Heat Words at Work

Use nearby clues to build precise vocabulary knowledge.

CCSS.ELA-Literacy.L.6.6 "Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline each word or phrase whose meaning is explained nearby. Circle the words that give the explanation, such as a synonym, definition, or example.

Why Cities Hold Heat

1 On a hot summer afternoon, temperatures can differ across the same city. A neighborhood with dark roofs, wide roads, and few trees often feels warmer than a nearby park. This pattern is called an urban heat island. Asphalt and concrete absorb, or take in, energy from sunlight. Later, they release some of that stored heat into the air. Trees help because their leaves provide shade, and water evaporating from leaves can cool the surrounding area. Scientists measure these temperature differences to understand where heat is most intense.

2 City planners use data from thermometers, maps, and satellite images to locate the hottest blocks. They may compare surface temperature, the warmth of roads or roofs, with air temperature, the warmth people feel around them. This evidence helps planners identify residents who are vulnerable, meaning more likely to be harmed by extreme heat. Older adults, young children, and people without reliable cooling may face greater risk. A city's infrastructure, including its streets, buildings, water systems, and power lines, can also affect how safely people handle a heat wave.

3 To mitigate, or lessen, urban heat, some communities plant street trees and build light-colored roofs that reflect more sunlight. Others create cooling centers in libraries or community buildings during dangerous heat. These actions are not equally easy in every place. Planners must consider cost, available land, and community needs. When people use the word equitable, they mean fair for people with different resources and circumstances. An equitable heat plan might focus first on areas with little shade, high temperatures, and many residents who lack air conditioning.

2 ANSWER WITH EVIDENCE

Use the passage

1. What does absorb mean in the first paragraph? Which nearby words help you determine its meaning?

2. What does vulnerable mean as it describes residents during extreme heat?

3. What does infrastructure mean in the second paragraph? Name two examples from the passage.

4. What does equitable mean in the passage, and what details show how an equitable heat plan would work?

3 YOUR TURN

Your own words

Write three sentences proposing one change that could make your school cooler during hot weather. Use at least two vocabulary words or phrases from the passage accurately, and give a nearby clue that explains each word or phrase you use.

ANSWER KEY

Heat Words at Work

GRADE 6 · L.6.6

PART 1 · READ AND MARK

Underline each word or phrase whose meaning is explained nearby. Circle the words that give the explanation, such as a synonym, definition, or example. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	What does absorb mean in the first paragraph? Which nearby words help you determine its meaning?	**Absorb means "take in." The nearby clue is "or take in."**
2	What does vulnerable mean as it describes residents during extreme heat?	**Vulnerable means more likely to be harmed by extreme heat.**
3	What does infrastructure mean in the second paragraph? Name two examples from the passage.	**Infrastructure means a city's systems and structures. Examples include streets, buildings, water systems, and power lines.**
4	What does equitable mean in the passage, and what details show how an equitable heat plan would work?	**Equitable means fair for people with different resources and circumstances. The plan would focus first on places with little shade, high temperatures, and many residents without air conditioning.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

Our school could mitigate, or lessen, heat by planting trees near the playground. Workers could check the surface temperature, the warmth of pavement, before choosing places for shade. An equitable, or fair, plan would give shade to areas used by students who spend the most time outside.

Accept equivalent definitions when students support them with nearby words from the passage. For Part 3, accept reasonable school-based proposals that use at least two passage terms accurately and provide clear meaning clues.