

## Study Guide



### Chapter 7, Section 2

For use with textbook pages 245–250

## EARLY INDUSTRY

### KEY TERMS AND NAMES

**National Road** major east-west highway started in 1811 that by 1818 ran from Cumberland, Maryland, to Wheeling, Virginia (now West Virginia) (page 246)

**Robert Fulton** American inventor who designed and built the *Clermont*, the steamboat that traveled upstream on the Hudson River in 1807 (page 247)

**Industrial Revolution** time of change in business and industry in which manufacturing shifted from hand tools to large, complex machines; goods were made in factories instead of workshops in homes (page 247)

**Francis C. Lowell** industrialist who built textile machinery in the United States after touring British textile mills; opened a series of textile mills in Massachusetts; introduced mass production of cotton cloth to the U.S. (page 248)

**Eli Whitney** American inventor and developer of interchangeable parts (page 248)

**interchangeable parts** uniform pieces that can be made in large quantities to replace other identical pieces (page 248)

**Samuel F.B. Morse** American inventor who perfected the telegraph and developed Morse code for sending messages (page 248)

**labor union** organization of workers that works for better wages and working conditions (page 249)

**strike** work stoppage (page 249)

### DRAWING FROM EXPERIENCE

How do you get from place to place? Do you ride a bicycle, a bus, a train, in an automobile? What is the transportation system like where you live? Could you continue your lifestyle without it?

The last section described the way the United States became more nationalistic after the War of 1812. This section discusses the effects of transportation advances and the Industrial Revolution on the United States in the early 1800s.

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## Chapter 7, Section 2 (continued)

### ORGANIZING YOUR THOUGHTS

Use the chart below to help you take notes. Industrialists and inventors brought the Industrial Revolution to the United States. Describe what the people listed in the chart developed or invented.

Industrialists and Inventors	Development or Invention
Robert Fulton	1.
Samuel Slater	2.
Francis C. Lowell	3.
Eli Whitney	4.
Samuel F.B. Morse	5.

### READ TO LEARN

- **A Revolution in Transportation** (page 245)

The Erie Canal was completed in 1825. This was part of the transportation revolution that happened in the Northern states in the early 1800s. As a result, great social and economic changes occurred in the United States.

In 1806 Congress funded the building of the **National Road**. This was a major east-west highway that started in Cumberland, Maryland, and ended in Wheeling, Virginia (now West Virginia). Conestoga wagons carried pioneers west on this road. Farmers traveled east on this road to bring their livestock and farm products to markets in the East. The National Road was the largest federally funded transportation project of its time. Most highway improvements were funded by state and local governments and by private businesses.

Rivers were a faster, easier, and cheaper way to move goods than were roads. The only problem was that loaded boats and barges could travel only downstream or with the current. In 1807 the steamboat called the *Clermont* by **Robert Fulton** and Robert R. Livingston traveled upstream on the Hudson River. This transportation advance made river travel more reliable and upstream travel easier. Use of the steamboat caused an increase in river travel and canal building. This increased trade between regions created economic growth.

Railroads were built in America in the early 1800s. Trains were faster than stagecoaches or wagons, and they could go more places than steamboats could. Railroads helped settle the West and expand trade among the nation's regions.

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### Chapter 7, Section 2 (continued)

6. Why was the steamboat an important advance in transportation?

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• **A New System of Production** (page 247)

The **Industrial Revolution** began in Britain in the 1700s. The revolution consisted of several developments in business and industry. Manufacturing went from hand tools to large, complex machines. Workers went from skilled artisans to workers given specific jobs. The workers were often unskilled. Home-based workshops were replaced by factories. Manufactured goods were sold nationwide and overseas.

Industry developed quickly in the United States in the early 1800s. An important factor was free enterprise. In this system, Americans could make money and make their own choices about how to use it. Free enterprise encouraged industrialization because companies were in competition. They experimented with new technologies to make goods cheaper and to transport them faster. Many states encouraged industrialization by passing general incorporation laws. These laws allowed companies to become corporations and to raise money by issuing stock.

Industrialization began in the Northeast. The swift-flowing streams provided waterpower for the factories. The Northeast had entrepreneurs and merchants who had money to invest in industry.

Importing British technology was difficult because it was illegal to pass on British technology to foreigners. In 1789 Samuel Slater built a textile machine in Rhode Island from his memory as a worker in a British textile mill. In 1814 **Francis C. Lowell** opened many textile mills in northeastern Massachusetts. He started mass production of cotton cloth in the United States.

Inventions and technological advances helped industry grow in the United States. **Eli Whitney** made the idea of **interchangeable parts** popular in the gun-making industry. Machines were able to produce large amounts of identical pieces that workers assembled into finished goods. In 1832 **Samuel F.B. Morse** perfected the telegraph. He developed the Morse code for sending messages. Newspapers used the telegraph to quickly collect and share news stories over wires.

7. What inventions and technological advances helped the Industrial Revolution grow in the United States?

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## Chapter 7, Section 2 (continued)

- **The Rise of Large Cities** (page 249)

Industrialization caused the rise of large cities. Thousands of people moved from farms and villages to towns and cities in search of factory jobs and better pay. By 1860 eight cities in the U.S. had populations of more than 100,000. The growth of cities led to opportunities for many kinds of jobs.

8. How did industrialization affect cities in the United States?

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- **Workers Begin to Organize** (page 249)

By 1860 there were 1.3 million factory workers in the United States. During the late 1820s and early 1830s, many factory workers joined **labor unions** to improve working conditions. The unions, however, had little power or money. They could not support **strikes**, or work stoppages. Courts often ruled against early unions.

Although early labor unions had little success, there were some gains. In 1840 President Martin Van Buren lowered the workday for federal employees to 10 hours. In 1842 the Supreme Court ruled that labor strikes were legal.

9. What were two gains made by early labor unions?

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- **The Family Farm** (page 250)

Industry and cities grew in the Northeast during the early 1800s. Farming, however, was the country's main economic activity and had the most workers until the late 1800s. Farming was more important in the South than in the North. The South had few cities and industries. The North began to focus on manufacturing.

10. What was the main economic activity in the United States during most of the 1800s?

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