

Cooling City Clues

Analyze how an explanatory model uses headings and visuals to organize information.

CCSS.ELA-Literacy.WHST.9-10.2a “Introduce a topic and organize ideas, concepts, and information to make important connections and distinctions; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.”

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline each heading, circle words that signal a comparison or sequence, and number each place where the author explains how a table or map helps readers.

How Cities Can Cool Down

- ① **THE HEAT ISLAND PROBLEM** On a summer afternoon, pavement can become far hotter than nearby grass. Cities often contain dark roofs, roads, and parking lots that absorb sunlight and release heat slowly after sunset. This pattern, called an urban heat island, can raise nighttime temperatures and make hot weather more dangerous for people without air conditioning. The problem is not spread evenly. Neighborhoods with fewer trees and more pavement may have less shade, warmer sidewalks, and higher cooling costs. To understand possible solutions, compare how different surfaces handle sunlight and water.
- ② **COMPARING SURFACES** Table 1 organizes three features that affect neighborhood heat: Surface | Main effect; Asphalt | absorbs sunlight, sheds water; Grass | releases water through evapotranspiration; Tree canopy | blocks sunlight, releases water. Asphalt therefore stores more heat than planted areas. Grass and tree canopy are not identical solutions: grass cools open ground, while tree canopy also shades people, buildings, and pavement. The table helps readers see this distinction quickly before considering a plan. It also connects surface choices to the earlier concern about unequal neighborhood conditions during heat waves.
- ③ **PLANNING WITH EVIDENCE** A city could use this information to set priorities rather than treating every block alike. First, officials might map pavement, tree cover, and places where residents wait for buses or walk to school. Next, they could plant and maintain trees along the hottest routes, while also protecting grass or gardens that allow water to soak into soil. A map would show where shade is most needed, and a table could compare proposed sites by cost, available space, and expected benefits. Together, these tools would turn a general heat problem into a clear, evidence-based planting plan.

2 ANSWER WITH EVIDENCE _____ Use the passage

1 What is the job of the first heading, and what concern does that section introduce?

2 How does Table 1 help readers distinguish between grass and tree canopy?

3 What two visual tools does the final section recommend, and what information would each tool provide?

4 How do the words "First," "Next," and "Together" organize the ideas in the final section?

3 YOUR TURN _____ Your own words

Write a 90-120-word mini-explanation of a school problem and a practical solution. Use two headings and include a simple table or graphic description that helps readers compare, connect, or distinguish important information.

PART 1 • READ AND MARK

Underline each heading, circle words that signal a comparison or sequence, and number each place where the author explains how a table or map helps readers. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	What is the job of the first heading, and what concern does that section introduce?	The first heading introduces the urban heat island problem and explains that its effects are not spread evenly across neighborhoods.
2	How does Table 1 help readers distinguish between grass and tree canopy?	It shows that grass cools open ground by releasing water, while tree canopy blocks sunlight and also shades people, buildings, and pavement.
3	What two visual tools does the final section recommend, and what information would each tool provide?	A map would show where shade is most needed. A table would compare possible planting sites by cost, available space, and expected benefits.
4	How do the words “First,” “Next,” and “Together” organize the ideas in the final section?	They present the plan in order: gather information, take action, then combine the tools into an evidence-based plan.

PART 3 • YOUR TURN (SAMPLE ANSWER)

WHERE WASTE STARTS Our cafeteria throws away food, wrappers, and bottles each day. These materials need different solutions: unopened food can be shared safely, while wrappers cannot. Table 1: Item | Best action. Unopened fruit | share cart. Plastic bottle | recycling bin. This table connects each waste type to a practical next step. **A CLEAR LUNCH PLAN** Place a share cart near the exit and labeled recycling bins beside trash cans. A simple sign can show which items belong in each place. Tracking the number of items collected each week would help the school decide whether the plan reduces waste.

Accept responses that introduce a clear school problem, organize information with two meaningful headings, and use a table or graphic description for a stated purpose. The explanation should make at least one useful connection or distinction and propose a practical solution.