ACTIVITY 2

Evaluating Energy Facts

INVESTIGATION

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Evaluating Energy Facts

ACTIVITY SUMMARY

Students further investigate the role of facts in decision-making. They engage in the practice of lateral reading to evaluate the credibility of an information source. Students use this tool to determine if the source for a claim of fact in the activity is credible. Then this strategy is applied to the unit scenario to evaluate claims of facts related to renewable energy.

ACTIVITY TYPE
INVESTIGATION

NUMBER OF
40–50 MINUTE
CLASS PERIODS
2

KEY CONCEPTS & PROCESS SKILLS

1   Facts support informed decision-making by leading to more accurate predictions about the likely outcomes of different choices.

2   Values affect people's behaviors, opinions, and decisions. There can be disagreement within a community when people hold a variety of values.

3   When gathering facts, first determine whether the source is credible before looking at the information or evidence provided by the source in more depth.

CONCEPTUAL
TOOLS

CREDIBLE
SOURCES

WEAVING
FACTS & VALUES IN
DECISION-MAKING

VOCABULARY DEVELOPMENT

claim of fact
a type of claim that you have not yet verified by observation or data

credible source
a source with relevant expertise that provides accurate information that is free from bias

expert
a person with extensive knowledge or skill in a particular subject based on research, experience, or occupation

lateral reading
a research technique used to evaluate a source's credibility as well as confirm the accuracy of facts

TEACHER BACKGROUND INFORMATION

Vertical and Lateral Reading

Vertical reading is the practice of reading within a single source to gather facts and evaluate credibility. This is the way that most students probably tend to approach information sources they encounter on-line. One might look for signs of credibility within the source—such as the About page, the professional appearances of the page, the name of the website—to determine whether the site is legitimate. As the Internet has grown, and misinformation and disinformation have become more prevalent, these vertical reading techniques have become less effective in helping people determine the credibility of a source.

Lateral reading is a technique used by professional fact-checkers that helps evaluate the credibility of a source as well as verify factual information found online. Using this technique, a website is investigated with simultaneous research from multiple sources, using separate browser windows. This is a more effective approach to determining the credibility of the author and verifying facts than vertical reading. Lateral reading makes use of the wealth of information that can be found online about an author or organization's expertise, reputation, biases, or conflicts of interest. It also provides a way to verify facts across several sources.

Critical Ignoring

Another tool used by professional fact-checkers is called critical ignoring. Critical ignoring is, essentially, being very selective about what is viewed. For efficiency, it is helpful to initially pay attention to some aspects of a search-results list or website while ignoring other parts. Following are some guidelines.

Pay attention to
- search results father down on the results list.
- how the website is related to the research topic.
- basic information about the author, publisher, or organization that owns the website.

Ignore • sponsored listings at the top of the search-results list.

• all the detailed information on the page until you have verified the author's credibility.

• the About page, which is written by the author and may not be a full representation of the author's background and experience.

Credible Sources

A credible source for science is often written by a scientist, engineer, or experienced professional in the specific field that is relevant to what you are researching. A credible source might also include references to relevant experts and other credible sources with links to those sources. Generally, government research agencies such as the Department of Energy, NASA, NIH, reputable research universities, and well-respected journalism institutions are good places to look for credible sources. If using a news agency, steer clear of opinion pieces, which have an obvious agenda.

Many people use Wikipedia as an information source. Scientific studies have shown the information contained on Wikipedia pages to be fairly accurate most of the time, and often more accurate than other popular sources. However, most digital literacy experts do not consider Wikipedia a credible source because the articles can be changed by anyone at any time. Most academic institutions do not allow citing Wikipedia as an information source.

One strategic way to use Wikipedia is to gather basic information about a topic on the site and then refer to the citations at the bottom of the article to find more sources to verify information, using lateral reading.

MATERIALS & ADVANCE PREPARATION

FOR THE TEACHER

— VISUAL AID 2.1
"Fact or Fiction?"

— VISUAL AID 2.2
"Evaluating Online
 Information"

**FOR EACH PAIR
OF STUDENTS**

— COMPUTER WITH
INTERNET ACCESS

FOR EACH STUDENT

— STUDENT SHEET 2.1
"VanwickForum Notes"

— STUDENT SHEET 2.2
"Lateral Reading"

— STUDENT SHEET 2.3
"Evaluating Claims
 of Fact"

Decide how you want student groups to be configured for the evaluating facts part of the procedure, as outlined in Teaching Step 5. If you are having students evaluate more than one claim of fact, copy the appropriate number of Student Sheet 2.3, "Evaluating Claims of Fact" for students.

If you plan to do the extension and curate materials for students, do the research and put the materials together before instruction. Sources of information could be government offices, utility companies, and news media articles.

TEACHING NOTES

> Suggestions for **discussion questions** are <mark>highlighted in gold.</mark>
>
> Strategies for the **equitable inclusion of diverse students** are <mark>highlighted in pink.</mark>

GETTING STARTED (10 MIN)

1 **Present two statements for students to evaluate their credibility.**

- Remind students that in the last activity, they distinguished between fact and values. Explain that this activity is a further investigation into facts. In this activity, students will focus on gathering facts via credible online sources.

- Begin the activity by engaging students in an exercise of distinguishing factual information from fake information. Display Visual Aid 2.1, "Fact or Fiction?," and have students give a show of hands, or conduct a pair-share, about whether each statement is likely to be factual or not. After collecting student opinions, reveal the correct answers.

  - Statement 1 is **TRUE**, based on the National Geographic Channel show "How Hard Can It Be?"

    A team of scientists, engineers, and pilots successfully launched a house, using weather balloons.

  - Statement 2 is **FICTION.** It is a popular conspiracy theory.

    A recent emergency alert system sent a test signal to cell phones around the country to activate nanoparticles that have been introduced into people's bodies.

2 **Leverage student experience with evaluating sources in their day-to-day life.**

- Ask, <mark>Have you ever seen, believed, or shared untrue information online? How did you realize the information was false?</mark> Student responses will vary, but many will report that they have believed and/or shared posts, articles, or videos that contained questionable information without verifying it first. They may have only realized it was false after posting it. Discuss places students are likely to go to verify information such as news sources, Google Image searches, or YouTube.

- Discuss how confident students are at evaluating information. Some students may think they are great at evaluating information online, while others are less confident in their evaluating skills. Students may rely on multiple sources or look to peers to determine if information is accurate.

- Connect why it is important to get reliable information when making decisions. Allow students to provide simple examples, such as when someone provides the wrong information and it negatively impacts them, or when they wasted time and money for something online that was not as advertised. Use these examples to point out that some types of decisions, especially those with a big impact or a very important outcome, require information that is trustworthy.

PROCEDURE SUPPORT (60 MIN)

3   Model how to identify claims of fact, values, and opinions in the VanwickForum posts.

- Before beginning, review the definition of *fact* that students developed in the last activity. Recall that facts must be verified by data or observation. When people make a statement containing information to make a point, it is often a claim of fact. A claim of fact is distinct from a fact because the person who has been given the claim of fact has not yet verified it. Claims of fact may be factual or not, but its status is yet to be determined.

- In Procedure Step 3, provide each student with a copy of Student Sheet 2.1, "VanwickForum Notes." On the board, model how to break down the statements, using the first post: "@JamieLovesHistory." Complete the first row of the table with students, which leaves four remaining posts for students to evaluate. A model response is shown in the Sample Student Response to Student Sheet 2.1 at the end of this activity.

- If you have students who require additional support in analyzing the text, you may want to photocopy the VanwickForum posts from the Student Book and have them mark claims of facts (underline) and values (circle) directly on the page.

4   Support students as they find and evaluate credible sources for information about the VanwickForum posts.

- In Procedure Step 4, assign each group one claim of fact from the posts to research. Some posts include more than one claim of fact. For a complete list of the claims in the posts, see the Sample Student Response for Student Sheet 2.1, "VanwickForum Notes."

- Initially, each student needs to look for a source related to their claim of fact. Some guidelines for choosing a source are as follows:
    - Avoid sponsored posts at the top of the search results.
    - A credible source for this topic would be best if written by a renewable energy expert such as a scientist or engineer. A credible source might also include an article that cites relevant experts and other credible sources and provides the links to those sources.
    - Do a brief scan of the source to make sure it is relevant to your topic before continuing with the evaluation.

- Support lateral reading in Step 5 with Student Sheet 2.2, "Lateral Reading." Students may need additional clarification around the ideas of bias and conflict of interest, which are criteria for evaluating the credibility of a source. As students work, circulate around the room and check that students are using multiple browsers as they work. Remind students to focus on evaluating the credibility of the source first instead of looking for facts from the source.

- For students with limited experience evaluating online sources, model the practice with a Think Aloud technique. Find a credible website, such as the Department of Energy for the @JamieLovesHistory post, and talk through how to complete the web analysis concurrently with filling out the student sheet.

- When groups have finished evaluating their sources (using Student Sheet 2.2), provide each student with Student Sheet 2.3, "Evaluating Claims of Fact." In Procedure Steps 6 and 7, have students record their findings as a group.

5   **Students find information to support or refute their assigned claim of fact.**

- Only after students verify that a source is credible should they look for information that supports or refutes their assigned claim of fact (in Procedure Step 8). If needed, review what it means for a claim to be supported or refuted by evidence.

- If you have students who need more support with Internet research or reading comprehension, you might consider assigning them straightforward claims, such as those in @JJAms and @StarshipEarth17.

- One possible sample student response for Student Sheet 2.3 is shown at the end of this activity. Table 2.1, shown on the next page, summarizes what students should find across all the posts.

TABLE 2.1
Claim of Fact Summary

CLAIM OF FACT	SUPPORTED OR REFUTED	
POSTED BY @JAMIELOVESHISTORY		
They (wind turbines) cast huge flickering shadows all day long that can be a health problem.	**REFUTED**	*No known health effects related to shadow flicker*
	Sample source	*WINDExchange US Department of Energy: Wind Energy Projects and Shadow Flicker*
Wind turbines cause health problems.	**REFUTED**	*Scientific studies have not found any health effects related to wind turbine noise, though they do confirm that there are correlations between self-reported levels of annoyance and the distance from the turbines.*
	Sample source	*PBS NOVA: Can Wind Turbines Make You Sick?*
POSTED BY @STARSHIPEARTH17		
The air pollution from the coal plant aggravates my asthma.	**SUPPORTED**	*A study showed that asthma symptoms decreased after a local coal plant was decommissioned.*
	Sample source	*Columbia Mailman School of Public Health: Asthma Hospitalizations Drop After Power Plants Reduce Emissions*
A solar farm won't produce as much pollution, so the region could have better air quality.	**SUPPORTED**	*Many states have started installing solar projects to replace fossil fuel plants in order to reduce emissions. The regions show lower amounts of air pollutants such as nitrous oxides and greenhouse gases than when it was powered by coal-fired plants.*
	Sample source	*US Department of Energy: Improving Air Quality with Solar Energy*
POSTED BY @SHINYPEARL		
Renewable energy projects only create jobs in the short term while they are being constructed.	**REFUTED**	*Renewable energy projects create short-term and long-term jobs. While it is the case that for wind and solar, a higher proportion of jobs created are for the shorter-term construction phase, there are still longer-term jobs created. Additionally, people who have skills working in fossil fuel industries, construction, or manufacturing are able to transfer their skills to renewable energy–related jobs.*
	Sample source	*New York Times: As Oil Companies Stay Lean, Workers Move to Renewable Energy*
There are more jobs in the coal industry than there are in the renewable energy industry.	**REFUTED**	*There are now more Americans working in the clean-energy industry compared with the fossil fuel industry by a margin of nearly 3 to 1.*
	Sample source	*Forbes Magazine: Renewable Energy Job Boom Creates Economic Opportunity as Coal Industry Slumps*

TABLE 2.1
Claim of Fact Summary

CONTINUED

CLAIM OF FACT	SUPPORTED OR REFUTED	

CLAIM OF FACT	SUPPORTED OR REFUTED	
Solar panels can only produce energy when it is sunny out.	**REFUTED**	*Solar panels generate at peak capacity on cloudless, sunny days. However, they can still generate smaller amounts of electricity in cloudy or raining weather.*
	Sample source	*US Department of Energy: Busted: Common Solar Myths and Misconceptions*
You can't meet the energy needs of the city at night with just solar panels.	**SUPPORTED**	*Solar panels can only function when there is light. They transform light energy into electrical energy. The only way to power something at night from solar is to use the solar to charge a battery system during the day.*
	Sample source	*How Stuff Works: Is There a Way to Get Solar Energy at Night?*

CLAIM OF FACT	SUPPORTED OR REFUTED	
Buildings account for 70% or more of electricity usage in the US.	**SUPPORTED**	*Buildings account for 76% of all electricity use and more than 40% of all energy use in the US. (Note: Electricity is a subset of energy use. Make sure that students are looking at the correct numbers.)*
	Sample source	*Quadrennial Technology Review: An Assessment of Energy Technologies and Research Opportunities*
Making buildings more energy efficient would help reduce greenhouse gas emissions from buildings.	**SUPPORTED**	*New homes and commercial buildings could cut their emissions by 70% with efficient design and use of renewables.*
	Sample source	*ACEEE: Energy Efficiency Can Slash Emissions and Get US Halfway to Climate Goals*

6   Reinforce the main ideas behind lateral reading.

• Before beginning the last step, Procedure Step 10, pause and lead a class discussion about students' experience evaluating the credibility of the sources. Ask, <mark>What features did you find in a more credible source compared to a less credible source?</mark> Make a list on the board. Responses will vary, but a sample of ideas is shown here.

> More credible sources:
>
> *- written by scientists*
>
> *- written by a journalist that focuses on the relevant field*
>
> *- include references and links to actual research*
>
> Less credible sources:
>
> *- did not contain references list*
>
> *- links provided went to other websites that did not provide research*
>
> *- not written by an expert*
>
> *- written by someone whose experience was in a different field*

• Address the following facts about websites as they come up to help students avoid overconfidence in their research.

> – Anyone can make a professional-looking website.
>
> – Anyone can pay to have ads, or not, on their website.
>
> – Domain names such as .com, .org, .net are freely available for purchase. Anyone can buy a .org website. However, .gov and .edu domains are more restricted.
>
> – The site's About page is drafted by the author who can tailor the information to fit their needs.
>
> – A lot of information doesn't mean it is good information.

• Display Visual Aid 2.2, "Evaluating Online Sources," which reviews three major steps for evaluating information online. These steps are helpful for ensuring that students can find good-quality information for whatever topic they are researching.

• <mark>Support students, particularly emerging multilingual learners, in sensemaking and language acquisition by adding terms to the word wall. For this activity, post the terms *claim of fact, lateral reading,* and *credible sources.* Provide additional examples for each term as needed.</mark>

SYNTHESIS OF IDEAS (10 MIN)

7 **Discuss with students how verified facts impact decision-making.**

• In Procedure Step 10, Revisit the Vanwick posts and elicit any changes in viewpoints as a result of the activity. Have students reflect on how their findings about the claims of facts changed their ideas about the posts. Have students review and reflect on the posts they thought were credible early in the procedure. Identify the misconceptions students may have had about renewable energy, both from supported and refuted facts.

• Ask, Why is it important to have the correct information when you are making decisions? Students' responses will vary but should highlight that using incorrect information could lead to a poor decision, or at least to a different decision than if they had verified facts. If this is a decision about something important, such as health, it could cause harm. Or If it is a decision about cost, they could end up paying more than was necessary.

• Review responses to Build Understanding item 2 where students identify a questionable post. Use this to reflect on how the tools introduced in the activity could be used in their day-to-day lives when they follow people on social media, especially if that information is informing decisions.

• Finish the activity by revisiting the Guiding Question, How can determining a credible source help you evaluate information? Use responses to this question to formatively assess the key concepts and process skills related to credible sources.

EXTENSION (10 MIN)

8 **Use the Extension as an opportunity for advanced learning.**

There are a variety of fake news games online where students can challenge themselves on their ability to distinguish fake news from real news, as well as learn more about misinformation and disinformation. Though often focusing on current events, online games are a fun way to review ideas related to credible sources and what makes online information trustworthy. Try them out before using them with students, as some of them can be quite lengthy and vary in content.

SAMPLE STUDENT RESPONSES

BUILD UNDERSTANDING

① **Write a 2–3 sentence post that shows your own thinking about renewable energy. Include your value and a relevant fact in the post.**

I really value protecting the environment. According to the EPA (https://www.epa.gov/greeningepa/ renewable-energy-epa), renewable energy sources reduce greenhouse gas emissions. But I need to know what other environmental effects they have before I can make a decision about Project REV.

② **Think of an article or social media post that you read that had questionable information in it.**
  a Describe the post.
  b   What negative outcomes could result from sharing this information?
  c How would you advise others on how to avoid sharing noncredible information?

Answers can vary. One sample response is shown here:

  a *The post said that taking vitamin E supplements makes you healthier.*
  b *It could have the negative outcome of encouraging people to spend money on something not proven to work; people may take too much, which could be harmful to their health; people may think they don't have to eat well because they are taking a supplement.*
  c *Look at research from a credible source about the effect of vitamin E supplements on human health before believing and sharing.*

③ **How can using credible sources help you make decisions?**

When making a decision, it is helpful to use information that you trust is accurate. Otherwise, you might make a decision by using wrong information, which can lead to a bad outcome.

CONNECTIONS TO EVERYDAY LIFE

④ **Imagine you follow a popular online influencer. A recent post he made generated a lot of arguments in the comments. You decided to try lateral reading to evaluate the post. You found the following:**

POST

Solar panels are bad for the environment! Almost 90% of them end up in landfills after 5 years of use. We should invest in cleaner fossil fuel technology like natural gas instead.

SOURCE

Social media post made by **@ImaSmarTee**, a popular fashion Influencer.

WEB SEARCH SUMMARY

@ImaSmarTee is an undergraduate student majoring in business at a local university. He regularly posts videos commenting on the latest fashion trends. One of his website sponsors is Big Oil Co., a local oil and energy company that gives the influencer money to promote the use of synthetic (fossil fuel–based) fabrics in clothing.

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a Should this source be considered credible? Explain why or why not.

No, this source is not credible because the author is not an expert studying or working in the field of energy. His expertise is in fashion, and he is sponsored by an oil company supporting his work, which could represent a conflict of interest.

b Should someone make a decision to buy solar panels based on the information in the post? Explain why or why not.

No, @ImaSmarTee is not an expert on energy or solar panels, so who knows if this information is correct. Someone could read this post and decide that it is not worth it to get solar. But this information might not be correct. If you need to make an important decision, you should do your research and make sure your information is correct.

POSTED BY	WHICH PART(S) OF THE STATEMENT IS A CLAIM OF FACT?	WHICH PART(S) OF THE STATEMENT IS A VALUE?
@JamieLovesHistory		
@StarshipEarth17		
@ShinyPearl		
@JJJams		
@GrannySmithJr		

SAMPLE STUDENT RESPONSE

POSTED BY	WHICH PART(S) OF THE STATEMENT IS A CLAIM OF FACT?	WHICH PART(S) OF THE STATEMENT IS A VALUE?
@JamieLovesHistory	• *Wind turbines cast huge, flickering shadows all day long that can cause health problems for people.*	• *having a beautiful view* • *health*
@StarshipEarth17	• *The air pollution from the coal plant makes the air quality unhealthy, which aggravates my asthma. A solar farm won't produce as much air pollution, so the region will have better air quality.*	• *healthy air quality* • *lowering air pollution* • *health*
@ShinyPearl	• *Renewable energy projects only create jobs in the short term while they are being constructed.* • *There are more jobs in the coal industry than there are in the renewable energy industry.*	• *jobs* • *local economy*
@JJJams	• *Solar panels can only produce energy when it is sunny out.* • *You can't meet the energy needs of the city at night with just solar panels.*	• *reliability of energy source* • *access to food for citizens*
@GrannySmithJr	• *Buildings account for 70% or more of electricity usage in the US.* • *Making buildings more energy efficient would help reduce emissions from buildings.*	• *reducing emissions*

Claim of fact _____

Find a relevant information source and record the information about it below.

Website URL _____

Name of site/title _____

Who is the author? _____

What type of website is it (.gov, .edu, .com, .org)? _____

What date was the page published/last updated? _____

Who is the intended audience? _____

Purpose of the site (to inform, entertain, persuade) _____

Does the site provide facts, opinions, or both? _____

Open a separate browser window to evaluate the site for evidence of credibility.
Look for other sources that describe the site, author, or its related institution (company, organization, or university). Use the other sources to answer the next three questions.

Is there evidence of expertise?
(Does the author have appropriate education or relevant experience? A strong reputation among peers? Do they work at a reliable organization, institution, or university? Are references acknowledged in the source? Are the references credible?)

Is there evidence of conflict of interest?
(Where does their funding come from? What other organizations do they partner with? Might these connections influence their writing?)

Is there any indication of bias?
(Is it politically neutral? Does there seem to be some kind of agenda—political, social, environmental? If there is a bias, what is it?)

SAMPLE STUDENT RESPONSE

Claim of fact   *Wind turbines cast huge shadows that can affect people up to 5 miles away.*

Find a relevant information source and record the information about it below.

Website URL   *https://windexchange.energy.gov/projects/shadow-flicker*

Name of site/title   *United States Department of Energy—WINDExchange*

Who is the author?   *No specific author listed, but it comes from the Office of Energy Efficiency & Renewable Energy*

What type of website is it (.gov, .edu, .com, .org)?   *.gov*

What date was the page published/last updated?   *Unknown*

Who is the intended audience?   *People in the community, decision-makers/stakeholders*

Purpose of the site (to inform, entertain, persuade)   *Inform and educate*

Does the site provide facts, opinions, or both?   *Facts*

Open a separate browser window to evaluate the site for evidence of credibility.
Look for other sources that describe the site, author, or its related institution (company, organization, or university). Use the other sources to answer the next three questions.

Is there evidence of expertise?
(Does the author have appropriate education or relevant experience? A strong reputation among peers? Do they work at a reliable organization, institution, or university? Are references acknowledged in the source? Are the references credible?)

> *While the exact author of this website is unknown, The About page lists experts from several research laboratories that, when researched further, have good reputations in the research community. The article does have a link to a research study from the Lawrence Berkeley National Laboratory. Thus, I would say that WINDExchange has appropriate expertise on this subject.*

Is there evidence of conflict of interest?
(Where does their funding come from? What other organizations do they partner with? Might these connections influence their writing?)

> *It does not seem to have a conflict of interest. It is a government-sponsored website, so I suppose there could be a conflict of interest that stems from what the government decides to spend money on. The website focuses on giving factual information about mostly utility-scale wind projects, but also has information about community and small wind.*

Is there any indication of bias?
(Is it politically neutral? Does there seem to be some kind of agenda—political, social, environmental? If there is a bias, what is it?)

> *I can't find any indications in other websites to indicate that WINDExchange has biases. But it is a little difficult to evaluate because many of the websites that reference the site are also government websites. WINDExchange is a website that only gives information about wind power, so I guess it might be seen as having a bias toward renewable energies. However, the purpose of the website is not to give any information about any other types of energy sources to begin with. There are many nongovernment sites that cite WINDExchange as a source to find more information about wind power.*

Claim of fact _____

GROUP MEMBER	INFORMATION SOURCE (WEBSITE)	CREDIBILITY RANKING 1–5 (LOW–HIGH)	INFORMATION RELATED TO THE CLAIM OF FACT	IS THE CLAIM OF FACT SUPPORTED OR REFUTED?

SAMPLE STUDENT RESPONSE

Claim of fact *Wind turbines cast huge flickering shadows that can be a health problem to people.*

GROUP MEMBER	INFORMATION SOURCE (WEBSITE)	CREDIBILITY RANKING 1–5 (LOW–HIGH)	INFORMATION RELATED TO THE CLAIM OF FACT	IS THE CLAIM OF FACT SUPPORTED OR REFUTED?
Student 1	*WINDExchange US Department of Energy* *https://windexchange.energy.gov/ projects/shadow-flicker*	*5*	*• shadow flicker only occurs at certain times of day (when the Sun is low)* *• total shadow flicker time is only a few hours a year* *• people with epilepsy have seizures triggered by flashes more than 120 flashes per minute. A 3-blade wind turbine shadow would flicker at 60 flashes per minute*	*refuted*
Student 2	*American Clean Power Association* *https://cleanpower.org/*	*4*	*• shadow flicker occurs mostly at sunrise and sunset* *• cites a study from health experts showing that there's no evidence that shadow flicker negatively affects health*	*refuted*
Student 3	*UK Department of Energy and Climate Change*	*5*	*• the frequency of flickering caused by the wind turbine rotation should not cause significant risk to health*	*refuted*
Student 4	*Frontiers in Public Health* *https://www.ncbi.nlm.nih.gov/pmc/ articles/PMC4063257/*	*3*	*• annoyance is associated with shadow flicker* *• many scientific papers show that there are no health effects likely from shadow flicker or noise from wind turbines*	*refuted*

ACTIVITY 2 : EVALUATING ENERGY FACTS

UNIT 6 : GROUP DECISION-MAKING

STATEMENT 1

A team of scientists, engineers, and pilots successfully launched a house into the air, using weather balloons.

STATEMENT 2

A recent emergency alert system sent a test signal to cell phones around the country to activate nanoparticles that have been introduced into people's bodies.

UNIT 6 : GROUP DECISION-MAKING | ACTIVITY 2 : EVALUATING ENERGY FACTS

Evaluating Online Information

① **FIND A SOURCE**

Find a relevant source.

• Steer clear of sponsored websites.

• Make sure the source is relevant to your research topic.

• Record basic information about the source like the *URL, author's name, organization, audience, purpose, etc.*

② **USE LATERAL READING**

Is the source credible?

Open another window and search while you read your source. Determine:

• Is the author an expert?

  Relevant experience, good reputation, cites research/other credible sources

• Is there a conflict of Interest?

  Funding sources, associated organizations

• Is there indication of bias?

  Political leaning or social agendas, past writings that show bias

③ **VERIFY FACTS**

Find out if the information repeated across multiple credible sources.