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

Transcripotion 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 off 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.