**Materials**

- Large clear container
- Water
- Small clear container with small opening
- Food coloring

1. Fill the large container with cold water.

2. Fill the small container with hot water and put some food coloring in it.

3. What do you think will happen when you put the hot water in the cold water? Gently drop the small container into the larger container. What happened? Why do you think that happened?

**The Science Behind It**

The hot water rises to the top because it is less dense than the cold water. When things are heated their molecules spread out more. When things are cold their molecules come closer together. When something’s molecules are more spread out, they become less dense or less tightly packed. Things that are less dense rise above things that are more dense so that is why the hot water rises above the cold water.