How to Build an Anemometer

I am really good at following instructions. I have special instructions that tell me what to do all of the time! These special instructions are called a “code”! Are you good at following instructions?

Follow the instructions below to build your own sundial.

**Materials:** 3 thin wooden dowels or skewers, 5 paper cups, an empty water bottle (any size), a hole puncher and tape.

**STEP 1**
Ask an adult for help to punch holes in one side of four of the cups. Add a piece of tape or colour one of the cups a different colour so it is easily identifiable.

**STEP 2**
Ask an adult for help making four evenly spaced holes in the fifth paper cup.

**STEP 3**
Slide two of the wooden dowels through the fifth cup so that it makes an “X” inside.

**STEP 4**
Add one cup to each end of the dowels and secure them with tape. Make sure the cups are all facing the same direction in the circle!
**STEP 5**

Take the third wooden dowel and poke a hole in the center of the fifth cup. Slide it up until it touches the “X” you made before with the other dowels.

**STEP 6**

Place the middle dowel into the empty water bottle.

**STEP 7**

Decorate your water bottle and the other cups of your anemometer.

An anemometer is a device used to measure the speed of the wind. The faster the wind is blowing, the faster the cups will spin around the bottle!

Take your anemometer outside and set a timer for 30 seconds, then count how many times the cup that you coloured a different colour (step 1) goes in a circle. On windier days it will go around more times in 30 seconds.

You can also try this by running as fast as you can and seeing how fast it spins, or by holding on your bike or when driving slowly. Make sure you are always setting a timer though so that you are counting how many times it spins in the same amount of time.