

Cooler City Plan

Study how an explanatory text develops one idea with clear details.

CCSS.ELA-Literacy.CCRA.W.2 "Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content."

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline the sentence that gives the main point of each paragraph. Circle the details that explain or support that point, so you can see how the writer builds an explanation.

How Trees Cool Cities

- ① Cities often feel hotter than nearby rural areas because pavement and dark roofs absorb sunlight and release heat slowly. This effect is called the urban heat island. Trees help reduce it in two ways. Their leaves shade sidewalks, buildings, and parked cars, so less sunlight reaches hard surfaces. On a sunny day, shaded pavement can be much cooler than pavement in direct sun. Shade also lowers the amount of energy a building needs for air conditioning.
- ② Trees also cool air through transpiration. After roots take in water, a tree releases water vapor from tiny openings in its leaves. Changing liquid water to vapor uses heat energy, which can cool the air near the tree. This benefit is strongest when trees are healthy and have enough water. A large, leafy canopy usually provides more shade and transpiration than a small young tree. For this reason, protecting mature trees can be as important as planting new ones.
- ③ Planting trees is not a complete solution to city heat. Young trees need years to grow, and some streets have little open soil for roots. City planners can choose locations where shade will help people most, such as bus stops, playgrounds, and blocks with few trees. They must also select species that fit the local climate and leave room for roots. When planting is paired with care, water, and protection, urban trees can make neighborhoods cooler and more comfortable.

2 ANSWER WITH EVIDENCE Use the passage

1 What is the central idea of the passage? Include both how trees help and what they need to work well.

2 How does paragraph 2 develop the idea introduced in paragraph 1?

3 What does paragraph 3 add to the explanation? Use two details from that paragraph.

4 Why does the writer include the sentence, "Planting trees is not a complete solution to city heat," at the start of paragraph 3?

3 YOUR TURN Your own words

Write a 6 to 8 sentence informative paragraph explaining how one change at your school could solve part of a problem. Begin with a clear main point, include at least two accurate details or examples, explain how each detail supports your point, and end with a concluding sentence.

PART 1 • READ AND MARK

Underline the sentence that gives the main point of each paragraph. Circle the details that explain or support that point, so you can see how the writer builds an explanation. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	What is the central idea of the passage? Include both how trees help and what they need to work well.	Urban trees can reduce city heat through shade and transpiration, but they need thoughtful planting, care, water, and protection.
2	How does paragraph 2 develop the idea introduced in paragraph 1?	Paragraph 1 explains cooling by shade, while paragraph 2 explains a second cooling process, transpiration, and why healthy, mature trees matter.
3	What does paragraph 3 add to the explanation? Use two details from that paragraph.	It explains limits and planning needs. Young trees take years to grow, some streets lack soil for roots, and planners must choose useful locations and suitable species.
4	Why does the writer include the sentence, "Planting trees is not a complete solution to city heat," at the start of paragraph 3?	It makes the explanation accurate by showing that trees help but do not solve every heat problem, and it introduces the paragraph about limits and planning.

PART 3 • YOUR TURN (SAMPLE ANSWER)

Adding water refill stations could help our school reduce the use of single-use plastic bottles. Students could fill reusable bottles during the day instead of buying or bringing bottled water. This change could mean fewer empty bottles in classroom trash cans and recycling bins. Refill stations can also provide a convenient water source after recess, physical education, or sports practice. The school would need to keep the stations clean and make sure they are easy to reach. With reusable bottles and working refill stations, the school could create less plastic waste.

Accept answers that identify the passage's main idea and explain how details are organized to develop it. For the open response, accept different school problems when the paragraph has a focused claim, relevant accurate details, explanations, and a conclusion.