

Mixing Oil and Water Experiment



Supplies Needed

- Glass jar with a lid or cup (can be done without lid)
- Some Water
- Food Colouring
- Some Oil (vegetable oil, sunflower oil, olive oil)
- Spoon
- 2 teaspoons washing up liquid

Instructions

Step 1 – Start by filling the jar / cup with water.

Step 2 – Add a few drops of food colouring to the water and stir until combined. Make some observations about the water. What happened when the food colouring was added? Was it easy to mix the food colouring into the water? Does the food colouring stay mixed with the water? What do you think will happen when we pour the oil into the jar /cup? Write down your hypothesis (prediction) and then follow the steps below.

Step 3 – Next pour the oil into the jar /cup. Make a few observations. Does the oil behave the same as the food colouring did when you added it to the water?

Step 4 – Securely tighten the lid on the jar and shake it for 15-20 seconds or stir with a spoon.

Step 5 – Set the jar / cup down and watch for a couple of minutes. Observe what happens to the oil and the water and write down your findings. Did the oil and water stay mixed together? Was your hypothesis correct? Do you think there is anything else that can be added to the jar / cup to prevent the oil and water from separating?

Step 6 – Next squirt in 1-2 teaspoons of washing up liquid.

Step 7 – Tighten the lid back on the jar and shake again for another 15-20 seconds or stir with the spoon.

Step 8 – Set the jar down and watch the liquid for a minute or two. Observe what happens to the oil and the water now that the washing up liquid has been added to the mix. Write down your findings. Did the oil and water stay mixed together this time? Do you know why adding the washing up liquid prevented the oil and water from separating?