**Industrial Revolution**

* Major change in the economy and society due to a shift from agriculture to industry with labor saving machines.
* Began in Europe in the mid 1700’s
  + A slow, long process where production shifts from simple hand tools to complex machines

**Causes – Agricultural Revolution**

* Europeans sought new markets for their goods
* Many Europeans migrated to the cities in search of jobs
* European middle class gained political power
* **New agricultural revolution:** **increases food production in Britain**
  + **Improved farm machinery** 
    - **Jethro Tull invented the horse drawn seed-drill, which increased agricultural output.**
* **During the agricultural revolution in the 1700s, wealthy landowners increased food production by-**
  + **Enclosure movement: taking over and fencing of peasant farms**
    - Farm laborers lose jobs/ small farmers can’t compete/ villages lose populations - helped wealthy landowners increase production
  + **Before a nation can begin to industrialize, that nation must first develop an adequate food supply.**

**Why did it begin in Britain?**

* **Natural resources**
  + Large deposits of coal and iron
    - **The two main natural resources used were iron and coal.** 
      * Coal was important to the Industrial Revolution because it provided the fuel to produce iron – iron was an important metal used for cooking utensils, tools, and eventually, machines.
* **Economic support** 
  + Government supported economic growth
  + Capital and demand – money to invest in factories and demand for products
    - **Britain took the lead in the Industrial Revolution because the British business class had capital to invest.**
  + **Capital is money used to invest in labor, people, and factories** 
    - **The availability of investment capital is the condition is most necessary to the process of industrialization in a society.**
* As technology continued to develop new innovations, steel became the most important material in the world for buildings, weapons, and railways. Railways changed the world with efficient transport at a low cost.
  + **During the Industrial Revolution, countries began measuring wealth and power by the amount of steel they produced.**

**Textile Industry**

* **The first major industry in Britain during the beginning of the Industrial Revolution was the textile industry [cloth and clothing].**
* Before factories, work was done at home, but new machines were too large and expensive to use at home.
* Technological advancements and inventions **allowed textiles to be mass produced for a cheaper price**:
  + John Kay – **flying shuttle** – wove cloth quickly
  + James Hargreaves – **spinning Jenny** – spun threads together
* **Industrialization in the textile industry resulted in the establishment of factories**
  + These were near streams, as water was needed to run machines; after the steam engine was invented, factories could be built anywhere.

**Steam Engine and other new technologies**

* **Steam Engine: became an important source of power for the Industrial Revolution**
  + **James Watt’s greatest contribution to the industrial revolution was improvements to the steam engine**
* **Dynamite: invented by Alfred Nobel,** who later regretted his invention and introduced the Nobel Peace Prize

**Rise of Big Business**

* Because Britain had a ready supply of money, or **capital**, to invest in new machines and factories, **Entrepreneurs** found new business opportunities and new ways to make profits.
  + **Entrepreneur: a person who organizes a business or businesses**
* As nations adopted a laissez-faire economic system, businesses were allowed to grow quickly without government intervention.
  + Some entrepreneurs and investors found that their risk of putting money into a business was lessened if they pooled it together to form a **corporation**.
  + **Corporation -  an independent legal entity owned by shareholders.**
    - Shares represent ownership of a company. When an individual buys shares in your company, they become one of its owners.
    - **Stock is a share in the ownership of a company. Stock represents a claim on the company's assets and earnings.**

Over time, these large corporations had so much money and power they formed monopolies. Monopoly is the extreme case in capitalism.

* **Monopoly *-* the exclusive possession or control of the supply or trade in a commodity or service with a goal to restrict competition.**
  + It is characterized by a lack of competition, which can mean higher prices and inferior products.

**Factories and Problems**

* The factory system allowed multiple machines and many workers to manufacture in a central location
  + **It created a new labor system where workers had to work regular hours and perform repetitive tasks**
  + Initially, each workers completed a full product one at a time.
  + Eventually, new developments were introduced which made work more efficient
    - **Division of labor increased worker productivity and output of manufactured goods**
      * Interchangeable parts: identical parts that could be used in place of another – simplified assembly and repair
      * **Assembly line: the plan in which each worker is given a specialized task on a product as it is moved on a conveyor belt**
* **An effect of the Industrial Revolution is that many people moved from rural areas to cities in search of work, which led to the concentration of workers in urban areas.**
  + **Urbanization: increase in the number of people living in cities** 
    - Led to dirty/ filthy streets, no sanitation, spread of disease, poor living conditions
    - **Urbanization affected the working class by forcing them to live in filth.**
* Within the factories and mines, work conditions were extremely poor
  + **Worked 12-16 hours a day**
  + Tired workers had accidents – losing limbs, fingers, and lives
  + Dirty air in coal mines led to spread of disease
  + Child labor: children as young as 5 years worked in factories and coal mines – parents needed the money
    - **Due to lack of education and eagerness to get a job, children did not complain about work conditions**
    - **Factory owners could pay children extremely low wages**
    - **More children could fit into factories, leading to higher production.**

**[workers in mines and factories during the early Industrial Revolution suffered from working conditions that were dangerous and inhumane]**

**Social Changes**

* **Working class**
  + Expendable resources in factories – not treated fairly
  + Worked 12-15 hours a day, 5-7 days a week
  + **Women in Europe began to change their status by working outside of the home.**
  + **In nineteenth-century cities, the poor lived in tenements near the factories**
    - a **tenement** is a crowded apartment building where tenants suffered from overcrowding, poor sanitation, disease, and poverty.
* **Middle Class** 
  + Businessmen or professionals
  + benefited the most from the Industrial Revolution
    - had better food and housing, which led to fewer diseases and longer life expectancy
  + **the fastest growing social group during the 1800s**
    - grew more powerful and formed libraries and schools to meet the increased need for education
  + focused on growing the **family** – didn’t have to work as much

**Labor Unions**

* As the population increased and workers’ situation worsened, they began to collectivize to make changes for a better life and better work environments
  + **In the nineteenth century, labor unions developed mostly in response to wages and working conditions.** 
    - **When workers unite to negotiate about conditions on the job they organize to form labor unions.**
    - They can go on strikes, or refuse to work, in hope that their bosses will give in to their demands by cutting hours, providing safety equipment, or improving work conditions

**Economic Theories**

**Capitalism**

* In 1776, **Adam Smith** wrote *The Wealth of Nations*, which outlined the basic principles of capitalism.
  + Privately owned businesses and property
  + Factors of production and distribution left to supply and demand
  + **Laissez – faire economics dictated that government should not interfere in the economy, allowing businesses to operate freely.**
  + **Supporters of capitalism opposed the creation of minimum wage laws and better working conditions because it would upset the free-market system.**

**Socialism**

* **The formation of employee organizations to improve working conditions contributed to the growth of socialist ideology in Europe.**
* **Socialists and communists believe in a society without social classes.** 
  + Socialism hoped to lessen the gap between the classes, communism sought to destroy the gap.
* **Socialism promised the government would protect the workers and promote equality by ending poverty and better distributing wealth according to need.**

**Communism**

* In 1848, Karl Marx wrote the Communist Manifesto, explaining his thoughts about the problems with capitalism.
  + Communism: Government owned property, production, consumption
  + **Marx believed history is the record of the struggle between classes in society.**
  + **There were a few wealthy business people while the majority of people were poor.** 
    - **He believed there was a constant struggle between employers (the owners of the means of production) and employees (the working class).**

**Nationalism**

* In Europe in the 1800s, devotion to one’s national group, or nationalism, swept through the continent. The elements of nationalism include
  + Culture
  + Language
  + History
  + Language
  + Territory
  + **Nationalism a strong feeling of pride/patriotism to a country or culture**
  + **Nationalism is most likely to develop in an area that has common customs, language, and history**
  + Nationalism can occur in three types of movements
    - Unification – merging of politically divided but culturally similar lands (Italy and Germany)
    - Separation – Culturally distinct group resists being added to a state or tries to break away
    - State building – culturally distinct groups form into a new state by accepting a single culture (The United States)