



Sixth Grade Science

6th Grade Science: Activity #1

Build Your Own Barometer!



Directions: This handout goes with a KCS Teacher Video. If you have access to the video, watch the video before doing this activity. You can find the videos here <https://www.knoxschools.org/Page/21816>

Objective:

Many of the weather instruments that are used to record weather observations can be recreated (in simplified versions) using materials commonly found at home. The objective of this lab is to build a simple barometer to record weather observations.

Background Information:

Meteorologists use many tools to predict and record the weather. One important tool is a barometer. Barometers are used to measure air pressure. Air pressure can help you predict good or bad weather. If the air pressure is rising that means good, clear weather is on it's way. If the air pressure is falling that means precipitation is on it's way.

Materials:

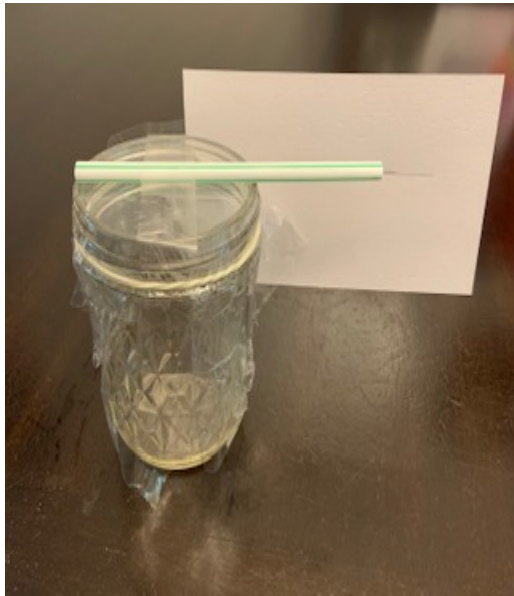
- Small glass jar/ tin can/ or any empty food can
- Plastic wrap or Large balloon (12")
- Scissors
- Tape
- Drinking straw/ Stirring stick / Popsicle stick
- Index Card or sturdy piece of paper
- Rubber band



Instructions:

1. Using the plastic wrap, cover the top of the can and secure it using the rubber band. The plastic wrap should form an airtight seal over the can.

2. Place the straw horizontally on the top of the can. Make sure it is centered width-wise (looking down, the straw should split the top of the can into two half circles). Tape the straw in place.



3. Tape the index card to the can behind the straw (you may need to trim the straw for this).

4. Record the location of the straw on the index card with a pencil.

5. Continue recording the location of the straw as often as you want. Does the location of the straw change?

Questions and Discussion:

1. Record a few observations, do you see any changes in the location of the straw?

2. Describe how your homemade barometer works.

3. If the straw moves up on the card, what kind of pressure would you expect? Why?