Cooling City Blocks

Notice how precise details build an explanation.

CCSS.ELA-Literacy.W.7.2b "Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline one definition, circle three facts or concrete details, and number two details that explain an effect described in the passage. These details show how an informational writer develops a topic.

Why City Trees Matter

1 City trees do more than make streets look green. Their leaves and branches form a canopy, a layer of plant cover above the ground. On hot days, that canopy blocks some sunlight from pavement and buildings. Pavement absorbs solar energy and can become much hotter than shaded ground. Trees also release water vapor through their leaves, a process called transpiration. As the water changes from liquid to vapor, it uses heat energy, which can help cool the air nearby.

2 Shade can change a person's experience on a sidewalk. A row of mature trees may shade a bus stop, a playground, or the south side of a building during part of the day. In one city block, shade is not spread evenly: a young tree with a small crown covers far less ground than an older tree with wide branches. For this reason, planners consider where a tree will grow, not only where it is planted. They may choose species that fit beneath power lines or tolerate compacted soil beside a curb.

3 Trees need care if they are going to provide these benefits for many years. Newly planted trees often need regular watering because their roots have not yet spread widely through the soil. A mulch ring, a layer of material such as wood chips placed around a tree's base, can help soil hold moisture. However, mulch should not touch the trunk, because trapped moisture can harm bark. By planting suitable trees and caring for them, communities can build cooler, more comfortable outdoor spaces.

2 ANSWER WITH EVIDENCE

Use the passage

1. What definition does the writer give for canopy, and how does this definition help explain the topic?

2. Identify two details that explain how trees can cool an area. Write both details.

3. How does the comparison between a young tree and an older tree develop the writer's point about planning where trees are planted?

4. Which detail explains why newly planted trees often need regular watering?

3 YOUR TURN

Your own words

Write 5 sentences explaining how a school composting program could help the school. Include a topic sentence, a definition of a key term, and at least three relevant facts or concrete details.

ANSWER KEY

Cooling City Blocks

GRADE 7 · W.7.2b

PART 1 · READ AND MARK

Underline one definition, circle three facts or concrete details, and number two details that explain an effect described in the passage. These details show how an informational writer develops a topic. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	What definition does the writer give for canopy, and how does this definition help explain the topic?	**A canopy is "a layer of plant cover above the ground." It helps explain how leaves and branches can block sunlight.**
2	Identify two details that explain how trees can cool an area. Write both details.	**A canopy blocks sunlight from pavement and buildings. Transpiration uses heat energy as water changes from liquid to vapor, which can cool nearby air.**
3	How does the comparison between a young tree and an older tree develop the writer's point about planning where trees are planted?	**It shows that a young tree with a small crown covers much less ground than an older tree with wide branches, so planners must consider where a tree will grow.**
4	Which detail explains why newly planted trees often need regular watering?	**Their roots have not yet spread widely through the soil.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

School composting can turn cafeteria scraps into a useful material instead of sending them to a landfill. Compost is decayed organic material that can improve soil. Students can place fruit peels, vegetable scraps, and coffee grounds in labeled collection bins. Workers should not add plastic wrappers or metal utensils because those materials do not break down into compost. After the material decomposes, the school can use it in garden beds to help soil hold water and provide nutrients for plants.

Accept accurate paraphrases of passage details for Questions 1 through 4. For the open response, accept varied school-related topics if the student writes five sentences with a clear explanation, an accurate definition, and at least three relevant facts or concrete details.