Canal Connections

Trace how people, tools, and places worked together to build a water route.

CCSS.ELA-Literacy.RI.5.3 "Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline details that show one thing causing or changing another thing, then draw an arrow between each connected pair.

Building the Panama Canal

1. In 1904, the United States began building the Panama Canal across Panama. The project faced a major problem: many workers became sick with yellow fever and malaria. Dr. William Gorgas led a health campaign after scientists learned that mosquitoes spread these diseases. Workers drained puddles, covered water barrels, and cleared standing water. As mosquito numbers fell, fewer workers got sick, and construction could continue more safely.

2. Engineers also had to move ships over land that was higher than sea level. They built locks, which are chambers with gates. A ship enters a lock, and water fills or drains from the chamber to lift or lower the ship. The locks raised ships to Gatun Lake. Ships then traveled across the lake, and other locks lowered them to the sea on the other side.

3. To create Gatun Lake, builders dammed the Chagres River. The dam held back water, flooding a wide area and forming the lake. This lake became part of the canal route, so ships did not need to travel through a long channel cut at that elevation. In August 1914, the first ship completed a full trip through the canal, connecting the Atlantic and Pacific oceans.

2 ANSWER WITH EVIDENCE

Use the passage

1. How did scientists' discovery about mosquitoes affect the health campaign and the canal project?

2. How did the movement of water inside a lock help ships travel through the canal?

3. How did damming the Chagres River change the route ships could take?

4. How did the locks and Gatun Lake work together to move a ship across Panama?

3 YOUR TURN

Your own words

Make a two-row challenge, action, result chart about the canal. Use one row for worker illness and one row for moving ships over high land, and explain how each action changed the result.

CHALLENGE	ACTION	RESULT

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PART 1 · READ AND MARK

Underline details that show one thing causing or changing another thing, then draw an arrow between each connected pair. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	How did scientists' discovery about mosquitoes affect the health campaign and the canal project?	**The discovery led workers to remove standing water. Fewer mosquitoes spread disease, so fewer workers became sick and construction was safer.**
2	How did the movement of water inside a lock help ships travel through the canal?	**Water filling or draining a lock lifted or lowered ships so they could move between sea level and higher land.**
3	How did damming the Chagres River change the route ships could take?	**The dam formed Gatun Lake, which became part of the canal route for ships.**
4	How did the locks and Gatun Lake work together to move a ship across Panama?	**Locks raised ships to Gatun Lake, ships traveled across the lake, and other locks lowered them to the sea on the other side.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

Challenge: Worker illness. Action: Workers removed standing water. Result: Fewer mosquitoes meant fewer workers became sick. Challenge: High land. Action: Engineers used locks and Gatun Lake. Result: Ships could be lifted, cross the lake, and be lowered to sea level.

Accept answers that accurately explain a relationship using details from the passage. In the chart, each row should clearly connect a challenge, an action, and the result of that action.