



Challenge: RAIN, RAIN – DON'T GO AWAY!

The Scoop: How much rain really falls in your neighborhood during the summer? And just how accurately does the TV meteorologist predict rainfall? In this challenge, you'll make your very own rain meter to measure the precipitation that falls right where you live.

What You'll Need:

- A plastic or metal ruler
- Paper and a pen or pencil
- Clear tape
- A clean, clear glass container with a straight side, like an mayonnaise or olive jar
- Scissors

The Challenge: You will be making a rain gauge to measure the amount of rainfall in your neighborhood.

1. Tape your ruler to the inside of the glass jar, making sure it touches the bottom and is standing straight up. Use enough tape so the ruler doesn't move around.
2. Check the weather forecast and see when the next rain is predicted to fall.
3. The day *before* a rainfall, find a place outdoors that is away from trees and places where it could be disturbed by people or cars. Try near your building or next to a fence. Set the jar down so that it won't fall over.
4. After it rains, collect your jar, note how high the water is on the ruler to determine how many inches of rain fell. How close was the forecast to the actual rain fall? If the numbers are different, think of reasons why.

Stuff to Think About:

- Pay attention to the weather on the days before and after it rains; what the sky looks like, how warm it feels. Do you notice anything different?
- You measured the amount of rain in a small jar, but the meteorologist forecasts for entire geographical regions. Do you expect your numbers to be the same as the meteorologist's? Different? And why?
- Sometimes the grass is wet with dew in the morning, even when it did not rain overnight. What do you think is happening?