

Evaluating an Argument

CCSS

RI.7.8: Trace and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient to support the claims.

Theme: *Energy and Our Future*

When you hear the word *argument*, do you picture people involved in some kind of shouting match? That may be what some arguments look like, but in writing, an **argument** is a text that explains why an author's position on an issue is valid.

When building an argument, a writer makes one or more **claims**, or statements he or she believes to be true. Then the writer backs up each claim with **evidence**, or information that supports the claim. Part of figuring out the strength of an argument is determining whether there is enough evidence to support the claim—and also whether the evidence does, in fact, act as support at all.

Read the following from an argument about solar-powered cars. First, circle the claim. Next, underline evidence. Finally, cross out any information that does not support the claim.

Dedicating research money to the development of affordable solar-powered cars would be a wise investment. First, solar cars would help end our dependence on fossil fuels like oil and coal, which contribute to the pollution of our atmosphere. In addition, solar power is a renewable resource; unlike fossil fuels, it will never run out. Solar cars would also help the consumer save money. Panels attached to cars can collect sunlight and turn it into electricity, so no one would ever need to buy another tank of gas. Finally, solar-powered cars would also come in all the same colors as gas-powered cars.

Read the chart below to see how the author constructed the argument.

Claim: Research money should be used to develop affordable solar-powered cars.



Evidence 1: Solar-powered cars would reduce pollution from fossil fuels.



Evidence 2: Solar power is a renewable resource that will never run out.



Evidence 3: Solar-powered cars generate electricity, so they don't need gas.

To trace the reasoning behind an argument, identify the author's claims and evidence. Then judge whether the author provides enough evidence and whether it is relevant, or actually supports each claim. If the ideas have a sound basis in logic, then the argument is valid.



The following excerpt is from a speech about meeting the energy needs of the United States.

Genre: Speech

from “A Generational Challenge to Repower America” by Al Gore

What if we could use fuels that are not expensive, don’t cause pollution, and are abundantly available right here at home?

We have such fuels. Scientists have confirmed that enough solar energy falls on the surface of the earth every 40 minutes to meet 100 percent of the entire world’s energy needs for a full year. Tapping just a small portion of this solar energy could provide all of the electricity America uses.

And enough wind power blows through the Midwest corridor every day to also meet 100 percent of U.S. electricity demand. Geothermal energy, similarly, is capable of providing enormous supplies of electricity for America.

(continued)

Explore how to answer this question: “This excerpt follows a section of the speech in which Gore makes claims about the dangers of relying on expensive foreign oil. What is Gore’s claim in this part of the speech?”

Here it’s important to identify or infer the speaker’s claim about other energy-generating options. In this case, the claim is made in the form of a question.

Underline facts in the text that relate directly to the claim. Then complete the graphic organizer.

Claim: We should use fuels that are cheaper, cleaner, and more easily accessible than foreign oil.



Evidence 1:



Evidence 2:

With a partner, discuss whether or not Al Gore has presented enough relevant evidence to support his claim.



Close Reading

In this section, Gore introduces a new claim, recommending a way to begin using renewable energy. What evidence does Gore provide to support this claim?

Underline details that support his claim.

Hint

In a valid argument, the evidence must be sufficient to prove the claims. Does Gore provide enough evidence?

Continue reading the excerpt from Al Gore’s speech. Use the Close Reading and the Hint to help you answer the question.

(continued from page 172)

The quickest, cheapest, and best way to start using all this renewable energy is in the production of electricity. In fact, we can start right now using solar power, wind power, and geothermal power to make electricity for our homes and businesses.

But to make this exciting potential a reality, and truly solve our nation’s problems, we need a new start.

That’s why I’m proposing today a strategic initiative designed to free us from the crises that are holding us down and to regain control of our own destiny. It’s not the only thing we need to do. But this strategic challenge is the lynchpin of a bold new strategy needed to re-power America.

Circle the correct answer.

How well does the author support his claim that the best way to begin using solar, wind, and geothermal power is to make electricity?

- A** He supports it well because the energy crisis is holding us back.
- B** He supports it well because he proposes a new energy strategy.
- C** He supports it poorly because he does not say why this way is best.
- D** He supports it poorly because these energy sources are not actually forms of renewable energy.



Show Your Thinking

Look at the answer that you chose above. Citing text evidence, explain why you chose this answer.



Consider both parts of the speech together. With a partner, evaluate the validity of the argument and claims made in favor of developing alternative energy sources.



Read the article. Use the Study Buddy and the Close Reading to guide your reading.



Genre: Economic Article

from “Clean Cars for California”

from Energy Independence Now

Sometimes an author's position and claims are not stated. As I read the article, I'm going to infer the author's claims from the supporting evidence that's given.

Close Reading

What is the author's claim about the Advanced Clean Cars Program?
Circle the sentences that reveal what the author believes to be true.

How does the data in the bullets help to support the author's claims?
Underline the supporting evidence.

- 1 On January 28, 2012, the California Air Resources Board unanimously voted to adopt the Advanced Clean Cars Program, which represents the most comprehensive effort in the world to set society on path to end our dependence on oil. It's a tremendous victory for California residents and consumers, with national and global benefits and implications. By 2025 in California:
- 2
 - One in seven new cars sold will be zero-emission (battery electric or hydrogen fuel cell electric) or plug-in hybrid vehicles, and approximately 1.4 million of these vehicles will be on the road;
- 3
 - Greenhouse gases will be reduced by 52 million tons, the equivalent of taking 10 million cars off the road;
- 4
 - Tailpipe emissions of soot- and smog-forming emissions will be cut by 75%;
- 5
 - California drivers will save \$5 billion in operating costs, with average consumers seeing nearly \$6,000 in fuel cost savings over the life of the advanced car (compared to added upfront costs of approximately \$2,000); and
- 6
 - 21,000 jobs will be added in California, rising to 37,000 in 2030.
- 7 The program rightly focuses industry efforts on both incremental and transformative change. On the incremental side, the Low Emission Vehicle (LEV) regulations set targets for automakers to improve the efficiency and emissions systems associated with internal combustion engines, which are likely to be at least part of our transportation portfolio well into the future.



Hints

Identify the answer choice that best summarizes the lines you circled on the previous page

Eliminate answer choices that do not specifically support the author's claim.

Is all of the evidence relevant, or actually related to the claim? Is there enough evidence to fully support the claim?

Use the Hints on this page to help you answer the questions.

- 1 Which statement best expresses the author's claim?
 - A It is important to reduce fuel costs for California drivers so that they can save money each year.
 - B By requiring cleaner, more efficient engine and emission systems, the Advanced Clean Cars Program benefits everyone.
 - C Requiring that one in seven cars be a zero-emission or plug-in vehicle is the only way to significantly reduce greenhouse gases.
 - D The greatest achievement of the Advanced Clean Cars Program is that it will create 21,000 jobs now and more in the future.
- 2 What evidence does the author provide to support this claim?
 - A The author explains that the cars will still play an important role in our future system of transportation.
 - B The author describes how the California Clean Air Resources Board adopted the Advanced Clean Cars Program.
 - C The author points out how dependence on oil harms both the nation and the world.
 - D The author provides details about how the Advanced Clean Cars Program will reduce car emissions and benefit consumers.
- 3 Decide how successful the author's argument about the Advanced Clean Cars Program is. Write a paragraph evaluating the soundness of the author's claims and the evidence used to support it. Cite at least two details from the passage to support your response.



Read the persuasive essay about wind power. Then answer the questions that follow.

The Case for Wind Power

by Scott Shears

1 As the world's population grows, so does the need for energy resources. The fossil fuels we have long relied on are both destructive and finite. Burning coal, oil, and natural gas releases carbon into the air, trapping more of the sun's heat in our atmosphere. And mining of these resources is becoming more costly. Already it is becoming harder to reach the remaining resources, and eventually even those will run out. When the world's energy needs rise while its access to fuel falls, there will be a crisis, one only made worse by the effects of climate change. The most practical solution is to replace the harmful, limited fuels with ones that are safe and limitless. That is why the U.S. government should fund the research and development of wind power, a clean and renewable resource. And these efforts should begin now.

2 The vast majority of the electricity we use comes from power plants that run on fossil fuels. Burning these fuels turns the massive turbines that generate electricity. It also releases greenhouse gases into the air. These gases are considered to be a major contributor to global warming. The steady rise in the average atmospheric temperature of the planet will eventually result in the melting of glacial ice, the rise of ocean levels, and the shifting of climates.

3 Wind power, in contrast, produces electricity without pollution. Wind turbines look and act like a common pinwheel—only on a much larger scale. They can be as tall as a 20-story building and have blades 200 feet long. The blades catch the wind, which turns a generator that produces electricity. This type of energy production burns no fuel, generates no emissions, and causes no harm to the environment. Additionally, wind power is a renewable resource that will never run out. Wind farms can stretch for hundreds of square miles and contain hundreds of individual turbines. A vast plain dotted with these elegant white machines is an impressive sight to behold. With additional government funding for research, turbine technology will become more efficient, producing more electricity with less wind power.

4 Critics of wind power maintain that the infrastructure it requires is not feasible. Wind blows strongest in open areas where tall buildings cannot block the currents. So wind farms must be built far away from the urban areas that need the power most. Hundreds of miles of costly new transmission lines would be required to connect the wind farms to existing electrical storage facilities. Critics say this expense, in addition to building the farms in the first place, is too great for the government to support.

5 But not every city needs to draw its wind power from so far away. In recent years, coastal cities such as Los Angeles, San Francisco, and New York City have considered constructing offshore wind farms. These cities require massive electrical resources, making wind power an attractive possibility. Winds blow harder offshore, which can translate into more power. Also, offshore winds blow strongly during the afternoon hours when energy consumption is at its peak. Constructing offshore wind farms and new transmission lines will be expensive, but this investment will surely pay off in the long run. Over time, drilling and mining for oil and coal will become more costly, but wind power is always free.



6 Another charge critics level is that wind power is unreliable. As they point out, the weather is unpredictable. Winds do not blow at consistent speeds, and sometimes they do not blow at all. In order to prevent power outages, backup power plants burning fossil fuels must be ready to kick in when the air is still. But backup power plants would only operate occasionally, contributing far less pollution than the ones in use today. And the development of storage batteries, to build up power reserves to be used when winds are low, would further reduce the use of fossil fuels. One such a battery will be part of a new wind power installation in Hawaii. Officials there plan to generate 70 percent of their state's power needs from renewable sources.

7 Wind power is the most practical solution to our nation's power needs. It draws on the endless blowing of the wind, so it will never run out. It creates no pollution, so it will not foul the air or contribute to global warming. And as it replaces fossil fuel power, it will reduce greenhouse gas emissions. Our government can make this change happen more quickly by investing in wind power. It is time for America to face the future and the undeniable part wind power will need to play.

1 Which statement **best** expresses the author's claim about wind power?

- A** Climate change can be reversed by switching from fossil fuels to wind power.
- B** Wind power is superior to fossil fuels because it is cheaper than drilling or mining.
- C** Wind power will be expensive to adopt and will not be a reliable energy source.
- D** The government should invest in wind power because it is clean and renewable.

Answer Form

1 (A) (B) (C) (D)

2 (A) (B) (C) (D)

3 (A) (B) (C) (D)

**Number
Correct****3**

2 Which sentence from the essay **best** supports the author's claim that wind power will reduce the release of greenhouse gases?

- A** "Wind farms can stretch for hundreds of square miles and contain hundreds of individual turbines."
- B** "This type of energy production burns no fuel, generates no emissions, and causes no harm to the environment."
- C** "Over time, drilling and mining for oil and coal will become more costly, but wind power is always free."
- D** "But backup power plants would only operate occasionally, contributing far less pollution than the ones in use today."



- 3** Which piece of evidence from the text is **not** relevant to the author's claim?
- A** "Wind power, in contrast, produces electricity without pollution."
 - B** "In addition, wind power is a renewable resource that will never run out."
 - C** "A vast plain dotted with these elegant white machines is an impressive sight to behold."
 - D** "Constructing offshore wind farms and new transmission lines will be expensive, but it is an investment that will surely pay off in the long run."

- 4** Below are three claims that one could make based on the essay "The Case for Wind Power."

CLAIMS

	Wind power is reliable.
	Wind power is affordable.
	Wind power is ecological.

Part A

Put an "X" by the claim that is supported by the most relevant and sufficient facts in "The Case for Wind Power."

Part B

Write a short paragraph with at least **three** details to show how the claim you chose in Part A is supported by relevant and sufficient facts in the essay.



Self Check

Go back and see what you can check off on the Self Check on page 169.