

Shade That Lasts

Evaluate how evidence develops a central idea.

ELA.9.R.2.2 "Evaluate the support an author uses to develop the central idea(s) throughout a text."

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline the sentence that states the central idea, then number three details that support, explain, or limit that idea so you can judge how well the author develops it.

Cooling Cities with Trees

- ① On a July afternoon, blocks with few trees can feel far hotter than nearby shaded streets. Pavement and dark roofs absorb sunlight, then release heat slowly after sunset. Researchers measure this urban heat island effect with air temperatures and satellite images of surface temperatures. In many cities, neighborhoods shaped by past disinvestment have less tree cover and more heat-absorbing surfaces. The pattern matters because extreme heat raises health risks, especially for older adults, outdoor workers, and people without reliable air conditioning. Tree planting is often presented as a simple solution, but the evidence shows that cooling a city requires more than putting seedlings in the ground.
- ② First, mature trees provide cooling that young trees cannot supply right away. A broad canopy shades sidewalks, walls, and parked cars, keeping surfaces from absorbing as much solar energy. Trees also cool air through transpiration, a process that releases water vapor from leaves into the air. These two mechanisms explain why temperature comparisons between shaded and unshaded places are useful evidence. However, a newly planted sapling has a small canopy and needs years of growth before it can shade a block. Thus, programs that count only how many trees are planted may exaggerate their immediate effect on neighborhood heat.
- ③ Evidence about tree survival adds another reason to look beyond planting totals. A sapling can die if it is not watered during dry periods, if its roots lack enough soil space, or if it is damaged by traffic and construction. When cities track survival rates and canopy growth over several years, those records show whether a planting program creates lasting shade. They also reveal which blocks receive maintenance and which do not. This support develops the central idea by connecting heat reduction to long-term care. It suggests that city leaders should protect existing large trees and plan watering, soil, and maintenance before promising cooler neighborhoods.

2 ANSWER WITH EVIDENCE _____ Use the passage

1 What central idea does the author develop about using trees to cool cities?

2 How does the explanation of shade and transpiration in paragraph 2 strengthen the author's central idea?

3 Why are totals of newly planted trees limited evidence of immediate cooling? Use two facts from the passage.

4 What evidence from paragraph 3 would best show whether a planting program creates lasting shade? Explain why it is stronger than a planting total.

3 YOUR TURN _____ Your own words

Write exactly three sentences evaluating the author's support. Name two different pieces or types of evidence, explain how each supports or limits the central idea, and identify one additional piece of evidence that would make the argument stronger.

PART 1 • READ AND MARK

Underline the sentence that states the central idea, then number three details that support, explain, or limit that idea so you can judge how well the author develops it. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	What central idea does the author develop about using trees to cool cities?	Tree planting alone is not enough to cool cities. Cities also need mature trees and long-term care that helps trees survive and grow.
2	How does the explanation of shade and transpiration in paragraph 2 strengthen the author's central idea?	It explains how trees reduce heat, so temperature comparisons between shaded and unshaded places can show why tree canopy matters.
3	Why are totals of newly planted trees limited evidence of immediate cooling? Use two facts from the passage.	New saplings have small canopies and need years to grow large enough to shade a block. They can also die without water, adequate soil space, and protection from damage.
4	What evidence from paragraph 3 would best show whether a planting program creates lasting shade? Explain why it is stronger than a planting total.	Records of survival rates and canopy growth over several years would be best. They show whether trees lived and grew enough to provide shade, while a planting total only shows how many trees were put in the ground.

PART 3 • YOUR TURN (SAMPLE ANSWER)

The explanation that broad canopies shade surfaces and cool air through transpiration supports the claim by showing how trees reduce heat. Records of survival rates and canopy growth support the need for long-term care because they show whether planted trees create lasting shade. The argument would be stronger with temperature measurements from the same blocks before and after mature canopy increases.

Accept responses that identify the need for mature trees and maintenance as the central idea and accurately explain how evidence supports or qualifies it. For Part 3, accept other relevant evidence proposals if students evaluate two supports and explain why the additional evidence would help.