

Make a Weather Vane

Make your base:

Take a cup lid. Label the four directions around the lid: N for north, E for East, S for South, and W for west. (figure #1)
Put the lid on a cup. Write your name on the cup. Decorate if desired.

Take a straw and put it in the hole in the lid of the cup.

Cover the top of the straw with a piece of tape. Then put one more piece of tape on top of that. (figure #2)

Make the weather vane topper:

Decorate a paper flag and an arrow. Cut them out.

Take a second straw. Cut small slits in each end, and insert your flag and arrow into the slits.

Balance the straw on your finger to find its center of gravity.

Ask an adult to poke a pin through the center, being sure that it's parallel with your flags. (#3)

Then, poke that pin through the tape on the top of the straw in your base cup. Make sure it turns easily. (#4 and 5)

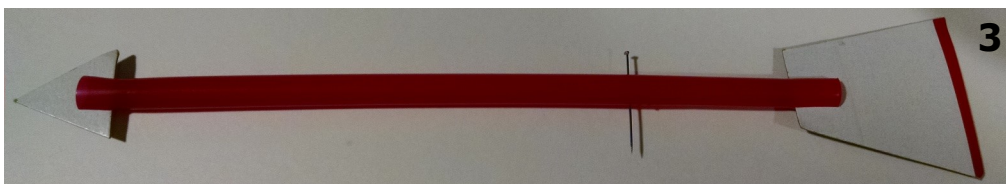
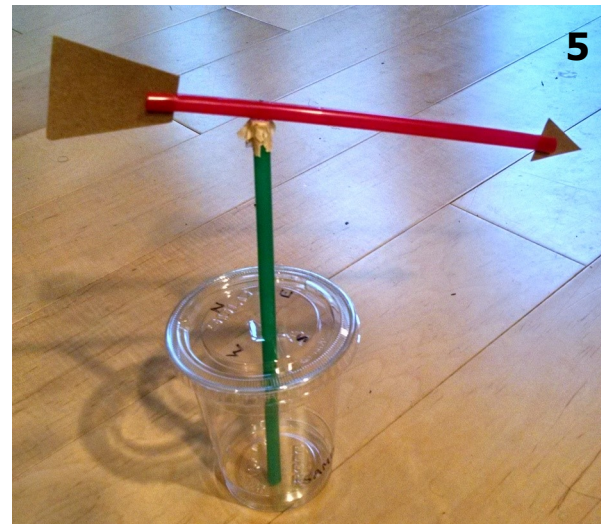
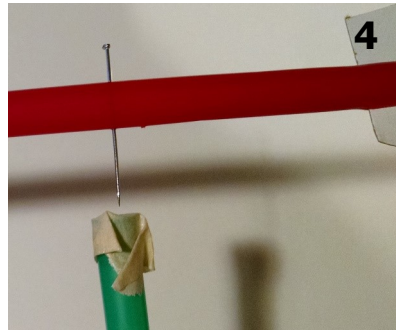
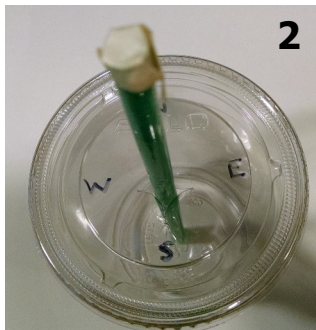
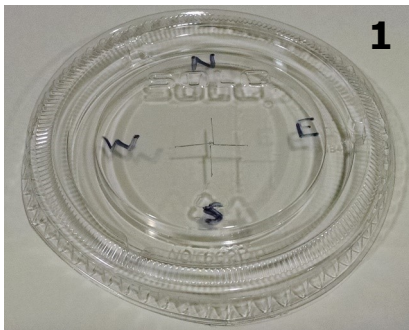
To use the weather vane:

Fill the cup part-way with water. This makes it heavy enough that it won't tip over.

Put the cup outside, with the letter N pointing to the north.

When the wind moves the weather vane, it will tell you what direction the wind is coming FROM.

If it's coming from the north, the weather will get colder. If it's coming from the south, it will get warmer. From the east means rain or snow is coming. From the west means the weather may clear.



Make a Anemometer

Make your base:

Take a cup lid. Label the four directions around the lid: N for north, E for East, S for South, and W for west. (Figure #1)

Put the lid on a cup. Write your name on the cup.

Take a straw, and put it in the hole in the lid of the cup.

Cover the top of the straw with a piece of tape. Then put one more piece of tape on top of that. (Figure #2)

Make the anemometer topper:

Take 4 straws. Pinch the end of one closed, and slide it inside the end of another to make a super long straw. Then do that again with the other two straws so you have two super long straws.

Make a plus sign + with the two straws. Poke a pin or nail through the center of the straws, going through both straws. Tape them together.

Decorate one cup (Dixie cup or cupcake wrapper).

Punch a hole in that cup and 3 plain cups, about halfway down, and then another hole in the opposite side of each cup.

Mount a cup on each end of both straws. Make sure the cups all face the same way around a circle. (Figure #3)

Then, poke the nail or pin that's in the center of the anemometer through the tape on the top of the straw in your base cup. Make sure it turns easily. (#4, 5)

To use the anemometer:

Fill the cup part-way with water. This makes it heavy enough that it won't tip over.

The anemometer measures the speed of the wind.

As it turns in the wind, every time the decorated cup passes you, count it. Count how many times it turns in one minute.

