

Anemometer (Wind Gauge)



Materials:

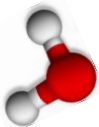
- 5 Dixie cups
- 2 straws
- 1 pencil
- 1 push tack or pin
- Hole puncher
- Scissors

Instructions:

1. In one of the cups, punch 4 holes, equally spaced around the top of the cup.
2. In the same cup, use the scissors to pierce a hole in the bottom of the cup, make the hole large enough for the pencil to fit through.
3. In the remaining 4 cups, punch 2 holes near the top, directly across from each other.
4. Push the two straws through the cup with four holes so the straws crisscross in the middle.
5. On one of the straw ends, push a 2 holed cup on the straw so that the straw pokes completely through the cup, exposing $\frac{1}{2}$ " out the other side.
6. Repeat Step 5 for the three remaining straw ends.
7. Orient the cups hanging at the edge of the straw horizontally, with the cup opening always in the same direction. (See the Attached Figure)
8. Fold the $\frac{1}{2}$ " of straw down, and tape it to the cup to secure the cups in place.
9. Take the pencil and push it through the bottom of the cup with the 5 holes, eraser first.
10. Meet the eraser where the two straws cross in the center, and pin through the two straws into the eraser with the pin.

The Science

You've just made your very own anemometer. The anemometer is the instrument used at weather stations to measure the wind speed. The cups catch the wind blowing in the air, and rotate the anemometer. The faster the wind, the faster the cups spin. How fast can you make yours spin in 10 seconds? How many revolutions per minute is that?



Did you complete this experiment?

You could become a certified Weather Lab Assistant.
Send us a photo or video of you and the completed experiment at kaaltv.com/weatherlab.
The Weather Lab Assistant of the week is announced on
Wednesdays on ABC 6 News Good Morning!



