

# Rain, Rain, Don't Go Away Rain Gauge



## What you need:

- 2 litre plastic bottle
- Scissors
- Duct tape
- Sand
- Sharpie marker
- Ruler

## Instructions:

- Empty and wash out the 2 litre bottle so it's nice and clean.
- Take the scissors and cut off the spout top right where the taper or curve of the bottle begins.
- Fill the bottom of the bottle with 1.5cm of sand. This will keep the bottle from falling over on those windy days.
- Pour in just enough water so you can see the water level above the sand. Yes, your sand will be wet! This is called your saturation point.
- Use the Sharpie Marker to draw a line at the saturation point above the sand. Next to the line write 'starting point'.
- Line the ruler up (from the starting/saturation point) and draw a line for every 2.5cm up to the top of the bottle.
- Take the top 'cut off' spout portion of the bottle and flip it upside down. Insert it into the bottle and use some duct tape to secure it. This part will help catch and collect the rainfall by funnelling it into your bottle.
- Now it's time to find a good place outside for your rain gauge and start recording your rain data.

## What happens and why:

The rain gauge collects water. When the water drips or pours into your rain gauge you can accurately measure how much rainfall has occurred.

## Extra Experiments:

1. Make more rain gauges. Place one in an open area outside, one underneath a tree and one by the edge of your roof. Are you getting different measurements of rainfall? If so, why do you think that is? And which one do you think is the most accurate reading?
2. Add 5mm / 1cm / 1.5cm spots onto your rain gauge so you get a more specific and accurate reading.