**Wind Turbine Design Post-Test**

1. **How are a wind turbine and a fan similar or different?**
2. They are the same. They both turn wind into energy.
3. They are the same. They both turn energy into wind.
4. They are opposites. A wind turbine converts kinetic energy into electrical energy, and a fan converts electrical energy into kinetic energy.
5. They are opposites. A wind turbine converts electrical energy into kinetic energy, and a fan converts kinetic energy into electrical energy.
6. **Which of the following *increases* the power generated by a wind turbine?
Circle all answers that apply.**
7. Increasing wind speed
8. Decreasing air density
9. Decreasing sunlight
10. Increasing blade size
11. Increasing rainfall
12. **What happens to the power produced by a wind turbine if the blades are placed at each of the three angles below? Explain.**

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**0°:**

**90°:**

**45°:**

1. **How would you design a wind turbine to collect the most energy?
Draw an example and explain below.**