

Grade 6 History & Geography

Unit 8: Industrialization and Urbanization in America

10 lessons and a unit quiz. Use this pack with the **Industrialization and Urbanization in America Student Reader** (print it, or download it once from the course) to teach the whole unit without the internet.

What is in this pack

- A lesson plan for each chapter: the Big Question, words to know, which pages to read, questions to talk over and the activity pages.
- The unit quiz, ready to print.
- Answers for the teacher at the back: every discussion question and the quiz key.

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Lesson schedule

Two or three lessons a week, about 30 minutes each. Tick each one off as you go.

	Lesson	Reader pages	Activity pages
☐	Chapter 1: The Industrial Giant	PDF pages 56–65	AP 1.1, AP 1.2
☐	Chapter 2: Railroads	PDF pages 66–75	AP 1.2
☐	Chapter 3: Resources, People, and Capital	PDF pages 76–81	AP 3.1
☐	Chapter 4: An Inventive People	PDF pages 82–91	AP 1.2, AP 4.1
☐	Chapter 5: Growing Business Enterprises	PDF pages 92–103	AP 1.2, AP 5.1
☐	Chapter 6: Monopolies, Trusts, and Pools	PDF pages 104–111	AP 6.1
☐	Chapter 7: The World of the Worker	PDF pages 112–121	AP 7.1, AP 7.2
☐	Chapter 8: Workers Organize	PDF pages 122–131	AP 1.2
☐	Chapter 9: The Urbanization of America	PDF pages 132–141	AP 9.1, AP 9.2
☐	Chapter 10: Growing Pains	PDF pages 142–151	AP 10.1, AP 10.2
☐	Unit quiz	—	—

Page numbers are the PDF page numbers of the Student Reader file, so they match what your PDF reader shows.

Chapter 1: The Industrial Giant

THE BIG QUESTION

How did America transform from an agricultural nation into an industrial giant?

Words to know

- **weaver** — a person who makes fabric by weaving threads or yarn together *The weaver produced many yards of fabric each day.*
- **telegraph** — a machine that communicates messages over long distances by sending signals through wires *The journalist used the telegraph to send his stories to newspapers all over the country.*
- **investor** — a person who puts money into a business with the goal of later making a profit *The investor put his life's savings into the company, hoping that it would be a success and earn him even more money in the future.*
- **textile** — cloth or fabric *The living room sofa was covered in a very colorful textile.*
- **manufacturer** — a person or company that makes or produces an item to be sold *The manufacturer made parts that were used in automobiles.*
- **spinning mill** — a factory that makes thread or yarn *The spinning mill employed many men, women, and children, who worked long hours making thread.*

Read

Read Chapter 1 in the Student Reader: PDF pages 56–65. Look at the pictures and maps together.

Talk it over

1. How did Andrew Carnegie make the most of his opportunities?
2. What did the U.S. Senate committee learn about working conditions in American factories?
3. Why did the British government prohibit anyone from selling a spinning or weaving machine to another country, or taking plans for making one out of Great Britain?
4. How did Samuel Slater manage to bring the design for a spinning machine to the United States?
5. How was the textile mill that opened in 1814 in Waltham, Massachusetts, different from earlier mills in the United States?
6. What was the biggest difference between the United States in 1850 and the United States in 1900?

Answers are at the back of this pack.

Check for understanding

- Answer the Big Question in a sentence or two: How did America transform from an agricultural nation into an industrial giant?
- Use one of today's words in a sentence of your own.

Activity pages

- Activity Page 1.1: World Map — Teacher Guide PDF page 190
- Activity Page 1.2: The Great Famine — Teacher Guide PDF page 191

Chapter 2: Railroads

THE BIG QUESTION

How did the development and expansion of railroads help grow the American economy?

Words to know

- **transcontinental** — across a continent *The first Transcontinental Railroad was completed in 1869 after railroad tracks coming from the western region of the United States were joined with railroad tracks coming from the East.*
- **federal government** — a national government that shares power with state or regional governments *The federal government is responsible for raising and maintaining the country's military.*
- **ton** — a unit of weight equal to two thousand pounds *The average Asian elephant weighs about six tons, or twelve thousand pounds.*
- **industrialism** — the organization of society around an economy based on the use of machines and factories *The rise of manufacturing marked a shift toward industrialism in the United States.*
- **market economy** — an economic system in which prices are determined by competition among businesses and not by the government *As a part of the market economy, business owners are allowed to determine how much they would like to charge for the goods they sell.*
- **standard time zone** — an area within which everyone observes the same time *New York and Massachusetts are in same standard time zone, but California is not.*

Read

Read Chapter 2 in the Student Reader: PDF pages 66–75. Look at the pictures and maps together.

Talk it over

1. What problems did the hundreds of small railroad companies in the early 1800s cause manufacturers?
2. Why do you think the federal government provided free land and loans to railroad companies?
3. How did Vanderbilt and Scott improve the railroads?
4. In what important ways did the railroads contribute to the growth of industry?
5. Prior to the availability of railroads, were people living in Springfield likely to buy the cheaper stove in Pleasantville? Why or why not?
6. After railroads, where would people in Springfield probably buy their stove? Why?

7. What happened to companies, like the Springfield Stove Company, that could not lower their prices to match their competitors' prices after the railroads came?
8. Once the availability of railroads lowered shipping costs, what was the only way that manufacturers in a particular city, such as New York, could compete with manufacturers in other cities?
9. Why did the government introduce standard time zones in 1883?
10. Do you think the railroads had more of a positive or negative effect on the U.S. economy, and why?

Answers are at the back of this pack.

Check for understanding

- Answer the Big Question in a sentence or two: How did the development and expansion of railroads help grow the American economy?
- Use one of today's words in a sentence of your own.

Activity pages

- Activity Page 1.2: The Great Famine — Teacher Guide PDF page 191

Chapter 3: Resources, People, and Capital

THE BIG QUESTION

How did investment in corporations help to drive America's rapid industrial development?

Words to know

- **natural resource** — something from nature that is useful to humans *Water was the natural resource that powered many early factories.*
- **mineral** — a naturally occurring substance found in Earth's crust *Emeralds are a mineral used in jewelry.*
- **ore** — rock from which metal can be obtained *The laborers heated the ore to high temperatures to extract the iron inside.*
- **capital** — money needed to pay for a workforce, machinery, and other equipment to support the development and growth of a business *The newly founded company needed immense amounts of capital to get off the ground.*
- **corporation** — a type of company, usually made up of many people, with certain legal rights and protections to conduct business *The corporation decided to purchase a number of smaller companies.*

Read

Read Chapter 3 in the Student Reader: PDF pages 76–81. Look at the pictures and maps together.

Talk it over

1. What natural resources were identified in the sections you just read?
2. What was oil used for?
3. Who did most of the work in U.S. mines and factories?
4. How did railroads and other businesses raise capital?
5. What effect did corporations have on the pace of America's industrial development?

Answers are at the back of this pack.

Check for understanding

- Answer the Big Question in a sentence or two: How did investment in corporations help to drive America's rapid industrial development?
- Use one of today's words in a sentence of your own.

Activity pages

- Activity Page 3.1: Domain Vocabulary: Chapters 1–3 — Teacher Guide PDF page 320

Chapter 4: An Inventive People

THE BIG QUESTION

How would you describe the inventors Alexander Graham Bell and Thomas Alva Edison?

Words to know

- **patent** — a license from the government that gives the person requesting the patent the exclusive right to make, use, or sell an invention *Thomas Edison applied for many patents to make sure that no other inventor could steal his designs.*
- **combustion engine** — an engine that converts fuel, such as gasoline, to energy *The automobile's combustion engine uses diesel as its fuel.*
- **phonograph** — a machine that records and reproduces sound; a record player *The family gathered around the phonograph to listen to music.*
- **electric current** — the flow of electricity through a circuit *The outlet connected the lamp to the electric current.*
- **carbon** — a nonmetal substance that makes up diamonds and graphite and is found in coal *Thomas Edison used carbon to make his light bulbs work.*

Read

Read Chapter 4 in the Student Reader: PDF pages 82–91. Look at the pictures and maps together.

Talk it over

1. What was the biggest difference between the Patent Office in 1790 and the Patent Office in 1890?
2. Why do you think inventors would want a patent on their invention?
3. For what invention did Alexander Graham Bell receive a patent?
4. Which inventions mentioned in the section created whole new industries?
5. What new way of working did Edison and his assistants use?
6. Edison said that genius “was one percent inspiration and ninety-nine percent perspiration.” What did he mean by this?
7. How was the nation’s refusal to turn off the electricity a tribute to Edison when he died in 1931?
8. Which Edison quote do you find most inspiring, and why?
9. What do Edison’s quotes and sayings reveal about him as a person?

Answers are at the back of this pack.

Check for understanding

- Answer the Big Question in a sentence or two: How would you describe the inventors Alexander Graham Bell and Thomas Alva Edison?
- Use one of today's words in a sentence of your own.

Activity pages

- Activity Page 1.2: The Great Famine — Teacher Guide PDF page 191
- Activity Page 4.1: Old and New Immigration — Teacher Guide PDF pages 323–325

Chapter 5: Growing Business Enterprises

THE BIG QUESTION

Why do you think Andrew Carnegie and John D. Rockefeller were so successful?

Words to know

- **enterprise** — an organized activity meant to make a profit; a company *Cornelius Vanderbilt made the railroad the primary focus of his business enterprise.*
- **impurity** — an unwanted substance that makes something impure or contaminated *The steel mill used large blast furnaces to burn off each and every impurity from the iron.*
- **efficient** — productive without wasting time or resources *Spending the school day passing notes and gossiping is not an efficient use of time.*
- **crude oil** — naturally occurring oil that has not been processed to remove impurities *Large tankers carried the crude oil from the well to the factory to be processed.*
- **refinery** — a place where resources are processed, usually for industrial use *The refinery was located close to the source of the oil, making it easy to transport the thick, black substance for processing.*

Read

Read Chapter 5 in the Student Reader: PDF pages 92–103. Look at the pictures and maps together.

Talk it over

1. What factors helped the United States grow into a strong industrial society?
2. Why do you think the text says it took “courage” to make the United States an industrial giant?
3. Why did Carnegie switch his focus from making iron bridges to making steel?
4. Why was Carnegie able to produce steel more cheaply than anyone else?
5. Why did Carnegie’s company start making steel beams for buildings when orders for steel rails for railroads were still pouring in?
6. How did Carnegie cut prices and competition?
7. Why did oil become valuable?
8. In what aspect of the oil business did Rockefeller choose to invest and why?
9. What steps did Rockefeller take to control the oil industry?
10. How do you think J.P. Morgan was able to purchase his art collection?

Answers are at the back of this pack.

Check for understanding

- Answer the Big Question in a sentence or two: Why do you think Andrew Carnegie and John D. Rockefeller were so successful?
- Use one of today's words in a sentence of your own.

Activity pages

- Activity Page 1.2: The Great Famine — Teacher Guide PDF page 191
- Activity Page 5.1: Domain Vocabulary: Chapters 1-5 — Teacher Guide PDF page 195

Chapter 6: Monopolies, Trusts, and Pools

THE BIG QUESTION

What were the perceived advantages and disadvantages of large and powerful businesses?

Words to know

- **freight** — shipped goods; cargo *The ship carried freight and passengers from New York to Boston.*
- **monopoly** — complete ownership or control of a resource or industry *John D. Rockefeller had a monopoly on the oil industry in the United States.*
- **trust** — a combination of corporations created to reduce competition and control prices *John D. Rockefeller's trust, Standard Oil, made it impossible for other companies to compete in the oil industry.*
- **trustee** — an individual responsible for overseeing a trust *The trustee voted to approve the purchase of the smaller company.*
- **regulate** — to control or place limits on *One role of the federal government is to regulate certain business practices.*
- **commerce** — the buying and selling of goods and services; trade *The tycoon wanted his business to be the leader in commerce and all related activities.*
- **free enterprise** — a system in which businesses operate with minimal government involvement *Men such as Rockefeller and Carnegie took advantage of the free enterprise system in the United States to earn their vast fortunes.*

Read

Read Chapter 6 in the Student Reader: PDF pages 104–111. Look at the pictures and maps together.

Talk it over

1. What new kind of organization did Standard Oil form, and for what purpose?
2. What impact did the Standard Oil trust have on industry in the United States?
3. Were trusts and monopolies good for consumers? Why or why not?
4. Who named this period the “Gilded Age,” and what does the phrase mean?
5. Do you think men like Rockefeller and Carnegie were robber barons or captains of industry?
6. What unfair business practices did railroads engage in?
7. What were two reasons why some Americans wanted to regulate big business?
8. Why didn't the Interstate Commerce Act and the Sherman Antitrust Act have much effect in controlling large corporations?

Answers are at the back of this pack.

Check for understanding

- Answer the Big Question in a sentence or two: What were the perceived advantages and disadvantages of large and powerful businesses?
- Use one of today's words in a sentence of your own.

Activity pages

- Activity Page 6.1: Innovators and Inventors — Teacher Guide PDF pages 196–197

Chapter 7: The World of the Worker

THE BIG QUESTION

What were some of the advantages and disadvantages for American workers during this period of change?

Words to know

- **mass production** — the making of very large amounts of something *Henry Ford relied on mass production to efficiently build many automobiles at relatively low cost.*
- **garment** — an article of clothing *Jane's favorite garment was the sweater knit by her grandmother.*
- **sweatshop** — a factory in which employees work for long hours in unsafe conditions for a low wage *The young woman was exhausted after her fourteen-hour workday in the sweatshop.*
- **consumption** — a disease that causes the body to waste away, generally over a long period of time; tuberculosis *The mother feared that her small child would catch consumption.*
- **engineer** — a person who uses science and math to build useful objects or buildings *The builder consulted with the engineer before breaking ground on the construction of the new library.*
- **machinist** — a person who operates, designs, builds, or fixes machines *The factory owner asked the machinist to take a look at the broken motor.*
- **accounting** — the process of recording, summarizing, and analyzing business transactions *Through careful accounting, the business owner realized that he was owed \$20 from one of his regular customers.*

Read

Read Chapter 7 in the Student Reader: PDF pages 112–121. Look at the pictures and maps together.

Talk it over

1. How did industrialization change the lives and work of craftsmen?
2. What hardships did children working in mines and textile mills face?
3. What did employers do when factory workers were injured on the job?
4. How did consumers benefit from the newly formed ready-made clothing industry and the canned food and meatpacking industries?
5. How did some workers benefit from industrialization?
6. What effect did industrialization have on unskilled workers?

Answers are at the back of this pack.

Check for understanding

- Answer the Big Question in a sentence or two: What were some of the advantages and disadvantages for American workers during this period of change?
- Use one of today's words in a sentence of your own.

Activity pages

- Activity Page 7.1: The World of the Worker — Teacher Guide PDF pages 328–330
- Activity Page 7.2: Domain Vocabulary: Chapters 4–7 — Teacher Guide PDF page 331

Chapter 8: Workers Organize

THE BIG QUESTION

What is a union, and what did Samuel Gompers do to change how unions were organized?

Words to know

- **convenience** — something that makes life easier or more comfortable *The businesswoman paid for the convenience of having her lunch delivered to her office each day.*
- **union** — an organization formed by workers to win and protect workers' rights *The union fought for shorter hours and safer working conditions at the factory.*
- **socialism** — an economic system in which major industries are owned or regulated by the government, rather than by private businesses *Many wealthy industrialists feared the spread of socialism across the United States.*
- **anarchist** — a person who rebels against or works to disrupt an established authority, usually a government or an economic system *The anarchist secretly plotted to create a commotion at the inauguration to cause panic in crowd.*
- **blacklist** — to list people or groups in order to avoid or exclude them *The workers were afraid the factory owner would blacklist them if they joined a union, which would make it difficult to find other jobs.*

Read

Read Chapter 8 in the Student Reader: PDF pages 122–131. Look at the pictures and maps together.

Talk it over

1. Why did workers organize labor unions?
2. Why did unions grow so slowly in the late 1800s?
3. What effect did the Haymarket riot have on the growth of the labor movement?
4. How did Samuel Gompers first become involved with unions?
5. Why do you think Samuel Gompers continued to fight for workers' rights even after losing his job and getting blacklisted?
6. Why did Samuel Gompers choose trade unions over socialism?
7. Why was the Homestead Strike a near disaster for the AFL?
8. What is Labor Day?

Answers are at the back of this pack.

Check for understanding

- Answer the Big Question in a sentence or two: What is a union, and what did Samuel Gompers do to change how unions were organized?
- Use one of today's words in a sentence of your own.

Activity pages

- Activity Page 1.2: The Great Famine — Teacher Guide PDF page 191

Chapter 9: The Urbanization of America

THE BIG QUESTION

Why did many American cities grow so rapidly during the early 1900s?

Words to know

- **urban** — relating to a city *During the 1800s and early 1900s, many people left their farms to move to urban areas to find jobs in factories.*
- **skyscraper** — an extremely tall building *The small boy gazed up from the sidewalk at the skyscraper towering overhead.*
- **subway** — an underground train system *The commuter took the escalator from the street down to the subway below.*

Read

Read Chapter 9 in the Student Reader: PDF pages 132–141. Look at the pictures and maps together.

Talk it over

1. How did the populations of American cities change from the late 1800s through the early 1900s?
2. What was the most important reason why Kansas City, Minneapolis, and Chicago grew so quickly?
3. What industries became important in Kansas City?
4. What change in manufacturing meant that factories no longer had to be built next to rivers or streams?
5. Why did so many people leave the farms for the cities between 1880 and 1910?
6. In addition to people moving from farms, where else did new city dwellers come from?
7. Would you have wanted to live in a major city during this time?
8. What developments in architecture during the 1880s changed the city forever?
9. What new forms of transportation permitted cities to spread out farther than two miles?

Answers are at the back of this pack.

Check for understanding

- Answer the Big Question in a sentence or two: Why did many American cities grow so rapidly during the early 1900s?
- Use one of today's words in a sentence of your own.

Activity pages

- Activity Page 9.1: Map of Railroads, Canals, and Business — Teacher Guide PDF page 200
- Activity Page 9.2: What Really Happened? — Teacher Guide PDF page 201

Chapter 10: Growing Pains

THE BIG QUESTION

Why do you think this chapter is called “growing pains”?

Words to know

- **boarder** — a person who pays to rent a room and receive meals *Barely able to make ends meet on her own, Mary decided to take in a boarder.*
- **tax** — money that people must pay to the government so that it can fund such things as schools and roads. *The government increased the gasoline tax so it had enough money to pay for services needed, such as highway repairs.*
- **corruption** — illegal or dishonest behavior, often by people in a position of power *The mayor's time in office was characterized by underhanded dealings and widespread corruption.*
- **payoff** — a bribe *The businessman offered a payoff to the mayor in exchange for a tax break.*
- **political machine** — a group that maintains political control, usually of a city, through bribery and intimidation *The journalist worked tirelessly to expose the illegal actions of the political machine in New York City.*
- **political boss** — the leader of a political machine *Nearly every businessman and politician in the city was influenced by the political boss.*

Read

Read Chapter 10 in the Student Reader: PDF pages 142–151. Look at the pictures and maps together.

Talk it over

1. What were some problems of tenement housing?
2. How did people in cities get rid of garbage?
3. Why was fire such a danger to cities?
4. Why were the cities at this time ripe for corruption?
5. Who was William Marcy Tweed?
6. What role did immigrants play in the industrialization and urbanization of America?

Answers are at the back of this pack.

Check for understanding

- Answer the Big Question in a sentence or two: Why do you think this chapter is called “growing pains”?
- Use one of today’s words in a sentence of your own.

Activity pages

- Activity Page 10.1: What Does It Mean? — Teacher Guide PDF page 202
- Activity Page 10.2: Domain Vocabulary: Chapters 8-10 — Teacher Guide PDF page 203

UNIT QUIZ

Industrialization and Urbanization in America

Name: _____ Date: _____

Circle the letter of the best answer.

1. Why did Andrew Carnegie go to work at age thirteen when his family first arrived in the United States?

- a) He was not smart enough to go to school.
- b) He looked and acted as though he were eighteen.
- c) The family needed the extra income.
- d) All thirteen-year-old children worked at this time.

2. What did the young Carnegie do to get better jobs?

- a) He learned telegraphy and bookkeeping, and read books.
- b) He learned foreign languages and wrote books.
- c) He got a college degree in business.
- d) He and his friend Tom O'Donnell formed their own company.

3. What is industrialization?

- a) the production of goods by machine in factories
- b) the production of goods by master craftsmen
- c) the production of goods by hand
- d) the production of goods by people in their homes

4. When did the United States enter a period of rapid industrial growth?

- a) before the Revolutionary War
- b) after the Revolutionary War
- c) after World War I
- d) after the Civil War

5. How important were railroads to industrial growth?

- a) not important
- b) a minor influence
- c) less important than automobiles
- d) very important

6. Why did goods have to be transferred from one train to another in the early days of the railroads?

- a) The trains broke down a lot.
- b) The trains traveled very slowly.
- c) There was no standard gauge for track.
- d) The engineers went on strike.

- 7.** Who was Cornelius Vanderbilt?
- a) the business partner of Andrew Carnegie
 - b) the inventor of oil-drilling machines
 - c) the head of the New York Central railroad system
 - d) a textile mill owner
- 8.** How did the expansion of the railroads affect the size of markets?
- a) It had no effect.
 - b) It increased the size of markets.
 - c) It decreased the size of markets.
 - d) It made markets unnecessary.
- 9.** Which factor did not contribute to America's industrial growth?
- a) abundance of natural resources
 - b) growing population
 - c) child labor laws
 - d) availability of capital
- 10.** What is stock?
- a) shares of ownership
 - b) building materials
 - c) a small farm
 - d) a type of road
- 11.** What is a patent?
- a) a protected right to make and sell a product
 - b) a kind of oil used to light lamps before electricity
 - c) a special share of stock sold only to owners of the company
 - d) a way of measuring the width of railroad tracks
- 12.** Which of the following did Alexander Graham Bell invent?
- a) light bulb
 - b) storage battery
 - c) phonograph
 - d) telephone
- 13.** Which of the following did Thomas Edison invent?
- a) phonograph
 - b) light bulb
 - c) moving picture camera
 - d) all of the above
- 14.** What did Thomas Edison believe was most important to becoming a successful inventor?
- a) formal education
 - b) money
 - c) inspiration
 - d) hard work; not quitting

15. In the 1880s, why did Andrew Carnegie's steel company shift production from rails to beams?

- a) The railroads didn't need any more rails.
- b) The company couldn't make money on rails.
- c) The railroads needed beams.
- d) The new skyscrapers would need beams.

16. Which use of oil made oil more valuable after 1900?

- a) lubricant
- b) kerosene for lamps
- c) fuel for cars
- d) ingredient in patent medicines

17. What happened to the gap between the rich and the poor during the growth of big business?

- a) The gap closed.
- b) The gap got smaller.
- c) The gap widened.
- d) Nothing happened.

18. What were the railroads forced to pay to the Standard Oil Company in the late 1800s?

- a) monopolies
- b) tips
- c) rebates
- d) profits

19. What were the two main goals of labor unions in the late 1800s?

- a) shorter hours and better working conditions
- b) the rights of women and children to work
- c) the right to join a party and to work for change
- d) freedom of speech and assembly

20. Which union did Samuel Gompers found?

- a) United Mine Workers
- b) International Ladies Garment Workers Union
- c) Committee for Industrial Organization
- d) American Federation of Labor

21. What is a strike?

- a) a holiday when businesses close
- b) a work stoppage
- c) a kind of labor union
- d) a way of hammering steel to shape it

- 22.** Why were cities able to expand outward in the late 1800s?
- a) The steamship was invented.
 - b) Skyscrapers were built.
 - c) People were healthier and could walk farther.
 - d) New forms of transportation, such as trolleys and subways, were built.
- 23.** Why did garbage and sewage disposal become major problems in cities?
- a) City populations climbed.
 - b) Many people lived in a single tenement.
 - c) Diseases spread rapidly in the city.
 - d) all of the above
- 24.** Who was a political boss in New York City?
- a) Andrew Carnegie
 - b) Cornelius Vanderbilt
 - c) William Tweed
 - d) Samuel Gompers
- 25.** What did political machines often do in cities during the late 1800s?
- a) count votes electronically
 - b) use secrets and trickery to enrich members and friends
 - c) support fairness in government
 - d) promote fair business practices

Answers

Chapter 1: The Industrial Giant

1. **How did Andrew Carnegie make the most of his opportunities?**

He went to night school to learn bookkeeping, taught himself to become a telegraph operator, and read important writers. He took on greater responsibilities at the Pennsylvania Railroad Company as opportunities presented themselves. He worked hard, taking advantage of different opportunities, and he saved, invested, and started his own business.

2. **What did the U.S. Senate committee learn about working conditions in American factories?**

From Thomas O'Donnell and others like him, the committee learned that some factory workers and their families lived in poverty.

3. **Why did the British government prohibit anyone from selling a spinning or weaving machine to another country, or taking plans for making one out of Great Britain?**

The spinning and weaving machines gave British manufacturers—and the government—a significant economic advantage over other countries. They did not want to lose that advantage.

4. **How did Samuel Slater manage to bring the design for a spinning machine to the United States?**

He memorized the design, which meant he did not have to carry written plans with him that would have otherwise been found by British authorities.

5. **How was the textile mill that opened in 1814 in Waltham, Massachusetts, different from earlier mills in the United States?**

The mill in Waltham did not just produce cotton thread, as had the previous factories. Its workers also dyed the thread, and other machines wove it into cloth.

6. **What was the biggest difference between the United States in 1850 and the United States in 1900?**

In 1850, the United States was mostly agricultural. By 1900, the country had many factories and was an industrial giant.

Chapter 2: Railroads

1. **What problems did the hundreds of small railroad companies in the early 1800s cause manufacturers?**

Each railroad company's tracks ran only a short distance. Because the track gauges varied from company to company, goods frequently had to be unloaded from one company's train cars, carried across town, and loaded onto another company's cars.

2. **Why do you think the federal government provided free land and loans to railroad companies?**

Answers may vary. Possible response: The federal government—like passengers,

producers, and consumers—would also benefit from a Transcontinental Railroad and increased railroad lines in many ways, including faster transportation times and increased tax revenues.

3. **How did Vanderbilt and Scott improve the railroads?**

They built railroad networks so more cities were connected by train. They also used a standard gauge.

4. **In what important ways did the railroads contribute to the growth of industry?**

The development and maintenance of the railroads required a lot of raw materials, such as lumber, coal, and steel. The cheap transportation the railroads provided meant that markets could be national rather than local.

5. **Prior to the availability of railroads, were people living in Springfield likely to buy the cheaper stove in Pleasantville? Why or why not?**

People in Springfield probably would not buy the less expensive stove in Pleasantville because the cost to ship it to Springfield would have made it more expensive in the end.

6. **After railroads, where would people in Springfield probably buy their stove? Why?**

Springfield residents would probably buy the cheaper stove in Pleasantville because, even with the shipping costs added, it would still be cheaper than the Springfield stove.

7. **What happened to companies, like the Springfield Stove Company, that could not lower their prices to match their competitors' prices after the railroads came?**

They went out of business.

8. **Once the availability of railroads lowered shipping costs, what was the only way that manufacturers in a particular city, such as New York, could compete with manufacturers in other cities?**

With the growth of railroads and the decrease in shipping costs, manufacturers could sell to wider and wider markets. To remain competitive, manufacturers had to become larger and more efficient.

9. **Why did the government introduce standard time zones in 1883?**

Previously, towns had kept their own time. This was problematic for the railroads, however, because the time in one place may have been slightly different than the time in another place, making it impossible to create accurate train timetables.

10. **Do you think the railroads had more of a positive or negative effect on the U.S. economy, and why?**

Answers may vary. Possible response: The railroads had a mostly positive effect because they made transportation faster and less expensive, created jobs in other industries, and lowered prices for consumers.

Chapter 3: Resources, People, and Capital

1. **What natural resources were identified in the sections you just read?**
coal, iron, gold, silver, copper, lead, zinc, timber/trees, and oil
2. **What was oil used for?**
It was first used for lighting and to lubricate machines; later it was also used as fuel to run motors.
3. **Who did most of the work in U.S. mines and factories?**
Immigrants and their children did most of the work.
4. **How did railroads and other businesses raise capital?**
They sold stock to investors who hoped to share the corporation's profits.
5. **What effect did corporations have on the pace of America's industrial development?**
Corporations greatly increased the pace of America's industrial development. Page 76
76

Chapter 4: An Inventive People

1. **What was the biggest difference between the Patent Office in 1790 and the Patent Office in 1890?**
The Patent Office was a much quieter place in 1790 than it was in 1890. People applied for only a handful of patents in 1790, while many thousands of applications for patents were received a century later.
2. **Why do you think inventors would want a patent on their invention?**
Inventors would want to protect their ideas and prevent others from copying their invention without their permission. They would hope that their invention would be something that could be manufactured and sold, so they would make money.
3. **For what invention did Alexander Graham Bell receive a patent?**
the telephone
4. **Which inventions mentioned in the section created whole new industries?**
Possible answers include: the telephone, the refrigerated rail car, the typewriter, and the internal combustion engine.
5. **What new way of working did Edison and his assistants use?**
Edison and his assistants worked in inventing teams to turn out inventions as regularly as a factory turns out products.
6. **Edison said that genius "was one percent inspiration and ninety-nine percent perspiration." What did he mean by this?**
Edison meant that only a small part of inventing something new and useful came from having a unique or brilliant idea. To be a successful inventor, a person had to keep trying new things even if the first attempts were not successful.
7. **How was the nation's refusal to turn off the electricity a tribute to Edison when he died in 1931?**
People had become dependent on electricity. They were afraid a cutoff of even a few minutes would be too disruptive. Edison's electric light bulb had changed their lives.

8. **Which Edison quote do you find most inspiring, and why?**

Answers will vary.

9. **What do Edison's quotes and sayings reveal about him as a person?**

Answers may vary. Some of the quotes can be seen as inspirational. Others show he valued hard work and common sense. Some are humorous.

Chapter 5: Growing Business Enterprises

1. **What factors helped the United States grow into a strong industrial society?**

Railroads, natural resources, a growing population, available capital, and new inventions all played a part.

2. **Why do you think the text says it took "courage" to make the United States an industrial giant?**

The individuals who invested in industry were taking a risk; there was no guarantee that their investments would work out, and they could have lost everything.

3. **Why did Carnegie switch his focus from making iron bridges to making steel?**

Steel was stronger than iron, and Carnegie knew that a process had been developed to turn iron into steel.

4. **Why was Carnegie able to produce steel more cheaply than anyone else?**

He bought the latest equipment. He invested in mines that produced iron, coal, and limestone, which are the basic ingredients for making steel. He bought boats and railroads to bring those ingredients and everything else that he needed to his steel mills.

5. **Why did Carnegie's company start making steel beams for buildings when orders for steel rails for railroads were still pouring in?**

Carnegie anticipated a growing need for steel beams for buildings as cities grew.

6. **How did Carnegie cut prices and competition?**

He cut prices and competition by hiring the best workers, insisting on efficiency, controlling costs, and buying the latest equipment; by owning everything needed by the mills; by buying efficient companies; and by seeing ahead and making quick adjustments.

7. **Why did oil become valuable?**

A simple method of refining was developed so that oil could be used to make kerosene and later could be used as fuel for cars and other machines.

8. **In what aspect of the oil business did Rockefeller choose to invest and why?**

Rockefeller invested in oil refining. It had less competition than oil drilling and was the most important part of the oil business. By controlling refining, he could control the prices paid to drillers and the prices paid by customers.

9. **What steps did Rockefeller take to control the oil industry?**

Answers may vary, but possible responses may include: He lowered the price of oil to force some of his competitors out of business, and he bought out other competitors. Rockefeller's actions were fair because he was working to build up his business. He

did what it took to become a leader in his industry.

10. **How do you think J.P. Morgan was able to purchase his art collection?**

Morgan is thought to have been one of the richest men in American history. He was able to purchase his art collection because of all the money he made as a wealthy banker who invested in railroad and steel companies.

Chapter 6: Monopolies, Trusts, and Pools

1. **What new kind of organization did Standard Oil form, and for what purpose?**

Standard Oil formed a trust to control all the business in the oil industry.

2. **What impact did the Standard Oil trust have on industry in the United States?**

The idea behind Rockefeller's trust caught on quickly, and other industries quickly adopted the concept.

3. **Were trusts and monopolies good for consumers? Why or why not?**

Sometimes trusts and monopolies led to lower costs for customers. But Americans also worried that these powerful monopolies and trusts would make it very difficult for small businesses to exist. They also worried that the powerful trusts could influence politicians to make laws and policies that would be in the best interests of big business.

4. **Who named this period the "Gilded Age," and what does the phrase mean?**

Mark Twain used the phrase to describe this period. To gild something means to paint it with gold. Things looked good on the surface— big businesses, growing wealth, and for some a glitzy lifestyle, but underneath there was corruption and also suffering.

5. **Do you think men like Rockefeller and Carnegie were robber barons or captains of industry?**

Answers may vary. Possible responses: Such men were captains of industry because their efforts led to the industrialization of the United States and vastly improved the country's economy; or, they were robber barons because they controlled entire industries and used questionable business tactics to make more money.

6. **What unfair business practices did railroads engage in?**

Railroads gave unfair rebates to certain customers, engaged in pooling with other railroad lines, and increased rates on lines in which they had a monopoly.

7. **What were two reasons why some Americans wanted to regulate big business?**

They wanted to end unfair business practices and reduce the influence of big business on politics.

8. **Why didn't the Interstate Commerce Act and the Sherman Antitrust Act have much effect in controlling large corporations?**

The Interstate Commerce Commission had little power, and the Sherman Antitrust Act was vague. Also, government and the courts often sided with business.

Chapter 7: The World of the Worker

1. **How did industrialization change the lives and work of craftsmen?**

In the factories, craftsmen no longer made an entire product. Instead, they did one part of the process over and over. They no longer worked for themselves or for a person they knew; in factories they worked for a set number of hours for strangers. It became harder to take pride in work or gain the respect of the community.

2. **What hardships did children working in mines and textile mills face?**

In mines, children faced darkness, constant bending, cuts and bruises, and possible miner's consumption. In mills, they faced long hours, no schooling, and no time for play. Both places were dangerous for children to work.

3. **What did employers do when factory workers were injured on the job?**

Many employers simply replaced injured workers. Workers did not have paid sick leave or Social Security the way they do now.

4. **How did consumers benefit from the newly formed ready-made clothing industry and the canned food and meatpacking industries?**

Ordinary people could afford to buy larger wardrobes and eat more varied diets.

5. **How did some workers benefit from industrialization?**

Skilled workers and managers earned good wages. Many new jobs based on inventions like the typewriter and telephone were created.

6. **What effect did industrialization have on unskilled workers?**

Some unskilled workers were able to learn new skills and get new jobs. Other unskilled workers, however, found themselves working long hours for low wages or were unemployed.

Chapter 8: Workers Organize

1. **Why did workers organize labor unions?**

They organized labor unions to improve their chances of getting better wages and working conditions.

2. **Why did unions grow so slowly in the late 1800s?**

At first, unions grew slowly because employers, with their power in government and the community, could stop strikes. Also, bosses could refuse to rehire strikers, thus making workers fearful about joining unions.

3. **What effect did the Haymarket riot have on the growth of the labor movement?**

Public opinion turned against labor unions after the Haymarket riot. Unions became connected in many people's minds with dangerous, foreign anarchists. Many union members left the unions.

4. **How did Samuel Gompers first become involved with unions?**

He joined his first union when he was fourteen; workers in the cigar factory where he worked decided to go on strike.

5. **Why do you think Samuel Gompers continued to fight for workers' rights even after losing his job and getting blacklisted?**

Answers may vary. Possible response: Despite facing adversity, Samuel Gompers

likely did not want other workers to experience the same challenges that he did. He became even more determined to fight for workers' rights after his own experiences.

6. **Why did Samuel Gompers choose trade unions over socialism?**

He decided that trade unions could win “bread-and-butter” gains for workers in the present, while socialism would take a long time.

7. **Why was the Homestead Strike a near disaster for the AFL?**

There was much violence, and men were killed. The workers lost the strike after months of effort. The company took back only about 10 percent of the workers and blacklisted the rest. Membership in the AFL fell by two-thirds.

8. **What is Labor Day?**

It is a holiday that celebrates the labor movement and American workers. It is observed on the first Monday in September.

Chapter 9: The Urbanization of America

1. **How did the populations of American cities change from the late 1800s through the early 1900s?**

The populations of some cities grew at a breathtaking pace, in some instances doubling or tripling in size.

2. **What was the most important reason why Kansas City, Minneapolis, and Chicago grew so quickly?**

They were connected to other areas by the railroad.

3. **What industries became important in Kansas City?**

Milling flour and meatpacking became important industries.

4. **What change in manufacturing meant that factories no longer had to be built next to rivers or streams?**

Machines began to be powered by steam rather than water, which meant that factories could be located anywhere.

5. **Why did so many people leave the farms for the cities between 1880 and 1910?**

Economic hard times caused many farmers to lose their farms. People could earn more in cities. Life was hard and lonely on the farms, so cities seemed more glamorous and exciting.

6. **In addition to people moving from farms, where else did new city dwellers come from?**

New city dwellers were also immigrants, mostly from Europe, and newly freed African Americans from the South.

7. **Would you have wanted to live in a major city during this time?**

Answers may vary. Possible response: Yes, I would have liked to live in a city during this time because there was more to do and more economic opportunity than on a farm. After reading this section, pause to have students add to the class list of factors that led to the growth of American cities. Record student responses on the board or chart paper.

8. **What developments in architecture during the 1880s changed the city forever?**

The steel skeleton and the elevator made skyscrapers possible.

9. **What new forms of transportation permitted cities to spread out farther than two miles?**

Horse cars, trolleys, elevated trains, and subways allowed the city to spread outward.

Chapter 10: Growing Pains

1. **What were some problems of tenement housing?**

They were overcrowded, stuffy, and dark. They rarely had running water or indoor toilets. Diseases spread easily.

2. **How did people in cities get rid of garbage?**

They dumped it into the ocean or rivers, had farmers haul it away for pig feed, and let people throw it into the streets.

3. **Why was fire such a danger to cities?**

Buildings were made of wood, were crowded, and were built very close together.

4. **Why were the cities at this time ripe for corruption?**

Cities were growing quickly, and a lot of money was being spent on improvements. City officials had to decide who would get the work, and many companies were willing to give payoffs to get the job.

5. **Who was William Marcy Tweed?**

He was the boss of Tammany Hall, in New York City. He stole millions of dollars from the city by false billing and other trickery.

6. **What role did immigrants play in the industrialization and urbanization of America?**

Immigrants flocked to the United States in search of new opportunities. Most immigrants settled in major cities, contributing to urbanization and urban growth. They mostly worked in factories and helped the growth of industrialization.

Unit quiz key

1. c 2. a 3. a 4. d 5. d 6. c 7. c 8. b 9. c 10. a 11. a 12. d 13. d 14. d 15. d 16. c 17. c 18. c 19. a 20. d 21. b 22. d 23. d 24. c 25. b