

# WIND POWER

## DAY THREE: BLOWN AWAY



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# BLOWN AWAY

## Welcome to Wind Power Day Three!

Wind has been used as an energy source for at least 3,000 years in the form of windmills. There are many modern designs but the underlying design principles haven't changed. Windmills have evolved to a different design, which you may know as a wind turbine.

Wind turbines, like windmills, are mounted on a tower to capture the most energy. At 100 feet or more above the ground, they can take advantage of the faster and less turbulent wind. Turbines catch the wind's energy with their propeller like blades. Usually, three blades are mounted on a shaft to form a rotor.

Wind turbines use blades to collect the wind's kinetic energy. Kinetic energy is the energy that an object possesses due to its motion. Wind flows over the blades creating lift (similar to the effect on airplane wings), which causes the blades to turn. The blades are connected to a drive shaft that turns an electric generator, which produces the electricity.

For today's activity, you are going to make your own wind turbine model from a pinwheel!

## ACTIVITY

### Materials:

- Paper
- Pencil
- Thumbtack or Pin
- Ruler

### Intructions:

- Cut out a 6.5" by 6.5" square of paper mark
- Mark the center of your square and cut from the corners diagonally towards the center of the square, stopping about 1" from the center point.
- Use a pen to make a hole in the center and at the end of every other one of the 8 corners
- Bring each corner with a hole in it to the center of the pinwheel
- secure the pieces with a thumbtack by pushing it into the eraser of the pencil.

## SNACK

### Ingredients:

- Ground Sausage
- Cresnet Rolls
- Cream Cheese

### Intructions:

- Brown sausage in a skillet over medium heat.
- Spread dough from 1 package of crescent rolls out onto a work surface and pinch perforations together to create a single sheet of dough.
- Spread half the cream cheese over the dough sheet, leaving a 1/2 inch margin around the perimeter
- Sprinkle half the cooked sausage evenly over the cream cheese
- Roll dough up into a log, starting at a long edge; wrap log in plastic wrap or parchment paper
- Refridgerate rolls for at least 1 hour
- Unwrap rolls and cut each into 1/2 inch slices. Place slices onto a baking sheet.
- Bake in the 375 degree oven for 10-15 minutes until pinwheels are golden brown.

### Materials:

- Skillet
- Oven
- Knife/Spoon

