



Weather

Measuring Temperature

A device used for measuring temperature is called a thermometer. In this activity, you will be making your own kind of thermometer. As water heats up, the molecules become more energized which will cause the water level to rise.

Supplies

- Three (3) Different Colored Markers
- Two (2) 2 Inch Pieces of Tape
- Two (2) Cups of Cold Water
- One (1) Food Coloring (any color)
- One (1) Clear Bottle
- One (1) Modeling Clay
- One (1) Piece of Poster Board (or Cardboard)
- One (1) Clear Straw

Time to make your own thermometer

1. Fill the bottle until it is 3/4ths filled with cold water.
2. Add 2-3 drops of food coloring to water.
3. Put the straw into the bottle so that about three inches are in the water.
4. Use clay to secure the straw at the mouth of the bottle, make sure no air can get through.
5. Tape the piece of posterboard to the straw, with one piece of tape at the top of the straw and one at the base by the clay.
6. Suck the straw gently until the water rises about halfway up the straw.
7. Use a marker to mark the water level in the straw on the poster board.
8. Put the bottle in a warm place like outside in the sun; the water will rise.
9. Use a different colored marker to mark where the water has risen on the poster board.
10. Now put the bottle in the refrigerator; the water level will go down when the temperature gets cooler.
11. Use a different colored marker to mark where the water level is now on the poster board.

Challenge



Questions

1. Do you have AC in your house? What temperature do you have it set to?
2. How quickly, or slowly, does your thermometer's liquid move?
3. Is one room hotter or colder than another? Why do you think that is?
4. Is it warmer by the window or in the middle of the room?