



KITCHEN SCIENCE

Density of Liquid

Some liquids don't mix and separate when put together. This is because they have different densities. Density describes how much of one thing is packed into a certain place. Objects and substances that are more dense feel heavier than the same amount of another object or substance that is less dense. Try this experiment to see how density works!

Adult supervision required!

You will need

- A clear plastic cup or glass
- Oil—any sort will do (about 1/2 a cup)
- Water (about 1/4 cup) room temperature
- Food colouring
- A pipette or dropper
- A shallow tray to catch any drips.



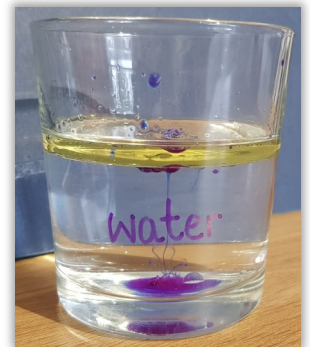
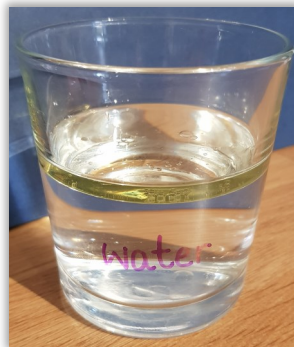
Instructions

1. Place a clear plastic cup (or glass) onto the tray to catch any drips.
2. Half fill the cup (or glass) with water.
3. Add about 1/4 cup of vegetable oil and watch what happens. What do you see?
4. Use a pipette or dropper to add a few drops of your chosen food colouring. Watch what happens. Do not stir. Be patient.

What should you see?

You should notice that the oil floats on top of the water. Water is more dense than the oil.

The food colouring has more density than the oil so it sinks down through the oil into the water below.



Now try this

What happens if you use warm water or cold water?

Can you use other liquids to make a density tower? Try using honey and washing up liquid if you have some.

Share your kitchen science experiments with us on Facebook, Twitter and Instagram!