

Notesheet on Origins of Industrialization

Objective – Understand and explain the origins of industrialization in Europe.

I. Definition of Industrialization: “Period during 1700s and 1800s in which the method of producing goods underwent massive expansion due to 1) mechanization & technology and 2) the organization of business and labor into factory system. Resulted in 1) the formation of new social classes (industrial wage workers, factory owners, mechanical engineers ... etc), 2) growth of urban areas and overall population, 3) availability of large amounts of relatively cheap goods.”

II. Conditions Necessary for Industrialization: Britain as first example.

A) Non-farming Labor Supply:

B) Investment Capital/Wealth:

C) Entrepreneurs/Businessmen:

D) Natural Resources:

E) Technology for Mass Production:

F) Transportation Network:

G) Markets:

H) Government Support:

The Industrial Revolution: England's Advantage

Part A. Your teacher will suggest several textbooks you might use as references in completing the following chart on factors that contributed to England's advantage in the Industrial Revolution. Research this topic for homework, and try to find at least one factor for each point in each category.

Political factors that supported the Industrial Revolution in England:

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Economic factors that supported the Industrial Revolution in England:

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Special factors that supported the Industrial Revolution in England:

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Geographic factors that supported the Industrial Revolution in England:

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Part B. After you have identified the most important factor in each category, develop your own thesis to explain why the Industrial Revolution occurred in the eighteenth-century England.

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List three bits of historical evidence that supported your thesis:

- a. _____
- b. _____
- c. _____

Part C. Read the following theses of recognized historians on causes of the Industrial Revolution in England. For each, list three bits of historical evidence that would support the interpretation.

"Probably the most important factor of all was the flexibility of the English social and political system."

T. Walter Wallbank et al., *Civilization: Past and Present*, Vol. 2, 5th ed. (Glenview, IL: Scott, Foresman, 1985), p. 503.

a. _____

b. _____

c. _____

"By increasing productivity and at the same time releasing part of the agricultural labor force for jobs off the farm, the agricultural revolution was assisting the industrial revolution."

Crane Brinton et al., *A History of Civilization*, Vol. II, 3rd ed. (Englewood Cliffs, NJ: Prentice-Hall, Inc., 1967), p. 9.

a. _____

b. _____

c. _____

"The industrial revolution could not have taken place if improved transportation facilities had not made it possible to bring coal and raw materials to new factories having steam-operated machinery and to carry away the finished products."

J. Russell Major, *The Western World: Renaissance to the Present* (Philadelphia, PA: J.P. Lippincott, 1966), p. 523.

a. _____

b. _____

c. _____

"Industrial progress has not proceeded everywhere at an equal pace, some countries undergoing this process earlier and more intensely. Great Britain was the pioneer, the first country in the world in which the industrial sector of the economy came to outweigh the agricultural one in terms of manpower employed and value of goods produced."

William L. Langer et al., *Western Civilization: The Struggle for Empire to Europe in the Modern World* (New York: American Heritage Publishing Company, 1968), p. 318.

- a. _____
- b. _____
- c. _____

"The shifting to modern machine production requires in any country a certain mobility of people and of wealth. Such mobility may be produced by state planning, as in the industrialization of the Soviet Union in recent times. In England a high degree of social mobility existed in the eighteenth century in consequence of a long historical development."

R.R. Palmer and Joel Colton, *A History of the Modern World*, 6th ed. (New York: Alfred A. Knof, 1983), p. 427.

- a. _____
- b. _____
- c. _____

III. Agricultural Revolution in England

A) New Farming Methods Lead to Greater Agricultural Productivity.

Examples:

1) Jethro Tull's Drill:

2) Townshend & Fertilizer:

B) Enclosure Movement: Wealthy farmers use new methods to grow more and earn more. Use wealth and power to buy and enclose common public land (i.e. literally put fences around it to keep others off) that poor farmers had used to supplement their meager resources (i.e. use to graze cows). Wealthy farmers grow more on these lands and get more profit. Smaller farmers fall behind and are forced to look elsewhere for a living.

C) Overall: High Farming Productivity means

1) Surplus Population

2) Switch from Farming

3) Investment Resources

4) Overall:

IV. Revolution in Production

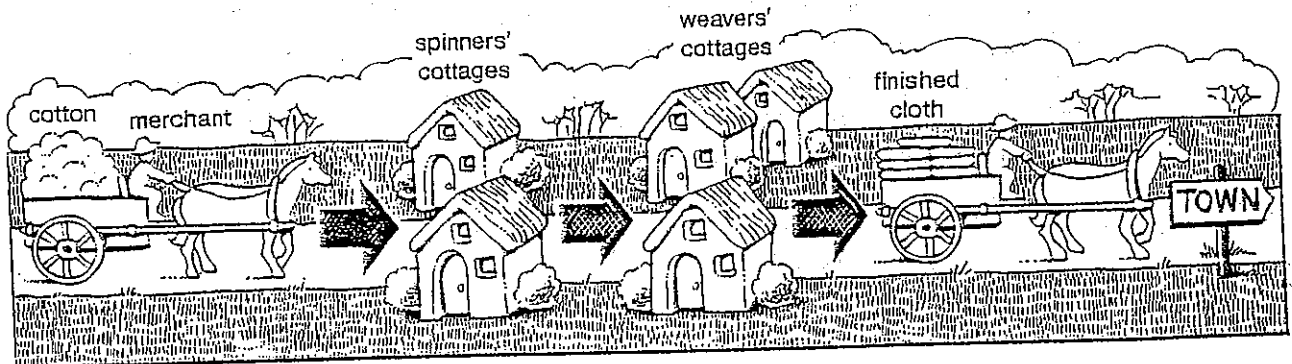
A) Old methods:

1) Artisan system:

2) Domestic system:

- a. Example: textiles/clothing (see diagram below and powerpoint slide)**

The Domestic System



B) Mechanization: In with the New Methods

- 1) Organized Application of advanced machinery:**

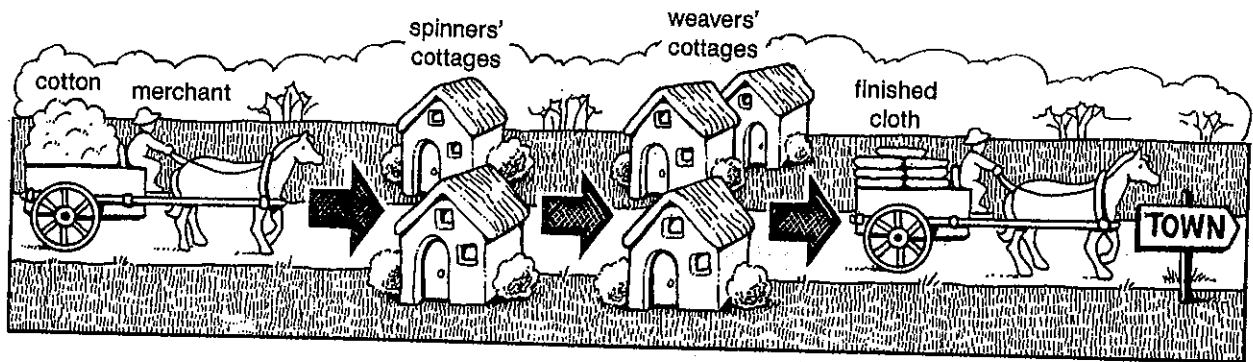
- a. Example: Power looms –**

2) Factory System:

CHAPTER 25 Skill Practice: Using Visual Information

Reread the material under the heading "Revolution in the Textile Industry" (textbook pages 492–493). Then look at the diagram below and answer the questions that follow.

The Domestic System



1. Describe the process of cloth-making as shown in the diagram. _____

2. What hand-operated inventions helped workers to spin thread and weave cloth faster? _____

3. What prevented water-powered spinning and weaving machines from being used in the cottage industry? _____

4. **Critical thinking** Many historians think the domestic system died out in England because it could not produce goods on as large a scale as the factory system. What kind of statistical information would a historian look for to test that hypothesis?

a. Surplus rural labor:

b. Origins of assembly line:

c. Results:

3) Coal and Iron:

a. Water wheels:

b. Steam Engine & James Watt:

c. Iron:

d. National Advantage:

V. Effects of Production in Britain and then elsewhere.

A) New class structure of industrial society – replaces old agricultural society

1) Working Class:

2) New business elite:

3) New Middle Class:

B) Urbanization:

C) Overall Positive Effects in early 1800s:

D) Negative Effects in early 1800s:

Name _____

Date _____

The Muckrakers' View of the Factories

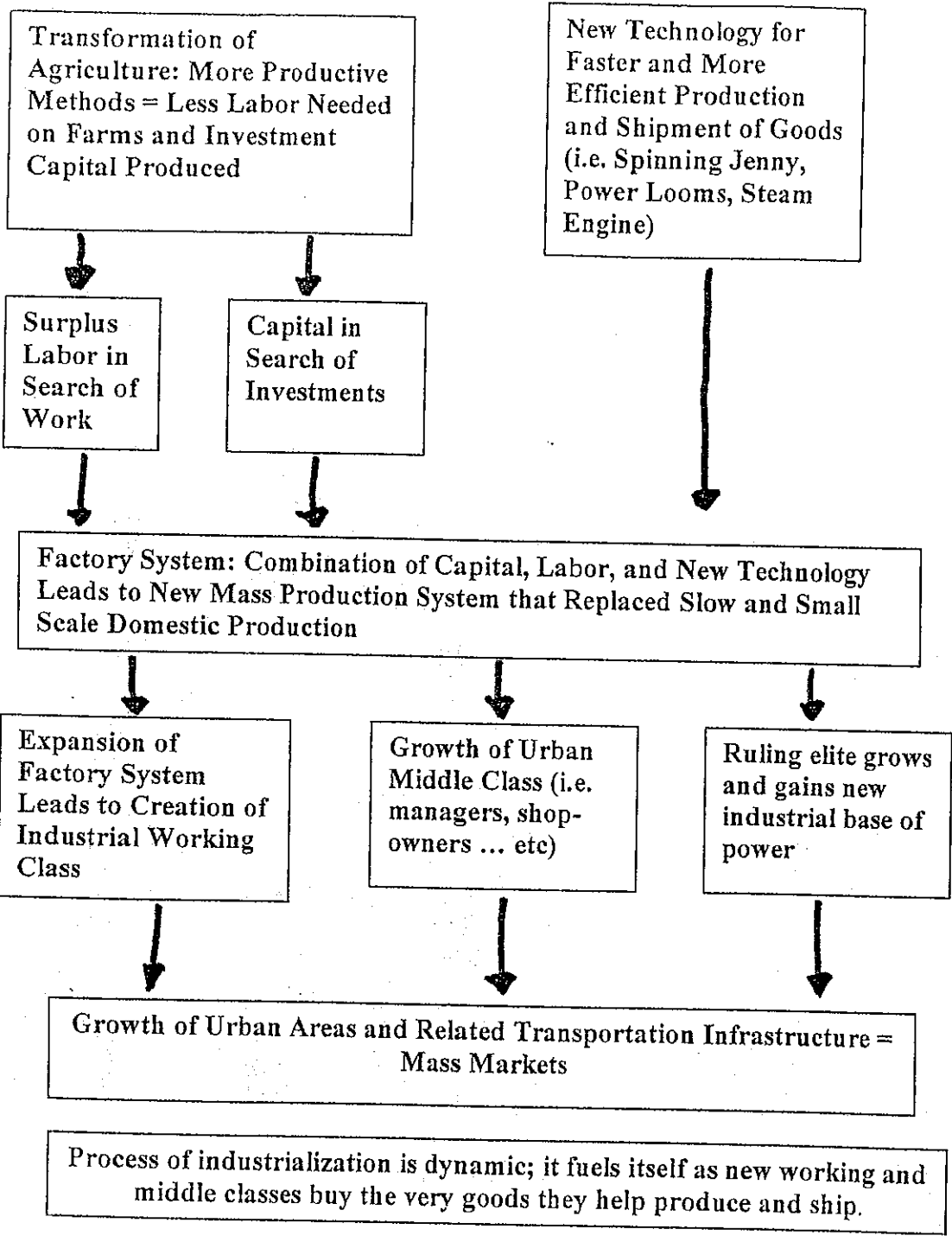
Read the following accounts of muckrakers and answer the questions after each excerpt.

There would be meat that had tumbled out on the floor, in the dirt and sawdust, where the workers had trampled and spit uncounted billions of consumption germs. There would be meat stored in great piles in rooms; and the water from leaky roofs would drip over it, and thousands of rats would race about on it. It was too dark in these storage places to see well, but a man could run his hand over these piles of meat and sweep off handfuls of the dried dung of rats. These rats were nuisances, and the packers put poisoned bread out for them, they would die, and then rats, bread, and meat would go into the hoppers together. This is no fairy story and no joke; the meat would be shovelled into carts, and the man who did the shoveling would not trouble to lift out a rat when he saw one—there were things that went into the sausage in comparison with which a poisoned rat was a tidbit.¹

—Upton Sinclair

1. Find specific examples in the selection to illustrate each of the following ideas:
 - a. The corporation's lack of concern for public health
 - b. The corporation's apparent focus on profits
 - c. The corporation's lack of concern for public safety
2. Check your textbook to find what legislation was passed as a direct result of this novel.

When the American Institute of Social Service tells us that 536,165 Americans were killed or maimed every year in American industry, our minds are stunned. The forty-six men who were killed in...



Effects:	Positive:	Negative:
	<ul style="list-style-type: none"> Cheap, quality goods Better Transportation New Opportunities Higher Standard of Living 	<ul style="list-style-type: none"> Bad Working Conditions Uneven employment Child Labor Food Safety and Sanitation Risks of City Life Wearing of social fabric No safety net

CHAPTER 25 Primary Source: A Doctor's Testimony on Child Labor

During the 1800's there were few laws in Britain regulating the employment of children (textbook page 495). In 1816, cotton mill workers, managers, and owners testified before a parliamentary committee investigating child labor. The witnesses included Thomas Wilson, a doctor employed by the owners of a number of cotton mills. Read the passage below from his testimony. On a separate sheet of paper, answer the questions that follow.

Q: There were 570 persons in the factories you examined, and only one was found ill? How long did the examination of workers take?

A: About ten and a half hours.

Q: For you to have seen 570 people in ten hours, your examination must have been rather slight?

A: It was rather slight.

Q: You found fifteen workers under the age of nine?

A: Yes.

Q: Do you think that a lad of fifteen is properly employed, if he works twelve hours out of the twenty-four?

A: I never heard them complain of being overworked.

Q: Is it not, in your judgment as a medical man, necessary that young persons have a little recreation during the day? Does it not contribute to their health?

A: I do not see it necessary.

Q: Your opinion, as a medical man, is that a boy of fifteen can be kept at work, day after day throughout the year, except for Sunday, without hurting his health?

A: Yes.

Q: In your judgment, is twelve hours a day the extent to which a person of fifteen ought to be employed?

A: Yes.

Q: Would you allow, out of those twelve hours, an hour for dinner or breakfast?

A: No.

Q: What is the earliest time, in your judgment, that a lad of fifteen ought to begin his job in the morning?

A: About six in the winter and half past five in the summer.

Q: Do you think it would at all hurt the lungs of a young person, to be inhaling particles of cotton, day after day?

A: No.

Q: How would the body be safe, under such circumstances, from getting those things into the lungs?

A: The particles cause coughing, which brings them back again.

Q: Would not constant coughing be harmful to the health of a very young person?

A: Not slight coughing.

From Human Documents of the Industrial Revolution in Britain, by E. Royston Pike. Copyright © 1966. Published by Unwin Hyman Ltd., London. Reprinted by permission.

Comprehension

- (a) How many workers did the doctor examine? (b) How long did it take him?
- (a) How did the doctor describe the examination he gave each worker? (b) How many workers under the age of nine did he examine?
- (a) About how many hours a day did the children in these mills probably work? (b) How many days a week did they work?
- On what did the doctor base his opinion that the children were not overworked?
- What was the doctor's opinion about allowing time during the workday for children

to play, rest, or eat meals? (b) What was the doctor's opinion about the effect on health of breathing in cotton particles?

Critical Thinking

- Drawing conclusions.* Do you think this doctor would have supported laws preventing or restricting child labor? Explain your answer.
- Detecting bias.* What factor might have influenced the doctor's attitudes about child labor?

CHAPTER 27 Skill Challenge: Recognizing Points of View

In the following selection a historian discusses the effects of industrialization and the growth of cities (textbook page 531) on the lives of European women. Read the passage and answer the questions that follow.

Industrialization and the growth of modern cities brought great changes to the lives of European women. These changes were particularly consequential for married women, and most women did marry in the nineteenth century.

The work of most wives became quite distinct and separate from that of their husbands. Husbands became wage earners in factories and offices, while wives tended to stay home and manage the household and care for the children.

As economic conditions improved late in the nineteenth century, married women tended to work outside the home only in poor families. One old English worker recalled that the "boy wanted to get into a position that would enable him to keep a wife and family, as it was considered a thoroughly unsatisfactory state of affairs if the wife had to work to help maintain the home."

This rigid division of labor meant that married women faced great injustice if they tried to move into the man's world, the world of employment outside the home. Husbands were unsympathetic or hostile. Well-paying jobs were off limits to women, and a woman's wage was almost always less than a man's, even for the same work. No wonder some women rebelled by the second half of the nineteenth century and began the long-continuing fight for equality of the sexes and the rights of women. More generally, rigidly separate roles narrowed women's horizons and fenced in their world.

From A History of World Societies, 2nd Ed., by John P. McKay, Bennett D. Hill, and John Buckler. Copyright © 1988 by Houghton Mifflin Company.

1. List four facts from the selection regarding the status of women in late nineteenth-century Europe.

2. What viewpoint concerning the role of women in society is revealed by the statement quoted in the third paragraph? _____

3. What is the author's point of view about the status of women in late nineteenth-century Europe? How does the author reveal his attitude? _____
