

West Civ Study Guide- Industrial Revolution

<p>What was the Agricultural Revolution?</p>	<p>Scientific farming. This movement was to increase productivity- greater yields for less effort. With the invention of the seed drill, that was much more efficient (fewer seeds, but more sprouted, so greater crops), and the crop rotation system (so no fields lay fallow), food production increased greatly. Livestock, too, was better, and because of these factors, the population rose. The enclosure movement also began at this time- wealthy landowners bought up small farms and evicted tenant farmers. The displaced moved to cities, becoming part of a workforce. The larger population also contributed to this, in addition to creating more consumers.</p>
<p>What was necessary for industrialization to occur?</p>	<ol style="list-style-type: none"> 1. Abundant natural resources 2. Geography 3. Good “climate” for new ideas 4. Good banking system 5. Political stability
<p>Why did it begin in Great Britain?</p>	<p>Britain had...</p> <ol style="list-style-type: none"> 1. <i>Abundant natural resources</i>- forests, rich soil, rivers, coal, iron 2. <i>Geography</i>-islands with ports and harbors, meaning access to materials and markets 3. <i>Good “climate” for new ideas</i>- society and people were open to invention. The Royal Society was a “club” for the exchange of ideas; invention contests were held and inventors were awarded. 4. <i>Good banking system</i>- loans were available for investment and expansion. The banks were government supported. 5. <i>Political stability</i>- there were no wars on British soil, even during Napoleon's time; government laws and policies encouraged business.
<p>What was the textile industry like?</p>	<p>The IR began in the textile industry. The textile industry was a “cottage industry”- it operated by the “putting out” system. Merchants gave peasants raw materials; they did one step of work (spinning, weaving, or sewing, for example) and then sold it, per piece, back to the merchants...</p> <ol style="list-style-type: none"> 1. John Kay invented the flying shuttle which allowed weavers to work twice as fast. Since they out-wove the spinners, Britain held a contest for innovations in spinning. 2. Hargreaves invented the spinning jenny which allowed spinners to spin 6-8 threads at once. The speed also made the threads stronger. 3. Arkwright invented the waterframe, which used water power to work machines, instead of people. Factories sprung up near rivers, eliminating the “cottage industry”. 4. Crompton invented the spinning mule, attaching the spinning jenny to the waterframe. 5. Cartwright invented the power loom. Spinning and weaving was so fast that there wasn't enough cotton available...

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	6. Cotton had been grown and hand-cleaned (by slaves) in the U.S. When Eli Whitney invented the cotton gin, this work was done automatically. British cloth output increased 500%.
What were factories?	Buildings that housed machines, at first near rivers (for water power). People came to work in factories, instead of working at home.
What was the steam engine?	Watt, a Scottish engineer, created a more efficient steam engine than one that had been used to pump water in mines. An entrepreneur, he went into business with Boulton. They sold these engines to factories, because they created power at any place or time. Water power wasn't needed, so factories moved to cities.
What did the railroad do? How did it change the world?	<ol style="list-style-type: none"> 1. Increased industry <ul style="list-style-type: none"> ● faster, cheaper ● existing industry grew ● whole new industry in itself 2. Boom to agriculture- crops could travel farther without spoiling 3. Changed attitude toward travel <ul style="list-style-type: none"> ● Jobs away from home, because they could visit easily-urbanization ● Travel for leisure emerged- resorts were built
What was urbanization?	<p>The movement of people from rural areas into cities, mostly for work. People also liked cities because they had entertainment and excitement.</p> <p>However, cities were ill-equipped to handle this. The infrastructure couldn't keep up with the growth, leading to problems with sanitation, crowding, and pollution.</p>
What were labor conditions like? <ul style="list-style-type: none"> ● Child Labor ● Factory Act/Mines Act ● Unions 	<p>Workers worked in very dangerous, noisy factories. They worked extremely long hours (around 14 a day) six days a week. Women received lower wages than men, and children lowest of all. They were employed because they were cheaper, faster, willing to work, and took bad jobs.</p> <p>To remedy these ills and abuses, Parliament held hearings, investigating the situation, then introduced legislation to protect factory workers. The Sadler Commission introduced the Factory Act of 1933, which made it illegal to hire children under 9, work children 9-13 more than 8 hours or children 14-18 more than 12 hours, required breaks and some instruction from employers.</p> <p>The Ashley Mines Commission introduced the Mines Act of 1842, which was the same as the Factory Act but also made it illegal to hire women in mines.</p>
What was the middle class?	A gap between the classes arose as the standard of living improved. A

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	<p>new middle class emerged, making a dramatic change in the social structure.</p> <ul style="list-style-type: none"> ● The highest class was the aristocracy. ● This was followed by the rich, upper middle class. ● The new middle class- the middle middle class, were not rich or poor doctors, lawyers, and managers (for example). ● Below them were the lower middle class of clerks and supervisors. ● The labor aristocracy- skilled laborers- were also in the lower middle class. ● The lower class was the working class. <p>The new middle class ate, dressed, and lived well. Their children and wives didn't work, but were waited on by servants. They shared a strict, formal moral and social code of conduct for every aspect of their lives.</p>
<p>What were laissez-faire economics?</p>	<p>People believed that the government should not concern itself with economics or business. The government did not aid poor people, because it was not considered their duty. Markets were free trade.</p>
<p>Who was Malthus?</p>	<p>Thomas Malthus wrote <i>Essay on Population</i>, saying that the population was growing faster than the food supply. War, famine, and disease were, according to him, the only checks on poverty. He said that the poor were stuck in an endless cycle of poverty, and that they shouldn't have children.</p>
<p>Who was Ricardo?</p>	<p>Ricardo wrote the Iron Law of Wages.</p> <ul style="list-style-type: none"> ● If times are good and all are prosperous, he said, ● more children are born. ● The population therefore rises, and ● there is a larger labor force. ● Therefore, wages decrease, ● so there is general unhappiness. ● This results in fewer births ● and a fall in population size, ● which begins the cycle anew. <p>He, like Malthus, said that poverty was an endless cycle and that the poor should not reproduce.</p>
<p>What was Socialism?</p>	<p>The idea that wealth (means of production), work, and profit should be shared equally.</p>
<p>Who were the Utopian Socialists?</p> <ul style="list-style-type: none"> ● Owen 	<p>These Socialists planned ideal agricultural communities but never tested them. They were scorned, and their ideas called "Utopian," meaning impossible.</p> <p>Owen, a Utopian Socialist of Scotland, shared the wealth from his mill with his workers. He built a town for them and offered their children</p>

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	<p>schooling. He tried a similar community in the U.S., but it failed.</p>												
<p>What was Communism?</p>	<p>“Scientific Socialism”. Communism was history-based. Communists saw history as a struggle between “haves” and “have-nots”. They saw economics as the key, driving factor. Their basic assumptions were that whoever owns/controls the means of production holds the power, because work (not raw material) is the source of true value. They felt, therefore, that wealth created by workers belongs to them. Communists saw that the IR widened the gap between the bourgeoisie (upper middle class owners) and the proletariat (workers). Eventually, they said, the proletariat would overthrow the bourgeoisie and create a socialist country. They expected this in Great Britain first, because the IR had developed there first.</p> <p>However, this didn't happen because:</p> <ol style="list-style-type: none"> 1. The rich did get richer, but the standard of living increased for the poor as well. 2. Workers only wanted their “fair share,” not to overthrow the government. 3. Parliament passed legislation to help the poor. 4. Marx only thought of economics, ignoring religion, nationalism, and patriotism. 												
<p>How did the IR spread?</p>	<p>The IR spread across Europe beginning in 1815, after the Napoleonic wars ended. Samuel Slater brought the IR to the U.S. by sneaking onto a ship and memorizing the plans to a spinning machine. (Britain wanted to keep inventors, and their invention, within the country).</p>												
<p>Who was Henry Ford, and what did he do?</p> <ul style="list-style-type: none"> ● Assembly line ● Interchangeable parts <ul style="list-style-type: none"> ○ Advantages/disadvantages 	<p>Henry Ford was the inventor of the Model-T car, interchangeable parts, and the assembly line. His cars were extremely affordable because of that.</p> <p>Interchangeable parts were parts that were all made the same, simplifying assembly and repair and lowering costs (not hand built). His assembly lines, where many people each did one small step in making a car, made Model T's very cheap. They favored quantity over quality, efficiency over craftsmanship.</p> <table border="1" data-bbox="539 1482 1464 1822"> <thead> <tr> <th data-bbox="539 1482 1003 1535">Advantages</th> <th data-bbox="1003 1482 1464 1535">Disadvantages</th> </tr> </thead> <tbody> <tr> <td data-bbox="539 1535 1003 1587">Cheaper (produce, sell, fix)</td> <td data-bbox="1003 1535 1464 1587">Less craftsmanship/pride</td> </tr> <tr> <td data-bbox="539 1587 1003 1675">More efficient</td> <td data-bbox="1003 1587 1464 1675">Boring, repetitive- productivity decreases</td> </tr> <tr> <td data-bbox="539 1675 1003 1728">Increased output</td> <td data-bbox="1003 1675 1464 1728">Mistakes repeated over and over</td> </tr> <tr> <td data-bbox="539 1728 1003 1780">More unskilled jobs</td> <td data-bbox="1003 1728 1464 1780">More unskilled jobs</td> </tr> <tr> <td data-bbox="539 1780 1003 1822">Specialization</td> <td data-bbox="1003 1780 1464 1822">Dangerous</td> </tr> </tbody> </table>	Advantages	Disadvantages	Cheaper (produce, sell, fix)	Less craftsmanship/pride	More efficient	Boring, repetitive- productivity decreases	Increased output	Mistakes repeated over and over	More unskilled jobs	More unskilled jobs	Specialization	Dangerous
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	Worker impersonal to owner
Who was Bessemer, and what did he do?	Bessemer invented the blast furnace, used for making steel out of iron. Steel was cheaper, stronger, and more durable. It was used to build skyscrapers.
Who was Edison?	Thomas Edison invented the lightbulb, spreading electricity across the world. He also held an inventor's lab, from which the phonograph emerged.
What were the changes in energy?	Electricity replaced steam as the power source, especially for machines. (Human power had been used, then water power, then steam, and lastly electricity/gasoline.)
What were the changes in communication?	Telegraphs, radios, and phones were invented, all allowing communication to occur at a faster pace and across longer distances.
What were the changes in transportation?	Railroads (see railroads), cars (especially the affordable Model-T), electric streetcars (allowing people to commute to work and live out of cities), and then airplanes were developed, making travel easier and faster.
What was business like? <ul style="list-style-type: none"> • Corporations 	Businesses became very large. When they needed capital, shares of stock- % of ownership in the company- were sold. Companies became corporations, which were legal entities within themselves. Shareholders (owners) had limited liability- they were not personally responsible for the corporation's debts (but their shares lost value).
What changes were made in medicine?	Lister- antiseptic, so many more surgical paintings survived. Pasteur- pasteurization, to purify milk.
Who was Darwin? <ul style="list-style-type: none"> • Ideas • Why were they controversial? 	Darwin developed the idea of natural selection- survival of the fittest. Traits that strengthen their host, he said, get passed on, because stronger hosts survive and reproduce. He wrote <i>Origin of Species and Descent of Man</i> , saying that man evolved from monkeys. Since this contradicted the Bible, it was controversial. Both religion and a simple belief in human superiority formed the main opposition to this idea.
What was Social Darwinism?	The application of the idea of natural selection to economics and society. This was used to justify imperialism, war, and racism. Business that were successful were seen as "fit," and wealthy, successful people were "fitter" than poor. "Fitter" became "better," and many decided that less fit people
How and why were cities planned and rebuilt?	Cities had grown rapidly and had to deal with disease, crowding, crime, open sewers, inadequate housing, adulterated food, and many other problems. The government had no control or responsibility in this area. They were torn down and rebuilt (starting with Napoleon II of France's

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	<p>hiring a German city planner, Hausman, to build Paris anew) following plans that accommodated sewer systems, police forces, housing, electric streetcars, and many other things.</p>
<p>How did industrialization affect society?</p>	<p>Industrialization diversified the middle class, raised the standard of living- both the rich and the poor became richer- brought urbanization, and boosted both manufacturing and agriculture.</p>
<p>What was the Women's Suffrage movement like?</p>	<p>Suffrage is the right to vote. Many women campaigned for this right, believing that persistence was needed to gain it, as well as violence. They knew society wouldn't want to change. In fact, many believed that society would crumble with women voters and workers, and that women weren't smart enough and that they were too emotional to make these decisions. After WWI, when women took men's jobs (and society did not, in fact, crumble), they won this right. In countries when women worked before this (such as New Zealand and Australia), women voted earlier.</p>
<p>What was Romanticism?</p>	<p>A movement in music, literature, and art. It was a rejection of the Enlightenment and reason, and a response to the IR and anti-Napoleon nationalism.</p> <ol style="list-style-type: none"> 1. Emotion, passion emphasized (feeling over thought) 2. Celebration of nature- seen as perfect and important 3. Heroic rebels- focused on rebellion against the establishment- “anti-heros” were unusual 4. Past (pre-IR) was glorified and seen as pure
<p>What was Realism?</p>	<p>A response to the IR. It was a rejection of Romantic emotion, and instead a stress on recording what was actually seen, from an objective (unbiased) view. Realistic artists recorded the ordinary lives of ordinary people. Among them was Dickens who recorded the ills of the IR. Art used drab color.</p>
<p>What was Impressionism?</p>	<p>An art movement. Since photography could capture a glimpse, paintings were made to show “quick glimpses,” being impressions, not replications. The middle class was often painted at leisure. A bright atmosphere and bright colors made up these paintings.</p>