



Topic: Renewable Energy (Wind)

Optimal Age Groups: Junior, Intermediate & Senior

Climate change! Greenhouse gasses! Fossil fuels! These are all words that have becoming increasingly common in today's world. As we create innovative ways to lessen our impact on the planet, new words have also become widespread: Clean energy! Green technologies! Renewable resources!

But what do these words really mean?

In this session we will talk about some of the natural processes that are used to create (and replenish) renewable energy. Specifically, we will focus on how we are able to harness kinetic energy from the wind and turn it into mechanical power and electricity. Topics of inquiry include: What were wind turbines used for in the past? How do they convert one form of energy to another? Where should they be placed to harness the most power? And more!

Students will then get to put their knowledge to the test by competing in teams to create the most efficient wind turbine. Using common household items, students will design a small prototype that will be hooked up to a voltmeter to measure electromotive output. With the help of our "leaf blower of science", students will get to see how the design of their turbines effects its efficiency. The team with the highest voltage gets bragging rights!