guided Reading Activity 9–4

DIRECTIONS: Filling in the blanks in the space provided, write the word or words that best complete the sentence. Refer to your textbook to fill in the blanks.

1. Despite the difficult working conditions of industrial America, industrialism brought about a dramatic rise in the _____.
2. In 1900 the average industrial worker made approximately _____ an hour and worked an average of _____ a week.
3. _____ generally received higher wages and had more control over how they organized their time on the shop floor.
4. In the 1830s, craft workers began to form _____—unions limited to people with specific skills.
5. Owners of large corporations opposed _____—unions that united all craft workers and common laborers in a particular industry.
6. _____ formed _____.

Profiles IN HISTORY

Mary Harris Jones published her life story, *The Autobiography of Mother Jones*, in 1925 when she was 95 years old.

Ask: What was Mother Jones's main message? (The only way workers could help themselves was to work together with other workers.)

Reading Check

Answer: They associated unions with immigrants, revolution, and anarchy.

Organizing Information Have students create a graphic organizer similar to the one shown below to categorize the obstacles facing immigrants coming to the United States in the late 1800s. Students should include as many rows as they need. **L1 US: 2C, 8A, 24B; ELA: Gr9/10/11: 4D, 4F**

Working Conditions	Family Life	City Life	Social Life

Student Edition TEKS

ELA: Page 328: Gr9/10/11: 6A, 8B, 10B; **Page 329:** Gr9/10/11: 10B, 19B, 20B

oaths or sign contracts promising not to join a union, and they hired detectives to go undercover and identify union organizers. Workers who tried to organize a union or strike were fired and placed on a **blacklist**—a list of “troublemakers.” Once blacklisted, a laborer could get a job only by changing residence, trade, or even his or her name.

1

If workers formed a union, companies often used a **lockout** to break it. They locked workers out of the property and refused to pay them. If the union called a strike, employers would hire replacement workers, or **strikebreakers**.

Political and Social Opposition Workers who wanted to organize a union faced several major problems. There were no laws giving workers the right to organize or requiring owners to negotiate with them. Courts frequently ruled that strikes were “conspiracies in restraint of trade,” for which labor leaders might be fined or jailed.

Unions also suffered from the perception that they threatened American institutions. In the late 1800s, the ideas of Karl Marx, called **Marxism**, had become very influential in Europe. Marx argued that the basic force shaping capitalist society was the class struggle between workers and owners. He believed

that workers would eventually revolt, seize control of the factories, and overthrow the government.

Marxists claimed that after the revolution, the government would seize all private property and create a socialist society where wealth was evenly divided. Eventually, Marx thought, the state would wither away, leaving a Communist society where classes did not exist. Marxism strongly shaped the thinking of European unions.

While many labor supporters agreed with Marx, a few supported anarchism. Anarchists believe that society does not need any government. At the time, some believed that with only a few acts of violence, they could ignite a revolution to topple the government. In the late 1800s, anarchists assassinated government officials and set off bombs all across Europe, hoping to trigger a revolution.

As Marxist and anarchist ideas spread in Europe, tens of thousands of European immigrants began arriving in the United States. Nativism—anti-immigrant feelings—was already strong in the United States. As people began to associate immigrant workers with revolution and anarchism, they became increasingly suspicious of unions. These fears, as well as the government’s duty to maintain law and order, often led officials to use the courts, the police, and even the army to crush strikes and break up unions.

Reading Check Identifying

2

Why were some Americans suspicious of Unions?

Profiles IN HISTORY

Mother Jones 1830–1930

Mary Harris “Mother” Jones emigrated to the United States from Ireland in 1835 at the age of five. Jones became the nation’s most prominent woman union leader after a tragic personal loss. In 1867 her husband George, a union organizer, and their four children died from yellow fever.

2

Widowed and childless, Jones moved to Chicago and opened a dressmaker’s shop. From her shop window, Jones could see the effects of the economic downturn of the 1870s: “poor shivering wretches, jobless and hungry.” At night she attended rallies for the Knights of Labor.

By 1890 Jones had become an organizer for the United Mine Workers. In 1897 she traveled to West Virginia.

2

The intrepid labor organizer trudged from camp to camp along railroad tracks or rode atop farm wagons. She slept in a tent.



A journalist who followed Jones on her trip reported that Jones began her speeches slowly, encouraging her listeners to “look on yourselves, and upon each other. Let us consider this together for I am one of you, and I know what it is to suffer.” Then Mother Jones would make an impassioned plea for the miners to join the union. “You pity yourselves, but you do not pity your brothers, or you would stand together to help one another.”

The Struggle to Organize

1

Although workers attempted on many occasions to create large industrial unions, they rarely succeeded. In many cases the confrontations with owners and the government led to violence and bloodshed. In 1868 William Sylvis, president of the Iron Molders Union and leader of the National Labor Union, wrote to Karl Marx to encourage Marx’s work and express his own hopes:

“Our cause is a common one. . . . Go ahead in the good work that you have undertaken, until the most glorious success crowns your efforts . . . monied

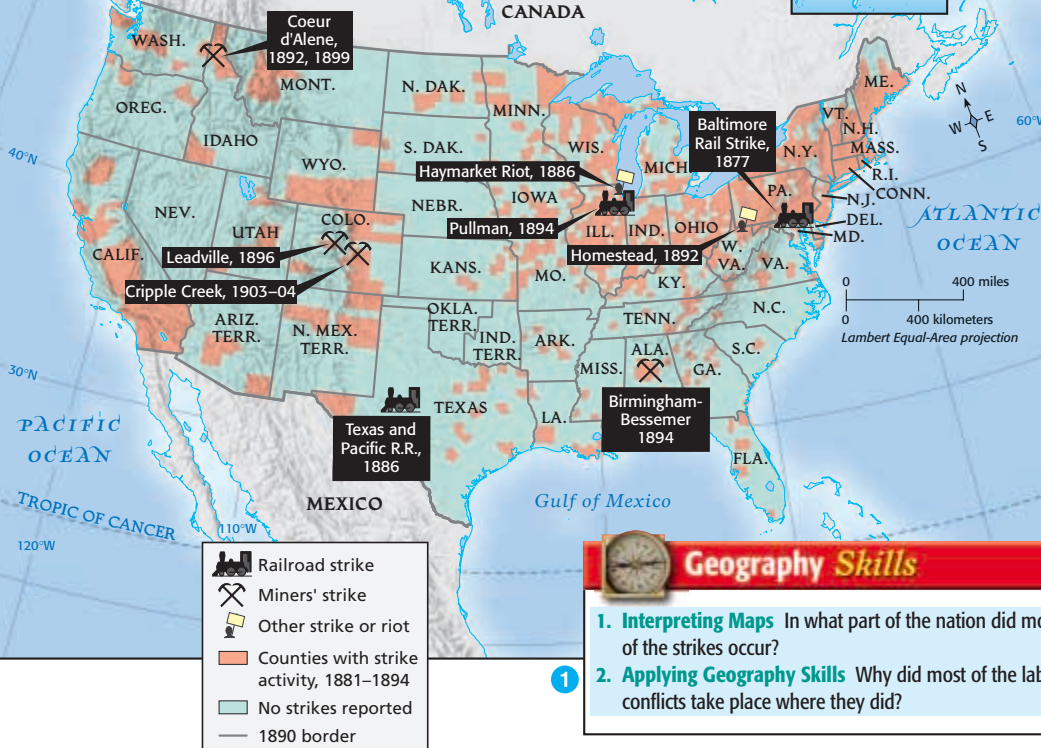
MEETING SPECIAL NEEDS

Verbal/Linguistic Have students play the role of a reporter assigned to cover the railroad strike of 1877. Tell them to write investigative articles that tell when, what, where, why, and how things occurred. Ask students to do independent research to find facts such as dates. Have volunteers read their articles to the class. **L2 US: 24A, 25D; ELA: Gr9/10/11: 4C, 4F, 13B**

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



Strikes and Labor Unrest, 1870–1890



Geography Skills

- Interpreting Maps** In what part of the nation did most of the strikes occur?
- Applying Geography Skills** Why did most of the labor conflicts take place where they did?

power is fast eating up the substance of the people. We have made war upon it, and we mean to win it. If we can we will win through the ballot box; if not, we will resort to sterner means. A little bloodletting is sometimes necessary in desperate causes. ☺☺

—quoted in *Industrialism and the American Worker*

The Great Railroad Strike of 1877 In 1873 a severe recession known as the Panic of 1873 struck the American economy and forced many companies to cut wages. In July 1877, as the recession continued, several railroads announced another round of wage cuts. This triggered the first nationwide labor protest. The day after the cuts took effect, railroad workers in Martinsburg, West Virginia, walked off the job and blocked the tracks.

As word spread, railroad workers across the country walked off the job. The strike eventually involved 80,000 railroad workers in 11 states and affected two-thirds of the nation's railways. Angry strikers smashed equipment, tore up tracks, and blocked rail service in New York, Baltimore, Pittsburgh, St. Louis,

and Chicago. The governors of several states called out their militias to stop the violence. In many places, gun battles erupted between the militia and striking workers.

Determined to stop the violence, President Hayes ordered the army to open the railroad between Philadelphia and Pittsburgh. He then sent troops to Chicago, where the strike had paralyzed the entire city. The troops restored order, but by the time the strike ended, more than 100 people lay dead, and millions of dollars of property had been destroyed.

The Knights of Labor The failure of the Great Railroad Strike convinced many labor organizers that workers across the nation needed to be better organized. By the late 1870s, enough workers had joined a new organization, the **Knights of Labor**, to make it the first nationwide industrial union.

The Knights called for an eight-hour workday and a government bureau of labor statistics. They also supported equal pay for women, the abolition of child labor, and the creation of worker-owned factories. The Knights' leaders initially opposed the use of strikes, preferring to use boycotts to pressure

Geography Skills

- Answers:**
- Northeast, Midwest, West
 - They were sites of major industrial development.

Geography Skills Practice
Ask: In which states did mining strikes occur? (Alabama, Colorado, Idaho)

Designing a Board Game Have students design a game based on life in the late 1800s. Invite interested students to play some of the games and explain the connections to the 1800s. **L3 US: 24A–D, 25C, 25D, 26B**

Use the rubric for creating a cooperative group management plan on pages 71–72 in the *Performance Assessment Activities and Rubrics*.

FYI

Almost 100 years after the railroad strike of 1877, another group of transportation workers, air traffic controllers, went on strike demanding higher wages and fewer working hours. In August 1981, over 11,000 striking air traffic controllers were fired.



Hard Work Strict rules were enforced in the workplace in the late 1800s. Many bosses forbade singing, drinking, joking, smoking, or conversation on the job. They also denied immigrant workers time to celebrate their national holidays and holy days, and they did not accommodate workers who did not want to work on the Sabbath.

INTERDISCIPLINARY CONNECTIONS ACTIVITY

Economics Have students use magazines to create a collage of today's American workforce. Instruct students to insert text callouts to highlight how today's workforce is similar to and different from the workforce the late 1800s. **L1 US: 24B, 25C, 25D; ELA: Gr9/10/11: 21B, 21C**

Student Edition TEKS

US HISTORY: Page 328: 2B, 21D, 25A; Page 329: 8B

CHAPTER 9

Section 4, 326–331

Reading Check

Answer: Frequent strikes and interference by authorities caused people to lose faith in unions.

Writing a Report Have students write a report about one of the labor issues mentioned in this section. Encourage students to use library and Internet resources for their research. **L1 US:** 2B, 2C, 21D, 24A–D, 25A–D; **ELA:** Gr9/10/11: 1A, 1B, 4A–D, 4F, 13B, 13C; Gr9: 7E–H; Gr10/11: 7E–G

3 ASSESS

Assign Section 4 Assessment as homework or as an in-class activity. **US:** 25D

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

Reading Essentials and Study Guide 9–4

Name _____ Date _____ Class _____

Study Guide

Chapter 9, Section 4
For use with textbook pages 326–331

UNIONS

KEY TERMS AND NAMES

deflation a rise in the value of money (page 327)
trade union unions that were limited to people with specific skills (page 327)
industrial union unions that represented all craft workers and common laborers in a particular industry (page 327)
blacklist a list of people who tried to organize a union or strike and were considered troublemakers by employers (page 328)
lockout a method used by employers to prevent unions from forming (page 328)
Marxism the ideas of Karl Marx (page 328)

Section Quiz 9–4

Name _____ Date _____ Class _____

★ Chapter 9 Score _____

Section Quiz 9-4

DIRECTIONS: Matching Match each item in Column A with the items in Column B. Write the correct letters in the blanks. (10 points each)

Column A	Column B
_____ 1. process whereby an impartial third party helps workers and management reach an agreement	A. Knights of Labor
_____ 2. a rise in the value of money	B. Women's Trade Union League
_____ 3. first national association dedicated to promoting women's labor issues	C. arbitration
_____ 4. unions limited to people with specific skills	D. deflation
_____ 5. first nationwide industrial union	E. trade unions

DIRECTIONS: Multiple Choice In the blank at the left, write the letter of the choice that best completes the statement or answers the question. (10 points each)

Student Edition TEKS

ELA: Page 330: Gr9/10/11: 10B; Page 331: Gr9/10/11: 1A, 1B, 4A, 4B, 4D, 4F, 6A, 7B–E, 10A, 10B, 19B, 20B; Gr9: 7I; Gr10/11: 7H

employers. They also supported **arbitration**, a process in which an impartial third party helps workers and management reach an agreement.

- In the early 1880s, the Knights began to use strikes, and they achieved great success initially. After striking Knights convinced one of Jay Gould's railroads to reverse wage cuts in 1885, membership in the union leapt from 100,000 to 700,000 in less than a year. The following year, 1886, marked the peak of their success. In the spring of that year, an event known as the **Haymarket Riot** undermined the Knights' reputation, and the union rapidly declined.

The Haymarket Riot In the early 1880s, the movement for an eight-hour workday began to build support. In 1886 organizers called for a nationwide strike on May 1 to show support for the idea. On that date, strikes took place in many cities, including Chicago.

On May 3, a clash between strikers and police in Chicago left one striker dead. The next evening, an anarchist group organized a meeting in Chicago's Haymarket Square to protest the killing. Around 3,000 people gathered to hear the speeches. When police entered the square, someone threw a bomb. The police opened fire, and workers shot back. Seven police officers and four workers were killed.

Police arrested eight people for the bombing. Seven of those arrested were German immigrants and advocates of anarchism. The incident horrified people across the country.

No one knew who threw the bomb. Although the evidence was weak, all eight men were convicted, and four were later executed. Unfortunately for the Knights of Labor, one of the men arrested was a member of the union. The incident badly hurt the Knights' reputation, and they began to lose members rapidly.

1

The Pullman Strike Although the Haymarket Riot set back the drive to create industrial unions, other labor organizers continued their efforts. In 1893 railroad workers created the American Railway Union (ARU) under the leadership of Eugene V. Debs. One of the companies the ARU unionized was the Pullman Palace Car Company.

1

The Pullman Company was based in Illinois. It had built a town named Pullman near its factory and required its workers to live in the town and to buy goods from company stores. In 1893 a depression

struck the United States, causing the Pullman Company to slash wages. The wage cuts made it difficult for workers to pay their rent or the high prices at the company stores. In May 1894, after Pullman fired three workers who complained, a strike began. In support, the ARU stopped handling Pullman cars all across the United States.

The boycott of Pullman cars tied up railroads and threatened to paralyze the economy. Determined to break the union, railroad managers arranged for U.S. mail cars to be attached to the Pullman cars. If the strikers refused to handle the Pullman cars, they would be interfering with the U.S. mail, a violation of federal law. President Grover Cleveland then sent in troops, claiming it was his responsibility to keep the mail running. When a federal court issued an injunction ordering the union to halt the boycott, the strike at Pullman and the ARU both collapsed.

- Reading Check Analyzing** Why did industrial unions frequently fail in the late 1800s?

The American Federation of Labor

Although large-scale industrial unions generally failed in the late 1800s, trade unions continued to prosper. In 1886 delegates from over 20 of the nation's trade unions organized the **American Federation of Labor (AFL)**. The AFL's first leader was

Samuel Gompers. His approach to labor relations—which he called “plain and simple” unionism—helped unions to become accepted in American society.

Gompers believed that unions should stay out of politics. He rejected socialist and communist ideas. Rather, he believed that the AFL should fight for small gains—such as higher wages and better working conditions—within the American system. He was willing to use the strike but preferred to negotiate.

Under Gompers's leadership, the AFL had three main goals. First, it tried to convince companies to recognize unions and to agree to collective bargaining. Second, it pushed for **closed shops**, meaning that companies could only hire union members. Third, it promoted an eight-hour workday.

1

The AFL grew slowly, but by 1900 it was the biggest union in the country, with over 500,000 members. Still, at that time, the AFL represented less than 15 percent of all non-farm workers. All unions, including railroad



Samuel Gompers

CRITICAL THINKING ACTIVITY

Synthesizing Ask students to describe stereotypes associated with unions. Have students then explain how these stereotypes were formed. Then ask students to explain the impact of these stereotypes on the efforts of organized labor. Finally, ask students to evaluate if these stereotypes about unions are still held by people today. **L1 US:** 2B, 24B; **ELA:** Gr9/10: 16B; Gr11: 15B

unions, represented only 18 percent. As the 1900s began, the vast majority of workers remained unorganized, and unions were relatively weak.

- ① **Reading Check** **Analyzing** What AFL policies contributed to its growth as a union?

Working Women

Throughout the 1800s, most wage-earning workers in the United States were men. After the Civil War, the number of women wage earners began to increase. By 1900 women made up more than 18 percent of the labor force.

③ The type of jobs women did outside the home in the late 1800s and early 1900s reflected society's ideas about what constituted "women's work." Roughly one-third of women worked as domestic servants. Another third worked as teachers, nurses, sales clerks, and secretaries. The remaining third were industrial workers, but they were employed in light industrial jobs that people believed appropriate to their gender. Many worked in the garment industry and food processing plants.

Regardless of their employment, women were paid less than men even when they performed the same jobs. It was assumed that a woman had a man helping to support her, either her father or her husband, and that a man needed higher wages to support a family. For this reason, most unions, including the AFL, excluded women.

③ In 1903 two woman labor organizers, Mary Kenney O'Sullivan and Leonora O'Reilly, decided to establish a separate union for women. With the help



Picturing History

Detail Work These women worked in the National Elgin Watch Company's gilding room, where they gilded metal watches with thin layers of gold. **What do you notice about their working conditions?**

of Jane Addams and Lillian Wald—the founders of the settlement house movement—they established the **Women's Trade Union League (WTUL)**, the first national association dedicated to promoting women's labor issues. The WTUL pushed for an eight-hour day, the creation of a minimum wage, an end to evening work for women, and the abolition of child labor. The WTUL also collected funds to support women on strike.

② **Reading Check** **Comparing** How were female industrial workers treated differently than male workers in the late 1800s?

Reading Check

Answer: emphasis on collective bargaining, closed shops, eight-hour workday

Picturing History

Answer: women workers working close together, uncomfortable chairs, dressed more formally than workers today

Ask: **Why do you think this constituted women's work?** (It was light industrial work that did not involve heavy machinery.)

Reteach

Have students list the barriers to labor union growth. **US: 2B**

Enrich

Encourage students to write a profile of one of the leading labor unions today, such as the AFL-CIO or the Teamsters. **US: 24A–D, 25A–D; ELA: Gr9/10/11: 1A, 1B, 4A, 4B, 4D, 4F**

Reading Check

Answer: excluded from unions, paid less than male counterparts, employed in jobs deemed appropriate for women

4 CLOSE

Have students describe industrial working conditions in the United States in the late 1800s. **US: 2B, 2C**

TAKS Practice

SECTION 4 ASSESSMENT

Checking for Understanding

- Define:** deflation, trade union, industrial union, lockout, Marxism, arbitration, closed shop.
- Identify:** blacklist, Knights of Labor.
- List** the groups of workers represented by the Knights of Labor and the American Federation of Labor.

Reviewing Themes

- Individual Action** What political contribution did Mary Harris "Mother" Jones make to American society?

Critical Thinking

- Analyzing** Why did early labor unions fail?
- Organizing** Use a graphic organizer similar to the one below to list the factors that led to an increase in unions in the late 1800s.



Analyzing Visuals

- Analyzing Photographs** Examine the photograph at the top of this page of workers in a watch factory. Most of the people in the picture are women. What do you think the jobs were of the men in the photograph?

Writing About History

- Persuasive Writing** Imagine that you are an American worker living in one of the nation's large cities. Write a letter to a friend explaining why you support or oppose the work of labor unions.

SECTION 4 ASSESSMENT ANSWERS

- Terms are in blue. **US: 25A**
- blacklist (p. 328), Knights of Labor (p. 329) **US: 2B**
- industrial workers, trade workers **US: 2B**
- She became a key organizer for the United Mine Workers union. **US: 21D**
- confrontations led to violence, courts ruled against them, frequent strikes, fought for many things all at the same time, blacklisting **US: 2B, 24B**
- concern about working conditions, concern about pay, concern about job security, economic challenges such as deflation **US: 2B, 25C**
- managers or supervisors
- Students' letters will vary. Letters should express a point of view. **US: 24G, 25D**

Student Edition TEKS

US HISTORY: Page 330: 2B, 24B, 25A; Page 331: 2B, 21D, 24B, 24G, 25A, 25C, 25D

GLENCOE
TECHNOLOGY

MindJogger Videoquiz

Use the **MindJogger Videoquiz** to review Chapter 9 content.



Available in VHS

Reviewing Key Terms

Students' answers will vary. The pages where the words appear in the text are shown in parentheses.

1. **gross national product** (p. 308)
2. **laissez-faire** (p. 310)
3. **entrepreneur** (p. 310)
4. **time zone** (p. 316)
5. **land grant** (p. 317)
6. **corporation** (p. 320)
7. **economies of scale** (p. 320)
8. **fixed costs** (p. 320)
9. **operating costs** (p. 320)
10. **pool** (p. 320)
11. **vertical integration** (p. 321)
12. **horizontal integration** (p. 321)
13. **monopoly** (p. 321)
14. **trust** (p. 322)
15. **holding company** (p. 322)
16. **deflation** (p. 327)
17. **trade union** (p. 327)
18. **industrial union** (p. 327)
19. **lockout** (p. 328)
20. **Marxism** (p. 328)
21. **arbitration** (p. 330)
22. **closed shop** (p. 330)

US: 25A, 25B; **ELA:** Gr9/10/11: 6A

Reviewing Key Facts

23. Morrill Tariff (p. 310), Andrew Carnegie (p. 320) **US:** 19B
24. iron ore, water, copper, coal, timber; large families, and floods of immigrants
25. helped increase the nation's productive capacity, improved transportation and communication **US:** 2B, 22C

CHAPTER
9

ASSESSMENT and ACTIVITIES

Reviewing Key Terms

On a sheet of paper, use each of these terms in a sentence.

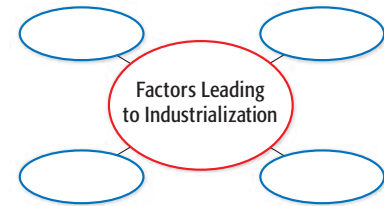
- | | |
|---------------------------|----------------------------|
| 1. gross national product | 12. horizontal integration |
| 2. laissez-faire | 13. monopoly |
| 3. entrepreneur | 14. trust |
| 4. time zone | 15. holding company |
| 5. land grant | 16. deflation |
| 6. corporation | 17. trade union |
| 7. economies of scale | 18. industrial union |
| 8. fixed costs | 19. lockout |
| 9. operating costs | 20. Marxism |
| 10. pool | 21. arbitration |
| 11. vertical integration | 22. closed shop |

Reviewing Key Facts

23. **Identify:** Morrill Tariff, Andrew Carnegie.
24. The United States had an advantage in industrializing due to its resources and large workforce. What resources did the nation have? Why was its workforce large?
25. How did inventions contribute to economic growth in the United States in the late 1800s?
26. How did the federal government encourage railroad companies to construct railroads?
27. What new methods of selling products were developed in the late 1800s?
28. Why did workers try to organize labor unions in the United States in the late 1800s?
29. What were the two basic types of workers in American industry at this time?

Critical Thinking

30. **Analyzing Themes: Individual Action** List the names and actions of five people who contributed to American economic growth in the late 1800s.
31. **Organizing** Use a graphic organizer similar to the one below to list the factors that led to making the United States an industrial nation.



32. **Interpreting Primary Sources** Americans like Ida Tarbell criticized large corporations such as the Standard Oil Company. In the following excerpt from *History of the Standard Oil Company*, she warns of the results of Rockefeller's business practices on the nation's morality. Read the excerpt and answer the questions that follow:

Very often people who admit the facts, who are willing to see that Mr. Rockefeller has employed force and fraud to secure his ends, justify him by declaring, 'It's business.' That is, 'It's business' has come to be a legitimate excuse for hard dealing, sly tricks, special privileges. It is a common enough thing to hear men arguing that the ordinary laws of morality do not apply in business.

Critical Thinking

30. Students' answers will vary. Names may include inventors and industrialists. **US:** 24B
31. large labor force, inventions, abundant natural resources, free enterprise system **US:** 2B, 25C; **ELA:** Gr9/10/11: 4D, 7D
32. **a.** force and fraud; **b.** the "it's just business" attitude that excused immoral actions **US:** 24A; **ELA:** Gr9/10/11: 4C, 13B

Chapter Summary

Factors Behind Industrialization

- Abundant natural resources
- Cheap immigrant labor force
- High tariffs that reduced foreign goods
- National communication and transportation networks

Growth of Business

- Little or no government intervention
- Development of pools, trusts, holding companies, and monopolies
- Small businesses could not compete with economies-of-scale of large businesses
- Practices of some big businesses sometimes limited competition

Changing Workplace

- Rural migration and immigration created large, concentrated workforce
- In large-scale industries, low wages, long hours, and dangerous working conditions were common
- First large unions formed but had little bargaining power against large companies

26. by offering land grants **US:** 2B
27. large display advertisements in newspapers, department stores, chain stores, mail-order catalogs
28. to change poor working conditions, low pay, and job security **US:** 2B
29. craft workers and common laborers **US:** 2B



Self-Check Quiz

Visit the *American Republic Since 1877* Web site at tx.tarvol2.glencoe.com and click on **Self-Check Quizzes—Chapter 9** to assess your knowledge of chapter content.

As for the ethical side, there is no cure but in an increasing scorn of unfair play. . . . When the businessman who fights to secure special privileges, to crowd his competitor off the track by other than fair competitive methods, receives the same summary disdainful ostracism by his fellows that the doctor or lawyer who is ‘unprofessional,’ the athlete who abuses the rules, receives, we shall have gone a long way toward making commerce a fit pursuit for our young men. ☺☺

—quoted in *Readings in American History*

- According to Tarbell, what practices had Rockefeller used to establish the Standard Oil Company?
 - In what way did Tarbell believe the attitudes of the American people contributed to Rockefeller’s business practices?
33. **Analyzing** Analyze the impact of technological innovations and industrialization on the American labor movement.

Practicing Skills

34. **Making Inferences** Reread the passage titled “Working in the United States” from Section 4, page 326. Then answer the following questions.
- What facts are stated about working conditions in the United States during this time period?
 - Based on your answer to the previous question, what can you infer about the attitude of employers toward their workers during this time?

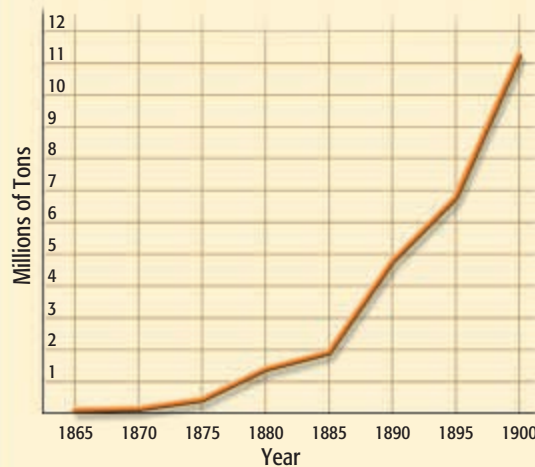
Writing Activity

35. **Portfolio Writing: Persuasive Writing** Think of a product that you think is essential to life today. Write an advertisement for this product that would persuade people to purchase it.

Chapter Activity

36. **American History Primary Source Document Library CD-ROM** Read “Driving the Golden Spike” by Alexander Toponce, under *Reshaping the Nation*. For further background, reread your textbook’s coverage of the same subject on page 315. Then prepare a presentation for your classmates. In it, describe what Toponce had to say about the workers during the celebration and what Grenville Dodge

Steel Production, 1865–1900



Source: *Historical Statistics of the United States: Colonial Times to 1970.*

had to say about their experience during the project. What attitudes do you think each man had toward the workers?

Economics and History

37. The graph above shows steel production from 1865 to 1900. Study the graph and answer the questions below.
- Interpreting Graphs** Between what years did steel production have the greatest increase?
 - Making Inferences** How did increased steel production contribute to American industrialism?



Directions: Choose the best answer to the following question.

Labor unions were formed for all of these reasons except:

- To improve workers’ wages
- To protect factory owners from being sued
- To make factories safer
- To prevent children from working long hours

Test-Taking Tip: If a question uses the word *except*, you need to look for the answer that does not fit. Remember that unions were formed to try to help workers. Which answer is least likely to help workers?



Answer: G

Test-Taking Tip: Instruct students to add the phrase “Labor unions were formed” before each of the possible answers to help them determine which answers they should eliminate. Remind them that they are trying to eliminate answers that include reasons why unions were formed. Answers F, H, and J can be eliminated. G is the correct answer.

TAKS: Obj 1, 3

33. Inventions such as electric power and the automatic loom led to large manufacturing companies and industrialization but created a host of challenges for workers, such as harsh working conditions. This led workers to unite and join labor unions. **US:** 2B, 22C, 24B

Practicing Skills

34. **a.** Working conditions were often unhealthy and dangerous. Workers breathed lint, dust, and toxic fumes. The lack of safety devices in heavy machinery caused a high number of injuries. **b.** Students’ answers will vary. They might suggest that employers were not concerned with the welfare of their workers. **US:** 24B; **ELA:** Gr9: 7H; Gr10/11: 7G

Bonus Question ?

Ask: What are some of the reasons the United States had become the world’s leading industrial nation by the early 1900s? (possible answers include: abundant natural resources, large workforce, free enterprise system)