

## Questacon Science Squad Activity – Oil and water

The video for this transcript can be found on the Questacon Science Squad website at:

<http://sciencesquad.questacon.edu.au/activities>

### Transcription from video:

*(Sound of bubbles popping)*

Tim: Hi everyone, my name's Tim and I'm from the Questacon Science Squad.  
I'm going to show you how to make oil and water mix today.

*(Camera pans to the table).*

You need:

- some water
- some food colouring, any colour will do
- a jar with a tight fitting lid
- some detergent and
- some cooking oil

The first step is to take some of the food colouring and drop a few drops into the jar. One, two, three. There we go a couple of drops.

*(Tim puts a few drops of food colouring into the jar)*

And now take the water and fill it up to about one third of the way up. So, just pour it in. There we go.

*(Tim pours some water into the jar)*

And now take the cooking oil and put a similar amount of cooking oil in. So it will be about two thirds of the way up the jar. There we go.

*(Tim adds some cooking oil to the jar)*

So you can see it's a bit of a globby mess at the moment. There's a lot of little drops and bubbles all through it. If you leave that for about two minutes it'll separate out.

But I can put this one aside because I made one a little bit earlier.

*(Tim screws the lid on the jar and puts it to the side)*

Here we have it here.

*(Tim picks up the jar he prepared earlier)*

You can see that the oil has started to separate out on top and the water is down the bottom.

*(Tim points to the oil then to the water in the jar)*

But I can make these two mix if I take the lid off, put in a squirt of detergent, a nice big squirt, put the lid back on, give it a big shake up.

*(Tim takes the lid of squirts some detergent in then he replaces the lid and shakes the jar)*

You can see that the oil and water have all mixed together.

*(Camera zooms in on the jar)*

If you want to find out why the oil and water mixed together, head to the Questacon Science Squad website. Catch you next time.