Which Way Does the Wind Blow?

4 weeks ago OYD No comments

Title: Which Way Does the Wind Blow?
Description: Learn about the wind and how to build a weather vane so you will know which way the wind blows.
Season: Any season, but best in autumn.
Length of Activity: 1 hour
Age: 6-12
Button: Start the Activity

Which Way Does the Wind Blow?

Wind is such a mystery! It's something you can feel only you can't necessarily see.

But what is it exactly? Well, wind, as we know it, is the movement of air, but it's actually made up of microscopic molecules of gasses like nitrogen and oxygen. When those molecules move in the same direction, they form what we know as wind.

When temperatures change, the air pressure expands and contracts. The more extreme those changes, the stronger the winds.

And while wind direction isn't always successful in weather prediction, it can help us make an educated guess about what is to come.

That's why today we'll show you how to make a weather vane, another word for a wind-compass.

Supplies and Tools needed:
● 1 plastic straw
● 2 paper plates
● 1 marker
● 1 pencil with a new eraser
● 1 pair of scissors
● 1 roll of tape
● 1 poster board
● 1 straight pin (ask an adult for help with this part!)
● 1 ruler
● 1 tube of modeling clay
● 1 table fan

Getting started

Step 1: Turn one of your paper plates over and, on the bottom, use your marker to draw a big 'N' for north at the top, a big 'S' for south, at the bottom, a big 'W' for west to the left side and a big 'E' on the right side.

Step 2: Using your poster board, cut out a triangle. This will be the tip of your arrow.

Step 3: Then cut out the shape of a house. It should be a bit bigger than your tip. If you are unsure of what a 'house shape' is, think of a square with a triangle as a hat! This will be the tail to your arrow.

Step 4: Take your straw and cut 1-inch slits (lengthwise) on the bottom and the top of the straw.

Step 5: Place the tip of your arrow in one slit and the tail of your arrow in the other.

Step 6: Take your ball of clay and place it in the center of your other paper plate, then place your plate with the compass on it on top so that the clay is in between the two plates.

Step 7: Now, in the top of the plate you drew your compass on, take your sharpened pencil and push it through the center of your plate so that it stands up sturdy. Be careful not to harm the surface you are working on. The tip of your pencil should sink into the clay.

Step 8: Ask an adult to help you push the pin through the center of your straw and into the pencil's eraser.

Step 9: Using the table fan, test your weathervane to see how it turns.

Step 10: If you take your weathervane outside, ask an adult to help you align the 'N' with north, for a more accurate reading of which way the wind is blowing.

Taking it Deeper
A weather vane will help you understand which way the wind is blowing, but meteorologists don't just measure direction, they also measure speed! Using an anemometer, they can tell you how many miles per hour the winds are blowing.

How might you adapt your weathervane in order to measure the speed? Need some inspiration? Check out this link for images of homemade anemometers.

Further Reading
Did you know there are different kinds of winds? To learn about all the different kinds of winds and further understand weather patterns, take a look at this article. Or, if you love picture books as much as we do, check out this beautiful list of books all about wind.

Further Watching
We love this scientific video all about wind and how it influences the weather.