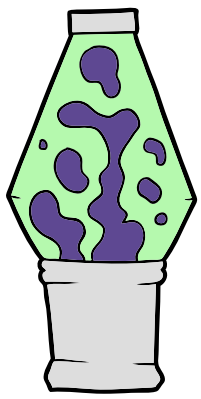
KS3
THURSDAY

MAKE YOUR OWN LAVA LAMP

#SurreyWPOatHome



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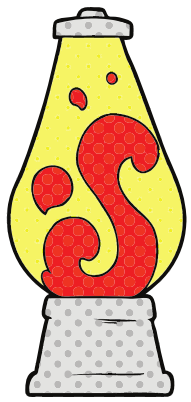

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TO MAKE YOUR LAVA LAMP, YOU WILL NEED:

Baking powder - 3 tablespoons
Food colouring - a few drops
Vinegar or lemon juice - 3 tablespoons
Vegetable oil
Water
A tall glass

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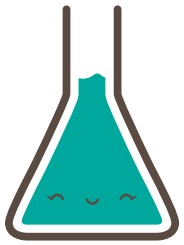
INSTRUCTIONS

- Add 3 tablespoons of baking powder to the glass
- Fill a quarter of the glass with cold water
- Add a drop of food colouring and mix
- Pour in the oil until the glass is 3 quarters full.
- Observe! Does the oil mix with the water?
- Pour in three tablespoons of vinegar or lemon juice
- What happens?



HOW DOES THIS WORK?

The mixture separates because of the **density** of the ingredients. The oil has lighter density than water so it sits on the top. The water and food colouring have the same density so they sit at the bottom.

When we add vinegar to the mixture, the vinegar and baking powder form a **chemical reaction** and the product of that reaction is carbon dioxide. Carbon dioxide is a gas and is lighter than water so it floats to the top. The gas bubbles that travel to the top can carry coloured globules. Once the bubble reaches the top and bursts the coloured globule will return to the bottom.