Shade and Sources

Build a practical position from different kinds of evidence

12.RL.29 "Compose clear, coherent writing that incorporates information from a variety of scholarly and non-scholarly sources and demonstrates a clear position on a topic, answers a research question, or presents a solution to a problem."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline the writer's position, circle each named source, and number the study's finding, the EPA's explanation, and the NWS's guidance in the order the writer uses them to build the plan.

A Cooler Route to the Bus

(1) At dismissal, students cross a wide asphalt lot to reach the public bus stop. On hot days, that walk can feel harsher than the temperature on a weather app suggests. Our district should plant shade trees along the paved route to the stop, rather than limit new trees to the athletic fields. This proposal rests on more than a familiar complaint about summer heat. A peer-reviewed urban-heat study offers evidence about tree cover, while public guidance from the Environmental Protection Agency (EPA) and the National Weather Service (NWS) helps translate that evidence into a practical safety plan.

(2) In a 2019 study published in *Proceedings of the National Academy of Sciences*, Carly Ziter and colleagues measured summer temperatures across Madison, Wisconsin. They found that greater tree canopy was associated with cooler daytime conditions, especially when canopy covered a substantial share of the surrounding area. This finding does not promise that one sapling will cool an entire bus stop tomorrow. The EPA's public guide to heat islands explains why vegetation can help: leaves shade surfaces and release water vapor. Together, the study and the guide support a continuous stretch of canopy, not a few decorative trees scattered far from the route.

(3) The NWS advises people facing extreme heat to spend time in air-conditioned places and drink water. Trees alone cannot replace those precautions, particularly during a heat alert. The district should therefore pair tree planting with access to a cooled indoor waiting area and drinking water, and keep those options available during heat alerts as the canopy grows. Funding and maintenance would need a separate review, since none of these sources establishes the cost of planting at this school. Still, the scholarly study identifies a cooling pattern, the EPA explains a mechanism, and the NWS supplies immediate safety guidance. Those different contributions make the recommendation more credible and useful.

2 ANSWER WITH EVIDENCE

Use the passage

1. State the writer's position. How do the Ziter study and the EPA guide play different roles in supporting it?

2. Why does the writer say that one sapling will not cool an entire bus stop tomorrow? Explain how this qualification shapes the planting plan.

3. How does the NWS guidance change the plan instead of merely repeating the study's evidence?

4. What part of the recommendation still needs evidence before the district acts? How does naming that gap strengthen the argument?

3 YOUR TURN

Your own words

Write one paragraph of 80 to 110 words arguing for a different first step the school should take during a heat alert, without making tree planting your main action. Use the Ziter study and at least one public agency source, explain what each contributes, and acknowledge one limit.

ANSWER KEY

Shade and Sources

GRADE 12 · 12.RL.29

PART 1 · READ AND MARK

Underline the writer's position, circle each named source, and number the study's finding, the EPA's explanation, and the NWS's guidance in the order the writer uses them to build the plan. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	State the writer's position. How do the Ziter study and the EPA guide play different roles in supporting it?	**The writer wants trees planted along the paved route to the bus stop. Ziter's study links greater canopy with cooler daytime conditions; the EPA explains how vegetation cools through shade and water vapor.**
2	Why does the writer say that one sapling will not cool an entire bus stop tomorrow? Explain how this qualification shapes the planting plan.	**The study does not establish that a single new tree provides immediate cooling. The writer therefore proposes a continuous stretch of canopy and adds protections while it grows.**
3	How does the NWS guidance change the plan instead of merely repeating the study's evidence?	**The study concerns tree cover and temperature. NWS guidance adds immediate precautions, so the plan includes an air-conditioned waiting area and drinking water.**
4	What part of the recommendation still needs evidence before the district acts? How does naming that gap strengthen the argument?	**Planting costs and maintenance need review. Naming that gap avoids claiming the cited sources establish the project's cost.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

During a heat alert, the school should let bus riders wait in an air-conditioned room and call them outside when buses arrive. Ziter and colleagues found that greater tree canopy was associated with cooler daytime conditions in Madison, but their study does not show that a newly planted tree would protect students this week. The NWS advises spending time in air-conditioned places during extreme heat, so an indoor waiting area offers a more immediate response. Staff would still need a safe way to signal bus arrivals, and students would need water. Tree planting could remain a longer-term project.

For Part 3, accept a distinct first step if the paragraph takes a clear position, uses the study and a public agency source accurately, explains their different contributions, and acknowledges a relevant limit.