

Forces of Industry

Trace how ideas, energy, and inventions changed production and daily life.

10.3b "Factors including new economic theories and practices, new sources of energy, and technological innovations influenced the development of new communication and transportation systems and new methods of production..."

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline a factor supporting industry. Circle the change it enabled and label an effect. Repeat for a second factor.

Connected by Industry

- ① From the late eighteenth century, investors supplied capital for British mills, mines, and transport. Workers, raw materials, and markets also mattered. In *The Wealth of Nations* (1776), Adam Smith explained how division of labor increased output: workers specializing in tasks could produce more together. He defended competition while also assigning government roles in justice and public works. Factory specialization reflected this principle, but factories did not originate simply because owners read Smith.
- ② Coal use expanded as improved steam engines pumped mine water and powered machinery. Burning coal heated water; steam drove moving parts. Waterpower remained important, so steam did not replace it everywhere at once. Canals lowered the cost of moving heavy supplies. In the nineteenth century, steam locomotives and steamships connected mines, factories, ports, and customers. Improved transport helped manufacturers obtain materials and reach larger markets.
- ③ Electric telegraphs sent coded messages through wires faster than letters could travel. Railways used them to coordinate trains, and merchants received market information sooner. These connected developments increased output and trade. Factory towns grew as people sought wages. Some owners and investors gained wealth, while many workers faced strict schedules, long hours, and dangerous conditions. Child labor was common in some industries. Industrialization had multiple causes and unequal effects; no single invention or theory explains it.

2 ANSWER WITH EVIDENCE Use the passage

1 How did division of labor change factory production, according to the passage?

2 Which fuel increasingly powered steam engines? Name two uses for those engines.

3 How did canals, railroads, steamships, and other transportation systems help manufacturers?

4 Name two effects of industrial growth on people or communities.

3 YOUR TURN Your own words

In three sentences, trace a factor from the passage to a production, transport, or communication change and then to an effect.

PART 1 • READ AND MARK

Underline a factor supporting industry. Circle the change it enabled and label an effect. Repeat for a second factor. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	How did division of labor change factory production, according to the passage?	Factory owners assigned workers repeated tasks. This specialization helped factories produce goods in larger quantities.
2	Which fuel increasingly powered steam engines? Name two uses for those engines.	Coal. Engines pumped water from mines and powered machinery; steam locomotives or steamships are also acceptable.
3	How did canals, railroads, steamships, and other transportation systems help manufacturers?	They connected factories to mines, ports, and wider markets. Faster, cheaper movement helped manufacturers get supplies and sell goods farther away.
4	Name two effects of industrial growth on people or communities.	Accept two distinct effects: factory towns grew, some owners gained wealth, or workers faced strict schedules, long hours, dangerous conditions, or child labor.

PART 3 • YOUR TURN (SAMPLE ANSWER)

Coal increasingly fueled steam engines. Steam locomotives moved freight along railroads. Better transport helped manufacturers obtain materials and reach larger markets.

Accept causal chains that accurately use a factor, a connected industrial change, and an effect stated in the passage. For Question 4, students may give any two distinct effects with enough detail to show the effect on people or communities.