

Racing Beads

The Action

Grade Level

Grade 3 – Heating and Cooling
Grade 5 – Heat
Grade 7 – Temperature and Heat

Materials

A Glass Beaker or Jar
3 pea sized beads
Butter or margarine
Wooden Spoon
Plastic Spoon
Metal Spoon

Instructions

Use the butter to stick one bead to each of the spoons, keep the beads at approximately the same level.
Place the spoons in the beaker so that the end without the bead is in the beaker.
Pour the boiling water into the beaker.
Watch to see which bead will fall into the water first.

Safety

The water that is being poured in the glass beaker is hot so use mitts for protection. The metal spoon and glass beaker will also get very hot so do not grab them with bare hands.

Hints

The softer the butter used on the end of the spoons (without it being so soft that it does not hold the bead in place) the quicker it will melt, which will decrease the waiting time.

Science Principle

Heat spreads better through some materials than others and metal is one of the best conductors of heat. For this reason the heat hits the butter on the metal spoon faster and therefore that bead falls first.