

Evidence Under the Roof

Evaluate sources and build a qualified research claim.

10.R.1 "Evaluation and Synthesis of Information Formulate and revise questions about a research topic, broadening or narrowing the inquiry as necessary. Gather and organize information from various sources, including internet resources..."

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline each detail that shows a source's evidence or purpose, and circle each limitation, bias, or verification step. These marks will help you compare sources before making a claim.

Should Riverton Require Cool Roofs?

- ① A student begins researching whether her city should require cool roofs on new buildings. Her first question, "Are cool roofs good?" is too broad to guide a search. She revises it to ask, "How do cool roofs affect summer indoor temperatures, energy use, and costs in Riverton apartments?" The revised question names a place, a building type, and measurable effects. It also suggests useful search terms, such as "cool roof energy use apartments" and "Riverton building code." A focused question can still broaden later if evidence shows that tenant health or maintenance costs are important.
- ② To investigate, she compares several source types. A city building-code page is a primary source for Riverton's current rules, though it may not prove how roofs perform. A peer-reviewed engineering study explains its methods, sample size, and limits, making its evidence easier to evaluate. A roofing company's blog may offer practical advice, but its goal of selling products can shape its point of view. An AI summary can help generate search terms, yet it may omit context or invent details. She checks every AI-provided claim against the original sources. She records each source's author, date, publication, main idea, supporting evidence, purpose, and limits in a research chart.
- ③ Her sources do not point in one direction. An engineering study reports that reflective roofs can lower roof-surface temperature and reduce cooling demand under tested conditions. The roofing blog claims that cool roofs "always pay for themselves quickly," but gives no local cost data. Rather than repeat that claim, the student concludes that cool roofs may reduce summer cooling needs, while installation prices, insulation, climate, and maintenance affect savings. She introduces the blog's claim as a counterclaim and explains its missing evidence. In her draft, she paraphrases findings, uses quotation marks for quoted language, and cites each borrowed idea in MLA style. Uncredited copying is plagiarism with serious consequences.

2 ANSWER WITH EVIDENCE _____ Use the passage

1 How did the student narrow her original research question? Name two details added in the revised question.

2 Which source is most useful for learning Riverton's current cool-roof rules? State one limitation of that source.

3 What possible bias affects the roofing company's blog, and how does the student use AI responsibly?

4 Why does the student treat the blog's claim as a counterclaim instead of accepting it as her conclusion?

3 YOUR TURN _____ Your own words

Choose a school or community issue. Write 80 to 100 words that include a revised research question, three planned source types with one limit for each, a tentative claim and counterclaim, and one ethical step for using AI or citations.

PART 1 • READ AND MARK

Underline each detail that shows a source's evidence or purpose, and circle each limitation, bias, or verification step. These marks will help you compare sources before making a claim. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	How did the student narrow her original research question? Name two details added in the revised question.	She added a specific place, Riverton, and a specific building type, apartments. She also named measurable effects: indoor temperatures, energy use, and costs.
2	Which source is most useful for learning Riverton's current cool-roof rules? State one limitation of that source.	The city building-code page is most useful because it is a primary source for current rules. It may not show how cool roofs perform.
3	What possible bias affects the roofing company's blog, and how does the student use AI responsibly?	The blog may be shaped by the company's goal of selling products. The student checks AI-provided claims against original sources.
4	Why does the student treat the blog's claim as a counterclaim instead of accepting it as her conclusion?	The blog says cool roofs always pay for themselves quickly but provides no local cost data. Her conclusion remains qualified because several local factors affect savings.

PART 3 • YOUR TURN (SAMPLE ANSWER)

Revised question: How would a later start time affect attendance and sleep for students at Central High during one school year? I would compare district attendance records, a student sleep survey, and a peer-reviewed sleep study. Records show attendance but not causes. Surveys show student experiences but may have incomplete or inaccurate responses. The study provides broader evidence but may not match Central High. My tentative claim is that a later start could improve attendance. A counterclaim is that bus schedules may raise costs. I would verify any AI search suggestions, paraphrase carefully, and cite every source in MLA format.

Accept equivalent source evaluations when students accurately identify usefulness and limitations. For Part 3, require all named elements, a plausible qualified claim, and an ethical use or citation action.