Chapter 10 Section 1: Economic Growth

I. The Growth of Industry (Pages 306–308)

A. Industrial Revolution
   1. The Industrial Revolution began in the mid-1700s in Britain.
   2. It was a period during which machinery and technology changed how people worked and produced goods.

B. The Industrial Revolution in New England
   1. The Industrial Revolution took hold in the United States in New England around 1800.
      a) Rivers and streams provided waterpower to run machinery in factories.
      b) New England was near needed resources, such as coal and iron from Pennsylvania and therefore had an advantage.
      c) New England shipped cotton from the Southern states and sent the finished cloth to markets throughout the nation.
      d) Capitalism played a large part in the development of different industries.
         • People put up capital, or their own money, for a new business in the hopes to make a profit, too.
      e) With the growth of industry came free enterprise.
         • People are open to buy, sell, or produce anything of their choosing as well as work wherever they want.
         • Competition, profit, private property, and economic freedom are all aspects of a free enterprise.
      f) New England had workers to handle the growth of industry.

C. New Technology
   1. The Industrial Revolution could not have taken place without the invention of new machines and new technology or the scientific discoveries that made work easier.
      a) Britain created machinery and methods that changed the textile industry with inventions such as the spinning jenny, the water frame, and the power loom.
      b) Most mills were built near rivers because the new machines ran on waterpower.
      c) In 1785 the steam engine provided power for a cotton mill.

   2. In the United States, many new inventions were created.
      a) In 1793 Eli Whitney invented the cotton gin. One worker using the machine could clean cotton as fast as 50 people working by hand.
      b) The patent law passed in 1790 protected the rights of people who created inventions.
         • A patent gives an inventor the sole legal right to the invention and its profits for a certain period of time.

II. New England Factories (Pages 308–309)

A. The Factory System
   1. Samuel Slater took over a cotton mill in Pawtucket, Rhode Island, where he was able to copy the design of a machine invented by Richard Arkwright of Britain that spun cotton threads.
   2. Slater memorized the design while in Britain, came to the United States in 1789, and established Slater’s Mill.
      • Lowell’s Mill, another textile plant in Waltham, Massachusetts, was established in 1814.
   3. The factory system, or bringing manufacturing steps together under one roof, began here.
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4. This was an important part of the Industrial Revolution because it changed the way goods were made and increased efficiency.

B. Interchangeable Parts
   1. The technology of making interchangeable parts made it possible to produce many types of goods in large quantities.
      a) It also reduced the cost of manufacturing goods.
   2. In 1798 Eli Whitney devised this method to make 10,000 rifles in two years for the United States government.
      a) He was able to make huge quantities of identical pieces that could replace one another.

III. Agriculture Expands (Page 310)

1. In the 1820s, more than 65 percent of Americans were farmers.

2. In the Northeast, farms were small and the produce was sold locally.

3. In the South, cotton production greatly increased with the development of the textile industry of New England and Europe.
   a) Enslaved workers planted, tended, and picked the cotton.
   b) With the invention of the cotton gin, cotton could be cleaned faster and cheaper than by hand, so farmers raised larger crops.
   c) Between 1790 and 1820, cotton production went from 3,000 to 300,000 bales a year.

4. In the West, farmers north of the Ohio River raised pork and cash crops such as wheat and corn. Some Southern farmers also moved west to plant cotton.

IV. Economic Independence (Page 310)

A. Second Bank of the United States
   1. Merchants, shopkeepers, and farmers put some of the money they earned back into their businesses to try to earn larger profits.
      a) Businesses that needed more money had to borrow it from banks.
   2. The charter for the First Bank of the United States expired in 1811.
      a) It had the power to establish a national currency and to make large loans.
      b) It helped strengthen the economic independence of the nation.

B. Cities Come of Age
   1. Cities and towns grew as a result of the growth of factories and trade.
      a) Many developed along rivers and streams to use the waterpower.
         a. Cities such as New York, Boston, and Baltimore became centers of commerce and trade.
         b. Towns such as Pittsburgh, Cincinnati, and Louisville became profitable from their proximity to major rivers.
   2. Cities and towns did not look like those today. Buildings were wood or brick. Streets were unpaved. Animals roamed freely.
      a) Because there were no sewers, the danger of diseases such as cholera and yellow fever grew.
      b) Fires could spread easily and could be disastrous.
      c) Cities offered many types of shops, jobs, a steady income, and cultural opportunities.
      d) Many people left their farms and moved to the cities for the city life.