

Fireworks in a Glass Experiment



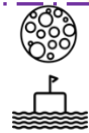
WHAT'S HAPPENING?

Oil and water don't mix. Also, oil is less **dense** than water (meaning there is less of it in the same volume) and therefore floats on top of the water. The food colouring is water based and does not mix with the oil.

The food colouring is heavier than the water, so it sinks through the oil and the water leaving trails as some of the colour **diffuses** into the water.

Vocabulary

Density: how much 'stuff' there is in a volume (or space).



Diffuse: spread out over a wide area.



Now, in your own words, can you explain how the 'fireworks' are created to someone in your family?

Extension ideas:

- Would other liquids work in the same way? What about milk?
- Is there anything else that we could add to make the fireworks move more?

Questions to ask and think about:

- How do real fireworks work?

