The Beaver Effect

Trace how one change to a stream leads to others.

4.RI.3 "Explain the relationship between events, ideas, or concepts in a historical, scientific, or technical procedures text, using evidence from the text."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB As you read, find three cause-and-effect pairs. Write the same number beside each cause and its effect to show how they connect.

What a Beaver Dam Changes

(1) At dusk, a beaver drags branches across a narrow stream. It pushes sticks into place, then packs gaps with mud and stones. Water backs up behind the new dam and forms a pond. The pond raises the water around the beaver's lodge. Because the lodge entrance stays under water, a fox on land cannot easily reach it.

(2) The dam slows the stream as it enters the pond. Tiny bits of soil carried by the water settle to the bottom instead of washing farther away. Along the pond's shallow edges, plants such as cattails can grow. Insects find food and shelter among the plants, and frogs hunt those insects. One change to the stream has helped create homes for several living things.

(3) A beaver pond also changes what happens during a storm. The pond can hold some extra rainwater, so less water may rush downstream all at once. However, the water behind the dam can spread over nearby land and cover a path. Beaver dams do not stop all floods. Their effects depend on how much rain falls and where the dam stands.

2 ANSWER WITH EVIDENCE

Use the passage

1. How does building the dam help protect the beaver's lodge from a fox?

2. Why do tiny bits of soil settle to the bottom of the pond?

3. How can plants along the pond's edges help frogs find food?

4. How can the pond change the flow of water downstream during a storm?

3 YOUR TURN

Your own words

A town plans a new walking path beside a beaver pond. In three sentences, suggest where to put the path and explain your choice using two different effects of the dam from the passage.

ANSWER KEY

The Beaver Effect

GRADE 4 · 4.RI.3

PART 1 · READ AND MARK

As you read, find three cause-and-effect pairs. Write the same number beside each cause and its effect to show how they connect. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	How does building the dam help protect the beaver's lodge from a fox?	**The dam makes water back up around the lodge. Its entrance stays under water, where a fox on land cannot easily reach it.**
2	Why do tiny bits of soil settle to the bottom of the pond?	**The dam slows the water, so soil carried by the stream settles instead of washing farther away.**
3	How can plants along the pond's edges help frogs find food?	**Insects find food and shelter among the plants. Frogs hunt those insects.**
4	How can the pond change the flow of water downstream during a storm?	**The pond can hold some extra rainwater, so less water may rush downstream all at once.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

I would put the walking path away from the low ground beside the pond. Water behind the dam can spread over nearby land during a storm and cover a path. Leaving space along the pond's shallow edges also gives plants, insects, and frogs room to live.

Accept any sensible path location supported by two different effects stated in the passage. Students should explain how each effect supports their choice.