Cooling the Schoolyard

Trace useful facts and record where they came from.

7.T.RA.2.a "Locate evidence in print and digital sources to support a central idea or question, recording standard bibliographic information, such as author, title, website name, page number, and year of publication. (I)"

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline the research question, circle two facts that help answer it, and number each source detail in the passage. These marks show which evidence is useful and how to find each source again.

Cooling the Schoolyard

1 During a hot September lunch, students at Harbor Middle noticed that the blacktop felt much hotter than the grass. They formed a research question: How could shade trees make the schoolyard safer and cooler during hot weather? Before recommending new trees, the students decided to collect evidence from reliable sources. They looked for facts that directly answered their question, not just facts about trees. They also recorded each source's author, title, website or publisher, year, and page number when one was available.

2 One source was the U.S. Environmental Protection Agency report Reducing Urban Heat Islands: Compendium of Strategies, Trees and Vegetation. On page 1, the report explains that trees cool nearby areas by providing shade and through evapotranspiration, when water moves from leaves into the air. This evidence fits the students' question because cooler surfaces and air can reduce heat on the schoolyard. Their source log listed U.S. Environmental Protection Agency as author, the EPA website as website name, and 2008 as the publication year.

3 A second source helped the group think about where to plant. In the U.S. Department of Energy webpage "Landscaping for Shade," readers learn that trees can shade roofs, walls, and windows, reducing heat entering buildings. That fact supports planting trees near the school building, but it does not prove that every spot on the blacktop will cool. The students recorded U.S. Department of Energy, "Landscaping for Shade," Energy Saver website, 2024, and no page number because the webpage had no numbered pages. They would need more evidence to choose exact locations.

2 ANSWER WITH EVIDENCE

Use the passage

1. What research question are the students trying to answer?

2. Write one piece of evidence from the EPA report that supports planting shade trees. Include the page number.

3. Record the bibliographic information given for the EPA report: author, title, website name, year, and page number.

4. Which source would help support a claim that trees near a school building could reduce heat entering it? Record that source's title, website name, and year.

3 YOUR TURN

Your own words

Write a new question about a school outdoor space. Then choose one source from the passage, record its author, title, website name, year, and page number or "no page number," and give one piece of evidence that helps answer your question.

ANSWER KEY

Cooling the Schoolyard

GRADE 7 · 7.T.RA.2.a

PART 1 · READ AND MARK

Underline the research question, circle two facts that help answer it, and number each source detail in the passage. These marks show which evidence is useful and how to find each source again. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	What research question are the students trying to answer?	**How could shade trees make the schoolyard safer and cooler during hot weather?**
2	Write one piece of evidence from the EPA report that supports planting shade trees. Include the page number.	**Trees cool nearby areas by providing shade and through evapotranspiration, p. 1.**
3	Record the bibliographic information given for the EPA report: author, title, website name, year, and page number.	**Author: U.S. Environmental Protection Agency. Title: Reducing Urban Heat Islands: Compendium of Strategies, Trees and Vegetation. Website: EPA website. Year: 2008. Page: 1.**
4	Which source would help support a claim that trees near a school building could reduce heat entering it? Record that source's title, website name, and year.	**"Landscaping for Shade," Energy Saver website, 2024.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

My question is, Could trees near the library entrance make waiting outside cooler? Source: U.S. Environmental Protection Agency, Reducing Urban Heat Islands: Compendium of Strategies, Trees and Vegetation, EPA website, 2008, p. 1. Evidence: The report says trees cool nearby areas by providing shade and through evapotranspiration.

Accept accurate quotations or paraphrases of the passage's evidence. For the open task, accept a reasonable new school-space question if the listed source information matches a passage source and the evidence connects to the question.