



## Making an accurate Soda Bottle Rain Gauge

### STEPS:

- 1) Find the spot towards the top of your bottle where the circumference is 12.56in draw a line around the bottle at that spot with your sharpie (this creates a 4in diameter opening to your bottle)
- 2) Use an exacto knife and cut the top off along your sharpie line.
- 3) Remove the label from your bottle, unscrew the cap, and set it to the side.
- 4) Tape both sides of the cut opening of the bottle (you can do this with smaller strips or with a couple larger pieces)



- 5) Place the top of the bottle inverted in the bottom of the bottle and secure it either with the binder clips or the paper clips.



- 6) Use your smaller, clear measuring cup to measure out 2 cm of water, and put it in the bottle.
- 7) Use your sharpie to draw a line where the water comes to on your bottle.
- 8) Repeat steps six and seven, four more times.

- 9) Once you have four lines, the next mark will be the Inch mark, it's helpful to make this mark larger or in a different color.



- 10) Repeat steps six through nine, four more times.  
11) Label the inch mark lines 1-5 from bottom to top.

## Help improve this activity:

How would you improve this design?

Are there any other materials we could consider using or substituting?

What suggestions do you have for attaching the rain gauge? What considerations would someone need to take into account?

Notes/Suggestions: