Freezing oil and water

Brief summary:

In this experiment you will observe how water and oil interact before and after being frozen.

You will need:

- Clear plastic container
- Water
- Oil (vegetable oil or olive oil)
- Freezer

What to do:

Step 1. Pour some water into the clear plastic container.

Step 2. Add roughly the same amount of oil to the container.

Step 3. Leave this for a few minutes until the oil rises to the top of the container and then place the container in the freezer for a couple of hours.

Step 4. After these couple of hours, you should see that the water and oil have switched places: the water is now on top of the oil!

Take it further:

Repeat the experiment using different types of liquid instead of water (e.g. salt water, milk, vinegar etc). How do these different types of liquid interact with oil when frozen?

Try our other freezing experiments: *Which freezes first: hot or cold water?* and *Colourful ice melt*.

Big questions:

Oil is a big part of our lives. We use it for all sorts of things, from cooking to driving to making plastics and cosmetics to making electricity. It is a huge help in our lives. But it does cause some environmental problems. Learn more about oil and some of its environmental impacts by finding the answers to the questions below:

- Where does oil come from and what do we use it for?
- Where does the oil that we eat come from?
- Where does the oil that we put in our cars come from?