

Changing American Life

Trace how ideas, inventions, and large projects affected the United States.

5.22 "Science, technology, and society. The student understands the impact of science and technology on society in the United States. The student is expected to: identify the accomplishments of notable individuals in the fields of science and..."

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline every accomplishment by a named person. Circle words that show an economic or daily-life benefit, then write 1 by medicine, 2 by communication, and 3 by transportation where those fields appear.

Ideas That Moved a Nation

- ① Inventors and scientists have changed daily life in the United States. Benjamin Franklin studied electricity and invented useful items, including bifocal glasses. Eli Whitney developed the cotton gin, which separated cotton fibers from seeds more quickly. John Deere made a steel plow that cut tough prairie soil. These tools helped people work faster and supported farming and trade.
- ② Thomas Edison helped develop a practical electric light bulb, making electric lighting more useful in homes and businesses. Alexander Graham Bell received a patent for the telephone, which carried voices over wires. George Washington Carver found new uses for crops such as peanuts and sweet potatoes. Wilbur and Orville Wright built and flew a successful powered airplane, opening new possibilities for travel.
- ③ Large projects and discoveries also strengthened the nation's economy. The transcontinental railroad linked eastern rail lines with the West, so goods and people could move across the country more easily. The space program created jobs and new technology, and Neil Armstrong became the first person to walk on the Moon. Medical discoveries protect health, while faster communication and transportation connect communities, workers, and customers.

2 ANSWER WITH EVIDENCE _____ Use the passage

1 How did Eli Whitney’s cotton gin and John Deere’s steel plow help people work?

2 What did the transcontinental railroad link, and what could move more easily because of it?

3 How did the space program advance economic development, and what did Neil Armstrong accomplish?

4 According to the passage, how do medical discoveries, communication, and transportation benefit society?

3 YOUR TURN _____ Your own words

Choose two technological innovations used in the United States today. Use two different fields from medicine, communication, and transportation. For each one, explain a benefit, and include an economic benefit in at least one row.

INNOVATION	FIELD	BENEFIT TO AN INDIVIDUAL	BENEFIT TO SOCIETY OR THE ECONOMY

PART 1 • READ AND MARK

Underline every accomplishment by a named person. Circle words that show an economic or daily-life benefit, then write 1 by medicine, 2 by communication, and 3 by transportation where those fields appear. 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 and John Deere's steel plow help people work?	The cotton gin separated cotton fibers from seeds more quickly, and the steel plow cut tough prairie soil. Both tools helped people work faster and supported farming and trade.
2	What did the transcontinental railroad link, and what could move more easily because of it?	It linked eastern rail lines with the West. Goods and people could move across the country more easily.
3	How did the space program advance economic development, and what did Neil Armstrong accomplish?	The space program created jobs and new technology. Neil Armstrong was the first person to walk on the Moon.
4	According to the passage, how do medical discoveries, communication, and transportation benefit society?	Medical discoveries protect health. Faster communication and transportation connect communities, workers, and customers.

PART 3 • YOUR TURN (SAMPLE ANSWER)

INNOVATION	FIELD	BENEFIT TO AN INDIVIDUAL	BENEFIT TO SOCIETY OR THE ECONOMY
Vaccines	Medicine	They lower a person's risk of some diseases.	Fewer illnesses can help schools and workplaces stay open.
Video calling	Communication	It lets faraway people talk and see one another.	It supports remote meetings and jobs.

Accept accurate explanations that connect an innovation to a clear benefit for individuals, society, or the economy. For the table, the two innovations must come from different listed fields, and at least one row must include an economic benefit.