Beyond the Planting Count

Turn a public claim into a researchable question.

12.6.R.1 "Students will find and comprehend information about a topic, using their own viable research questions."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline the question about lasting shade, circle each record that could help answer it, and number the two limits on interpreting shade measurements. Use your marks to decide what the records can and cannot show.

Did the Trees Deliver Shade?

1 In the fictional city of Bellport, volunteers planted 240 street trees along four bus routes in spring 2018. A 2025 newsletter calls the program a success because crews planted every tree they promised. That count documents an action, not its lasting result. A rider waiting at an exposed stop might ask a narrower question: How much sidewalk shade did the new trees provide at those stops seven summers later? A useful answer requires knowing which stops received trees and comparing shade at the same places over time. Planting totals alone cannot establish whether a canopy still reaches the sidewalk.

2 Bellport's public works office kept a planting list that identifies each tree's location and species. Annual inspection logs report whether each tree was alive, when a dead tree was replaced, and whether crews watered or pruned it. Those records can help explain why a tree may or may not have grown, but a living tree does not necessarily shade the sidewalk. A summer 2018 sidewalk survey and a summer 2025 survey record the area shaded at each stop at 3 p.m. on clear July days. Because both surveys use the same time and season, their measurements can support a comparison.

3 The surveys measure shade at stops, but they do not identify every cause of a change. A new shelter might cast a shadow, while a building renovation might remove one. Field notes that separate tree shade from other shadows would strengthen a claim about the program. Researchers should also check whether the surveys cover all planted stops or only a convenient sample; missing stops could distort a citywide conclusion. If the question instead concerns why shade differs among stops, inspection logs become especially important. Their maintenance entries can be compared with later shade measurements, although a pattern alone would not prove that watering caused growth.

2 ANSWER WITH EVIDENCE

Use the passage

1. The newsletter calls the program a success. Write a research question that tests whether the trees produced lasting sidewalk shade. Which three records in the passage would you consult?

2. Revise “Did the trees help?” into a question about tree survival that the passage's records could answer. Specify the trees, the time span, and what you would measure.

3. Suppose one stop has more measured shade in 2025 than in 2018. What additional information mentioned in the passage would help you investigate whether the planted trees account for the change?

4. A researcher asks whether watering caused greater shade at some stops. Which records could reveal a pattern, and why would that pattern alone not answer the question?

3 YOUR TURN

Your own words

Develop your own answerable research question about Bellport's tree program that does not repeat a question above. In 4 to 5 sentences, identify at least two records you would use, describe a comparison, and state one limit on your conclusion.

ANSWER KEY

Beyond the Planting Count

GRADE 12 · 12.6.R.1

PART 1 · READ AND MARK

Underline the question about lasting shade, circle each record that could help answer it, and number the two limits on interpreting shade measurements. Use your marks to decide what the records can and cannot show. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	The newsletter calls the program a success. Write a research question that tests whether the trees produced lasting sidewalk shade. Which three records in the passage would you consult?	**How did sidewalk shade at stops with trees planted in 2018 change by summer 2025? Consult the planting list, annual inspection logs, and the 2018 and 2025 sidewalk surveys.**
2	Revise "Did the trees help?" into a question about tree survival that the passage's records could answer. Specify the trees, the time span, and what you would measure.	**What proportion of the trees planted along Bellport's four bus routes in 2018 were still alive in 2025? The planting list and annual inspection logs could answer this.**
3	Suppose one stop has more measured shade in 2025 than in 2018. What additional information mentioned in the passage would help you investigate whether the planted trees account for the change?	**Check the planting list for trees at that stop and the inspection logs for their survival and replacement. Field notes separating tree shade from shelter or building shadows would help identify the source of the added shade.**
4	A researcher asks whether watering caused greater shade at some stops. Which records could reveal a pattern, and why would that pattern alone not answer the question?	**Compare watering entries in the inspection logs with later sidewalk shade surveys. A pattern would not prove causation because other factors, such as pruning or shelter shadows, could affect measured shade.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

Among trees planted in 2018 that remained alive through 2025, did tree species relate to the amount of shade measured at their stops in 2025? I would use the planting list to identify species and the inspection logs to identify surviving original trees. I would match their locations to the 2025 sidewalk survey and compare shade measurements by species. Any difference would not prove that species caused it because shelters and pruning could also affect the measured shade.

Accept other focused questions when the named records could supply the needed information. Distinguish evidence of planting or survival from evidence of lasting sidewalk shade.