

TEMPERATURE AND DENSITY

Do you think that temperature can affect the density of water? Let's find out!

THE MATERIALS

- Two balloons
- A watertight bin
- Hot and cold water

THE EXPERIMENT

1. Fill the bin $\frac{3}{4}$ full with lukewarm water.
2. Fill up one balloon with hot tap water and tie it off. Ask your grownup for help!
3. Fill the second balloon with cold tap water and tie it off.
4. Drop the balloons into the water one at a time. Make a note of what happens to each one.

THE RESULTS

The hot balloon should float because the water inside is less dense than the water in the bin. The heat causes the water molecules to move around very quickly, making the water lighter.

The cold balloon should sink because the water inside is denser than the water in the bin. The colder temperature makes the water molecules move very slowly, making the water heavier.

What else do you think you could do to test density at home?



**COLOR
ME!**

