

Name: _____

Wind Energy Exploration Sheet

Answer the questions below as you read about wind energy.

1. What is wind?
2. In your own words, describe how wind forms?
3. List two places that wind forms.
4. Wind is measured using a _____ or an _____
5. Wind speed is measured in _____.
6. On the Wind Power Classification Scale, what speed do wind power class 7 winds have?
_____ m/s
7. Look at the map of the United States. Where are the strongest winds located?
8. What are wind farms? _____
9. What form of energy is captured by a wind turbine? _____
10. The blades of the wind turbines turn gears that spin a generator to produce _____

11. What is the “grid”?

12. What does a **step-up transformer** do?

13. What does a **step-down transformer** do?

14. What is the voltage of electricity when it reaches your home?

15. Describe briefly how electricity reaches your home.
NOTE: You can use a diagram.

16. What do you think is the biggest advantage of wind energy?

17. What do you think is the biggest disadvantage of wind energy?