

Choices for Riverton

Trace environmental impacts, protections, and policy tradeoffs.

6.9 "The student will investigate and understand that humans impact the environment and individuals can influence public policy decisions related to energy and the environment..."

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline human actions or energy choices that can affect air, water, or land, circle protective actions, and number statements that show a cost or tradeoff.

Riverton Weighs Its Options

- ① Riverton gets electricity from a natural-gas power plant and a growing number of solar panels on school roofs. Natural gas is nonrenewable because it forms over a very long time. Solar energy is renewable because sunlight is replaced naturally. Both systems need careful management. Burning natural gas can release pollutants that worsen air quality and can harm breathing. Solar panels produce electricity without air pollution while operating, but they cost money to install and need space and materials to make.
- ② The town's stream supplies water for gardens and wildlife. After heavy rain, oil from parking lots and fertilizer from lawns can wash into storm drains and then the stream. This runoff can lower water quality and may make the water unsafe for some uses. To reduce the hazard, Riverton plans to plant native grasses beside the stream and add covered bins for leaking chemicals at the public works yard. These steps protect land and water, yet they require workers, supplies, and town funding.
- ③ At a public meeting, students may speak, write to council members, or share evidence during a comment period. Riverton's council is considering a policy that would use town money for more solar panels, stream protections, or both. Choosing both could improve air and water quality and conserve natural resources, but it could raise fees or leave less money for other services. Council members must compare benefits, costs, and safety needs. Individual residents can influence the final policy by giving respectful, evidence-based reasons.

2 ANSWER WITH EVIDENCE _____ Use the passage

1 How are natural gas and solar energy different as resources, and how can each choice affect air quality?

2 Name two sources of runoff named in the passage. Then name one planned action that could reduce this hazard.

3 What is one benefit and one possible cost of choosing both more solar panels and stream protections?

4 According to the passage, how can students or other residents influence Riverton's final policy decision?

3 YOUR TURN _____ Your own words

Write four sentences recommending one environmental policy for Riverton. Include two benefits, one cost or tradeoff, and one way a resident could influence the decision.

PART 1 • READ AND MARK

Underline human actions or energy choices that can affect air, water, or land, circle protective actions, and number statements that show a cost or tradeoff. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	How are natural gas and solar energy different as resources, and how can each choice affect air quality?	Natural gas is nonrenewable and burning it can release air pollutants. Solar energy is renewable, and solar panels produce electricity without air pollution while operating.
2	Name two sources of runoff named in the passage. Then name one planned action that could reduce this hazard.	Oil from parking lots and fertilizer from lawns are runoff sources. Planting native grasses beside the stream or adding covered bins for leaking chemicals could reduce the hazard.
3	What is one benefit and one possible cost of choosing both more solar panels and stream protections?	A benefit is improved air and water quality or conserving natural resources. A possible cost is higher fees or less money for other services.
4	According to the passage, how can students or other residents influence Riverton's final policy decision?	They can speak at a public meeting, write to council members, or share respectful, evidence-based reasons during a comment period.

PART 3 • YOUR TURN (SAMPLE ANSWER)

Riverton should fund a stream-protection policy with native grasses and covered chemical bins. Native grasses can slow polluted runoff, and bins can keep leaking chemicals out of storm drains. The policy would require town money for supplies and workers. A student could speak at a council meeting and explain these benefits.

Accept other accurate policies connected to energy, air quality, water quality, land protection, or resource conservation. A strong response states a clear recommendation, two realistic benefits, a realistic tradeoff, and a valid form of public participation.