



## **Energy All Around Us Wind**

### **Overview**

Wind energy is one of the earliest forms of energy that man harnessed via wind mills.

### **Arizona State Standards**

SC06 S5C3 PO1 Identify various ways in which electrical energy is generated using renewable and nonrenewable resources.

SC06 S5C3 PO 4 Compare the following ways in which energy may be transformed. (Mechanical to electrical, electrical to thermal)

### **Objectives**

The student will explain that wind energy is renewable and can be an example of mechanical to electrical transformation.

### **Background Information**

Everything that occurs in the universe occurs due to the exchange and transformation of energy. It is difficult for students to understand this since we do not “see” energy. This activity is designed to help students construct their own understanding of energy and how it behaves.

### **Materials**

Pencil  
Thumb tack  
Diagram #1

### **Procedures**

1. Cut out the main square.
2. Cut along the dotted lines
3. Bend A, B, C, and D into E.
4. Attach all together by placing a thumb tack through the black dots. Pin into the erase of the pencil.
5. Give the students some time to play with their “windmills”
6. Have the following discussion with the students: “What makes the blades move?” “What is the down fall of relying on wind energy?” “How do you think wind energy is transformed into electrical energy?” “Where have you seen windmills?”
7. Have students create a graphic organizer showing how wind energy can be changed to electrical energy, the pro and cons of wind energy, and their own definition of wind energy.



Picture of windmill cut out.

