213 Hot and Cold

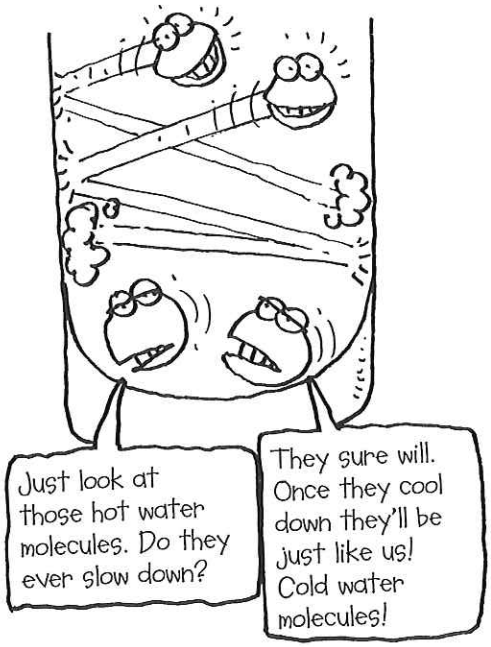
Find out how temperature affects how quickly liquids mix.

Materials

- 1 glass cold water
- 1 glass hot water
- food coloring
- eye dropper

STEPS

1. Gently add four drops of food coloring to the glass of cold water. Count how many seconds the color takes to mix into the water completely.
2. Gently and carefully add four drops of food coloring to the glass of hot water. Count how many seconds the color takes to mix in completely.



Did You Know?

Water and other liquids are made up of tiny molecules that you can't see. The molecules in hot water have more energy than those in cold water, and so move around faster. The faster they move around the food coloring molecules, the faster the food coloring is spread through the whole glass.

214 Ice Pick-up

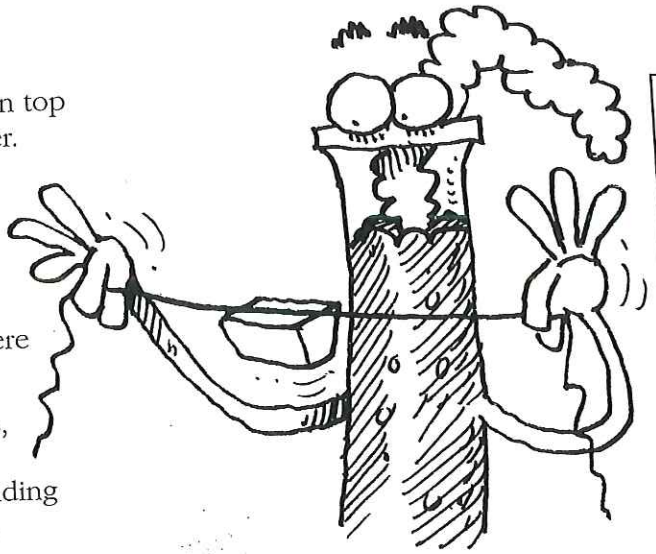
You can pick up an ice cube without touching it.

Materials

- ice cube
- glass of water
- piece of string
- salt

STEPS

1. Place the ice cube on top of the full glass of water.
2. Carefully place the string across the ice cube.
3. Sprinkle some salt onto the ice cube, where the string lies.
4. After a few minutes, try to lift the ice cube out of the glass by holding the ends of the string.



Did You Know?

The salt melts the ice around the string, making a little puddle. After a few minutes, the coldness of the ice cube freezes the little puddle o water into ice again, around the strir This lets you pick up the ice cube. In places where snow stops peopl using roads, salt is used to melt the ice away faster.