

CHAPTER 22

The Revolution in Energy and Industry

STUDY-REVIEW EXERCISES

Define the following key concepts and terms.

cottage workers

domestic system

Industrial Revolution

protective tariff

Chartist movement

§ energy crisis of the eighteenth century

real wages

sexual division of labor

separate spheres

§ patriarchial tradition

Identify and explain the significance of each of the following people and terms.

Thomas Malthus

David Ricardo

§ Andrew Ure

Crystal Palace

Cartwright's power loom

spinning jenny

Zollverein

Factory Act of 1833

§ *Credit Mobilier*

§ Combination Acts

§ parish "apprentices" in cotton mills

§ Henry Cort

James Hargreaves

Robert Owen

James Watt

§ Friedrich List

George Stephenson

§ Grand National Consolidated Trades Union

§ Emile and Isaac Péreire

Friedrich Engels

craft union

REVIEW QUESTIONS

Check your understanding of this chapter by answering the following questions.

1. Why did the Industrial Revolution begin in England?
2. Describe the energy crisis in England. How was it solved?
3. What was the relationship between the steam engine and the coal mine? The railroad and the coal mine?
4. What impact did the railroad have on (a) the factory system, (b) the rural workers, and (c) the outlook and values of society?
5. What did James Watt do to increase the efficiency of the steam engine?
6. How did the change in textile production affect employment in spinning and weaving for adults and children?
7. What effect did the French Revolution and the wars of **1792-1815** have on the economies of the continental states? What were the variations in the timing and extent of industrialization in the United States, Belgium, Germany, and France?
8. What disadvantages and advantages were felt by countries that industrialized after Great Britain?
9. What do the careers of Cockerill, Harkort, and List tell us about the problems and methods of industrialization on the Continent?
10. What was the purpose of the *Zollverein*? Of the *Credit Mobilier*?
11. Did Britain's new industrial middle class ruthlessly exploit the workers?
12. Did the standard of living improve or decline between 1790 and 1850? What about other factors, such as diet and working conditions?
13. What was the effect of the factory system in Britain on the family?
14. What was the subcontract system and how did it work? Did it have a negative or a positive impact on working-class life?
15. What is meant by the term sexual *division of labor*? What are the various theories about its emergence?

16. What were the goals and accomplishments of the Chartists?

Test your understanding of the chapter by providing the correct answers.

1. The Industrial Revolution began in England in about _____ in the _____ industry.
2. A decrease in food prices led to an *increased/decreased* demand for manufactured goods.
3. The *Scotsman* who improved the steam engine.
4. Henry Cod developed a new process of using coke to improve the output of
5. The first railroad line was the _____ line, and the first effective locomotive was Stephenson's
6. The railroads tended to *increase/decrease* the number of cottage workers.
7. The architectural wonder of the 1851 industrial fair in London.
8. Between 1780 and 1820, purchasing power in Britain *increased/decreased*.
9. The role of the government in bringing about industrialization was *greater/less* in continental countries than in Britain.
10. The economic and trade agreement formed in 1834 that allowed goods to move among German member states without tariffs.
11. The possibility of a worker becoming a successful industrialist *increased/decreased* as the nineteenth century wore on.
12. With the Act of 1833, the employment of children in British factories tended to *increase/decrease*.

Major Political Ideas

1. What role did the government play in the process of industrialization? Did this role vary from country to country?
2. Why, with the Factory Act 1833, did the British government turn toward some state intervention?

Issues for Essays and Discussion

1. What were the causes of the Industrial Revolution in Britain? Which of the causes, in your opinion, were the most important?

2. Historians have long argued whether the Industrial Revolution was a blessing or a disaster for the workers who lived through it. What is your opinion? What information exists that allows us to measure the impact of industrialization? Did the Industrial Revolution affect women and men alike?

Interpretation of Visual Sources

Study the image entitled *Work*. What does this picture tell you about the lives of the various social classes? Compare this image with the ones of women in the cotton mills on pages 728 and 745. In what ways are these three images romanticized? Which representation do you feel is the most accurate depiction of life during this period.



Geography

1. Compare Map 22.1 and Map 22.2 in the textbook in terms of the major industrial areas and transportation networks shown on each. How do these maps explain why an ever-greater portion of the English population lived in the north as time passed? What different stages in the development of English transportation are illustrated by these maps? Write your answers in the space provided below.
 2. Study Map 22.2 and Map 22.3 in the textbook. Using the space below, compare British and continental industrialization by 1850 in terms of (a) railroads, (b) coal deposits, and (c) industrial centers. What role did geography play in Britain's early industrial lead?
 3. Four of Europe's most important centers of modern industry are (a) the Manchester-Sheffield area, (b) the Ruhr valley, (c) the Liege region, and (d) the Roubaix region. Locate these regions on Map 22.2 and Map 22.3. What countries are they in? What do they have in common?