

Machines Move Markets

Trace how inventions linked production, travel, and communication.

SS.8.A.4.6 "Identify technological improvements (including inventions and inventors) that contributed to industrial growth."

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline each of the three named inventions and circle the person connected to each one. Then write 1, 2, and 3 beside one sentence for each invention that explains how it helped industry grow.

Technology Connects Industry

- ① In the early 1800s, new machines changed how Americans made cloth and processed crops. Eli Whitney patented the cotton gin in 1794. Its wire teeth separated cotton fibers from seeds far faster than hand cleaning. More cleaned cotton reached textile mills, where workers used power-driven machines to spin and weave thread. Mills gathered workers and machines in one place, increasing the amount of cloth produced. The cotton gin expanded cotton farming, while the mills created a steady demand for raw cotton.
- ② Transportation improvements linked farms, towns, and markets. In 1807, Robert Fulton's steamboat, the Clermont, made a successful commercial trip on the Hudson River. Steam power allowed boats to travel upstream without depending on wind or river currents. Steamboats carried passengers and heavy cargo, such as grain and cotton, more reliably along inland waterways. Railroads later added another fast route for goods. As transportation costs and travel times fell, manufacturers could obtain raw materials and sell finished products in places farther away.
- ③ Communication also became quicker. Samuel Morse developed a practical electric telegraph system, and in 1844 he sent a famous message over a line from Washington, D.C., to Baltimore. Telegraph operators used coded electrical signals to carry news and business information within minutes. A factory owner could learn prices, order supplies, or contact distant customers much faster than by mail. Together, machinery, steam transportation, railroads, and telegraph lines connected producers to materials, workers, and buyers. These improvements helped industry grow beyond local markets.

2 ANSWER WITH EVIDENCE _____ Use the passage

1 How did Eli Whitney's cotton gin change the amount of cotton that reached textile mills?

2 What transportation technology is connected to Robert Fulton, and what advantage did its steam power give it?

3 How could Samuel Morse's telegraph help a factory owner make business decisions faster?

4 How did transportation improvements and the telegraph each help manufacturers work with distant markets?

3 YOUR TURN _____ Your own words

Choose a technological improvement from the 1800s that is not named in the passage. Write exactly three sentences that name its inventor, describe the improvement, and explain two ways it contributed to industrial growth.

PART 1 • READ AND MARK

Underline each of the three named inventions and circle the person connected to each one. Then write 1, 2, and 3 beside one sentence for each invention that explains how it helped industry grow. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	How did Eli Whitney's cotton gin change the amount of cotton that reached textile mills?	It separated cotton fibers from seeds much faster than hand cleaning, so more cleaned cotton reached textile mills.
2	What transportation technology is connected to Robert Fulton, and what advantage did its steam power give it?	Fulton is connected to the steamboat, the Clermont. Steam power let boats travel upstream without depending on wind or river currents.
3	How could Samuel Morse's telegraph help a factory owner make business decisions faster?	It carried business information within minutes, allowing an owner to learn prices, order supplies, or contact distant customers faster than by mail.
4	How did transportation improvements and the telegraph each help manufacturers work with distant markets?	Transportation lowered travel costs and times, helping manufacturers get raw materials and sell products farther away. The telegraph let them quickly share prices, orders, and other business information with distant places.

PART 3 • YOUR TURN (SAMPLE ANSWER)

Cyrus McCormick patented the mechanical reaper in 1834. It cut grain faster than hand tools, so farms could harvest more wheat with fewer workers. Larger harvests supplied growing cities and created more goods to ship and sell.

Accept historically accurate 1800s improvements not named in the passage if the student correctly identifies an inventor and explains two reasonable connections to industrial growth. Explanations may address faster production, larger output, lower costs, transportation, communication, or expanded markets.