Trees, Heat, and Rain

Combine source evidence to make a schoolyard decision.

5.T.RA.1.c "Consider and integrate information from research, including relevant and accurate evidence from two or more credible sources. (C)"

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Circle the name of each source, then underline facts and label them S for shade, W for rainwater, or L for a local school or weather detail.

Researching a Better Schoolyard

1. To plan a cooler, less soggy schoolyard, Maya began with the U.S. Environmental Protection Agency, or EPA. The agency explains that trees cool places in two ways. Their leaves shade pavement and buildings. Trees also release water vapor from their leaves, which cools the air. The EPA gathers and shares environmental research for communities and schools.

2. The U.S. Department of Agriculture Forest Service reports another tree benefit. During rain, leaves and branches catch some water before it reaches the ground. Tree roots also help soil take in water. In places covered by asphalt, rain cannot soak into the ground as easily, so it can flow quickly into drains or collect in low spots.

3. Before choosing planting sites, Maya checked the National Weather Service climate summary for her area. It lists many hot summer days and several heavy-rain events each year. She also studied a school map made by the district facilities office. The map shows a large, unshaded blacktop play area and a walkway where puddles often form after rain. These local records describe where problems occur.

2 ANSWER WITH EVIDENCE

Use the passage

1. Maya wants evidence about cooling pavement. Which source is more relevant, the EPA or the Forest Service? Explain using two details from that source.

2. Based on the EPA evidence and the school map, which area has the strongest evidence for adding shade? Explain your choice.

3. To address puddles at the walkway, which two sources should Maya combine? What does each source add?

4. How does the National Weather Service summary help Maya combine the EPA and Forest Service evidence into one plan?

3 YOUR TURN

Your own words

Write a three-sentence recommendation to the principal about where to plant trees first. Use evidence from at least two named sources in the passage, and explain how the local weather record affects your recommendation.

ANSWER KEY

Trees, Heat, and Rain

GRADE 5 · 5.T.RA.1.c

PART 1 · READ AND MARK

Circle the name of each source, then underline facts and label them S for shade, W for rainwater, or L for a local school or weather detail. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	Maya wants evidence about cooling pavement. Which source is more relevant, the EPA or the Forest Service? Explain using two details from that source.	**The EPA is more relevant. It says tree leaves shade pavement and buildings, and trees release water vapor that cools the air.**
2	Based on the EPA evidence and the school map, which area has the strongest evidence for adding shade? Explain your choice.	**The unshaded blacktop play area. The map identifies it as unshaded blacktop, and the EPA says tree leaves shade pavement and cool the air.**
3	To address puddles at the walkway, which two sources should Maya combine? What does each source add?	**She should combine the Forest Service report and the district facilities map. The Forest Service explains that tree parts catch rain and roots help soil absorb water, while the map identifies the walkway as a place where puddles form.**
4	How does the National Weather Service summary help Maya combine the EPA and Forest Service evidence into one plan?	**It reports both many hot days and several heavy-rain events. This shows that evidence about cooling from the EPA and rainwater absorption from the Forest Service is relevant to her area.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

I recommend planting trees beside the unshaded blacktop play area first. The EPA says tree leaves shade pavement and cool the air, and the district facilities map identifies this unshaded place. The National Weather Service summary reports many hot summer days, so this location is an important place to cool.

Accept a supported recommendation for the blacktop or the puddle-prone walkway. The response should name at least two sources, use accurate evidence from them, and connect the weather summary to the chosen need.