

THE AMAZING REVERSING FISH

For this experiment you will need:

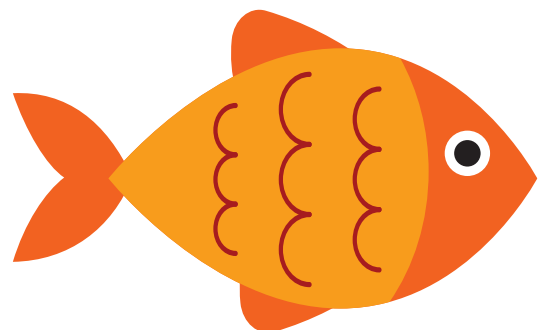
- A see-through drinking glass or bottle
- Some water
- Paper
- Colouring pens
- A ruler



→ STEP 1

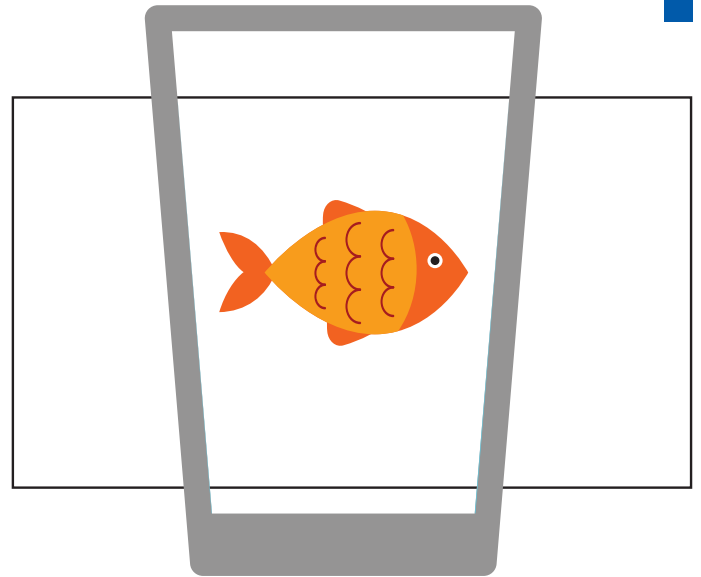
Draw a fish on a piece of paper.
Or if you want you can draw something
different like a shark or crocodile!
It should be **around 7cm long**. Use
your ruler to get the correct size.

**We have a picture on the final page
to help if you want.**



→ STEP 2

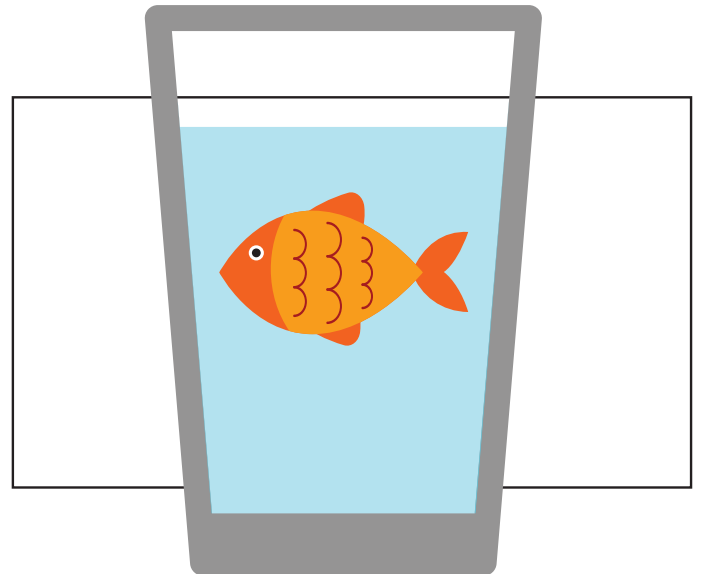
Place your fish behind the glass.
It shouldn't look much different.



→ STEP 3

Fill up the glass with water.

Now hold the fish behind the glass again,
what has changed? If it doesn't work, try
moving the picture closer or further away
from the glass, or move your head a little
bit closer to get a better look.

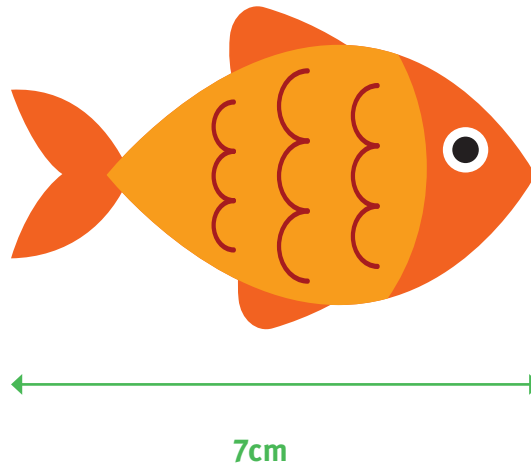


→ What happened?

As you fill the glass with water you change the way light passes through it. Water makes the light bend, so the light from the left of the picture crosses to the right and the light from the right passes to the left. This makes the picture look the wrong round!

Why not practise this trick on members of your family! You could also try writing in reverse and using this trick to reveal secret messages!

The fish we have drawn is around **7cm** long.



Draw your own fish here and cut it out.
It should be about as **long** as the green line.
Use a ruler to help.

