# **Science in English:**

### Build a THERMOTER ... It's easy!

Read, translate, understand to build by your self a THERMOTER



# SCIENCE PROSECTS

# **Make a Thermometer**

Watch how a simple thermometer works.

## What do you need?

- 1. Tap water
- 2. Rubbing alcohol (do not drink this)
- 3. Clear, narrow-necked plastic bottle (11-ounce water bottles work well)
- 4. Food coloring
- 5. Clear plastic drinking straw
- 6. Modeling clay



#### What to do?

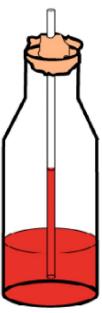
Pour equal parts of tap water and rubbing alcohol into the bottle, filling about 1/8 to a 1/4 of the bottle.

Add a couple of drops of food coloring and mix.

Put the straw in the bottle, but don't let the straw touch the bottom (DO NOT DRINK THE MIXTURE).

Use the modeling clay to seal the neck of the bottle, so the straw stays in place.

Now hold your hands on the bottle and watch what happens to the mixture in the bottle.



# What you'll discover!

Congratulations. You just made a thermometer. Just like any thermometer, the mixture expanded when it was warmed. This made the liquid no longer fit in the bottom of the bottle. As the alcohol expanded the colored mixture moved up through the straw. If the bottle were to get very hot, the liquid would have come through the top of the straw.

Of course, in order to accurately read the temperature, you will need to buy a real thermometer that is carefully calibrated for temperature changes. This one is to see how a thermometer works — just for fun.

Duels sont les mots qui te sont inconnus ? ( à traduire ) Souligne les et recherche leur raduction , tu en auras besoin pour réaliser ton premier thermomètre