

# Fireworks in a Glass

## You will need:

- A glass or jar
- Small bowl
- 3-4 tablespoons of oil
- Warm water
- Food colouring (different colours)
- Fork

1. Fill the glass or jar about  $\frac{3}{4}$  full with warm water.
2. In a separate bowl, add 3-4 tablespoons of oil and carefully add a few drops of different coloured food colouring.
3. Mix it all gently with a fork - just enough to disperse the food colouring a little bit. You'll notice it doesn't mix with the oil - it just breaks up into smaller dots.
4. Pour the oil and colour mixture into the warm water.
5. Watch as the coloured drops sink down into the water and mix together creating a firework effect.

@MrsBpriSTEM



## THE SCIENCE

This is all to do with the density of each liquid (how heavy it is for its size). Food colouring dissolves in water but not in oil. Because the oil is less dense than the water, it will float at the top. The coloured droplets sink because they are denser than the oil. As they sink to the bottom of the oil, they mix with the water and begin to dissolve, creating tiny 'explosions'.