EXPLORING WIND ENERGY

Kit Sponsor: Remy Pangle **STEM**

Objectives:

As a result of this lesson, students will understand how electricity is generated from the wind. Students will be able to measure the wind, measure electricity, and assemble a model turbine.

Overview:

Secondary students develop a comprehensive understanding about wind formation, wind energy, and electricity generation from wind through reading, critical thinking activities, and hands-on investigations. The kit comes with a Teacher Guide, a class set of Student Guides, and the materials necessary to conduct the activities, including two KidWind Basic Turbines and a geared nacelle to convert one turbine to a geared turbine.

To replenish any materials used, lost or broken during classroom use, check craft, hardware, or hobby stores. For more information or to purchase this kit, visit NEED.org

MATERIALS

This kit includes:

Anemometer
Wind gauge
Wind vane
Genecon and Book
Box of snow cone cups
Multimeters
Compass
Large straws
Small straws
Straight pins
Pencils
Small binder clips
Alligator Clips
Masking Tape
¼" Dowels
18" Long balsa sheets
16" Long chloroplast sheets
Hub
PVC 1' 90 degree Joints
PVC 1' T-Joints (2 with drilled holes)
PVC 6" pipe
PVC 24" pipe
PVC 2" pipe
PVC couplers
Generators
Geared Head Assembly
¼" Dowels
Visual Voltmeter
Extra Generators
Teacher guide
Student Guides

Not in this kit:

Foam cups
Hole punch
Rulers
Scissors
Permanent Markers
Tape

Additional Equipment Needed:

Fan

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