Beavers Change Water

Read closely to trace causes, effects, and solutions.

CCSS.ELA-Literacy.CCRA.R.10 "Read and comprehend complex literary and informational texts independently and proficiently."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline one sentence in each paragraph that tells its main idea. Number two details in each paragraph that help you understand that idea.

Nature's Stream Builders

1. Before a beaver builds a dam, it looks for a stream with moving water and nearby trees. Using its teeth, the animal cuts branches and drags them into the channel at different times of the day and night. It packs mud, stones, and plants between the branches. Water slows behind the barrier and spreads into a pond. A beaver lodge, often built in that pond, has an underwater entrance that helps protect the family from many predators.

2. The pond does more than provide a home. It changes the surrounding habitat, which is the place where plants and animals live. Slow water can leave behind sediment, bits of soil and rock carried by the stream. As sediment settles, water may spill onto nearby ground during high flows. These wet areas can support frogs, insects, water birds, and certain plants. For this reason, scientists sometimes call beavers ecosystem engineers because their building activities alter an entire landscape.

3. Beaver dams can also create problems. A pond may flood a road, cover a trail, or drown trees that cannot survive with their roots underwater. People once often removed dams quickly when they caused trouble. Today, some communities try other solutions first. Workers may place a pipe through a dam so water can drain at a controlled level. This approach can reduce flooding while allowing the beavers and the wet habitat to remain in the same area.

2 ANSWER WITH EVIDENCE

Use the passage

1. What is the main idea of paragraph 1? Use one detail from the paragraph to support your answer.

2. What does the phrase "ecosystem engineers" mean as it is used in paragraph 2?

3. How does paragraph 3 add to the ideas in the first two paragraphs?

4. Why might a community try placing a pipe through a dam instead of removing the dam?

3 YOUR TURN

Your own words

Write a three-sentence summary of the passage. Include one sentence about how beavers build dams, one about how dams change habitats, and one about how people can respond to flooding.

ANSWER KEY

Beavers Change Water

GRADES K-12 · CCRA.R.10

PART 1 · READ AND MARK

Underline one sentence in each paragraph that tells its main idea. Number two details in each paragraph that help you understand that idea. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	What is the main idea of paragraph 1? Use one detail from the paragraph to support your answer.	**Beavers build dams that slow stream water and create ponds. They use branches, mud, stones, and plants to make the dam.**
2	What does the phrase "ecosystem engineers" mean as it is used in paragraph 2?	**It means beavers change the environment around them. Their dams create ponds, affect sediment, and form wet areas that support many living things.**
3	How does paragraph 3 add to the ideas in the first two paragraphs?	**It introduces problems that dams can cause for people, then explains a solution that can reduce flooding while keeping the habitat.**
4	Why might a community try placing a pipe through a dam instead of removing the dam?	**A pipe can lower the water level and reduce flooding while allowing the beavers and wet habitat to stay.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

Beavers build dams from branches, mud, stones, and plants, which slows water and forms ponds. The ponds and wet areas can support many plants and animals, so beavers can change an entire landscape. When dams cause flooding, communities can use pipes to control water levels without destroying the habitat.

Accept accurate paraphrases that show the student understands the cause-and-effect relationships across all three paragraphs. In the summary, accept different wording if it includes dam building, habitat changes, and a flooding response.