

Industrial revolution study guide

[History](#), [Revolution](#)



History Study Guide Industrial Revolution Industrial Revolution during the 19th century •Industrial Revolution oReason: ? Natural resources •Coal oUsed to develop the steam engine. oNeeded for the constructions of machines and steam engines. •Iron ore oNew methods of producing iron: ? 1709- Abraham Darby used coal to smelt iron (separated iron from its ore) ? When he discovered coal gave off impurities that damaged the iron, he found a way to remove the impurities from coal ? Invention and improvement of the steam engine First invented in 1712 by Thomas Newcomen. It was powered by coal to pump water out of mines. •1769- James Watt improved this engine. This engine became the key power source of the industrial revolution. oSpread of the Industrial Revolution: ? Britain enforced strict rules to keep the technology from spreading. (no exporting inventions) ? 1807- William Cockerill opened factories in Belgium to manufacture spinning and weaving machines. ? Belgium became the first European nation outside of Britain to industrialize. While countries such as Germany, France and the US began to develop (because of their abundant supply of coal, iron, and other resources – more than Britain), some countries developed more slowly, such as southern and eastern countries in Europe (because of lack of natural resources, or capital to invest in industry. Ex: Russia. Had the resources, but social and political conditions slowed the economic development) ? Social changes: •Rapid urbanization •Long hours of work in dangerous conditions (men, women and children) •More food ?? lower price •More jobs •More cities, railroads, and factories Continuous competition between nations oRole of cotton textile, iron, and steel industries: ? Cotton: •Increasing demand of textiles lead to the invention of

the flying shuttle (John Kay), spinning jenny (James Hargreaves, 1764), water frame (Richard Arkwright). ? These machines lead to the building of factories. ? Iron: •Built better machines than coal ? Steel industries: •1856, Henry Bessemer developed a process to purify iron ore and produce steel. •Lighter, harder, and more durable than iron •Other improves on the Bessemer process ? produced faster and for a cheaper price •Major material used in tools, bridges, and railroads. Industrialized countries measured their success in steel output

oBritish Enclosure Movement: ? Process of taking over and fencing off land formerly shared by peasant farmers. ? 1500s – did it to gain pastures for their sheep ? increased wool output ? 1700s – wanted to create larger fields that could be cultivated more efficiently ? Farm output rose ? profits rose because larger fields needed fewer workers ? Farmers became homeless and jobless ? Villages decreased ?? Jobless farmworkers moved to towns and cities ? formed growing labor force that tended the machines of the industrial revolution. Rise of factory system and demise of cottage industries: ? Machines were too large to keep them inside the houses ? Manufacturers built long sheds to house these machines. ? First located near fast moving streams ? provided water power to run the machines. ?

Factory: places that brought together workers and machines to produce large quantities of goods. oRising economic powers that wanted to control raw materials and markets throughout the world: ? Monopolies (?)

•Technological advances that produce the Industrial Revolution: oSpinning Jenny (James Hargreaves): ? Spun many threads at the same time Steam Engine (James Watt): ? Key power source in the Industrial Revolution oCotton Gin (Eli Whitney): ? Removed seeds from cotton (as opposed to people

removing them) oProcess of making steel (Henry Bessemer): ? Purified iron
 •Impacts of the Industrial Revolution on industrialized countries: oPopulation increase oIncreased standards of living but not for all ? Wages varied ? unskilled workers won less than skilled workers ? Women received less than half the pay of a man (doing the same work) ? Periods of unemployment ? Standard of living: measures the quality and availability of necessities and comforts of the society ?

More varied diets ? Better homes ? Dressed in inexpensive, mass producing clothing ? Advances in medicine oImproved transportation: ? Boats ? Trains ? Subways oUrbanization ? Creation of suburbs ? Creation of slums
 oEnvironmental pollution oIncreased education ? Education in slums was given by religious people who thought children deserved an education, despite their harsh work hours. (protestants) oDissatisfaction of working class with working conditions: ? Extensive hours ? Dangerous work ? Little breaks oGrowth of middle class •Capitalism oAdam Smith's the Wealth of Nations: Explains classical economics, popularized many ideas of classical economics ? Main ideas: •Laissez-faire philosophies •Invisible hand ? Promotes assembly line production ? Disagreed with mercantilism ? People had natural rights. oRole of market competition and entrepreneurial abilities: ? I don't know this. If you guys can help me please!! olmpact on standard living and growth of middle class: ? I don't know this. If you guys can help me please!! oDissatisfaction with poor working conditions and the unequal distribution of wealth in society: ? I don't know this. If you guys can help me please!! Socialism and communism: oKarl Marx's The Communism Manifesto (Friedrich Engels.) Das Kapital: ? Set principles of communism ? Labor

theory of value ? increase concentration of wealth, decreasing rates of profit ? Against capitalism oResponse to the injustice of capitalism: ? I don't know this. If you guys can help me please!! oImportance to communists of redistributions of wealth: ? I don't know this. If you guys can help me please!! •Nature of work in factory systems: oFamily-based cottage industries displaced by factory systems ? I don't know this. If you guys can help me please!! Harsh working conditions with men competing with women and children for wages ? Rigid schedule ? Long working hours ? 12 to 16 hours ? Dangerous conditions ? no safety devices ? Other dangers: •Coal dust destroyed miner's lungs •Textile workers breather air with lint ? If workers were sick they lost their jobs oChild labor that kept costs of production low and profits high ? Children had nimble-fingers and were quick moving. ? Did the jobs grownups couldn't ? Child labor was accepted by parents because they had worked in farms ? Orphans were mostly hired ? Some owners provided education Owners of mines and factories who exercised considerable control over the lives of their laborers ? I don't know this. If you guys can help me please!! •Social effects of the industrial revolution: oWomen and children entering the workplace as cheap labor oIntroduction of reforms to end child labor ? I don't know this. If you guys can help me please!! oExpansion of education: ? Public education: •Schools were primitive ? teachers had little schooling •Rural areas: oChildren attended school only when they were not needed in the farm or shops •Late 1800s: oMore children attended school Education improved oGovernment began to expand the high schools •High schools: oLearned classical languages (Greek and Latin), history and mathematics oOnly middle class

families could afford children to attend these schools oMiddle class girls were sent to school in hope to marry well and become better wives and mothers ? Higher education: •Colleges expanded too •Middle or upper class people attended college •Studied history and languages, philosophy, religion and law •Late 1800s: universities added science classes (chemistry and physics) •1840s: colleges for women started to appear In the Slums: •Protestants offered education for the children in the slums oWomen's increasing demands for suffrage: ? Groups dedicated to women's suffrage appeared in the 1800's ? Some liberalistic men supported this idea ? Critics •women were too emotional to be allowed to vote •they belong in the home •needed to be protected from politicians ? African American suffragists: •Claimed they weren't women because no one helped into carriages or over puddles, so they should have the right to vote ? Suffragists in western world got their right to vote in the 1900s ?

Europe and US: suffrage struggle lasted until the end of WW1 •Assess the impact of the industrial revolution on work and society: oWork: ? Faster than village work, but outcome wasn't as good ? Harsh conditions ? At first was seen as a good thing, but people got tired of the mistreating oSociety: ? Slums were created •Why did the industrial revolution originate in England? o ^ discussed above •Why did the spread of industrialism to Europe and the US accelerate colonialism and imperialism? ol don't know this. If you guys can help me please!! •How did the industrial revolution produce changes in culture and in society? ol don't know this.

If you guys can help me please!! •What was the role of capitalism and the market competition in the industrial revolution? ? I don't know this. If you guys can help me please!! •How did the industrial revolution impact the lives of workers? oHarsh conditions VOCAB •Cartel: formal organization with the means of controlling and regulating prices and selling some product to share monopolistic terms •Corporation: union of 2 or more investors who decide to combine their resources and going into business together •Dividend: the money paid to shareholders out of the earnings of a corporation

- Entrepreneurs: person who organizes and runs a business that takes risks
- Free-enterprise: economic system that allows companies to make their own economic decisions with no/little government interference
- Joint-stock enterprise: the capital is divided into small units, allowing investors to contribute varying amounts of the total. Profits are divided between stockholders in proportion of shares they own
- Laissez-faire: doctrine of no interference from the government in private businesses issues (regulations, taxes, tariffs, enforced monopolies)
- Mercantilism: body of economics.

Government controls foreign trade. Money was wealth, gold and silver key to prosperity, and one nation's gain was another's loss •Monopoly: one person or enterprise produces the entire output of a good or service •Physiocrats: believed the wealth of a nation was derived from the value of " land agriculture" or " land development" •Standards of living: refers to the wealth, comfort, material goods and necessities available to a socioeconomic class in a geographic area •Stocks: original capital paid into or invested in the business by its founders.

Shares of a particular company • Stock- holders: owner of a stock in a corporation • Tariff: taxes imposed on importing goods • Trust: legal entity created by the trustor, trustee holds the right to manage the trustors assets for the benefit of the beneficiary