## **Pre-assessment: Justified True/False – ENERGY**

<u>Directions</u>: Read the following statements carefully. Decide if the statement is True or False. Explain your reasoning in the "Why We think so" column. When done, share your answers with others at your table. Explain in the "Why We Think So" Column what everyone agrees on and why.

Statement	Т	F	Why I Think So	Why We Think so
Energy can only be used once before its destroyed.				
2. Humans are the source of all energy.				
Natural gas comes from fossil fuels.				
4. Electricity can be made by a wind turbine at night.				
5. Wind is an unreliable source of energy.				
6. A flowing river is an example of potential energy.				
7. Carbon Dioxide is a greenhouse gas.				
8. Sun is a source of renewable energy.				
9. A Barrel of oil is an example of kinetic energy.				
10. Most of Minnesota's electricity comes from burning coal.				

		Name	date	hr
Post-assessm	ent – Exit Slip: Wind Energy			
<u>Directions:</u> You he	ave 5 minutes to respond to the following qu	estions as best as yo	u can.	
1.	What did you learn today and you didn't k	now before?		
2.	What important question remains unansw	ered for you?		
3.	What would help you learn better tomorro	ow?		
		Name	date	hr

## Post-assessment – Exit Slip: Wind Energy

<u>Directions:</u> You have 5 minutes to respond to the following questions as best as you can.

- 1. What did you learn today and you didn't know before?
- 2. What important question remains unanswered for you?
- 3. What would help you learn better tomorrow?

Name	date	hr

# **Research Project**

### What Type of Energy Source Is Best for Us and for The Environment?

You and your partner will be assigned a type of energy source to research and present to class in the format of your choice. The assigned topics include Solar Power, Hydropower, Wind power, Geothermal Power, Biomass, Manure, Nuclear, Fossil fuels. MUST BE WRITTEN IN YOUR OWN WORDS. NO COPY/PASTE.

#### A. Format Options

- Power point, Prezi (5-7 Slides, no more than 50 words per slide)
- Poster (only on the front side), Informational Brochure
- Documentary Video (5-7 min maximum length)
- B. Include the following information
- Description of the fuel source you are assigned (5 points)
- 2-3 Examples of important inventions related to the production or use of this energy. Include the name and background of the person or the culture first used it. (10 points)
- Pros and Cons of this type of energy for humans and for the environment (10 points)
- Your names, Title, class section (5 points)
- Sources (5 points)
- Neatness, proper length (5 points)
- C. Presentation (10 points)
- Clear voice
- Eye contact with class
- Not reading the slides directly

D.	Self and Peer Evaluations	(10	poi	nts)	

E.	Due Date -	

Total Points\_\_\_\_\_/60

# **Wind Turbine Challenge Post-Assessment**

Student Directions: Think about the sequence of events you experienced while designing the wind turbine blades. Write the sequence and what you learned at each trial in the following table.

Design	What I did (Cause)	What happened (Effect)	Why? (Because)	
1st Trial				
Second Trial				
Third Trial				
The big idea I learned by doing this activity				

**Teacher Summery**: This post assessment allows students to review and organize their activity and learn the cause and effect of each decision they made. They can see the sequence of the result of the wind turbine outcome based on the changes made and are able to explain the reasoning for it. By writing the big idea, the teacher can quickly decide if the main point of the activity is mastered.