

CHAPTER 19

Quick Study Guide

- Have students use the Quick Study Guide to prepare for this chapter's test. Students may wish to refer to the following pages as they review:

New Inventions and Ideas

Section 1, pp. 609–611; Section 2, pp. 614–615; Section 3, p. 618; Section 4, pp. 622–626

Effects of the Industrial Revolution

Section 1, pp. 608–610; Section 3, pp. 616–620; Section 4, pp. 622–626

Why Britain Industrialized First

Section 2, pp. 612–614

Responses to the Industrial Revolution

Section 4, pp. 622–626

Events From 1750–1850

Section 1, p. 610; Section 2, pp. 614–615; Section 4, pp. 625–626

- For additional review, remind students to refer to the

L3

Reading and Note Taking Study Guide

Note Taking Study Guide, pp. 173, 175, 177, 179–180
Section Summaries, pp. 174, 176, 178, 181

- Have students access **Web Code nap-1901** for this chapter's **History Interactive** timeline, which includes expanded entries and additional events.

- If students need more instruction on analyzing a timeline, have them read the **Skills Handbook**, p. SH32.

- When students have completed their study of the chapter, distribute Chapter Tests A and B.

All in One Teaching Resources, Unit 4, pp. 54–59

For **Progress Monitoring Online**, refer students to the Self-test with Vocabulary Practice at **Web Code naa-1951**.

CHAPTER 19

Quick Study Guide

Progress Monitoring Online

For: Self-test with vocabulary practice
Web Code: naa-1951

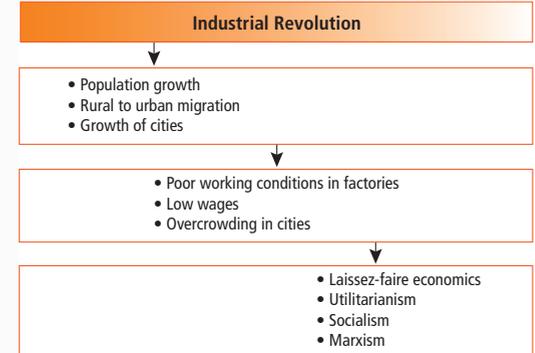
New Inventions and Ideas

Inventors and Thinkers	Inventions and Ideas
Jethro Tull	Seed drill
Thomas Newcomen	Steam engine
James Watt	Improved steam engine
John Kay	Flying shuttle
James Hargreaves	Spinning jenny
Richard Arkwright	Water frame
Eli Whitney	Cotton gin
George Stephenson	Steam-powered locomotive
John Wesley	Methodism
Adam Smith	Laissez-faire economics
Thomas Malthus	Population growth could outpace food supply.
Jeremy Bentham	Utilitarianism
Robert Owen	Utopian communities
Karl Marx	Communism, Marxism

Why Britain Industrialized First

Industrial Revolution in Britain
Plentiful natural resources
Ready workforce
Prosperous economy
Availability of capital and demand
Stable government

Effects of the Industrial Revolution



Responses to the Industrial Revolution

- Bentham/Mill: utilitarianism
- Socialism
- Owen: utopianism
- Marx/Engels: communism

Events From 1750–1850

Early Industrial Revolution Events Global Events



1760s
Watt improves the steam engine.

1764
The spinning jenny is invented.



1750

1775

1762
Catherine the Great comes to power in Russia.

1770
Cook claims Australia for Britain.

1788
Futa Toro outlaws slave trade.

Differentiated

Instruction Solutions for All Learners

L1 Special Needs L2 Less Proficient Readers

Use the following study guide resources to help students acquiring basic skills:

Adapted Reading and Note Taking Study Guide

Adapted Note Taking Study Guide, pp. 173, 175, 177, 179–180
Adapted Section Summaries, pp. 174, 176, 178, 181

L2 English Language Learners

Use the following study guide resources to help Spanish-speaking students:

Spanish Reading and Note Taking Study Guide

Spanish Note Taking Study Guide, pp. 173, 175, 177, 179–180
Spanish Section Summaries, pp. 174, 176, 178, 181

Concept Connector

Concept Connector

Cumulative Review

Record the answers to the questions below on your **Concept Connector** worksheets. In addition, record information from this chapter about the following concepts:

- Economic Systems: market economy
- Economic Systems: centrally planned economy
- Economic Systems: mixed economy

- Economic Systems** What is socialism? Compare socialism to mercantilism, another economic system. Research to learn how they are similar and different. Think about these factors:
 - who supported each system
 - main theories
 - existence today
- Technology** Once James Watt made improvements to Thomas Newcomen's steam engine, it became a key power source of the Industrial Revolution. Research to learn why steam power made such an impact and then compare it to the impact of the printing press. Think about the following:
 - who benefited from the use of the invention
 - what preceded the invention
 - why the invention was so important
- Trade** The development of the railway network in the 1800s led to increased trade as people and goods were able to travel faster and farther. Research the Silk Road, the ancient trade route that started in China and stretched to Asia Minor and India. How was railroad travel of the Industrial Revolution both similar to and different from travel on the Silk Road? Think about the following:
 - speed of transport
 - multiple uses
 - advantages and disadvantages

Connections To Today

- Migration: Twentieth Century Global Migrations** During the Industrial Revolution, rural workers migrated to urban areas to live and work. Today, people still migrate in various parts of the world. Do online and library research to find information on rural-to-urban migration in a country located in Asia or Africa. Write a brief newspaper article in which you compare the experiences of those who migrated then and now.



Strawberry pickers at work, South Africa

- People and the Environment: Population Growth** The population growth that occurred during the Industrial Revolution often created filth and unsanitary conditions as people crowded into tenements. The growth also caused an increase in the demand for products, which led to the opening of more factories. Do online and library research to find the history of population growth in the town or state in which you live. What are the patterns and results?

Tell students that the main concepts for this chapter are Economic Systems, Technology, and Trade, and then ask them to answer the Cumulative Review questions on this page. Discuss the Connections to Today topics and ask students to answer the questions that follow.

Cumulative Review

- Socialism is a system of production, backed by radicals and some workers, in which the means of production are owned collectively rather than by individuals. Mercantilism is a system of trade, backed by kings, that aims for a trade surplus to maximize the influx of gold and silver into royal treasuries. Unlike mercantilism, some forms of socialism still exist today.
- The shift from handwritten manuscripts to printed books allowed ideas to spread more quickly and benefited readers. The shift from hand production to steam-powered machine production increased the scale and efficiency of production and benefited capitalists and consumers.
- Rail travel was much faster than travel on foot or by camel along the Silk Road. Both modes of travel had both commercial and military uses. Both modes of travel boosted economic growth. However, railways caused pollution, and the Silk Road opened China to invasion.

Connections to Today

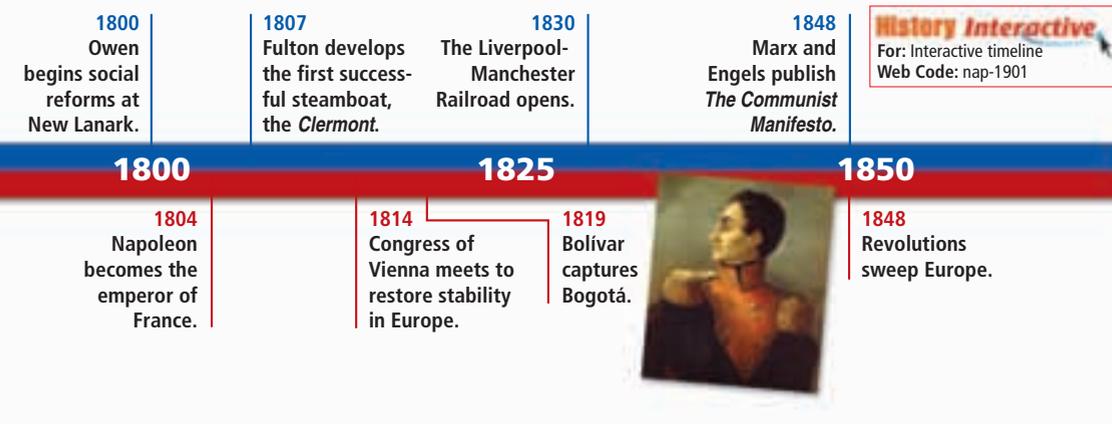
- Articles should highlight both geographical and historical differences. They may choose to focus on modern migration policies.
- Students should trace the history of population growth or decline in their town or state. For periods of growth, they should mention environmental effects such as air and water pollution.

For additional review of this chapter's core concepts, remind students to refer to the

 **Reading and Note Taking Study Guide**

Concept Connector, pp. 339, 375, 379

L3



Differentiated

Instruction Solutions for All Learners

L1 Special Needs L2 Less Proficient Readers

Use the following study guide resources to help students acquiring basic skills:

 **Adapted Reading and Note Taking Study Guide**

Adapted Concept Connector, pp. 351, 406, 413

L2 English Language Learners

Use the following study guide resources to help Spanish-speaking students:

 **Spanish Reading and Note Taking Study Guide**

Spanish Concept Connector, pp. 351, 406, 413

Chapter Assessment

Terms, People, and Places

1. Thomas Malthus
2. proletariat, tenement
3. enterprise
4. utilitarianism
5. smelt
6. James Watt

Main Ideas

7. Farmers lost their farms or jobs and migrated to cities to find work.
8. An agricultural revolution reduced deaths from famine. Women who ate better had stronger babies who lived longer. Better hygiene, sanitation, and medical care also slowed deaths from disease.
9. Britain's natural and human resources, technological inventions, effects of demand and capital, and social and political conditions helped bring about the Industrial Revolution.
10. by speeding up production with new inventions and fostering the creation of factories
11. (a) long hours, low pay, and dangerous, unhealthy conditions (b) Women worked long hours, received only half of men's salaries, and also had to feed and care for their families.
12. He wanted the government to prevent abuse of workers and to give the vote to workers and women.
13. (a) He saw it as the history of class struggle, which would end in world revolution and power for the proletariat. (b) World revolution never happened, and by the 1990s, nearly all countries had incorporated elements of capitalism.

Chapter Focus Question

14. The Industrial Revolution caused massive technological changes in mechanization, the use of energy, and transportation. It resulted in rapid urbanization and the creation of both a prosperous new middle class and a working class that lived and worked in wretched conditions. It led to the development of laissez-faire capitalism, utilitarianism, socialism, and communism.

Critical Thinking

15. (a) Steam power led to greater mechanization and new forms of transporta-

Chapter Assessment

Terms, People, and Places

Complete each sentence by choosing the correct answer from the list of terms below. You will not use all of the terms.

smelt	James Watt
urbanization	Manchester
Thomas Malthus	tenement
proletariat	socialism
enterprise	utilitarianism

1. _____ predicted that population would outpace the food supply.
2. A member of the _____ most likely lived in a small, crowded building called a _____.
3. Investors in Britain were ready to risk their capital to invest in _____.
4. Those who advocated _____ believed that the goal of society was to bring about the greatest happiness for the greatest number.
5. To _____ involves separating iron from its ore.
6. _____ improved the efficiency and design of Newcomen's steam engine.

Main Ideas

Section 1 (pp. 608–611)

7. How did the enclosure movement affect farmers?
8. Identify three causes of the population explosion that occurred in the 1700s.

Section 2 (pp. 612–615)

9. Describe four factors that helped bring about the Industrial Revolution in England.

Writing About History

Expository: Explanatory Essay During the late 1700s, the Industrial Revolution began to transform Britain. An agricultural revolution triggered a chain of events, and Britain sped ahead of the rest of the world to become the first industrial nation. But why is the Industrial Revolution considered to be a "revolution"? Write an explanatory essay to answer this question.

Prewriting

- Ask yourself what you need to know in order to write an effective explanation. Think about what you already know about revolutions.
- Do research to gather facts, descriptions, examples, and other details to clearly illustrate your point.

tion. (b) Improved iron led to its use in the manufacture of bridges, machinery, and railroads. (c) The railroad allowed goods to be transported swiftly and cheaply.

16. Britain's coal and iron resources helped power and build machinery. Its ports and rivers provided transportation for goods.
17. (a) Population grew rapidly. (b) Cities became crowded, overwhelmed by waste, and polluted by industry. (c) Working and

10. How did the Industrial Revolution transform the textile industry?

Section 3 (pp. 616–621)

11. (a) What were the main characteristics of factory work? (b) What challenges did factory work create for women?

Section 4 (pp. 622–627)

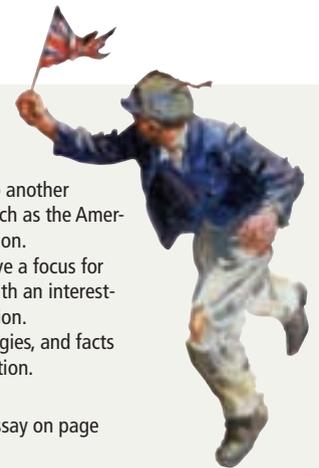
12. List the government reforms sought by John Stuart Mill.
13. (a) Describe Karl Marx's view of history. (b) How have events challenged that view?

Chapter Focus Question

14. What technological, social, economic, and cultural changes occurred as the Industrial Revolution took hold?

Critical Thinking

15. **Synthesize Information** What were the impacts of each of the following technologies: (a) steam power, (b) improved methods for smelting iron, (c) railroad?
16. **Geography and History** Explain the link between Britain's natural resources and its rise as an industrial nation.
17. **Analyze Information** Describe how the Industrial Revolution affected each of the following: (a) size of population, (b) cities, (c) working and living conditions, (d) women and children.
18. **Predict Consequences** If more people had supported utilitarianism, how do you think it would have influenced society?
19. **Recognize Ideologies** Explain the major differences between Adam Smith's free market ideas and Karl Marx's socialist ideas.



Drafting

- Create a Venn diagram to compare aspects of the Industrial Revolution to another revolution you have learned about, such as the American Revolution or the French Revolution.
- Write a thesis statement once you have a focus for your essay. Begin your introduction with an interesting lead-in to get your reader's attention.
- Be sure to include comparisons, analogies, and facts in your essay to support your explanation.

Revising

- Use the guidelines for revising your essay on page SH12 of the Writing Handbook.

living conditions improved for the middle class but were horrible for the working class. (d) Working-class women and children had dangerous and difficult jobs with long hours and low pay.

18. Answers should show an understanding of the characteristics of utilitarianism.
19. Smith: the free market would increase everyone's prosperity. Marx: free-market capitalism benefited the rich at the expense of the poor.

Document-Based Assessment

New Economic and Social Theories

Various thinkers of the day attempted to understand and interpret the dramatic changes brought about by the Industrial Revolution. They responded with a wide range of explanations and solutions, as the documents below illustrate.

Document A

"As every individual, therefore, endeavours as much as he can both to employ his capital in the support of domestic industry, and so to direct that industry that its produce may be of the greatest value; every individual necessarily labours to render the annual revenue of the society as great as he can. . . . By preferring the support of domestic to that of foreign industry, he intends only his own security; and by directing that industry in such a manner as its produce may be of the greatest value, he intends only his own gain, and he is in this, as in many other cases, led by an invisible hand to promote an end which was not part of his intention. . . . every individual it is evident, can, in his local situation, judge much better than any statesman or law-giver can do for him."

—From *The Wealth of Nations* by Adam Smith, 1776

Document B

"In those characters which now exhibit crime, the fault is obviously not in the individual, but the defects proceed from the system in which the individual was trained. Withdraw those circumstances which tend to create crime in the human character, and crime will not be created. Replace them with such as are calculated to form habits of order, regularity, temperance, industry; and these qualities will be formed. . . . Proceed systematically on principles of undeviating persevering kindness, yet retaining and using, with the least possible severity, the means of restraining crime from immediately injuring society, and by degrees even the crimes now existing in adults will also gradually disappear. . . ."

—From *A New View of Society* by Robert Owen, 1816

Analyzing Documents

Use your knowledge of the new economic and social theories and Documents A, B, C, and D to answer the questions below.

- According to Adam Smith in Document A, individuals promote the good of society because of
 - high ideals.
 - self-interest.
 - government pressure.
 - religion.
- How did Robert Owen explain the fact that some people become criminals?
 - the invisible hand of fate
 - struggles between the ruling class and the oppressed
 - the influence of problems in society
 - the power of population over production
- Thomas Malthus argued that a society where all individuals enjoy happiness, comfort, and pleasure is
 - only possible with increased agricultural output.
 - impossible because of the base nature of human greed.
 - impossible because of the pressures of population.
 - possible when people are treated decently and fairly.
- Writing Task** Suppose you were working in Britain in the year 1840. Which of the above economic philosophies would you support? Remember to identify your occupation and social class. Use your knowledge of the Industrial Revolution and the documents above to support your opinion.

● Writing About History

As students begin the assignment, refer them to page SH10 of the **Writing Handbook** for help in writing an explanatory essay. Remind them of the steps they should take to complete their assignment, including prewriting, drafting, and revising. For help in revising, remind them to use the guidelines on page SH12 of the **Writing Handbook**.

Document C

New Lanark Mills, Scotland



Document D

" . . . the power of population is indefinitely greater than the power in the earth to produce subsistence for man. Population, when unchecked, increased in a geometrical ratio. Subsistence increases only in an arithmetical ratio. A slight acquaintance with numbers will show the immensity of the first power in comparison of the second. . . . No fancied equality, no agrarian regulations in their utmost extent, could remove the pressure of it even for a single century. And it appears, therefore, to be decisive against the possible existence of a society, all the members of which should live in ease, happiness, and comparative leisure; and feel no anxiety about providing the means of subsistence for themselves and families. Consequently, if the premises are just, the argument is conclusive against the perfectibility of the mass of mankind."

—From *An Essay on the Principle of Population 1798*
by Thomas Malthus

Document-Based Assessment

- To help students understand the documents on this page, give them the following **TIP: Consider how each document relates to the others. Ask yourself whether these documents address different aspects or provide different views of the topic.**
- To provide students with further practice in answering Document-Based Assessment Questions, go to  **Document-Based Assessment**, pp. 54–66
- If students need more instruction on analyzing primary sources, have them read the **Skills Handbook**, p. SH33.

Answers

- B
- C
- C
- Responses should show a clear understanding of the chosen economic philosophy and its effects on a person of the chosen occupation and social class. Students should use specific evidence from the documents and the chapter to support their conclusions.