The Industrial Revolution inspired new ideas about economics and affected society in many ways.

**Main Idea**

**Reading Focus**

1. What new ideas about economics developed during the Industrial Revolution?
2. What competing economic ideas arose as a result?
3. How did the Industrial Revolution affect society?

**Key Terms and People**

- laissez-faire
- Adam Smith
- Thomas Malthus
- Karl Marx
- socialism
- communism
- standard of living

**What marvels of industry were displayed in a glass palace?** In 1851, the Great Exhibition in London drew residents and visitors to a huge glass and iron building called the Crystal Palace. Inside the marvelous structure were nearly 14,000 exhibits, many of which displayed industrial products and processes. English writer Charlotte Brontë was dazzled by the exhibition: "It is a wonderful place—vast, strange, new, and impossible to describe. Its grandeur does not consist in one thing, but in the unique assemblage of all things." Brontë was impressed by the wide range of exhibits, including "great compartments filled with railway engines and boilers, with mill machinery in full work." All these remarkable exhibits showed the accomplishments of the Industrial Revolution. People came from far away to gawk at those achievements. In fact, some 6 million visitors from across Europe and elsewhere attended the exhibition.

**New Ideas about Economics**

During the late 1700s and early 1800s industrialization was changing not just products and work, but also how people thought about economics. One change was that mercantilism was giving way to capitalism and competition.

**Capitalism and Competition** Under the old mercantile system, governments restricted trade to protect their own industries from foreign competition. Then, starting in the late 1700s, some people said that governments should not interfere in business. This idea is called *laissez-faire* (lehz-ay-FAIR) economics, from a French phrase meaning "free to do."

**Teach the Main Idea**

**Results of the Industrial Revolution**

1. **Teach** Ask students the Reading Focus questions to teach this section.
2. **Apply** Have students create two Web diagrams for the section, one that shows the key people and their ideas and the other that shows the costs and benefits of industrialization.
3. **Review** As you review the section, have students explain the different political and economic ideas that came out of the Industrial Revolution.
4. **Practice/Homework** Have students write a one-page essay on the positive and negative results of the Industrial Revolution.

**Visual-Spatial, Verbal-Linguistic**

**Alternative Assessment Handbook, Rubric 37:** Writing Assignments
Adam Smith became the leading advocate of laissez-faire economics. In 1776 he published The Wealth of Nations, in which he analyzed the definition and creation of wealth. Smith wrote that markets free from government interference benefited all. Such an economic system free from regulation is called a market economy. Also in a market economy, businesses can compete freely against each other for trade. The British government agreed with Smith’s ideas and ended most regulations by the 1840s.

Smith influenced Thomas Malthus, who was concerned about population growth caused by the development of industry. Malthus wrote that the population would always grow faster than food production. Therefore, he concluded, poverty and misery would never go away. Population growth, Malthus said, was slowed only by war, disease, famine, and decreased reproduction. Because many people agreed that these problems were unavoidable, Malthus’ ideas were used to justify low wages and laws that limited charity to the poor.

In time, Malthus was proved wrong. The disasters he predicted did not happen, but the population did grow. Still, the ideas of Smith and Malthus affected attitudes. As Smith predicted, industrialization succeeded and spread. Industrial capitalism emerged as the main economic pattern in the Western world.

**New Roles for Business Leaders**

Industrialization also changed the roles that business leaders played in public life. Before the Industrial Revolution, people who owned land controlled the wealth and power. But by the mid-1800s, the leaders of industry began taking away the landowners’ influence. Some industrialists became extremely wealthy, and their new wealth bought them political power.

The Industrial Revolution also highlighted the role of the entrepreneur, someone who starts a new business. Among the entrepreneurs were financiers, bankers, and investors who poured their money to create large corporations. As demand increased for capital to build factories, banking and finance became more important occupations. Some industrialists made fortunes simply by buying and selling companies for a profit.

A few industrialists, mainly in the United States, built some of the largest corporate empires ever seen—and acquired wealth that few people could imagine. In the late 1800s, their stories helped make them famous. Andrew Carnegie, who was born in Scotland, was an example of “rags to riches” success. His father, a weaver, was driven out of work by the textile mills. The family moved to America, and Carnegie started working in a mill at age 12. With hard work, creativity, intelligence, and tough business practices, he led the expansion of the American steel industry.

A View of Andrew Carnegie

Andrew Carnegie, who took the steel industry to new heights, gave away some $350 million to fund various charities. This cartoon from Punch, a satirical British magazine, shows Carnegie giving $2 million to Scottish universities. The original title is “The MacMillion.”

The mortarboards, which are the headgear for college graduates, are labeled with the names of Scottish universities. Carnegie’s clothing is a combination of the traditional Scottish kilt and the American flag.

### Differentiating Instruction

**Learners Having Difficulty**

1. Draw the graphic organizer for students to see. Omit the italicized answers.

2. Organize students into mixed-ability pairs. Have pairs copy and complete the graphic organizer. [Visual-Spatial](#)

**Primary Source**

“Upon the sacredness of property civilization itself depends—the right of the laborer to his hundred dollars in the savings bank, and equally the legal right of the millionaire to his millions.”

—Andrew Carnegie, “Wealth” from the North American Review, June 1889

**Primary Source**

“In a sense, the theory of the Communists may be summed up in a single sentence: Abolition of private property.”

—Karl Marx and Friedrich Engels, The Communist Manifesto, 1848

**Answers**

Reading Like a Historian 1. *His traditional Scottish clothing indicates he was pro Scottish.* 2. *possible answer—thought Carnegie was too generous because artist shows him throwing money*
Competing Economic Views

Contrast How is socialism different from capitalism? Under capitalism, individuals own property and control industry, whereas under socialism, the government or society does.

Interpret How were Robert Owen’s ideas applied in New Lanark? Emphasis on good of all, good working conditions, nonprofit stores, free schooling, strict rules

Predict What factors might have led to the failure of New Harmony? Possible answer—economic failure, conflicts within community

Info to Know

Robert Owen Robert Owen began his career as an entrepreneur in the textile industry. When he purchased New Lanark, one of his first actions was to set up a school nearby. He stopped employing children under the age of ten, and sent them to school instead. Fearing a loss of money, Owen’s partners protested. In response, Owen borrowed money to buy out his partners’ shares of the business.

Other industrialists achieved similar feats. Examples include Cornelius Vanderbilt in railroads and John D. Rockefeller in oil. These men built giant corporations that drove out their competitors. They were both admired for their contributions to human progress and criticized for their treatment of workers. For example, they were generally against their employees’ joining labor unions. Although some, like Andrew Carnegie, gave generously to charity, people who disapproved of their methods sometimes called them “robber barons.”

Reading Check Summarize What were some of the new ideas about economics?

Competing Economic Views

Not everyone agreed that laissez-faire capitalism was a good thing. Some thinkers blamed capitalism for bad working conditions and big gaps between the rich and poor. They took a different stance on economic systems. Two of these men were Robert Owen and Karl Marx.

Robert Owen In contrast to the gloomy views of Thomas Malthus, Robert Owen had a more hopeful view of how industry might affect people. He thought that for the good of all, society or the government, instead of individuals, should own property and control industry—a theory called socialism. The theory was a clear contrast to capitalism.

To demonstrate his ideas, Owen built a mill complex at New Lanark, Scotland, that gained widespread praise as a model industrial town. The workers there enjoyed good working conditions, shopped at nonprofit stores, lived in decent houses, and could earn sick pay. Because he felt that education improved character, Owen even provided free schooling for the workers’ children. He also imposed strict rules on workers’ personal lives, including curfews and bathing requirements.

Owen brought his ideas to the United States in 1825, when he founded a community called New Harmony in Indiana. New Harmony was to be a utopia, an ideal community where poverty and other evils of society did not exist. The belief that such communities can solve society’s problems is called utopianism.

The efforts of Owen and other people who believed in socialism led to a movement called social democracy. Those who advocated social democracy wanted to move from capitalism to socialism by democratic means.

Primary Sources

The Iron Law of Wages

The ideas of Adam Smith and Thomas Malthus had many admirers. Among them was David Ricardo (1772–1823), an English banker. In an 1817 work, Ricardo argued that natural economic forces would keep wages low—so low that workers barely had enough to survive. Ricardo’s theory came to be called The Iron Law of Wages, indicating that the “law” was real and unchangeable. The theory was popular with factory owners, since it justified their paying low wages to their employees.

“It is when the market price of labour exceeds its natural price that the condition of the labourer is flourishing and happy, that he has it in his power to command a greater proportion of the necessaries and enjoyments of life, and therefore to rear a healthy and numerous family. When, however, by the encouragement which high wages give to the increase of population, the number of labourers is increased, wages again fall to their natural price, and indeed from a reaction sometimes fall below it.”

—David Ricardo, On Wages, 1817

Reading Check Sequence According to Ricardo, what is the sequence of the rise and fall of wages?

1. The market price of labour exceeds its natural price.
2. Workers have money to buy his partners’ shares of the business.
3. Workers’ wages fall.
5. Workers’ wages fall below their natural price.

Reading Check Draw Conclusions Do you think Ricardo felt some sympathy with workers? Why or why not?

Skills Focus: Drawing Conclusions

Reading Skill Economic Issues of the Industrial Revolution

Background: Explain to students that for countries to determine whether their economies will be based on free enterprise or on socialism, they must decide what goods will be produced, how goods will be produced, and for whom. Other economic factors arose during the Industrial Revolution, such as monetary systems, and measures of wealth and value determination, which today include such indicators as CPI and GNP.

1. Organize students into small groups.
2. Have groups discuss why these various economic issues arose during the Industrial Revolution, and why different methods of value determination emerged.
3. Guide students in a class discussion about each group’s conclusions.

Academic Vocabulary

stance attitude or position

Alternative Assessment Handbook Rubrics 11: Discussions; and 14: Group Activity
Effects on Society

The rise of new economic ideas was among the countless effects of the Industrial Revolution. Other effects were felt in small and large ways, from how families lived to how countries dealt with each other. For example, the shift away from cottage industries affected home life and the roles of women in society.

Effects on Home Life

When work was done in the home, women often worked alongside their husbands. Then when industry drew workers away from home, women were usually the ones who stayed home to care for children. The worlds of work and home began to separate. Women and men were seen as occupying “separate spheres”—the woman in the home and the man in the workplace to support the home and family.

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Karl Marx. A more radical view of socialism was put forth by two Germans, Friedrich Engels and Karl Marx. They declared that as capitalism grew, more and more workers would sink into poverty. In time they would rebel, seize control of the “means of production”—such as factories and farms—and govern themselves. Capitalism would collapse. Workers would establish a society based on cooperation and equal distribution of wealth. Such a revolution was inevitable, the authors claimed.

In time, Marx would be better known than Engels. In 1867 Marx produced the first volume of Das Kapital. In this three-part work, he put forth his arguments against capitalism. One of its evils, Marx said, was how capitalism disrupts the relationship between labor and profit. He thought there should be a direct connection between one’s work and one’s pay. For example, he thought it was not fair that one worker could toil all day at back-breaking labor and make very little money while another person got rich doing nothing more than sitting in an office speculating on future markets.

Marx thought that socialism could help rid the world of these injustices. However, he believed that the transition to socialism would not happen quickly because many people, especially the wealthier classes, would not see any benefit for themselves. For that reason, he thought the workers would have to control the government. Because the government would then control the economy, a command economy would result. The system in which the government owns almost all the means of production and controls economic planning is called communism. Years later, some governments would adopt communism and use it to violate basic human rights and freedom of choice.

Reading Check

Infer Why did capitalism provoke strong response from the socialists?

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Skills Focus: Analyzing Costs and Benefits

Social Studies Skill
Analysis of Industrialization

1. Organize students into small groups.
2. Have groups discuss the following questions:
   How has the Industrial Revolution changed everyday life? How has it changed the way you view the world? Who has it benefited most and who has it benefited least? How might the negative impact of industrialization be diminished? For example, what could be done to reduce pollution that continues to occur? How might industry be refocused in the future to achieve the maximum benefits with minimum costs?
3. Guide students in a large group discussion of these questions.

Answers
Interpreting Maps
1. Britain, Belgium, parts of Germany and eastern Europe, northern Italy; 2. industrial area grew up around a mine or power source.

Recent Scholarship
Many male writers who lived through the Industrial Revolution expressed a longing for an idealized past. According to Susan Zlotnick, professor of English at Vassar College, British women writers had a very different perspective. In her book Women, Writing, and the Industrial Revolution, Zlotnick argues that writers like Elizabeth Gaskell and Charlotte Brontë were more willing to accept industrialism and foresaw the possibility of improvement in the changes that it brought. Women, Writing and the Industrial Revolution, by Susan Zlotnick, The Johns Hopkins University Press, 2001.

The idea of separate spheres had another effect. Although so many people enjoyed what the new industrialized economy provided, in general they saw the business world as without moral controls. Women were expected to provide moral guidance in the home. Middle-class families were more affected by this division between home and work than were lower-class families. Poorer families that depended on two incomes to survive could not afford for the wife to stay home. However, belief in the home as society’s moral center was equally powerful among lower-class families.

Effects on Countries
On a scale much larger than the family home, industrialization also affected entire countries. For some nations, industry brought with it great power. For example, Great Britain, France, and Germany became leaders in the global economy.
Mass production increased their ability to build ships and make weapons. With increased military strength, some countries were able to conquer and control sources of raw materials around the world.

The powerful industrial giants could even control the economy of a place thousands of miles away. For example, India had made and exported cotton cloth for centuries already when Britain took control of the region. Indian textile workshops were not mechanized, however, so cotton cloth imported from Britain was cheaper. The Indian textile industry could not compete and was practically destroyed.

Back on this side of the world, the effect of industrialization on the United States was very dramatic. With its huge size, wealth of natural resources, and spirit of independence, the United States industrialized rapidly. Like the major industrial powers of Europe, the United States gained global political power based on its industrial strength. In addition, industry helped the country’s population grow quickly. A large number of the new Americans had moved from other lands around the world, drawn by jobs in American factories. The immigrants, both skilled and unskilled, contributed to the nation’s economic success and its cultural variety.

### Long-Term Effects on Societies

Overall, industrialized societies saw an increase in wealth. It is true that much of the wealth flowed into the pockets of a few rich industrialists. But manufacturing also created a new middle class of clerks, merchants, and managers. In general, the standard of living, or level of material comfort, for people in industrialized countries improved. Even many of the poorest people gradually benefited from labor-saving devices and cheap, machine-made goods.

The Industrial Revolution introduced something new to the middle class: leisure. People had more time on their hands and more money in their pockets. They could enjoy public sports events, a concert in the park, a day at the beach, or even a vacation. With increased leisure time, they could become more educated or participate more deeply in politics.

You will soon read how industrialization brought big changes to almost all aspects of daily life—from art to transportation. We are still experiencing those changes in our lives today. The full story of the Industrial Revolution has yet to be written.

### Close

Guide students in a discussion about the positive and negative effects of industrialization.

### Review

- **Online Quiz, Section 3**

### Assess

- **SE Section 3 Assessment**
- **Progress Assessment: Section 3 Quiz**
- **Alternative Assessment Handbook**

### Reteach/Intervene

- **Interactive Reader and Study Guide, Section 3**
- **Interactive Skills Tutor CD-ROM**

### Answers

**Reading Check** families—wealth, leisure time, better educated; countries—increased power, wealth, and living standards; overcrowding of cities, pollution, rapid population growth