

Teaspoon Anemometer

Teacher's Guide

The Initial View (Introducing the Activity)

Be careful breaking or cutting the spoons and inserting them into the cork! Remind them to be careful with the broken spoons. The spoons can be held with a pair of pliers and then broken off. You can also break them by hand. It would be *best* to have them all broken or cut ahead of class time. *Leave about an inch or so of the handle still attached to the spoon.*

Take a Deeper View! (More Science)

Meteorology is the science of forecasting **Weather**. In order to forecast what the weather is going to do, it takes a lot of information. This information or **Data** must be gathered by different instruments. **Temperatures, Wind Speeds, Air Pressures**, location of **High** and **Low Pressure** areas, **Fronts, Cloud Cover** and much more information must be constantly gathered and analyzed. The **Anemometer** is the instrument used to measure wind speed and most can measure direction as well. Other instruments used are **Radar, Satellites, Balloons**, and other devices, though plain old observation by the human eye is also vital to forecasting!

If your "wind catcher" didn't turn smoothly, it wasn't **Balanced**. The **Forces** coming from the four spoons can't make the clay turn smoothly unless they are an even distance apart!

More and Bigger Views! (Additional Classroom Ideas)

1. There are a lot of careers in Meteorology. Get on the Internet and find out what some of these jobs are. How much science, math, and language arts are needed for these jobs?
2. Find out what instruments are used in gathering information for weather forecasting.
3. Computers are used a great deal in making forecasts. Visit a TV station, or other place where meteorologists analyze data and find out more about computers and weather.
4. There are some good weather **Radar** sites on the Internet. Find one, bookmark it and watch the weather happen. It's a great place to have easy to find in stormy weather!
5. Get a weather map and chart the movement of a weather pattern across the US.
6. Find out what are the major **Climate** (climate is weather over a long time period) zones around our planet. Get some maps and color in the areas where these climate types are found. Make blank maps of your own, draw in these climate zones.
7. What are some weather related disasters people in different areas face?
8. If someone has been through a big blizzard, tornado, hurricane or other weather-related emergency, write a story about it and share it with the class.
9. How does weather affect the clothing we wear, what we do, and other activities we plan? Does weather affect our moods or our behavior? Find some examples.
10. Have a meteorologist visit class to talk about weather science.
11. What were some methods people used in the past for predicting weather? How did ancient cultures try to influence weather? How has weather or climate affected or destroyed old cultures? Especially check out ancient Native American cultures in the SW US which scientists think crashed due to climate changes.
12. What type of climate changes are meteorologists predicting for the future if present trends keep happening?
13. How are people possibly affecting climate on Earth?

Answers

1. (the spoons weren't evenly spaced so everything wobbled)