

Rain on Pavement

Analyze how a model text uses sources, details, and organization to explain an environmental issue.

8.W.1.B "Write expository texts to examine a topic or concept that conveys ideas and information by maintaining a clear focus with relevant, well-chosen facts, definitions, concrete details, quotations, and examples from multiple credible sources..."

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline the sentence that states the main focus, circle each source name, and number details that show either a stormwater problem or a possible response. These marks will help you see how evidence and organization support one clear idea.

Keeping Rain Out of Streets

- ① During heavy rain, a city street can act like a roof. Asphalt and concrete are impervious surfaces, meaning water cannot soak through them. Instead, runoff moves quickly into storm drains and nearby streams. The U.S. Environmental Protection Agency explains that runoff can carry oil, trash, and other pollutants from paved areas. As more land is covered by pavement, a neighborhood may experience deeper puddles, overloaded drains, and dirtier waterways. Managing rain where it falls can reduce these pressures.
- ② One approach changes the ground itself. Permeable pavement contains gaps or porous material that lets water enter layers below. The U.S. Geological Survey notes that permeable pavement can help reduce runoff, although it needs maintenance to keep openings from clogging. Another approach adds planted spaces. Rain gardens are shallow areas filled with deep-rooted plants that collect water from roofs or sidewalks. EPA describes rain gardens as a type of green infrastructure. A school parking lot might use permeable spaces, while a narrow curbside strip might hold a rain garden.
- ③ Choosing a design requires local evidence, not a single universal answer. Engineers examine soil, slope, available space, and the amount of water flowing from a site. For example, the National Oceanic and Atmospheric Administration reports that heavier downpours have become more common in many parts of the United States, increasing the value of planning for intense storms. A city can track flooded intersections before and after a project, then use those observations to improve later designs. Careful planning protects streams while making streets safer during storms.

2 ANSWER WITH EVIDENCE _____ Use the passage

1 State the passage's main focus. Then give two details from paragraph 1 that support that focus.

2 How does paragraph 2 organize its information to make the possible responses easier to understand?

3 Which source provides evidence about heavier downpours? Explain why that information is relevant to the passage's focus.

4 How do the school parking lot and curbside strip examples at the end of paragraph 2 clarify the relationship between the two approaches?

3 YOUR TURN _____ Your own words

Choose a rainwater issue at a school or in a neighborhood. Write one 90-to-120-word paragraph that compares two possible responses, includes a definition and concrete details, and names at least two credible sources you used.

PART 1 • READ AND MARK

Underline the sentence that states the main focus, circle each source name, and number details that show either a stormwater problem or a possible response. These marks will help you see how evidence and organization support one clear idea. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	State the passage's main focus. Then give two details from paragraph 1 that support that focus.	The focus is reducing urban stormwater problems by managing rain where it falls. Supporting details include runoff carrying pollutants from paved areas and pavement contributing to overloaded drains or dirtier waterways.
2	How does paragraph 2 organize its information to make the possible responses easier to understand?	It presents two approaches, defines and describes each one, then gives an example setting for each approach.
3	Which source provides evidence about heavier downpours? Explain why that information is relevant to the passage's focus.	The National Oceanic and Atmospheric Administration provides the evidence. More frequent heavy downpours make planning for intense stormwater runoff more important.
4	How do the school parking lot and curbside strip examples at the end of paragraph 2 clarify the relationship between the two approaches?	They show that permeable pavement and rain gardens can fit different kinds of spaces, so a site may need a response suited to its conditions.

PART 3 • YOUR TURN (SAMPLE ANSWER)

Installing a green roof on a school addition can slow stormwater runoff while adding insulation. A green roof is a roof covered with plants growing in a layered system. The Environmental Protection Agency explains that green roofs can absorb rainfall and reduce the amount of water that leaves a roof. The U.S. Department of Energy reports that vegetation and growing media can help lower roof temperatures in summer. Unlike a bare dark roof, a planted roof needs structural support, waterproofing, and regular care. For a small addition with a strong roof, these trade-offs may make a green roof a useful choice.

Accept equivalent statements of the central focus and any accurate, relevant evidence from the passage. For the open response, look for a clear focus, a comparison structure, concrete source-based information from two named credible sources, and a word count from 90 to 120 words.