



Lesson Three: “Choices, Choices, Wyoming’s Energy Mix”

Grade Level: 3rd Grade

Time: 55 minutes

Essential Question: How can we be stewards of Wyoming’s mineral and energy resources to benefit current and future generations?

Objectives: Students will:

- Identify an author’s point of view about the pros and cons of renewable and nonrenewable energy resources.
- Share their own agreement (or disagreement) with the author’s point of view.

Purpose: Students learn that there are opposing points of view regarding energy resources and how good stewards must listen to all points a view about a resource.

Required Materials/Resources:

- *Choices, Choices, Wyoming’s Energy Mix Texts A-D* (sources 1-10)
 - Text A covers the pros of renewable energy (one per each student in the group)
 - Text B covers the cons of renewable energy (one per each student in the group)
 - Text C covers the pros of nonrenewable energy (one per each student in the group)
 - Text D covers the cons of nonrenewable energy (one per each student in the group)

TEACHER NOTE:
Texts A-D are intentionally written as opinion pieces. While the facts are accurate, students should be able to identify the writer’s opinion and feelings about the energy resource.

- Chart paper (optional for step 4)

Suggested Teacher Preparation:

- Familiarize yourself with the procedures for the student discussion protocol.
- Break students into four equal groups and determine how many copies of each text are needed.
- Prepare the chart for step 4.

Standards:

Social Studies: SS5.2.4, SS5.5.4(Explicit)

ELA: 3.RI.6, 3.SL.1(Explicit), 3.RI.2, 3.RI.9, 3.SL.4
(Practiced/Encountered)

CVE: CV5.2.2, CV5.2.3(Practiced/Encountered)

Vocabulary:

- **Energy** - power derived from the utilization of natural resources, especially to provide light and heat or to work machines, useable power
- **Nonrenewable resources** - resources that cannot be replenished (made again) in a short period of time
- **Renewable resources** - resources that are capable of being replenished

Instructional Procedure/Steps:

1. Say: **“In the previous lesson, we learned that Wyoming has many renewable and nonrenewable resources that produce electrical energy. Today, we will learn about the pros and cons of Wyoming’s renewable and nonrenewable resources and how as good stewards, it’s important to listen to understand all points of view.”**

2. Divide students into four even groups and assign the groups a letter: A, B, C, or D. Have students meet in their group, and then pass out the secondary source text selection that matches the assigned group letter. Each student gets their own copy of the text. Say: **“You will now read and discuss your assigned text as a group. Your purpose for reading is to identify the author’s point of view about the resources in the text and to find at least one piece of evidence that supports that point of view. Please highlight or underline the text evidence you believe supports the author’s point of view. You may also write on your paper if it will help you remember something important from your group’s discussion.”** At this point, check for student understanding of the directions and clarify as needed. Say: **“When your group is finished discussing your text, everyone will change groups and share your author’s point of view and evidence with other classmates, who have read another text. Keep this in mind, so that you are able to share about your own text with others for the second part of our activity.”**

3. When students are finished reading their assigned texts, check in with each group to assure each group has identified the author’s point of view and at least one piece of supporting evidence. Next, regroup students into groups of four. Each group should include a student who has read each of the texts (a student who read text A, a student who read text B, and so on). Say: **“Now you will meet with others who have read a different text than you. Take turns sharing about your text. Share the author’s point of view from your text and at least one piece of evidence that author uses as support. The text evidence you choose needs to support the author’s viewpoint and not say something random.”**

4. When groups finish sharing, reconvene the entire class. Display or draw the following chart on the board:

text	point of view and evidence
A	
B	
C	
D	

5. Ask students who read Text A to identify the author’s point of view with supporting textual evidence, and paraphrase their response on the chart. Repeat the same process with groups B, C, and D. Ask: **“What do you notice about the point of view of Text A versus the point of view of Text B?”** They have opposite points of view. **“What do you notice about the point of view of Text C versus the point of view of Text D?”** They have opposite points of view. **“Is the point of view of each text supported with evidence?”** Yes. **“How do we know which text’s point of view is correct?”** We cannot choose because they are points of view. Say: **“We are learning that not everyone will see a particular resource as a pro or a con. Different points of view can arise on topics, and it is important as good stewards to listen to understand all points of view, not just those with which we agree.”**

Assessment:

- Lead the students in a whole group discussion by asking the following questions:
 - **“Why do you think we need to understand those who disagree with us?”**
 - **“How can we show others that we are listening to understand their point of view?”**

- **“What does this have to do with being a good steward?”**

The conversation is meant to be an opportunity to formatively assess student understanding of what it means to be a good steward.

Credits/Sources:

1. U.S. Energy Information Association - EIA. (n.d.). *EIA Energy Kids: Energy Sources* Retrieved June 26, 2017, from <https://www.eia.gov/kids/energy.cfm?page=2>
2. National Geographic Society. (1996-2020). *Renewable Energy*. Retrieved October 14 ,2020, from <https://www.nationalgeographic.org/article/renewable-energy/>
3. Alliant Energy. (n.d.) *Alliant Energy Kids: What is Renewable Energy*. Retrieved June 29, 2017, from <http://www.alliantenergykids.com/EnergyandTheEnvironment/RenewableEnergy/000625>
4. Wyoming Mining Association. (2017). *Coal*. Retrieved June 29, 2017, from <https://www.wyomingmining.org/minerals/coal/>
5. Wyoming Mining Association. (2018). *Uranium*. Retrieved August 14, 2018, from <https://www.wyomingmining.org/minerals/uranium/>
6. Current Results Publishing Ltd. (2017). *Days of Sunshine of Per Year in Wyoming*. Retrieved June 30, 2017, from <https://www.currentresults.com/Weather/Wyoming/annual-days-of-sunshine.php>
7. Poudre Rural Electric Association, Milton Geiger, Alternative Energy Administrator.
8. Wyoming State Geological Survey. (2018). *Wyoming’s Oil and Gas Facts*. Retrieved August 14, 2018, from <http://www.wsgs.wyo.gov/energy/oil-gas-facts>
9. energy4me. (2015). *Petroleum – Oil and Natural Gas*. Retrieved August 14, 2018, from <http://energy4me.org/all-about-energy/what-is-energy/energy-sources/petroleum/>

10. American Gas Association. (2018). *Natural Gas Heating Systems*. Retrieved August 14, 2018, from <https://www.aga.org/natural-gas/in-your-home/heating/>