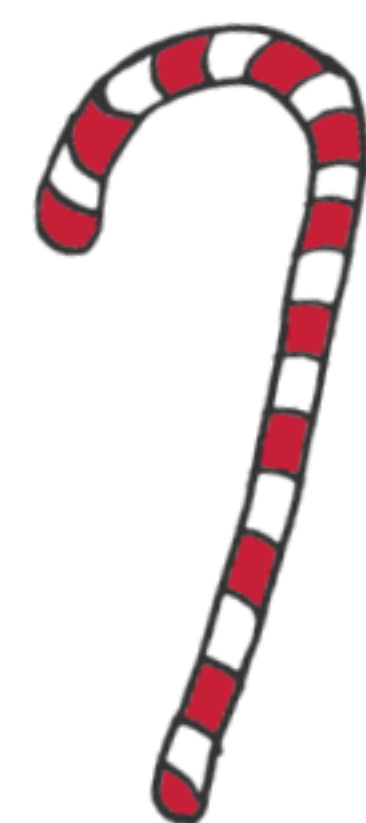




ELF



FIREWORKS

You'll need

Vegetable or sunflower oil

Warm water

Food colouring

Glass or jar



Instructions

Fill the glass or jar about 3/4 full of warm water.

Carefully pour a small layer of oil onto the surface of the water and leave to settle. Note that oil and water don't mix!

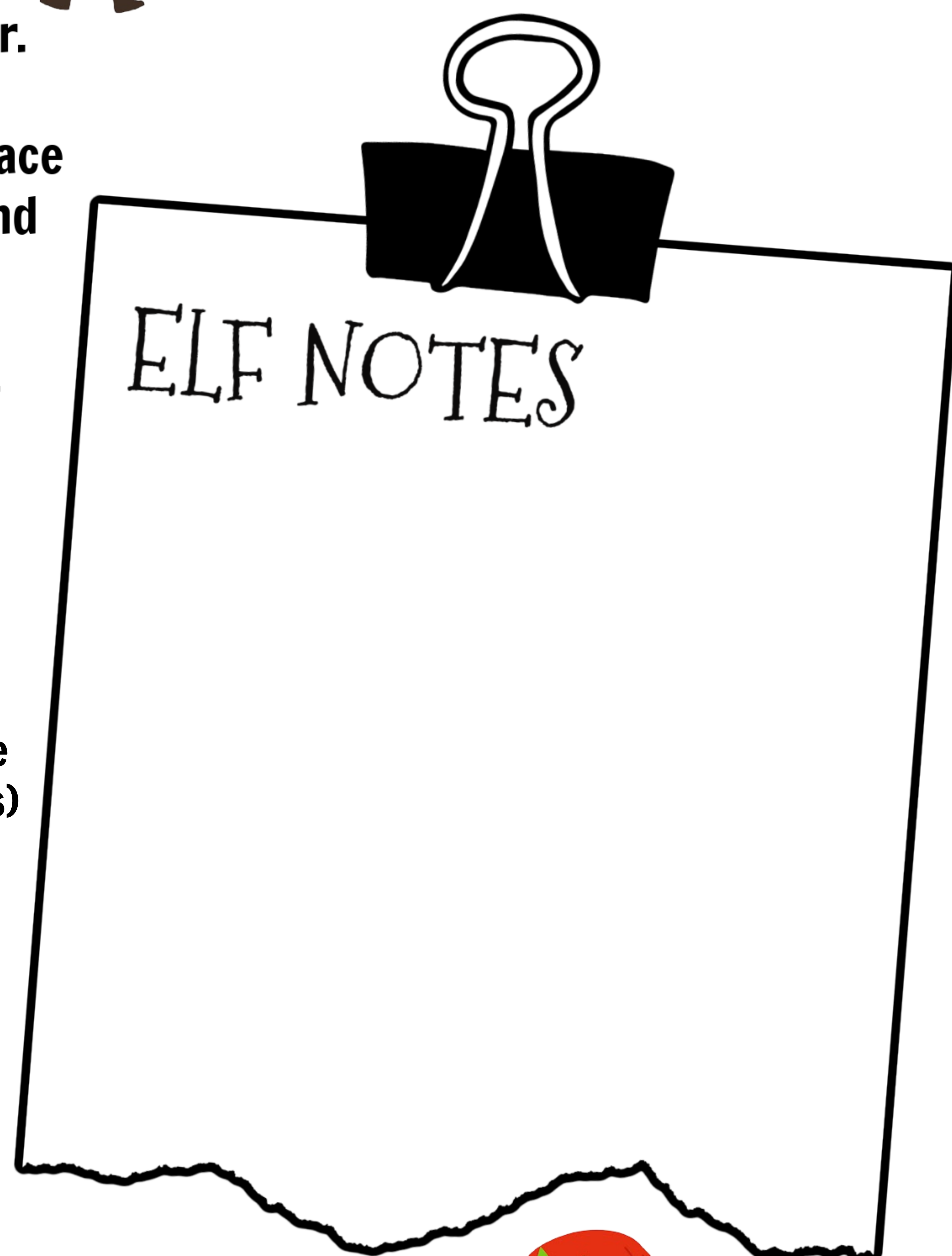
Carefully drop small amounts of food colouring into the jar. You should see the food colouring drop through the oil into the water leaving colourful trails behind.

Why does it work?

Food colouring is more dense than water so sinks to the bottom of the glass leaving trails (resembling fireworks) as some of the colour diffuses into the water.

The water based food colouring forms a bead shape in the oil as oil is hydrophobic (water hating).

Oil molecules are more attracted to each other than water molecules so repel the food colouring . Surface tension between water molecules pulls them into the coloured spheres you see in the oil.



Science Sparks™

Adult supervision required. You are responsible for your own safety.

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