

# Zedua Experiments

**Title:** Fireworks in a jar ( Density of a substance)

What is density?

The degree of compactness of a substance. The density of a substance is the relationship between the mass of the substance and how much space it takes up (volume).

## Materials Required:

1. Clear Jar (glass or plastic)
2. Oil
3. Water
4. Several drops of food coloring
5. Plastic Fork

## Procedure:

1. Pour warm water into the clear glass jar.(until it is 3/4th)
2. Mix a few tablespoons of oil and several drops of different colors of food coloring in a separate bowl.
3. Mix the oil and food coloring gently using a fork.
4. Pour the oil mixture into the jar.
5. Observe that the food coloring will slowly sink out of the oil and into the water. When this happens, it will expand and begin to mix with the other colors.

## What's happening?

Food coloring dissolves in water but oil does not. Since the oil is less dense than the water, it will float at the top. The colored droplets begin to sink because of their density.



Source: pintrest