

Evidence in Concert

Trace how credible sources work together to answer a local question.

11.T.C.2.d "Synthesize information from a variety of credible sources used to research the answers to questions on academic and individual topics of interest. (C)"

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline each of the three sources, circle the evidence it contributes, and write 1, 2, or 3 beside the source to show how the council combines broad science with local data.

Shade at the Bus Stop

- ① Students on the Riverton Youth Council asked whether their city should add shade trees near bus stops. To answer, they used three credible sources: an Environmental Protection Agency webpage about urban heat islands, a peer-reviewed study in *Environmental Research*, and Riverton Parks Department's 2023 tree inventory. The EPA explained that pavement and roofs absorb heat, while trees cool areas through shade and evaporation. The study measured hotter land-surface temperatures where tree cover was lower. The inventory listed each city-owned street tree, its condition, and its location. Each source answered a different part of the council's question.
- ② Next, members placed the inventory's tree locations on a map with major bus routes. They found that several eastside stops had little nearby canopy, although the inventory did not measure temperature at individual stops. The EPA source and research study gave the inventory meaning: both indicated that less tree cover is linked to hotter conditions. However, neither source proved that planting one tree would make every stop safe during extreme heat. By combining the broad scientific evidence with Riverton's local record, the council identified locations where shade was most likely needed and noted what the evidence could not yet show.
- ③ Based on this synthesis, the council proposed a one-year pilot: plant several large-canopy trees and install temporary shade structures at the least-covered eastside stops. The tree inventory could help staff select sites with few existing trees, while the EPA and research study supported the priority for shade. Temporary structures could offer more immediate relief because new trees need time to grow. The council also recommended measuring temperatures at pilot and comparison stops during summer. Those measurements would test whether the local project reduced heat exposure.

2 ANSWER WITH EVIDENCE _____ Use the passage

1 How did the three sources contribute different kinds of evidence to the council's question?

2 What conclusion did the council draw after mapping the tree inventory with bus routes, and which two sources helped explain that conclusion?

3 Why did the council avoid claiming that one new tree would make every bus stop safe during extreme heat?

4 How does the council's pilot proposal respond to both the evidence and a limitation in the evidence?

3 YOUR TURN _____ Your own words

Choose an academic or individual question that interests you. In 80 to 100 words, name three credible sources, explain what evidence each source contributes, and state a conclusion that combines the sources while noting one question that still needs study.

PART 1 • READ AND MARK

Underline each of the three sources, circle the evidence it contributes, and write 1, 2, or 3 beside the source to show how the council combines broad science with local data. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	How did the three sources contribute different kinds of evidence to the council's question?	The EPA explained how urban surfaces and trees affect heat, the peer-reviewed study connected lower tree cover to hotter temperatures, and the tree inventory showed where local trees were located and their condition.
2	What conclusion did the council draw after mapping the tree inventory with bus routes, and which two sources helped explain that conclusion?	The council identified eastside stops as likely needing more shade because they had little nearby canopy. The EPA source and the Environmental Research study explained why lower tree cover is connected to hotter conditions.
3	Why did the council avoid claiming that one new tree would make every bus stop safe during extreme heat?	The EPA source and research study supported a link between tree cover and heat, but neither proved that planting one tree would make every individual stop safe.
4	How does the council's pilot proposal respond to both the evidence and a limitation in the evidence?	It targets low-canopy stops because the sources support adding shade there, and it calls for temperature measurements because the inventory did not measure heat at individual stops.

PART 3 • YOUR TURN (SAMPLE ANSWER)

My question is whether later high school start times improve teen sleep. The American Academy of Pediatrics recommends start times of 8:30 a.m. or later because adolescent sleep patterns shift later. A CDC school-start-times page explains that insufficient sleep is common among high school students and is linked to health and safety concerns. In a peer-reviewed Seattle study, Dunster and colleagues found that a 55-minute delay increased students' sleep by 34 minutes. Together, these sources support a later start time, although local transportation schedules also need study.

Accept responses that accurately distinguish what each credible source contributes and use evidence from more than one source to support a conclusion. For Part 3, accept varied topics and source choices if the response names three credible sources, synthesizes their evidence, stays within the word range, and includes a reasonable limitation or remaining question.