

## YOU WILL NEED

- \* Rubber gloves
- \* Large Pyrex® beaker
- \* Vegetable oil
- \* Small Pyrex® tube
- \* Water



**1** Put on some rubber gloves and fill the large beaker about three-quarters full with oil.



The tube is easy to see in the oil...

**2** Take the small Pyrex® tube and carefully insert it into the oil.



...and now it's gone!

**3** Now push the small tube down to allow oil to flow into it. Watch the tube disappear as the oil rises up!

## NOW TRY THIS

Try the experiment again, but this time fill the beaker halfway with water before adding the oil. The tube is now visible... but only in the water! Read The Science Bit to find out why.



The water stays at the bottom, giving you a peek at the tube inside.

# DISAPPEARING GLASS



You've probably seen magicians make objects like coins or playing cards disappear. Here's a disappearing act you can do yourself using the science of bending light.

## THE SCIENCE BIT...

When you turn on a light, it shines on everything, bouncing off objects and into your eyes. Glass, though, is transparent, meaning that light passes *through* it instead of bouncing off it.

If light doesn't bounce off glass into your eyes, how can you see it? It's because light bends a bit when it passes from air to glass. If you look at a glass, the light coming through from behind it bends and everything looks wobbly (see image, right). When light passes from oil to glass, it hardly bends – dipping the glass in oil, the wobbles go away and the glass disappears! Light bends a bit between water and glass, which is why you can see the glass in water.

