

# How to Make a Thermometer

## Summary

Students will make a thermometer showing that liquids when heated expand.

## Main Core Tie

SEEd - Grade 6

[Strand 6.2: ENERGY AFFECTS MATTER Standard 6.2.3](#)

## Time Frame

1 class periods of 45 minutes each

## Group Size

Large Groups

## Materials

strong plastic bottle with a scREW cap  
a thin plastic straw  
modeling clay  
water colored with poster paint.

- [worksheet](#)

## Student Prior Knowledge

Particles move. When heated particles move even more.

## Instructional Procedures

Drill a hole in plastic bottle caps. You can have the kids collect and bring the bottles.  
Put the straw into the hole and seal with the clay.  
Fill the Bottle 1/2 full of colored water. Make the water come about 3/4 the way up the straw then close the lid tightly.  
Let sit for 5 minutes.  
Put the Thermometer into a bowl of ice water and see what happens to the water level.  
Put it into warm water.

## Bibliography

Lesson Design by Jordan School District Teachers and Staff.

## Authors

[Utah LessonPlans](#)