

Wind Turbine Design Challenge



Using your knowledge (and Google) of wind energy, build a small turbine to produce as much power as possible! Think about the best construction techniques and the most innovative design to make it operate. Grades will be based solely on performance.

What materials should I use?

The great thing about the Wind Turbine Design Challenge is that it is wide open and you may use any materials that you can find.

What are the rules for building and testing your turbine?

Wind Source - Power will be generated by wind from a box fan in the classroom.

Power Generation - You will attach your blades to a motor (like the one you used for your electric car project).

Build - You are allowed to use gears if you choose.

Your grade:

1. Did you follow the instructions outlined above and have a functioning wind turbine?
 - ✓ If yes, 70 points. If no, receive a zero.
2. What is the energy output for your wind turbine?
 - ✓ A voltmeter will be attached to your output and a voltage reading will be taken for one minute.
 - ✓ All readings will be compared, the highest will receive 30 points while the lowest will receive 10 points.

