

Natural Resources for Energy

Lesson 3

Evaluating Claims and Evidence

Learning Goals

By the end of this lesson, you should be able to:

- Use vocabulary about hydrogen and fuels.
- Evaluate whether or not claims are well supported.
- Determine which out of two passages has better support.
- Locate three to four pieces of relevant evidence.



Listen



Watch

Your Background Knowledge

Who remembers what a claim is?



Raise your hand.
Talk to the class.

Your Background Knowledge

Who remembers the difference between a claim and evidence?



Raise your hand.
Talk to the class.

What is a Claim?

An assertion of something as fact.

- Example: Renewable energy resources can be harmful to landscapes, rivers, and other habitats.

What is Evidence?

That which tends to prove or disprove something.

- Example: A dam that is used to create a reservoir for a hydropower plant can obstruct migration of fish to their upstream spawning areas in areas where salmon must travel upstream to spawn, such as along the Columbia River in Washington and Oregon.



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Your Background Knowledge

Who remembers what makes a claim valid?



Raise your hand.
Talk to the class.

What Makes a Claim Valid?

FACTS are more valid than OPINIONS.

Factual, statistical, and logical evidence is considered MORE valid than anecdotal and emotional evidence.



Listen



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Reviewing Types of Evidence

- We are going to practice matching types of evidence with definitions and examples.
- Take a look at the notecards.
- Sort the cards by connecting each type of evidence with the definition and an example.
- You will have three columns: type, definition, example.



Work by yourself



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New Vocabulary

- We are going to compare two articles about hydrogen as a fuel.
- First, we will discuss some of the vocabulary in the passages.
- What do you think alternative fuel means? Alternative to what?



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New Vocabulary

- We are going to work through a vocabulary worksheet to develop an understanding of the following vocabulary words:
hydrogen, fuel cells, sustainability, efficiency, decomposition, emissions
- Work with a partner to match the terms with the definitions and pictures.



Work with a partner



Listen



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Video

We will watch this video to understand more about how hydrogen is used as a fuel sources.

[HYDROGEN 101](#)



Listen



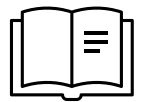
Watch

Guided Practice

Now, you will practice identifying a claim and evidence in an article about biofuels. As you read, ask yourself and be ready to answer:

- What is the main argument the author is trying to make?
- What evidence is the author using to support their claim?
- How valid is that evidence?

To begin, please read the article titled “Hydrogen as an Alternative Fuel.”



Read

Guided Practice

1. What is the main claim of the passage?

Please share answers out loud or in the Zoom chat.



Work by yourself.
Answer the questions.

Identify Evidence

We will look at page 12 in the GED® Graphic Organizer “Both Sides Now.”

Can you identify three pieces of evidence from the passage to support the claim? Which column should we put the evidence in, supports or opposes?



Raise your hand.
Talk to the class.

Types of Evidence

Remember the different types of evidence:

Factual, statistics or data, examples or anecdotes, logical reasoning, and emotional appeal

For the evidence that you found, categorize each piece of evidence by noting its type in the margins.



Read.

The Other Side

Now, you will practice identifying a claim and evidence for a second passage. You will look for the article's main claim and evidence that opposes the claim made in the first article as you read. Then, independently, you will write the key pieces of evidence in the second column. You will categorize these pieces of evidence by noting their type in the margins.

Please read the article titled “Challenges of Hydrogen.”



Read.

Independent Practice

1. What is the main claim of this passage? Raise your hand to answer.
2. Can you identify two to three pieces of evidence to support the claim?
Add this information to the graphic organizer.



Work by yourself.
Answer the questions.

Independent Practice

Remember the different types of evidence:

Factual, statistics or data, examples or anecdotes, logical reasoning, and emotional appeal

For the evidence that you found, categorize each piece of evidence by noting its type in the margins.



Work by yourself.
Answer the questions.

Evaluating Evidence

REMEMBER: Factual, statistical, and logical evidence is considered MORE valid than anecdotal and emotional evidence.

Which passage has more valid or FACTUAL evidence?

Which passage has more anecdotal and/or emotional evidence?

Looking at the evidence for both passages, which has evidence relates most directly to the claim?



Raise your hand.
Talk to the class.

Writing

Now, using the graphic organizer, your task is to write a one-paragraph response to the question **“Which article on the utilization of hydrogen is best supported? Why?”**

- Use at least three of the vocabulary words from your chart in your paragraph.
- Include a claim regarding which argument is best supported, reasons to back up the claim, and two to three pieces of text evidence from the articles.

You may use the following sentence starters to help you begin:

- The article that is best supported by evidence is ... because ...
- The article with the strongest evidence is ... because ...

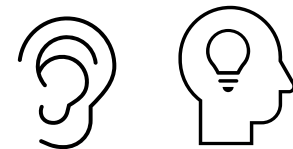


Work by yourself.
Answer the questions.

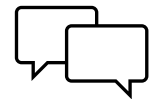
Reflection

Can you:

- Use vocabulary about hydrogen fuel?
- Evaluate whether or not claims are well supported?
- Locate three to four pieces of relevant evidence in a passage?
- Determine which out of two passages has better support?



Listen | Think



Ask the teacher if you
have a question.