

Grade 2

Week 5

INVESTIGATING HOT AIR

Air takes up space but did you know that hot air takes up more space than cold air? Prove it for yourself in this experiment.

MATERIALS:

plastic water bottle (liter or 1/2 liter size)
balloon
a deep bowl
hot water
ice

PROCEDURE:

1. Fit the balloon over the mouth of the bottle.
2. Stand the bottle in the bowl and fill the bowl with hot water.
3. After a few minutes you will see a change in the balloon. Record your observation.
4. Tip away the water and fill the bowl with ice.
5. Record your observations.

HOW IT WORKS:

When the air is warmed by the hot water, it expands and needs more space, so it stretches out the balloon. When the air is cooled by the ice, it contracts and needs less space, so the balloon goes down.

Look up the words "expand" and "contract" in the dictionary to gain a better understanding of what happened in this experiment.