Objectives

- Analyze the factors that led to the industrialization of the United States in the late 1800s.

- Explain how new inventions and innovations changed Americans’ lives.

- Describe the impact of industrialization in the late 1800s.
Terms and People

- **entrepreneur** – people who invest money in a product or enterprise in order to make a profit

- **protective tariff** – taxes that would make imported goods cost more than those made locally

- **laissez faire** – a policy which allowed businesses to operate under minimal government regulation

- **patent** – a grant by the federal government giving an inventor the exclusive right to develop, use, and sell an invention for a set period of time
Terms and People (continued)

- **Thomas Edison** – an inventor and creative genius who received more than 1,000 patents for new inventions

- **Bessemer process** – a process for purifying iron resulting in strong, but lightweight, steel

- **Suspension bridge** – bridges in which the roadway is suspended by steel cables

- **Time zone** – twenty-four zones around the world, one for each hour of the day

- **Mass production** – systems that depended on machinery to turn out large numbers of products quickly and inexpensively
How did industrialization and new technology affect the economy and society?
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This “second industrial revolution,” led by scientists and inventors, improved people’s daily lives.
Several factors led to increased industrial growth during the Civil War. This laid the groundwork for postwar prosperity.

- Factories used new tools and methods to produce supplies in big numbers.
- Railroads expanded across the nation.
- The government encouraged immigration.
A great many immigrants to the United States were pushed from their homelands by:

- political upheaval at home
- religious discrimination
- crop failures
The American system of capitalism is one in which individuals own most businesses. These **entrepreneurs** invest money in products in order to make profits.

Entrepreneurs fueled industrialization in the late 1800s.

They benefited from **laissez-faire** policies, which allowed businesses to work under minimal government regulation.
### Major Inventions of the 1800s

<table>
<thead>
<tr>
<th>Inventor</th>
<th>Major invention</th>
<th>Year</th>
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<tbody>
<tr>
<td>Samuel Morse</td>
<td>Telegraph</td>
<td>1844</td>
</tr>
<tr>
<td>Elias Howe</td>
<td>Sewing machine</td>
<td>1846</td>
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<tr>
<td>Elisha Otis</td>
<td>Safety elevator</td>
<td>1852</td>
</tr>
<tr>
<td>Thomas Edison</td>
<td>Light bulb</td>
<td>1880</td>
</tr>
<tr>
<td>Granville Woods</td>
<td>Steam boiler</td>
<td>1884</td>
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</tbody>
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Thomas Edison was the most prolific inventor of the era.

He and his team of workers developed the light bulb, the phonograph, the motion picture camera, and hundreds of new products.
Daily life changed dramatically as a result of new technologies.

Morse’s telegraph gave rise to a communications revolution. The telephone debuted in 1876, the wireless telegraph in 1896.

The Bessemer process, which purified iron to create steel, changed construction. Steel made skyscrapers and suspension bridges possible.
Railroads expanded.

This led to the physical and economic growth of cities.

Chicago, Atlanta, and Pittsburgh became important hubs.
# Railroads Changed America

| They encouraged innovation. | • Air brakes were invented in 1869.  
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<th>• Refrigerated cars were invented to transport food.</th>
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| They led to the growth of industry. | • Businesses obtained raw materials easily.  
|                           | • They sold products to people far away. |
America exported grain, steel, and textiles in huge amounts and became a world economic power.
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Many Americans moved to cities to find work.
People began to raise concerns about the impact of industrialization on the environment.
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In response, Congress set aside protected lands. Yellowstone Park was created in 1872.
Section Review

QuickTake Quiz

Know It, Show It Quiz

Technology and Industrial Growth

Sunday, September 22, 13