

Chapter 22

The Revolution in Energy and Industry

A. True or False

Where the statement is true, mark T. Where it is false, mark F, and correct it in the space immediately below.

- ___ 1. The Industrial Revolution began in England in about 1780 in the textile industry.
- ___ 2. A decrease in food prices led to a decreased demand for manufactured goods.
- ___ 3. Henry Cort developed a new process of using coke to improve the output of pig-iron.
- ___ 4. The first railroad line was the Liverpool-Manchester line, and the first effective locomotive was Stephenson's *Rocket*.
- ___ 5. The railroads tended to increase the number of cottage workers.
- ___ 6. Between 1780 and 1820, purchasing power in Britain increased.
- ___ 7. The role of the government in bringing about industrialization was greater in continental countries than in Britain.
- ___ 8. The possibility of a worker becoming a successful industrialist increased as the nineteenth century wore on.
- ___ 9. With the Factory Act of 1833, the employment of children in British factories tended to decrease.
- ___ 10. The eventual, long-term effects of the industrial revolution included a lower standard of living for the laboring classes.
- ___ 11. Thomas Savery and Thomas Newcomen invented versions of the combustion engine.
- ___ 12. Thomas Malthus argued that population always outgrows the food supply.
- ___ 13. Prussia supported industrialization by subsidizing the hiring of unskilled former peasants as factory workers.
- ___ 14. The main source of labor in early English factories was former cottage workers.
- ___ 15. According to the testimony of young British miners in 1841-42, many began to work at age 8 or 9.

B. Multiple Choice

Select the best answer and write the proper letter in the space provided.

- ___ 1. In the 1830s, the most technologically advanced country in the world was
a. Belgium. b. the United States c. France d. Britain
- ___ 2. Which of the following was a period of falling real wages for English workers?
a. 1792-1815 b. 1815-1850 c. 1840-1850 d. 1850-1890
- ___ 3. The first large factories produced
a. wool textiles. b. cotton textiles c. iron and steel d. furniture
- ___ 4. Which of the following was most likely to characterize a cottage worker?
a. Worked at his or her own pace
b. Never worked alongside other members of his or her family
c. Worked at a steady and constant rate
d. Would probably prefer factory work to domestic industry work
- ___ 5. All of the following were reasons for why Britain was the first to industrialize EXCEPT
a. Britain already enjoyed a large market in the form of its empire.
b. Britain had developed advanced agriculture that produced a surplus.
c. Britain had a central bank as well as a good canal system.
d. Britain had a domestic market with many local protective barriers.
- ___ 6. The energy crisis of the eighteenth and nineteenth centuries was solved by reliance on
a. wood b. coal and steam c. electricity d. water power
- ___ 7. According to Friedrich List, the promotion of industry
a. was dangerous for the well-being of the peasants.
b. was vital for the defense of the nation.
c. increased the poverty of the population.
d. required free trade between nations.
- ___ 8. The most significant technological advance made during the Industrial Revolution was the
a. first large factory. b. cotton-spinning jenny c. steam engine d. water frame
- ___ 9. Which of the following was passed by the British Parliament to outlaw unions and strikes?
a. The Factory Act of 1833 b. The Combination Acts
c. The Mines Act of 1842 d. The Grand National Consolidated Trades Union Act
- ___ 10. The Industrial Revolution in France
a. developed at a faster pace than it did in Germany.
b. developed more rapidly than in Britain.
c. occurred largely prior to 1780.
d. lagged behind that of Britain.

- ___ 11. The growth of the railroad caused all of the following EXCEPT
- a reduction in the cost of overland freight.
 - an increase in the demand for cottage industry goods.
 - the growth of a class of urban workers.
 - the widening of markets
- ___ 12. The first continental country to industrialize was
- Belgium.
 - France
 - Italy
 - Germany
- ___ 13. The industrial development of continental Europe was delayed by
- a lack of resources.
 - the French Revolution and Napoleonic wars.
 - the plague.
 - a labor shortage.
- ___ 14. Before the 1830s, the
- family continued to work as a unit in the factories.
 - factory employed only females.
 - mother and father worked together while their children went to factory schools.
 - factory employed only the males.
- ___ 15. The British workers' campaign to gain the franchise between 1838 and 1848 was called the
- Ten-Hours' movement.
 - Luddite movement
 - Chartist movement
 - democratic movement
- ___ 16. Which of the following was NOT characteristic of Robert Owen?
- He was a scholar who wanted to implement his socialist ideas.
 - He experimented with cooperative and socialist communities.
 - He organized one of Britain's first national unions.
 - He tried to improve the working conditions of his workers.
- ___ 17. The first factories were
- steel mills.
 - chemical firms
 - clothing companies
 - textile mills
- ___ 18. The early industrialists in Britain very often were
- aristocrats taking advantage of new economic opportunities.
 - members of the established church.
 - Irish immigrants.
 - Quakers and Scots.
- ___ 19. Workers who smashed the machines that put them out of work were known as
- Luddites.
 - anti-Modernists
 - Chartists
 - apprentices
- ___ 20. William Cockerill's cotton-spinning plant in Belgium was controversial because
- he employed only women.
 - he had illegally exported technology from Britain.
 - he had to bribe government officials to obtain the necessary permits.
 - he required his workers to convert to Catholicism to keep their jobs.

- ___ 21. By the end of the nineteenth century large decreases in per capita industrial levels had occurred in
 a. India and China. b. France c. Britain d. Germany
- ___ 22. For women, the Industrial Revolution
 a. provided a greater chance of economic equality with men.
 b. discouraged marriage and children.
 c. provided new career opportunities in high-level jobs.
 d. caused them to be confined to low-paying, dead-end jobs.
- ___ 23. It appears that during the Industrial Revolution in Britain the gross national product
 a. rose at about the same rate as the per capita consumption of goods.
 b. rose more rapidly than the per capita consumption of goods.
 c. rose less rapidly than the per capita consumption of goods.
 d. fell below the per capita consumption of goods.

C. Matching

Match the person, place, or event in the left column with the proper description in the right column by inserting the correct letter on the blank line.

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| ___ 1. James Watt | A. Inventor of an improved spinning machine called the water frame |
| ___ 2. Crystal Palace | B. Economist who believed that an “iron law of wages” would result from overpopulation |
| ___ 3. <i>Zollverein</i> | C. Romantic poet who criticized the impact of industrialism on the environment in the countryside |
| ___ 4. Combination Acts of 1799 | D. Corporate bank in Paris that pooled the resources of many small investors to fund major railroad projects |
| ___ 5. Richard Arkwright | E. Inventor of the first truly efficient steam engine |
| ___ 6. James Hargreaves | F. Inventor of the power loom that increased the speed of weaving |
| ___ 7. Edmund Cartwright | G. Laws that outlawed the formation of labor unions or strikes |
| ___ 8. David Ricardo | H. Inventor of the spinning jenny |
| ___ 9. <i>Crédit Mobilier</i> | I. Writer who accused the middle-class of ruthlessly exploiting the working class during the industrial revolution |
| ___ 10. William Wordsworth | J. Customs union in the German states that provided for free trade among member states |
| ___ 11. Friedrich Engels | K. Location of London’s great industrial fair of 1851 |