

15-Minute Family STEAM DIY Rain Gauge

Supplies Included:

Plastic bottle Aquarium gravel

Supplies From Home:

Permanent Marker Scissors or Box Cutter Tape Ruler

- 1. About a few inches from the top of the plastic bottle, draw a line around the bottle. Puncture the bottle on the line you drew with the tip of the scissors/box cutter and then cut all the way around the bottle until the top section comes off
- 2. Place several small rocks in the bottom (for weight).
- 3. There is a line near the bottom of the bottle where the middle & bottom of the bottle joins together. With the permanent marker, draw a line all the way around this line. Fill the bottle with water to the line and mark it "0". This will calibrate your gauge.
- 4. Now using the ruler/tape measure, draw lines in regular intervals starting at this line and moving up. Every inch would be a good measure. Label each line with its measurement.
- 5. Flip the top section (that you cut off) upside down and slide it into the bottom section of the bottle. The bottle opening (where the cap was) should be facing down toward the gravel/rocks. Use tape to secure them together if they don't fit tightly.
- 6. Your new rain gauge is ready for a rainy spot. Find a place where it can be wedged between two things so that the wind or rain won't tip it over. Make sure it's not under an awning or sheltered by trees.

The Science

Rain falls into the top of the gauge and collects at the bottom, where it can be measured. Have your child compare the amount of rain to the length of time the shower lasted. Was it a short and heavy rain shower or a long and light one? Does it fill faster when the drops are bigger?



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