MOST* Homemade Anemometer

Materials

- Cardboard
- 4 Cups
- Thumbtack
- Scissors
- Stapler
- 2-3 inch tall container with a lid
- Pencil

An **anemometer** is an instrument that measures wind speed and you can make one right at home.

Instructions

1 Cut the cardboard into two strips that are about 1 and a half inches wide and 12 inches long. Staple the strips together so they make a cross with equal length on all sides.

2 Staple the cups on their side to the ends of the cardboard cross. Make sure they are of similar sizes and you can tell one apart from the others. This can be done by using a different color cup or marking one of the cups with tape. Make sure that all the cups face the same way. Why do you think all the cups have to face the same way? What would happen if they didn't?

3 Use the scissors to make a hole in the lid of the container that is just a little bit larger than the pencil. Use the thumbtack to attach the center of the carboard cross to the eraser of the pencil. Put the lid back on the container. Then put the empty end of the pencil in the hole of the lid so it can spin freely. Why do you think the pencil needs to spin freely?

4 Now you can measure the wind speed. If the cups make 10 full circles in a minute that means the wind speed is about 1 mph. What is the wind speed at your house? Is it the same every day? What is the average wind speed? Is the wind speed different in different areas around your yard? Why do you think that is? What could we use the wind power for? Why might wind power be helpful? What might be some challenges with wind power? What might be the best places for wind turbines? Anemometers can help us find the best places to place wind turbines to get the most power out of them.