**The Industrial Revolution**

In this chapter, you will learn about important changes in the way things are \_\_\_\_\_\_\_\_\_\_\_\_\_ that began in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and spread to the rest of the world. You will also learn how the Industrial Revolution brought about major changes in where people lived, working conditions, and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**Understanding Economics**

* Economics is how people meet their \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ by making, distributing, and using goods and services. Economists study how people work and earn \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, how they \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ money, and how they use their time, energy, and money to satisfy their \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**The Three Economic Questions**

* People have unlimited \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ – things that they would like to have or to do. We can move never be wholly satisfied because we have limited \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to meet these unlimited wants. We have only so much time, energy, and resources to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ needs and desires.
* Every society has limited \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to meet the unlimited \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of its members. Therefore, every society must answer \_\_\_\_\_\_\_\_\_\_\_\_\_\_ basic economic questions:

**\_\_\_\_should it be produced?**

**What should be \_\_\_\_\_\_\_\_?**

**\_\_\_\_\_ should get it?**

* In other words, every society must decide what things to \_\_\_\_\_\_\_\_\_\_\_\_\_ with its limited \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. It cannot simply satisfy all of its members’ unlimited wants. Which wants and needs should it satisfy? What should it produce to satisfy these wants? Who should \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ how those goods and services are made? Finally, who should receive the goods and services that a \_\_\_\_\_\_\_\_\_\_\_\_\_\_ produces?
* Societies answer these three basic economic questions in different ways. In some societies, people follow \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to answer these questions. They produce whatever their \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ produced, using the same, time-honored traditional methods. In other societies, a ruler or the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ tells everyone what to do and decides who gets what is produced. A third way to answer these questions is based on economic \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**Free Enterprise System**

* In these societies, people are free to do whatever they \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. People enjoy economic freedom – the freedom to make their own \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in deciding what to buy, where to work, and what to make. This is known as the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* In the free enterprise system, individuals enjoy the freedom of making their own \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ decisions. People have the right to \_\_\_\_\_\_\_\_\_\_ property – such as possessions, homes, factories, farms, and businesses – and to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ their property as they see fit. Some individuals \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ their money or time in private businesses to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ goods and services.
* In doing this, they hope to make a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (*extra money that is made after all expenses are paid)*. In a free enterprise system, several producers often make the \_\_\_\_\_\_\_\_\_\_\_\_\_ goods or promote the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ services. This gives consumers a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in the type of goods available and how much they want to \_\_\_\_\_\_\_\_\_\_\_\_\_\_. It also forces producers to attract consumers by improving \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and reducing \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Less efficient producers are unable to compete and go out of business. When they can compete successfully, producers are often able to increase their business and make a larger \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* In a free enterprise system, government interference is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. The government supplies some service, sets rules, and acts as a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to settle disputes and make sure the economy is functioning smoothly. Otherwise, the three basic economic questions are answered by the free interplay between \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ *(those who make and sell goods and services)* and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ *(those who buy and use goods and services).*

**The Law of Supply and Demand**

* *Supply* refers to how much of a good producers make \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. *Demand* refers to how much of a product consumers are willing to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* In a free enterprise system the interaction of supply and demand determines \_\_\_\_\_\_\_\_\_\_\_\_\_ and what goods are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. For example, if demand for a product or service is high, prices go up. If demand is low, prices will go \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**Adam Smith: Prophet of Free Enterprise**

* **Adam Smith**, a Scottish professor, was the first to explain how the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_works. His book, The *Wealth of Nations*, was published in 1776, the same year as the Declaration of Independence.
* Smith explained how production benefits from the division of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, in which workers specialize in particular steps of the process. He also explained how the laws of supply and demand determine the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Inefficient producers go out of business and only those producers who make the best goods and sell at the best prices survive. In this way, the entire economy benefits. According to Smith, each person pursues his or her own \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in a free enterprise system, but an “**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**” guides individual actions so that they actually work for a common good.
* Smith attacked the restrictive system of British \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, which had led the American colonies to declare their independence. Smith thought mercantilism was a waste of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, encouraging the inefficient production of goods. Smith favored a government “hands off,” or **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**, policy.

The free enterprise system, which flourished in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, played an important role in the Industrial Revolution. It allowed investors and business owners to put their resources where they had the greatest \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ for the economy

**The Industrial Revolution**

* While the American and French Revolutions encouraged political \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, a different kind of revolution was stirring in Europe. It was an \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ revolution. The effects of the Industrial Revolution were just as far-reaching as the effects of the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ revolutions that took place in America and France.
* The Industrial Revolution brought about fundamental \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in the way goods are made. It introduced \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (*the large-scale production of identical goods*) and the use of new sources of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to meet human needs. People started making goods in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ instead of at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and they began to use \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ power to run machinery. Science also became more closely linked to technology, resulting in a stream of constant \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**Causes of the Industrial Revolution**

* The Industrial Revolution first began in Great Britain in the \_\_\_\_\_\_\_\_\_\_\_\_\_. There were several important factors that made Great Britain ready for the Industrial Revolution:

**Pre-Conditions for Industrialization**

* **Geographical Advantages**

Great Britain had many \_\_\_\_\_\_\_\_\_\_\_\_ and rivers, and plentiful \_\_\_\_\_\_. As an island, it was protected from \_\_\_\_\_\_\_\_\_\_\_\_\_\_, close to European markets, and well-located for trade with other areas.

* **Transportation and Communications**

Great Britain had a well-developed coastal \_\_\_\_\_\_\_\_\_\_\_\_\_, canals, port towns, an excellent \_\_\_\_\_\_\_\_\_\_\_\_\_ service, daily newspapers, and the most powerful \_\_\_\_\_\_\_\_\_\_\_\_\_ in the world.

* **Large Colonial Empire**

Britain’s far-flung \_\_\_\_\_\_\_\_\_\_\_\_ empire brought valuable raw materials to her ports. Running a colonial empire contributed to the development of sophisticated \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and commercial skills.

* **Powerful Middle Class**

A large and powerful \_\_\_\_\_\_\_\_\_\_\_\_\_\_ class participated in government and promoted free enterprise and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ improvement. They brought together capital, labor, and new industrial inventions.

* **Agricultural Improvements**

British farmers used scientific methods to boost \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, such as enclosing common lands, rotating \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and careful animal \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Fewer people were needed to work on farms.

* With its favorable \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, colonial empire, political stability, global trade, prosperous agriculture, and thriving middle class, Britain was ready for something dramatic to happen in its \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Advances in science also helped set the stage. Inventors and business owners took a “scientific approach” to solving problems. Because of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ advances, British manufacturers had technical skills to build new machines.

**Innovations in Textile Manufacturing**

* A series of British \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ then triggered the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Revolution. Advances in science helped inventors take a practical approach to problems. The revolution began in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and spread to other fields. For centuries, cotton and wool were pulled and twisted on a spinning wheel to make thread or yarn. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (1764) used a single wheel to control several \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ at a time. This replaced the single spindle on conventional spinning wheels. This allowed many threads to be spun at once. Larger quantities of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ could soon be made quickly and inexpensively.
* Other similar \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ improved both spinning and weaving. James Watt, a Scottish inventor, improved the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ engine (1769) by creating separate \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ for the steam to get hot and to cool down. Watt’s improved steam engine made steam power available for mechanical purposes. His improvements allowed factory construction to be placed anywhere, since factories were no longer dependent on \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to power their machines.

**The Shift from Home to Factory**

* Before the Industrial Revolution, craftsmen worked at home, spinning wool, cotton, and linen by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and then weaving the thread or yarn into finished cloth. Merchants often dropped off raw \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and collected the cloth. This was known as the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ system.
* During the Industrial Revolution, large numbers of workers began working together in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. In factories, workers could be supervised and could use \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ driven by water and steam power. The rate of production in the new factories was astonishing. By the standards of the time. As a result of these improvements, the price of cloth \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and the demand for textiles \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Raw cotton was imported in England, largely from the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ United States. In England, it was spun into thread and woven into cotton cloth in factories. From there, the cloth was \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ all around the world.
* England’s plentiful supplies of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ provided the resources needed for steam power to run the factories. Its engineers and craftsmen were skilled at making machinery. As the demand grew for less costly British \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, more and more factories were built, employing \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ numbers of workers.

**Working Conditions**

* While factory owners grew richer and more powerful, the conditions of the new “working class” \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Early factories were often appalling places to work, with \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ conditions. Work hours were long, and workers received barely enough pay to live on. Women and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ also worked. Children were used to crawl in and clear the machines, a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ task. In hard times, factory workers lost their jobs and were left to beg, steal, get local poor relief, or die of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**Urbanization**

* Fewer workers were needed on \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ because of improvements in agriculture. With the shift of work to factories, large numbers of workers moved from their farms and homes in the countryside to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. The migration from rural communities to cities marked one of the largest \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ shifts in history. Cities became crowded and highly \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Factory smoke greatly \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the air. Local governments were often unable to cope with the needs of large numbers of workers.

**Changes in Transportation Technology**

* Improvements in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ accelerated advances in industrialization. Steam engines were applied to steam \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in the early 1800s. They were also used to power locomotives, creating the first \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in the 1820s. Railroads unified the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of a region by linking cities, factories, towns, and the countryside together. At the same time, railroad \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ required vast amounts of coal, iron, and steel, greatly stimulating the growth of heavy industry.

**Changes in European Society**

* The Industrial Revolution led to important changes in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. A new middle class of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, composed of merchants, landowners, and bankers emerged. These people helped to develop the free enterprise system (also known as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_).

**Characteristics of 19th-Century Capitalism**

* **Role of the Entrepreneur.**

The means of production (factories) were owned by people known as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Entrepreneurs organize, manage, and assume responsibility for a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in hopes of making a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

* **Role of the Worker.**

Former \_\_\_\_\_\_\_\_\_\_\_\_\_ workers left their homes in the countryside for jobs in more populated and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ areas. These workers provided their labor, for which they received wages.

* **Role of the Government.**

Nineteenth-century governments followed a policy of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. This meant that the government did not \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in relations between workers and business owners.

**Family in the Industrial Revolution**

* The Industrial Revolution brought many changes to \_\_\_\_\_\_\_\_\_\_\_\_ life. In pre-industrial times, most people lived in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. They were peasant farmers or craftsmen. Husbands and wives worked together in the fields or at home., spinning thread and weaving cloth. Children learned from their \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and worked along side them. Few went to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* With the rise of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, all this changed. Many men, women, and even children began working in factories. Some children were sent to work in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to crawl in small spaces, until new laws limited child labor. The factory whistle told them when to come to work and when to go. Less time was spent by family members at home or together. Often younger unmarried men and women served as unskilled factory workers.
* People moved from villages into \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Conditions became more \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and whole families huddled into small apartments, sharing rooms. Many families had less access to fresh \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, sunlight, and fresh air. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ like cholera and typhus could spread quickly.
* While \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ classes enjoyed fabulous \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, historians still debate whether the living \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of workers improved or actually worsened in the early decades of the Industrial Revolution. Later in the century, municipal \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ led to improvements in public water supplies and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, although they did not \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ crowded living conditions. Reformers also introduced free public \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ for children.
* Scientists like \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ also played an important role in improving living conditions for people of all social classes. Pasteur believed most diseases were caused by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ – tiny creatures that could only be seen under a microscope. Many doctors at first resisted Pasteur’s “germ theory” of science. However, Pasteur was able to show how better \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ practices, like washing hands and boiling instruments before operations or delivering babies, could reduce \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Pasteur also developed new \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to combat diseases like anthrax and rabies, which he also thought were caused by germs. He pioneered the heating of liquids to kill germs.

**Reform Movements**

* The changes caused by the Industrial Revolution brought about both \_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ reforms, first in Great Britain and then in the rest of \_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* **Social Reforms.**

The misery of the \_\_\_\_\_\_\_\_\_\_\_\_\_ classes and the injustices of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ began to disturb the conscience of the new middle class. They also feared working class \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. This led Parliament to ban \_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ from working in the mines, to limit working hours to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and to bring about safer working conditions. Poor law reform established \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ for the unemployed.

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ was a popular monarch. Victoria favored social \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to help her subjects. With her husband, Prince Albert, she also favored many private efforts to help the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* **Municipal Reforms.**

Municipal reform made cities \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and more \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ places to live. Public health officials improved the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of drinking water and introduced sewer systems to make cities \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and prevent the spread of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ like cholera. Street lamps and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ forces made cities safer. Governments also introduced the first free public elementary \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to prepare citizens for adulthood.

* **Workers Unions.**

Some workers organized into \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and threatened to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ if they did not obtain higher wages and better conditions. Even those favoring conservative values like Otto von Bismarck in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, introduced social reforms, such as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ insurance, in order to win the favor of the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ class.

* **Political Reforms.**

The rising \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ class of factory owners, merchants, and bankers demanded greater \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ power. In Great Britain, the old House of Commons represented the counties and many old towns, known as boroughs. Many new towns had no \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ at all. The Reform Bill of 1832 gave greater representation in Parliament to the new towns and extended \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ rights to the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ class. Liberals argued these gradual reforms would avoid a revolution. Later reform bills gradually extended voting rights to the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ classes. By the late 19th century, all adult \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ could vote in Britain, but not \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**Marx and the Birth of Communism**

* Two critics of the new capitalist system were \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (1818-1883) and Friedrich Engels. Their ideas were published in *The Communist Manifesto* (1848). Marx later wrote *Capital* (1867). Marx’s ideas became the basis of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Marx believed that workers created value through their \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. He believed that business owners used their \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to take advantage of workers by taking for themselves most of the value of what workers produced.
* The capitalist, Marx said, only paid workers the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ they needed to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. The rest that they produced, known as the “\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_,” was kept by the owner for himself. Over time, owners would get richer and richer, while their workers, known as the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, would get poorer. Marx predicted that the conditions of workers would become so bad that they would eventually rise up and overthrow their capitalist rulers in a violent \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* After the revolutions, Marx predicted that workers would establish an \_\_\_\_\_\_\_\_\_\_\_\_\_\_ society and live in perfect \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Marx called this system “\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.” In pure Communism, everything would be owned in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. There would be no \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ property. There would also be no \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in a Communist system. Cooperation would replace \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, allowing everyone’s needs to be met. During his lifetime, Marx believed that a Communist revolution would soon occur in an industrialized country in Western Europe.

**Socialism**

* Other \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the new industrial conditions did not go as far as Marx and Engels. They did not call for a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ revolution. These critics were called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. However, they did think it was necessary to improve conditions for workers.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ first began in the 1800s as a political movement in response to the injustices of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and the exploitation of \_\_\_\_\_\_\_\_\_\_\_\_\_\_. Many workers had to work long \_\_\_\_\_\_\_\_\_\_\_\_\_ for low wages in unsafe \_\_\_\_\_\_\_\_\_\_\_\_\_\_. Socialist reformers preached more state influence, equal rights, and an end to the inhumane treatment of workers. These reformer believed the best way to safeguard workers would be to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to protect workers and even to have the government \_\_\_\_\_\_\_\_\_\_\_\_ some businesses for the workers’ benefit. They formed their own socialist \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ across Europe.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ disagreed with the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ belief that workers’ conditions could only be improved through \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ revolution. Socialists believed that workers could improve their own conditions by political \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Later socialists argued that the government should own basic \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and also provide essential \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, like free schooling, low-cost housing, inexpensive public transportation, and a national \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ program.

**The Second Industrial Revolution**

* The constant stream of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ triggered by the Industrial Revolution led to a “\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Industrial Revolution” in the late 19th century. This was based on improvements in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, steel, and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ industries, and by the production of \_\_\_\_\_\_\_\_\_\_\_\_\_\_. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (1847-1931) developed the phonograph, motion pictures, and the electric light bulb in the 1870s – inventions based on electricity.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ invented the telephone in 1876.
* Other inventors developed \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ engine – an engine running on petroleum-based gasoline. Scientists like Polish-born \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (1867-1934) also started studying radioactivity. She became the first woman to win a Nobel Prize for her discovery of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**The Impact of Industry on Nationalism**

* In the last chapter, you learned how the French Revolution and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ unleashed the forces of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. In the first half of the 19th century, conservative statesmen, like Prince Metternich managed to contain nationalist forces. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ strengthened the power of the middle classes, who demanded national independence and unity in many places across Europe. Business leaders especially hoped to benefit from unified national markets. Skillful politicians and journalists also channeled worker \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ into nationalism.

**The Unification of Italy and Germany**

* Following the failure of the Revolutions of 1848 in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, statesmen like Count Cavour in Italy and Otto von Bismarck in Germany managed to unify their nations through skillful \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and the use of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**Italy (1859-1860)**

* For centuries, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ had consisted of a number of smaller states. Nationalists called for a unification of Italy into a single \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Count Camillo di Cavour (1810-1861) was \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the state of Piedmont in Northern Italy. He became famous by writing an essay on \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. In the new industrial age, railroads could help unite Italy \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Cavour enlisted French support to defeat Austria, driving the Austrians out of Northern Italy. Cavour next annexed Northern and Central Italy to the Kingdom of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* The nationalist leader \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, along with his secret revolutionary society, overthrew the unpopular Kingdom of the Two Sicilies (*Naples*). Garibaldi agreed to join this area to Cavour’s enlarged Piedmont. By 1860, Italy had become a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ nation. The ruler of Piedmont became the first \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of Italy.

**Germany (1863-1871)**

Like Italy, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ still consisted of a number of smaller states. Chief rivals for the leadership of Germany were the two largest German states – \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Austria contained many non-German \_\_\_\_\_\_\_\_\_\_\_\_\_\_ and people. The leaders of Austria did not want to see Germany united, since Austria could not bring its non-German \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ into Germany.

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ strengthened Prussia’s hand. Prussia organized the German states into a customs union (known as *\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*). Other German states adapted their economies to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Then Prussia’s Chancellor, Otto von Bismarck, followed a policy of “\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_” to unite Germany. Liberals failed to unite the German states in 1848; now Bismarck achieved unification through Prussia’s economic and military \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ had industrialized faster than \_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Bismarck combined skillful diplomacy and Prussian military might to achieve German \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Prussian military leaders made use of new \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, like the railroad and the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, to build the most powerful \_\_\_\_\_\_\_\_\_\_\_\_\_\_ in Europe.
* After a series of successful wars against \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, Austria, and France, Germany was finally united in 1871. The King of Prussia became \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (*emperor*) of Germany.