Roof Debate

Trace a claim, evidence, and reasoning in a policy article.

7.RI "The student will use textual evidence to demonstrate comprehension and build knowledge from grade-level complex informational texts read..."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline the author's claim and the evidence that supports it. Circle one detail that does not help prove the claim, then number 1, 2, and 3 beside the passage's three stages of reasoning.

Should Cities Require Cool Roofs?

1 On a cloudless summer day, dark roofs can become far hotter than the air above them. They absorb much of the Sun's energy and transfer heat into buildings and nearby air. For this reason, city governments should require cool, reflective roofs on new large buildings. A cool roof does not solve every heat problem, but it can reduce indoor heat gain. This policy would help cities lower energy use while preparing for hotter summers ahead.

2 Research supports the proposal. In hot weather, a reflective roof can stay substantially cooler than a conventional dark roof, so less heat moves into the building below. The U.S. Department of Energy reports that cool roofs can reduce a building's cooling energy needs, although savings depend on climate, insulation, and roof design. Less electricity demand can also ease stress on the power grid during heat waves. In one neighborhood, residents painted a mural on a community center wall last year.

3 Some owners worry that reflective materials cost more at installation or that a bright roof will look unusual. City rules could address these concerns by applying first to large new buildings, where roof replacement is already planned. They could also allow materials in several colors that still reflect more sunlight than dark surfaces. By considering costs and appearance after presenting the benefits, the article frames the requirement as a practical response to heat, not a sudden demand.

2 ANSWER WITH EVIDENCE

Use the passage

1. Write a main idea statement for the article.

2. How does the author develop the argument across the three paragraphs?

3. Which detail is irrelevant to the claim about cool roofs? Explain why it is irrelevant.

4. How does the phrase "a practical response to heat, not a sudden demand" support the author's purpose?

3 YOUR TURN

Your own words

Choose a school improvement proposal. In four sentences, state a claim, give two relevant facts or reasons in a logical order, then name one detail that is irrelevant and explain why.

Roof Debate

PART 1 · READ AND MARK

Underline the author's claim and the evidence that supports it. Circle one detail that does not help prove the claim, then number 1, 2, and 3 beside the passage's three stages of reasoning. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	Write a main idea statement for the article.	**Cities should require cool, reflective roofs on new large buildings because they can reduce heat gain and energy use.**
2	How does the author develop the argument across the three paragraphs?	**The author introduces the heat problem and claim, provides scientific evidence of benefits, then addresses practical objections and possible solutions.**
3	Which detail is irrelevant to the claim about cool roofs? Explain why it is irrelevant.	**The detail about residents painting a mural on a community center wall is irrelevant because it does not show that cool roofs reduce heat or energy use.**
4	How does the phrase "a practical response to heat, not a sudden demand" support the author's purpose?	**It presents the policy as reasonable and carefully planned, which helps persuade readers to support it.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

Our school should add shaded tables near the playground. Shade reduces students' direct exposure to sunlight during outdoor lunch. The tables could give students a cooler place to eat on hot days. The school mascot's colors are irrelevant because they do not show whether shade will protect students.

For the open task, accept varied proposals if the response includes a clear claim, two relevant supports, and an accurately explained irrelevant detail.