

Source Trail

Trace how researchers locate and use sources for different evidence needs.

12.T.RA.2.a “Navigate and use a variety of credible print and digital sources, including academic databases, to locate relevant information about a central argument, topic, or question. (I)”

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline each source Mara uses, circle the tool or route she uses to locate it, and write a margin note stating what that source can best support.

Researching Heat and Trees

- ① For a research project on whether tree canopy can reduce dangerous summer heat in Phoenix, Mara begins by turning her question into search terms: “Phoenix tree canopy heat,” “urban heat island Arizona,” and “shade surface temperature.” A general web search helps her notice the names of local agencies and researchers, but it is not her final evidence. She opens the City of Phoenix Office of Heat Response and Mitigation page to find current municipal plans and neighborhood heat priorities. The page identifies its department, publication dates, and linked reports, so Mara records its URL, title, and date in a source log.
- ② Next, Mara searches an academic database through her school library. In Academic Search Complete, she combines “urban forest” AND “heat exposure” and limits results to peer-reviewed journals. One article, published in 2021 in Environmental Research, compares temperatures and tree cover across several U.S. cities. Mara reads the abstract before opening the full text. Because the study addresses heat and vegetation but does not focus only on Phoenix, she labels it background evidence rather than local evidence. She also checks the authors’ university affiliations, methods section, and reference list before deciding how much weight to give its findings.
- ③ To locate a print source, Mara uses her library catalog and searches “Phoenix climate adaptation.” She finds a 2023 book from a university press that summarizes regional heat policy and cites state temperature data. The catalog record gives the call number, allowing her to find the book in the library and inspect its bibliography. Mara does not treat every source as interchangeable. The city page is most useful for official local actions, the journal article supplies research context, and the university press book connects regional policy to documented data. Her source log notes what each source can support, not merely where she found it.

2 ANSWER WITH EVIDENCE _____ Use the passage

1 What useful role does Mara’s general web search play, and why does she not use it as her final evidence?

2 What exact search terms and result limit does Mara use in the academic database?

3 Why does Mara label the 2021 journal article as background evidence rather than local evidence?

4 Name the three parts of the journal article that Mara checks before deciding how much weight to give its findings.

3 YOUR TURN _____ Your own words

Choose a research question about a local or national issue. Write three planned source-log entries: one credible public digital source, one peer-reviewed article found through an academic database, and one print source found through a library catalog. For each entry, name the search route and state the specific evidence the source could provide.

PART 1 • READ AND MARK

Underline each source Mara uses, circle the tool or route she uses to locate it, and write a margin note stating what that source can best support. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	What useful role does Mara's general web search play, and why does she not use it as her final evidence?	It helps her identify local agencies and researchers. She does not use it as final evidence because she needs to evaluate and use the original credible sources she finds.
2	What exact search terms and result limit does Mara use in the academic database?	She searches "urban forest" AND "heat exposure" and limits results to peer-reviewed journals.
3	Why does Mara label the 2021 journal article as background evidence rather than local evidence?	The study addresses heat and vegetation across several U.S. cities, but it does not focus only on Phoenix.
4	Name the three parts of the journal article that Mara checks before deciding how much weight to give its findings.	She checks the authors' university affiliations, the methods section, and the reference list.

PART 3 • YOUR TURN (SAMPLE ANSWER)

Research question: How do later high school start times affect teen sleep? 1. Digital source: Search site:cdc.gov school start times to find the CDC page "Schools Start Too Early," which could provide public-health recommendations and national context. 2. Academic database: Search PubMed for "later school start times" AND adolescent sleep to locate Dunster et al.'s peer-reviewed 2018 article, "Sleepmore in Seattle," which could provide measured changes in sleep and school performance. 3. Print source: Search the library catalog for "adolescent sleep" to locate Sleep: A Very Short Introduction by Steven W. Lockley and Russell G. Foster, which could provide scientific background on sleep rather than direct evidence about one school district.

Accept equivalent answers that accurately distinguish discovery tools from evidence sources and explain a source's relevance to the research question. For Part 3, students should identify three distinct source types, a plausible route for locating each one, and a specific evidence purpose for each source.