

Evidence Under Shade

Compare what each source can establish.

12.T.RA.2 "Curating Sources & Evidence: Reference parts of texts to address a specific topic or question and explore various sources of information to make connections across a broad range of topics."

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Number each distinct source type or data set in the passage. Underline the words that explain what a source can show or cannot show.

Cooling a Hot City

- ① To decide where a city should add shade, planners cannot rely on a single summer afternoon. Satellite images from NASA's Landsat program can show land-surface temperatures, revealing how pavement and sparse vegetation can create hotter blocks. These images do not directly measure the air a person breathes, so planners compare them with neighborhood weather sensors. Researchers use satellite and ground measurements to map heat across U.S. cities. The maps can identify patterns, but their dates, resolution, and type of temperature limit what they can prove about daily exposure.
- ② Health records answer a different part of the question. The Centers for Disease Control and Prevention reports that heat can worsen existing illnesses and can cause heat-related illness or death. Emergency-department visits and death certificates can show when harm rises, yet they may miss people who never seek care or may record more than one cause of death. Census data adds information about age, income, housing, and access to air conditioning, but it does not show an individual's health. When planners place health data beside heat maps, they can locate areas where high temperatures and higher vulnerability overlap.
- ③ Residents' testimony can test whether a map matches lived experience. At a public meeting, bus riders might describe waiting beside unshaded asphalt, while park staff might note that a nearby lawn closes during drought restrictions. A city tree inventory can document where public trees stand and what species they are, but it may exclude trees on private land. Budget documents then reveal maintenance costs, watering limits, and planned projects. Together, these sources support a more careful recommendation: prioritize shade where heat and vulnerability coincide, then check local conditions and long-term care before choosing trees, shelters, or other cooling measures.

2 ANSWER WITH EVIDENCE _____ Use the passage

1 Why should planners compare Landsat images with neighborhood weather sensors before making a claim about daily heat exposure?

2 How do health records and Census data complement each other when planners identify vulnerable areas? Include one limitation of either source.

3 What connection can planners make between residents' testimony and a heat map?

4 A planner wants to know whether street trees are practical on a hot, vulnerable block. Which two sources in paragraph 3 should the planner consult, and what would each source contribute?

3 YOUR TURN _____ Your own words

Choose a public question unrelated to city heat. Curate three different source types by naming a specific part of each source, stating what it can contribute and a limitation, then write a recommendation that connects the sources.

PART 1 • READ AND MARK

Number each distinct source type or data set in the passage. Underline the words that explain what a source can show or cannot show. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	Why should planners compare Landsat images with neighborhood weather sensors before making a claim about daily heat exposure?	Landsat images show land-surface temperatures but do not directly measure the air people breathe. Weather sensors provide ground-level air-temperature information.
2	How do health records and Census data complement each other when planners identify vulnerable areas? Include one limitation of either source.	Health records show patterns of heat-related harm, while Census data shows neighborhood factors such as age, income, housing, and air-conditioning access. Health records can miss people who do not seek care, and Census data cannot show an individual's health.
3	What connection can planners make between residents' testimony and a heat map?	Testimony can test whether the map reflects lived conditions, such as waiting on unshaded asphalt or losing access to a park lawn during drought restrictions.
4	A planner wants to know whether street trees are practical on a hot, vulnerable block. Which two sources in paragraph 3 should the planner consult, and what would each source contribute?	The city tree inventory can show public-tree locations and species. Budget documents can show maintenance costs, watering limits, and planned projects.

PART 3 • YOUR TURN (SAMPLE ANSWER)

Question: Where should a county add public electric-vehicle chargers? The U.S. Department of Energy Alternative Fuels Data Center's Station Locator shows existing public charging locations, but it does not show whether a station is reliable. The Census Bureau's American Community Survey table S0801 reports commuting patterns, although its estimates describe a past period rather than current traffic. The county capital-improvement plan's transportation-project list identifies sites that may be funded, but it reflects budget priorities. I would compare gaps in reliable chargers with commuting corridors and fund sites that the plan can build, then verify reliability with operator data.

Accept equivalent references to the passage's source types and accurate explanations of how sources complement or limit one another. For the open task, accept varied public questions if the response uses three distinct sources, identifies a specific part of each, notes meaningful limits, and makes a connected recommendation.