

Machines and Markets

Analyze how new systems and transportation expanded the economy.

8.27.C “analyze how technological innovations brought about economic growth such as the development of the factory system and the construction of the Transcontinental Railroad.”

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline both innovation names. For each innovation, mark one three-part cause-and-effect chain: write F1, F2, and F3 beside the factory-system technological change, immediate effect, and economic-growth result, then write R1, R2, and R3 beside the railroad chain.

Technology Builds Growth

- ① In the early 1800s, the factory system changed how many Americans made goods. Instead of producing cloth or tools in scattered homes and small shops, businesses gathered workers and machines in one place. Waterpower, and later steam power, ran equipment for long hours. A factory owner could make large amounts of the same product more quickly. Greater output often lowered the cost of each item, so more customers could buy it. Factory jobs and orders for raw materials also brought money into growing industrial towns.
- ② Building the Transcontinental Railroad created another kind of economic activity. After Congress passed the Pacific Railway Act in 1862, the Union Pacific built west from Omaha, while the Central Pacific built east from California. The lines met in 1869 at Promontory Summit, Utah. Building them required thousands of workers, including many Irish and Chinese laborers, who earned wages. Construction also created demand for iron rails, locomotives, wood ties, tools, food, and other supplies. Companies that provided these materials and services received contracts and hired more workers.
- ③ Once the railroad operated, it connected western producers and eastern buyers more directly. A rancher, miner, or farmer could send products farther and faster than before. Eastern factories and stores could reach customers in western communities, while western businesses could obtain machines and manufactured goods. Faster transportation reduced travel time and often lowered shipping costs. As trade increased, businesses sold to wider markets and invested in new production. Towns near railroad stations later grew because travelers, freight, and businesses used the rail connection.

2 ANSWER WITH EVIDENCE _____ Use the passage

1 What change in the factory system led to greater output, and how did greater output help businesses sell more goods?

2 Before the railroad began operating, what two kinds of economic activity did its construction create?

3 How did railroad operation help western producers and eastern businesses reach wider markets?

4 Why did lower shipping costs support economic growth after the railroad was completed?

3 YOUR TURN _____ Your own words

Write exactly three sentences explaining how the factory system and the Transcontinental Railroad worked together to expand the economy. Include one effect of factories, one effect of the railroad, and one link between the two innovations.

PART 1 • READ AND MARK

Underline both innovation names. For each innovation, mark one three-part cause-and-effect chain: write F1, F2, and F3 beside the factory-system technological change, immediate effect, and economic-growth result, then write R1, R2, and R3 beside the railroad chain. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	What change in the factory system led to greater output, and how did greater output help businesses sell more goods?	Factories gathered workers and machines in one place and used power-driven equipment. They produced more goods, often at a lower cost per item, so more customers could buy them.
2	Before the railroad began operating, what two kinds of economic activity did its construction create?	It provided wages for thousands of workers. It also created contracts and jobs for companies supplying rails, locomotives, ties, tools, food, and other materials.
3	How did railroad operation help western producers and eastern businesses reach wider markets?	The railroad connected western producers with eastern buyers and let products travel farther and faster. It also let eastern factories and stores reach customers in western communities.
4	Why did lower shipping costs support economic growth after the railroad was completed?	Lower shipping costs helped businesses trade more easily over long distances. Increased trade allowed businesses to sell in wider markets and invest in new production.

PART 3 • YOUR TURN (SAMPLE ANSWER)

The factory system made large amounts of goods at lower cost, so more people could buy manufactured items. The Transcontinental Railroad moved products between western producers and eastern buyers faster and often more cheaply. Together, factories had wider markets for their goods, and railroad-linked businesses invested in new production.

Accept accurate cause-and-effect explanations that connect each innovation to expanded production, employment, trade, lower costs, or wider markets. For Question 2, accept labor wages and demand for materials or supplier contracts, not later town growth near stations.