Puddle Word Detective

Use observations and reference sources to investigate word meanings.

7.L.6.a "Research words and gather vocabulary knowledge."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline *runoff*, *permeable*, *infiltration*, and *intercept*, then circle a phrase near each word that helps explain its meaning.

Where Did the Rain Go?

1 After a downpour, the basketball court held wide puddles, but the nearby garden path was almost dry. Lena wrote that contrast in her field notebook. A city stormwater guide gave her a useful term: *runoff*, rainwater that travels over land instead of soaking into it. The guide said hard surfaces often increase runoff because water cannot pass through them easily. Lena drew a question mark beside *permeable* in the guide's description of the garden path. She decided not to guess its meaning from the path alone.

2 At the library, Lena checked a dictionary entry for *permeable*: allowing liquids or gases to pass through. That definition fit the guide's claim that water could move through the path's porous surface and into the ground below. The dictionary also listed *permeate*, a verb meaning to spread through something, but Lena did not treat the two words as interchangeable. She added another guide term to her notes: *infiltration*, the movement of water into soil. On the court, little water could infiltrate through the solid pavement.

3 Lena also found a tree-care article describing how leaves *intercept* some rain before it hits the ground. A dictionary gave two meanings of *intercept*: to stop something on its way, or to receive a message meant for someone else. The article's mention of leaves and falling rain helped Lena choose the first meaning. Still, the tree did not make every puddle disappear. She labeled her notebook sketch *canopy* and copied the article's explanation: a tree's canopy is the spread of its branches and leaves.

2 ANSWER WITH EVIDENCE

Use the passage

1. Which observation in Lena's notebook supports the stormwater guide's explanation of *runoff*? Explain the connection.

2. Why does *permeable* fit the guide's description of the garden path, while *permeate* would not fit in its place?

3. Use the guide's meaning of *infiltration* to explain why water could stay on the basketball court.

4. Which dictionary meaning of *intercept* fits the tree-care article? What detail in the article helps you decide?

3 YOUR TURN

Your own words

A new tree grows over a bench. In two or three sentences, use *canopy* to predict how the tree might change the bench area during light rain, and support your prediction with two details from the tree-care article.

ANSWER KEY

Puddle Word Detective

GRADE 7 · 7.L.6.a

PART 1 · READ AND MARK

Underline *runoff*, *permeable*, *infiltration*, and *intercept*, then circle a phrase near each word that helps explain its meaning. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	Which observation in Lena's notebook supports the stormwater guide's explanation of *runoff*? Explain the connection.	**The court held puddles after the storm. This fits runoff because water remained on the hard surface instead of soaking into the ground.**
2	Why does *permeable* fit the guide's description of the garden path, while *permeate* would not fit in its place?	**The path allows water to pass through, so permeable describes it. Permeate is a verb meaning to spread through something, not a word that describes the path.**
3	Use the guide's meaning of *infiltration* to explain why water could stay on the basketball court.	**Infiltration means water moving into soil. The court's solid pavement keeps much of the water from reaching the soil, so water can remain on the surface.**
4	Which dictionary meaning of *intercept* fits the tree-care article? What detail in the article helps you decide?	**It means to stop something on its way. The article says leaves intercept rain before it hits the ground.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

The new tree's canopy, its spread of branches and leaves, might keep the bench a little drier during light rain. The tree-care article says leaves intercept some rain before it reaches the ground, so they may catch some rain above the bench.

Accept reasonable predictions that use canopy to mean the spread of a tree's branches and leaves. Responses should use the article's details about the canopy and leaves intercepting some rain, without claiming that a tree stops all rain.