

City Green Words

Use science vocabulary to explain how trees help cities.

5.7.F “respond using newly acquired vocabulary as appropriate; and”

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline the words canopy, transpiration, runoff, permeable, and habitat. Circle nearby words that help you figure out what each vocabulary word means.

Trees at Work in the City

- ① On hot days, a city block with many trees can feel cooler than a block with only pavement. The branches and leaves form a canopy, a leafy cover that shades sidewalks and buildings. Trees also release water vapor through transpiration. As this water changes into vapor, it can help cool the air around the leaves.
- ② During a storm, rainwater can rush from roofs and streets into drains. This moving water is called runoff. Too much runoff may carry litter, oil, and soil into nearby streams. Parks can reduce this problem with permeable paths, which let water soak through small spaces instead of sliding across a hard surface. The soil then absorbs some water like a sponge.
- ③ City planners often choose native trees because these species grew in the region before people planted gardens and roads. Native trees can provide habitat, or a place to live, for local birds and insects. A healthy tree canopy, permeable ground, and native plants can work together. They cool a neighborhood, slow runoff, and support living things in a busy city.

2 ANSWER WITH EVIDENCE _____ Use the passage

1 What does runoff mean in the passage? Answer in one sentence using the word runoff.

2 Explain how a permeable path can reduce runoff. Use both vocabulary words in your answer.

3 Why might city planners choose native trees? Use the words native and habitat in your answer.

4 How does transpiration help cool the air? Use the words transpiration and vapor in your answer.

3 YOUR TURN _____ Your own words

A community wants to improve a bare schoolyard. Write 2 or 3 sentences recommending a plan that uses at least four vocabulary words from the passage accurately.

PART 1 • READ AND MARK

Underline the words canopy, transpiration, runoff, permeable, and habitat. Circle nearby words that help you figure out what each vocabulary word means. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	What does runoff mean in the passage? Answer in one sentence using the word runoff.	Runoff is rainwater that moves from roofs and streets into drains or streams.
2	Explain how a permeable path can reduce runoff. Use both vocabulary words in your answer.	A permeable path reduces runoff by letting rainwater soak through small spaces into the soil.
3	Why might city planners choose native trees? Use the words native and habitat in your answer.	City planners may choose native trees because native trees provide habitat for local birds and insects.
4	How does transpiration help cool the air? Use the words transpiration and vapor in your answer.	During transpiration, trees release water vapor, which can help cool the air around their leaves.

PART 3 • YOUR TURN (SAMPLE ANSWER)

Our schoolyard should include native trees to create a canopy and habitat for local birds. We should add a permeable path so rainwater can soak into the soil, reducing runoff.

Accept responses that use the required vocabulary accurately and explain ideas supported by the passage. For Part 3, accept reasonable plans that use at least four passage vocabulary words correctly.