AMSCO Chapter 22, Industrial Revolution, 1750-1900

1. Preindustrial Societies
2. Most English families lived on farms, growing own food, making own clothes from wool and flax they raised and spun at home.
3. Indian cotton was cheaper and so British imported raw cotton from the Americas and a cottage industry system to create clothes at home.
4. Women in cottage industry earned very little and produced slowly, but were home on the farm and relatively independent
5. Causes of Industrialization
6. Growth of technology – spinning jenny (spin yarn) and water frame (weave cloth) moved production to large factories where bulky machines used water power, leading to factory system
7. Interchangeable parts – Eli Whitney (cotton gin inventor) uses system of interchangeable parts for gun manufacturing in the US; if one part of the gun broke it could be fixed with a new identical part
8. No need for skilled workers to make a new whole item, unskilled workers could repair by changing a part
9. Division of labor develops and is expanded upon by Henry Ford into the assembly line
10. Steam Engine – James Watt invents way to burn coal to create steam and generates energy
11. Railroads develop from steam engine
12. Steamships also developed for use up rivers, and then in oceans
13. Population Growth
14. Agricultural revolution increased food supply by using crop rotation and the seed drill, plus new crops introduced from new world
15. Improved medical care reduced infant mortality and life expectancy rates
16. Urbanization – Enclosure Movement closed the commons to local farmers, and many farmers were forced to move to the cities in search of work
17. Britain’s advantages
18. Geographical – on Atlantic, many seaways, easy to import/export; immense coal deposits; many canals, rivers and harbors
19. Colonies – timber, slave trade, lots of entrepreneurs w capital to invest
20. World’s strongest fleet, including naval and commercial ships
21. Legal protection of private property, investors felt safe
22. England had the highest wages in Europe and Asia at that time
23. Spread of Industrialization
24. France did NOT have big cities or a large labor force like Great Britain.
25. The French Revolution and European wars occupied France’s attention and money
26. Germany was a collection of small states, not a nation. Upon unification in 1871, industrialization was fast, especially in steel and coal production
27. US was fully industrialized by 1900, especially via use of the transcontinental railroad, subsidized by public funds
28. US had vast natural resources, such as timber, coal, and oil
29. Many Europeans and Asians fled to the US and joined the American work force
30. Invention of telegraph enabled long distance communications
31. Second industrial revolution – late 19th and early 20th centuries
32. steal, chemicals, precision machinery, electronics, internal combustion engine, automobiles and airplanes, electrification, telephone, radio
33. Japan finally begins industrialization under Meiji in late 19th century.
34. Primarily industrialized in fear of being attacked by industrialized countries
35. Hired foreign consultants to instruct workers and managers on factory operations, ended up also duplicating industrial problems
36. Russia also entered industrial phase by 1900, especially Trans-Siberian railroad, from Moscow to the Pacific Ocean, facilitating trade with China and Japan.
37. Coal, iron and steel industries grew, but agriculture was still main economic focus
38. Effects of Industrial Revolution
39. Effects on families
40. Families no longer worked together on farms, but rather in cities in factories
41. 14 hour days 6 days a week led to exhaustion, accidents, injury and death
42. Low wages led parents to send children to work, and children suffered numerous diseases and accidents
43. Effects on Urban Areas
44. Cities grew randomly, with no planning
45. Damaged ecological footprint
46. Inhumane tenement living w polluted water and open sewers led to cholera, dysentery and tuberculosis
47. Effects on Class Structure
48. New class of miners and factory workers, slum dwellers, working class; low skills, no satisfaction from producing a complete product, easily replaceable
49. New middle class of managers, small business owners and professionals who were literate
50. New wealthy industrialists and corporate owners, captains of industry who soon overshadowed landed aristocracy in terms of power
51. Effects on Women’s Lives
52. Women of the working class worked in mines and factories
53. Middle class women who stayed home were a status symbol that the husband earned enough money; cult of domesticity including being pious, submissive, pure and domestic
54. Feminism grew as working women called for equality
55. Effects on Mass Culture
56. Consumerism and leisure in England, advertising of luxury goods for disposable income
57. Leisure activities developed liked biking and boating, and spectator sports
58. Effects on the Environment – burning of coal, petroleum and natural gas, toxic air, polluted water
59. Effects on Business Organization – giant corporations to minimize risk amongst stockholders; monopolies dominated certain industries
60. Responses to Industrial Revolution
61. Growth of Unions – work for better wages and working conditions, establishing contracts
62. minimum wages, limit on number of hours worked, overtime pay, five day work week
63. Expanded the vote, reduced property ownership qualifications
64. Social reform
65. No more child labor under age 10 and no children in coal mines
66. universal education ages 5-10
67. In Germany, workers accident and unemployment insurance, old age pensions to protect his government from unrest
68. Uniting the World
69. increased global interdependence for raw materials
70. International labor unions established to demand higher wages world wide.
71. Intellectual Reaction
72. Adam Smith – “invisible hand” of market means businesses operate for their profit and society will benefit i.e. laissez-faire
73. John Stuart Mill – social reforms must protect people, like labor unions, child labor laws, safe working conditions; utilitarianism – greatest good for the greatest number of people, working within capitalism
74. Utopian socialism – capitalism is unfixable, workers or government should own means of production
75. Karl Marx and Frederick Engels (Communist Manifesto)
76. Capitalism divides society into workers (proletariat) and middle class (bourgeoisie); middle class exploits workers by making a profit on their labor; workers should revolt and take control, ending capitalism and beginning communism
77. Anarchism – government is the problem, local communities should run themselves
78. Industrial Revolution’s Legacy
79. mass production
80. more cheaper goods
81. urbanization
82. water and air pollution
83. work shifts from country to city
84. families no longer working together in one home
85. industrialized nations prospered, looked for more raw materials, hindered early industrialization in other countries and returned to colonialism