Cool City Clues

Identify techniques that clarify an explanation.

6.T.T.2 "Expository Techniques: Analyze and apply expository techniques."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Circle the definition of the urban heat island effect, underline the comparison that explains evaporation, and star the sentence that gives evidence from temperature maps. These techniques make the information easier to understand.

How Trees Cool City Streets

1 On hot summer days, city blocks can feel much warmer than nearby parks. This difference is called the urban heat island effect, a rise in temperature caused by pavement, roofs, and other surfaces that absorb sunlight. Trees can help lower that heat. Their leaves shade sidewalks and buildings, so less sunlight reaches surfaces that store warmth. A single tree cannot cool an entire city, but groups of trees can make streets more comfortable for people walking, waiting for buses, or playing outside.

2 Shade is not the only way trees change city temperatures. Through transpiration, trees release water vapor from their leaves. As the water evaporates, it takes heat from the surrounding air, much like sweat helps cool a runner. Researchers often compare a tree-lined street with a street that has little shade. The tree-lined street may have cooler pavement and air because leaves block sunlight and evaporation removes heat. This comparison helps readers see why planting trees can be useful in crowded neighborhoods.

3 Tree programs also use facts to show where help is needed most. In many cities, temperature maps show that neighborhoods with fewer trees are often hotter than neighborhoods with more tree cover. These maps do not prove that trees are the only cause, since building materials, traffic, and access to green space also matter. Still, the maps give planners evidence for choosing places to plant. By using a definition, an example, a comparison, and facts, an explanation can make a complex topic clearer.

2 ANSWER WITH EVIDENCE

Use the passage

1. What expository technique does the author use to explain the urban heat island effect? Include the words from the passage that show this technique.

2. How does the comparison to a runner's sweat help explain transpiration?

3. What cause-and-effect relationship explains why a tree-lined street may have cooler pavement?

4. Why does the author say temperature maps do not prove that trees are the only cause of hotter neighborhoods, and how are the maps still useful?

3 YOUR TURN

Your own words

Write a four-sentence explanation about a way to reduce waste at school. Include a definition of one key word, a comparison, a cause-and-effect statement, and one accurate fact or example.

ANSWER KEY

Cool City Clues

GRADE 6 · 6.T.T.2

PART 1 · READ AND MARK

Circle the definition of the urban heat island effect, underline the comparison that explains evaporation, and star the sentence that gives evidence from temperature maps. These techniques make the information easier to understand. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	What expository technique does the author use to explain the urban heat island effect? Include the words from the passage that show this technique.	**The author uses a definition: "a rise in temperature caused by pavement, roofs, and other surfaces that absorb sunlight."**
2	How does the comparison to a runner's sweat help explain transpiration?	**It shows that evaporation removes heat and cools the surrounding air, just as sweat helps cool a runner.**
3	What cause-and-effect relationship explains why a tree-lined street may have cooler pavement?	**Leaves block sunlight, so less heat reaches and warms the pavement.**
4	Why does the author say temperature maps do not prove that trees are the only cause of hotter neighborhoods, and how are the maps still useful?	**Other factors, such as building materials, traffic, and green space, also affect temperature. The maps give planners evidence for choosing places to plant trees.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

Composting is a process that turns food scraps and yard waste into material that can enrich soil. A compost bin works like a recycling station for banana peels, apple cores, and dry leaves. When students place these scraps in a bin instead of a trash can, less food waste goes to a landfill. Fruit and vegetable scraps are examples of materials that can be composted.

Accept equivalent descriptions of definition, comparison, cause and effect, and evidence when they are supported by the passage. For the writing task, accept varied school-waste topics if the response has four sentences and includes all four required techniques accurately.