

Shade, Heat, Choices

Analyze how structure and style turn a city problem into a plan.

10.T.SS.1 "Organization: Analyze, evaluate, and use organizational structures and style to shape thoughts across genres."

NAME _____

DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Read the passage. Underline words or phrases that signal cause and effect, contrast, or sequence, then write a short margin label naming the main job of each paragraph.

Cooling a City with Trees

- ① On a July afternoon, a city block of black asphalt can feel far hotter than a nearby park. This difference is part of the urban heat island effect. Pavement and dark roofs absorb sunlight, then release stored heat after sunset. Buildings also slow breezes, while air conditioners push additional warm air outdoors. For residents without reliable cooling, hot nights can be especially dangerous because bodies have less time to recover. The problem is not spread evenly: neighborhoods with fewer trees and more pavement often face the highest temperatures.
- ② Trees can change this pattern in two ways. Their leaves shade sidewalks, walls, and roofs, so those surfaces absorb less solar energy. At the same time, water evaporating from leaves cools the surrounding air, much as sweat cools skin. Researchers measure these effects with thermometers, satellite images, and comparisons between shaded and unshaded streets. Yet planting a tree is not an instant fix. Young trees provide limited shade, and drought can weaken them. A cooling plan therefore needs species suited to local rainfall, room for roots, and long-term care.
- ③ Because money and land are limited, city leaders must decide where trees will help most. Temperature maps can identify blocks that stay hot at night, but maps alone do not show whether residents can water and protect new plantings. Planners can combine heat data with conversations about bus stops, apartments, and walking routes. This order, from measuring the problem to choosing sites to maintaining trees, turns a broad goal into a practical plan. It also keeps the focus on people who face the greatest risk, rather than on the number of trees planted.

2 ANSWER WITH EVIDENCE Use the passage

1 How does paragraph 1 move from a broad observation to a more focused problem?

2 In paragraph 2, what shift does the word "Yet" signal?

3 Why does the author compare water evaporating from leaves to sweat cooling skin?

4 How does the sequence in paragraph 3 support the author's main point about planning?

3 YOUR TURN Your own words

Write a three-paragraph informational proposal about one change that would improve comfort or safety at your school. Organize it as a problem and its causes, a solution and its limits, and a step-by-step plan. Use at least one contrast signal and one sequence signal.

PART 1 • READ AND MARK

Read the passage. Underline words or phrases that signal cause and effect, contrast, or sequence, then write a short margin label naming the main job of each paragraph. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	How does paragraph 1 move from a broad observation to a more focused problem?	It begins with the heat difference between asphalt and a park, explains causes of urban heat, and then focuses on neighborhoods with fewer trees and more pavement.
2	In paragraph 2, what shift does the word “Yet” signal?	It shifts from explaining how trees cool an area to explaining why planting trees alone is not an instant solution.
3	Why does the author compare water evaporating from leaves to sweat cooling skin?	The comparison gives readers a familiar, concrete way to understand how evaporation cools the air.
4	How does the sequence in paragraph 3 support the author’s main point about planning?	It moves from identifying hot areas to selecting sites to maintaining trees, showing that an effective plan requires connected steps.

PART 3 • YOUR TURN (SAMPLE ANSWER)

Students often wait for buses beside the west parking lot, where there is no shade. In late spring, the concrete reflects heat, and the metal bench becomes uncomfortable to touch. The exposed stop can make a short wait feel unsafe for students who are already overheated after practice. Adding a shade canopy would block direct sunlight and make the waiting area easier to use. A roof would not lower every outdoor temperature, however, and it could cost more than replacing the bench. The proposal should include a durable design and a place for rainwater to drain. First, the school could ask students and drivers when the stop is busiest. Next, staff could compare canopy prices and choose a location that does not block buses. Finally, the school could inspect the structure each year. This sequence connects the problem to a realistic solution rather than treating the canopy as a quick fix.

Accept answers that accurately explain how paragraph order, transitions, and the comparison guide the reader. For the open response, accept varied school topics if the three paragraphs follow the required structure and use clear contrast and sequence signals.