Where Rain Goes

Trace how a model explanation uses sources, transitions, and precise terms.

8.CL.8.b "Write informative or explanatory texts to examine and convey complex ideas or processes effectively, by developing the topic with relevant information or data from credible sources and using appropriate transitions and precise vocabulary."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline two facts attributed to named sources, circle transitions that show sequence or contrast, and number three stages of the runoff's journey from pavement into soil.

A Different Route for Rain

1 After a heavy rain, a school parking lot can send water rushing toward a storm drain. Unlike a grassy field, asphalt is an impervious surface, so little rain soaks through it. The U.S. Environmental Protection Agency (EPA) explains that runoff from hard surfaces can carry pollutants into waterways. Oil from vehicles and bits of litter may travel with that water. A rain garden offers another route: it is a shallow planted area that collects runoff and lets some of it sink into the ground.

2 First, a curb cut or sloped path guides runoff from pavement into the garden's shallow basin. There, plants slow the flow while soil and mulch trap some particles carried by the water. The U.S. Geological Survey (USGS) calls the movement of water from the surface into soil infiltration. Because the basin holds water temporarily, more of that water has time to infiltrate than it would on pavement. Plants also take up some water through their roots. This sequence reduces the amount of runoff entering a drain during smaller storms.

3 However, a rain garden is not a magic drain. If the soil is already saturated or a storm brings water faster than the basin can hold it, excess water needs an overflow route. Poorly placed gardens can even direct water toward buildings, so location matters. The EPA describes rain gardens as a form of green infrastructure, which uses plants and soil to manage stormwater near where it falls. Instead of claiming that a garden stops all flooding, a careful explanation shows how its parts work and identifies when they may not be enough.

2 ANSWER WITH EVIDENCE

Use the passage

1. Which source-backed detail supports the claim that runoff from pavement can affect waterways? Explain the connection.

2. How do “First” and “There” help you follow what happens to runoff after it leaves the pavement?

3. Why is “infiltration” more precise than saying that water “disappears”?

4. Revise this claim using a limitation from the passage and a transition that signals contrast: “Rain gardens stop flooding in every storm.”

3 YOUR TURN

Your own words

Write a 75 to 100 word paragraph for a school newsletter explaining how a rain garden could address puddles near bicycle racks. Attribute one relevant fact each to the EPA and USGS, use at least two transitions and precise vocabulary, and explain one limit without copying sentences from the passage.

ANSWER KEY

Where Rain Goes

GRADE 8 · 8.CL.8.b

PART 1 · READ AND MARK

Underline two facts attributed to named sources, circle transitions that show sequence or contrast, and number three stages of the runoff's journey from pavement into soil. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	Which source-backed detail supports the claim that runoff from pavement can affect waterways? Explain the connection.	**The EPA says runoff from hard surfaces can carry pollutants into waterways. Asphalt is a hard surface, so runoff from the parking lot may carry pollutants there.**
2	How do "First" and "There" help you follow what happens to runoff after it leaves the pavement?	**"First" introduces the path into the basin. "There" points to the basin, where plants slow the water and soil and mulch trap some particles.**
3	Why is "infiltration" more precise than saying that water "disappears"?	**The USGS defines infiltration as water moving from the surface into soil. The term names where the water goes rather than suggesting it vanishes.**
4	Revise this claim using a limitation from the passage and a transition that signals contrast: "Rain gardens stop flooding in every storm."	**Rain gardens can reduce runoff during smaller storms; however, saturated soil or a full basin means excess water needs an overflow route.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

A rain garden beside the bicycle racks could give runoff from the pavement another place to go. First, a sloped path could guide water into a shallow planted basin. The EPA explains that rain gardens use plants and soil to manage stormwater near where it falls. Next, water could move from the surface into soil, a process the USGS calls infiltration. However, if the soil becomes saturated, an overflow route must carry extra water safely away from the racks and school building.

Accept equivalent source-backed explanations and revisions that accurately describe the process and its limits. For the paragraph, check the word count, both source attributions, at least two useful transitions, precise vocabulary, and an accurate limitation.