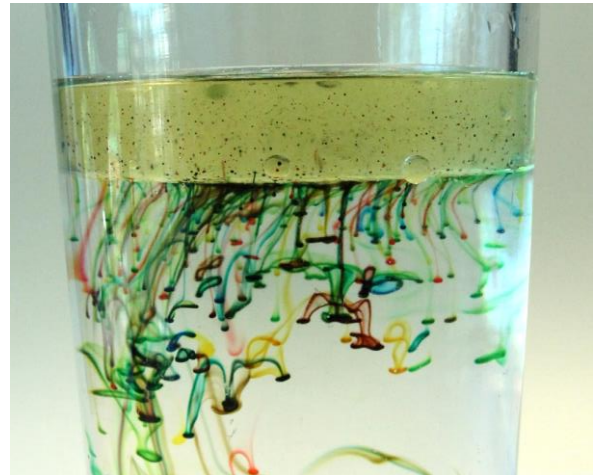


Fireworks in a Jar

Materials

- Tall glass (or glass jar)
- Water
- Small measuring cup
- Vegetable oil
- Food colouring, 3 or 4 colours in dropper bottles
- Teaspoon



Instructions

1. Half-fill the tall glass with water.
2. Pour about 50 mL of vegetable oil into the measuring cup.
3. Add food colouring to the oil (three drops of each colour).
4. Mix the oil and food colouring with the teaspoon to break up the drops of food colouring to make smaller drops.
5. Pour the vegetable oil and food colouring from the jug into the glass of water and notice how the oil floats to the top.
6. Watch as the drops of food colouring slowly sink through the oil. As each drop reaches the water, you will see a burst of colour in the water.

What happens?

Oil and water do not mix well and oil floats on water because it is less dense (density is a measure of the amount of mass in a given volume). The food colouring sinks through the oil towards the water because it is made of pigment mixed with water. When the colour pigment reaches the water, it creates streamers that look like fireworks.