

Name: _____ Date: _____ Block: _____

Wind Energy

Your challenge is to research another source of clean energy – Wind Power. You will have to start by researching electric generators, and then you'll have to find a way to harness wind in order to activate your electric generator.

1. List at least 4 sources that you used to research electric generators.

2. Research and list at least 3 different types of wind turbines.

3. Sketch a design of the turbine that you would like to construct.

Completion/Skill Mastery					
3	At the project due date the model works as a proof-of-concept. Functions correctly based on the scientific principles studied in the Scientific Inquiry, but is not a finished product.	2	At the project due date the model physically represents a final version but does not work, or, shows most progress toward working but is incomplete.	1	At the project due date the model does not function as intended and is not near completion
Engineering process					
3	I used the information I found to come up with a design, and I built something that sort of works. I tested and modified my design to get it to work better.	2	I tried to build something based on a design I found, but it didn't work.	1	I didn't really build anything - I just copied a design I found and didn't actually even try to build it.
Efficiency/time usage					
3	Most time used efficiently but maybe didn't have materials ready to begin, or missed classes/opportunities to engage in build.	2	Missed classes, didn't have materials ready for building promptly, or had materials ready but didn't engage in building efficiently	1	Dawdled, wasted time, delayed, an made little progress
Effort/work ethic					
3	researched, learned about the issue. Solution is kind of a new idea but draws heavily from existing projects/products. Could be more novel. Doesn't have the clearest purpose, usefulness or viability	2	drew heavily from existing ideas, didn't alter or innovate in any major way. Build quality is good but purpose/intent/viability isn't clear.	1	Dawdled, wasted time, delayed, threw hands up and asked to be told what to do
Communication					
3	Most, but not all, design features were communicated well. Someone else could build it with some assistance	2	Blueprint/sketch is has some labels and measurements, but is difficult to interpret and would be difficult to build from	1	Even when prompted, student would not communicate design features, and it would be very difficult/impossible for someone else to recreate the design.