

## **The Growth of Big Business**

1. What was oil used for in the mid 1800s? (560)
2. Who was Edwin Drake? (560)
3. What factors of production led the US from having an agricultural economy to an economy based on industry? Briefly explain each factor. (561)
4. What is an entrepreneur, and why did they need capital? (561)
5. How does a corporation raise capital? (561)
6. What industry was the first to form corporations? (561)
7. Who founded the Standard Oil Company of Ohio, and what did it produce? (562)
8. What is horizontal integration? (562)

9. How did Rockefeller work to drive others out of business? (562)
10. Define trust. (562)
11. What is a monopoly? (562)
12. Who designed a way to make affordable steel? (563)
13. What city became the steel capital of the nation, and who dominated the industry? (563)
14. What is vertical integration? (563)
15. How were Carnegie and Rockefeller philanthropic? (564)
16. How **could** big business hurt consumers? (564)
17. What was the Sherman Anti-Trust Act? (564)

## networks

There's More Online!

**CHART/GRAPH**

- Factors of Production
- Ford Stock Prices

**GRAPHIC ORGANIZER**

The Oil and Steel Industries



### Lesson 3

## An Age of Big Business

**SENTIAL QUESTION** *How does technology change the way people live and work?*

### IT MATTERS BECAUSE

*Industrial expansion was made possible in part by the development of new business practices and organizations—though there were costs to the new way of doing business.*

## The Growth of Big Business

**GUIDING QUESTION** *What is the role of the factors of production in making goods and services?*

In western Pennsylvania, people had long noticed a sticky black oil—petroleum—that seeped from the ground. Some people actually used the oil as a kind of medicine. Then, in the 1850s, researchers found they could burn petroleum to make heat and smoke-free light. It also was good for lubricating machinery. Suddenly, oil was valuable.

Edwin L. Drake believed that he could find large amounts of petroleum by digging a well. Many people thought Drake was wrong. At that time, few people knew that pools of oil did indeed exist underground. They did not imagine that oil wells could lead to great fortune.

In 1859 Drake drilled a well in Titusville, Pennsylvania. He struck oil. This led to the creation of a multimillion-dollar petroleum industry.

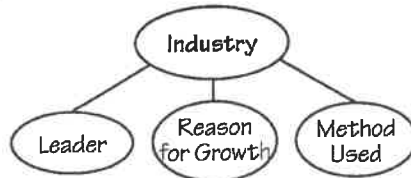
### The Factors of Production

During the late 1800s, new technology, transportation, and business methods allowed business leaders in the country to tap its rich supply of natural resources. This continued the

#### Taking Notes: Organizing

As you read, create two diagrams like this one to organize information about the oil and steel industries.

560 *The Industrial Age*



#### Content Vocabulary

- factors of production
- stock
- trust
- entrepreneur
- shareholder
- monopoly
- corporation
- dividend
- merger

shift in the United States from an economy based on farming to one based on industry. The change was possible because the United States had the resources needed for a growing economy. Among these resources were what economists call the **factors of production**—land, labor, and capital.

As a factor of production, land refers not just to the land itself but also to all natural resources in it. Petroleum is an example. The United States held many natural resources.

The second factor of production is labor. It takes large numbers of workers to turn raw materials into goods. Between 1860 and 1900, the population of the country more than doubled.

The third factor of production is capital. These are the things people use to make other goods and services. The machines, buildings, and tools used to make automobiles, for example, are capital goods. Money is another type of capital.

### Finding Capital for Expansion

With the economy growing after the Civil War, many businesses looked for ways to expand. To do so, **entrepreneurs** (ahn•truh•pruh•NURZ)—people who start businesses—had to raise capital in the form of money. They needed this capital to buy raw materials and equipment, pay workers, and cover other costs.

One way a company can raise capital is by becoming a **corporation** (kawr•puh•RAY•shuhn). This is a type of business organization that can have many owners and grow very large. A corporation often sells shares—part-ownership of the corporation—called **stock**. It then uses the money raised to build the business. The people who buy the stock are the corporation's **shareholders** (SHEHR•hohl•duhrz).

When a corporation does well, shareholders earn **dividends** (DIH•vuh•dehdz). These are cash payments from the corporation's profits.

The rise of corporations helped fuel industry in the late 1800s. Railroads were the first to form corporations. Manufacturing firms, banks, and other businesses followed.

Buyers of stock receive certificates that represent their partial ownership in the corporation.



### PROGRESS CHECK

**Explaining** Why is capital important for economic growth?

**factors of production** land, labor, and capital used to make goods and services  
**entrepreneur** a person who starts a business

**corporation** legally defined organization of people and resources with the purpose of doing business  
**stock** shares of ownership a company sells in its business

**shareholder** a person who invests in a company by buying stock  
**dividend** a stockholder's share of a company's profits, usually as a cash payment

# The Growth of Oil and Steel

**GUIDING QUESTION** *How did John D. Rockefeller and Andrew Carnegie build fortunes in the oil and steel industries?*

As news of Edwin L. Drake and his oil strike of 1859 spread, prospectors and investors hurried to western Pennsylvania. "Oil rush" towns with names such as Oil City and Petroleum Center sprang up overnight. The oil boom expanded as prospectors struck oil in Ohio and West Virginia.

John D. Rockefeller was the most famous figure of the oil industry. When he was just 26, he and four **partners** built an oil refinery—a plant to process oil—in Cleveland, Ohio. In 1870 Rockefeller organized the Standard Oil Company of Ohio. He then set out to dominate the oil industry.

## Rockefeller and the Standard Oil Trust

One method Rockefeller used was horizontal integration. This means combining competing companies of the same type into one corporation. Standard Oil grew powerful and wealthy.

Rockefeller lowered prices to drive competitors out of business. He pressured customers not to deal with rival companies, and he got the railroads to give him low rates. In 1882 Rockefeller formed a **trust**, a group of companies managed by a single board of trustees. Shareholders of these companies traded their stock for Standard Oil stock, which paid higher dividends. In this way, Standard Oil gained partial ownership and control

Newspapers and magazines often portrayed corporations as "monopoly monsters" that were too powerful to be controlled.

### ► CRITICAL THINKING

*Summarizing* Describe what is taking place in this cartoon.



## Reading HELPDESK

**trust** a combination of firms or corporations formed by a legal agreement, especially to reduce competition

### Academic Vocabulary

**partner** a person who takes part in an activity with others, especially in the operation of a business

of the other companies. Rockefeller had created a **monopoly**—total control of an industry by a single producer.

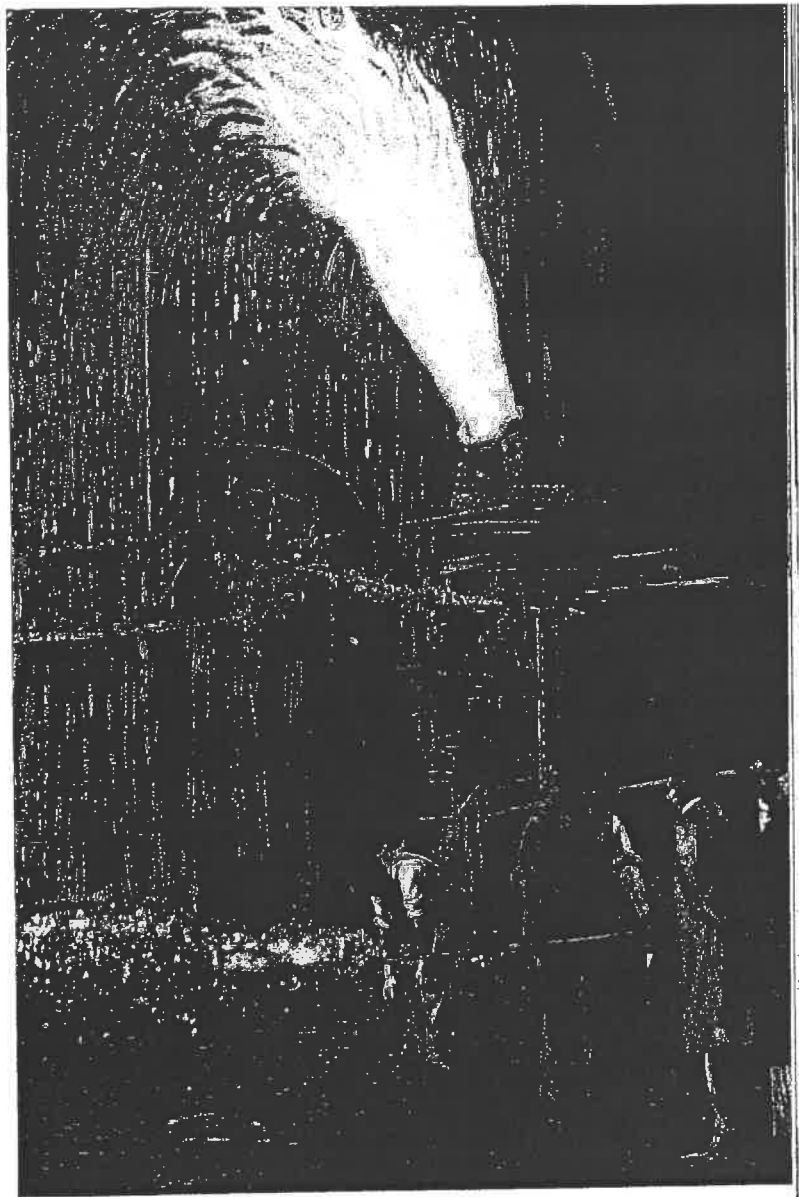
## Carnegie and the Steel Industry

Steel became a big business during this era, too. This strong metal was ideal for making railroad tracks, bridges, and many other products.

Two new methods of making steel—the Bessemer process, developed by English inventor Henry Bessemer, and the open-hearth process—changed the industry. With these new methods, mills were able to make large amounts of affordable steel. In the 1870s, companies built large steel mills in western Pennsylvania and eastern Ohio. Pittsburgh, Pennsylvania, became the steel capital of the nation. Cleveland, Chicago, Detroit, and Birmingham, Alabama, also became important hubs for steel production.

The leading figure in steelmaking was Andrew Carnegie, the son of a Scottish immigrant. Starting as a messenger and telegraph operator, he worked his way up to become manager of the Pennsylvania Railroad. Carnegie soon realized that there was a huge market for steel. After learning about the Bessemer process, he built a steel plant near Pittsburgh.

By 1890 Carnegie dominated the steel industry. He did this through vertical integration: He acquired companies at all stages of the steel-making process. Carnegie bought iron and coal mines—the raw materials of steel. He bought warehouses, ore ships, and railroads for storing and moving raw materials. In this way, Carnegie gained control of all steps of his business. This allowed Carnegie to reduce the cost of making steel and the prices he charged for it. Many other steel companies could not compete. By 1900 the Carnegie Steel Company was making a third of the nation's steel.



Before the Bessemer converter, shown here, making steel was a slow, costly process. This device made possible the mass production of steel.

**monopoly** total control of a type of industry by one person or one company

**merger** the combining of two or more businesses into one

### Academic Vocabulary

**trend** a general direction of events

Andrew Carnegie was a leading industrialist of the late 1800s.



## Millionaires and Philanthropists

Carnegie, Rockefeller, and other industrial millionaires of the era grew interested in philanthropy—the use of money to benefit the community. They used their fortunes to found schools, universities, libraries, and more. Carnegie donated \$350 million to various organizations. He built Carnegie Hall—one of the world’s most famous concert halls—in New York City. He also funded the building of more than 2,000 libraries worldwide. Rockefeller used his fortune to establish the University of Chicago in 1890 and to found New York’s Rockefeller Institute for Medical Research.

## Corporations Grow Larger

In 1889 New Jersey encouraged the **trend** toward monopolies by allowing formation of holding companies. A holding company could gain power over multiple other companies by buying their stock instead of buying the companies outright. Other states also made **mergers**—the combining of companies—easier.

Some people admired large businesses. Others felt they hurt consumers. With little competition, corporations were under no pressure to improve their products or services. In 1890 Congress passed the Sherman Antitrust Act, which made trusts and monopolies illegal. At first, however, it did little to curb the power of big business.

### **PROGRESS CHECK**

**Describing** How did Standard Oil become a monopoly?

## LESSON 3 REVIEW

### Review Vocabulary

- Use the following words in a sentence that illustrates what the terms have in common.
  - corporation
  - stock
- Examine the terms below. Then write a sentence explaining what the terms have in common.
  - merger
  - monopoly

### Answer the Guiding Questions

- Summarizing** What are factors of production, and what role do they play in producing goods and services?
- Explaining** How did horizontal and vertical integration help Rockefeller and Carnegie gain control of the oil and steel industries?
- EXPOSITORY WRITING** Why do you think wealthy industrialists such as Rockefeller and Carnegie became philanthropists? Write a paragraph that answers this question.