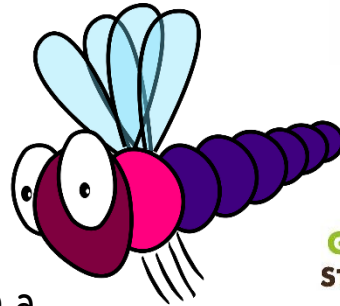


Make an Underwater Viewer

Find out what's lurking in your local pond or stream with your own homemade underwater viewer! Caddis fly larvae, dragonfly nymphs, maybe even a trout... who knows what you'll discover!



GREEN-SCHOOLS
STAY HOME - WATER

Time to make: 10-15 minutes

What do you need?

1. 1 Large (2l) Plastic Bottle – it's best to use a bottle that's mostly one width along the main body i.e. doesn't curve in and out.
2. Clingfilm
3. Elastic bands
4. A stanley knife or scissors
5. Help from an adult (essential!)



Warning! Stanley knives are very sharp and dangerous. Ask an adult to use the knife for you.

Eco-tip: This project upcycles a plastic bottle into a new tool. However, you probably don't need more than one underwater viewer! So in general, the best way to cut down on plastic waste is not to buy it in the first place – instead of buying bottled water see if you can get a sturdy reusable bottle to carry your drinks in.



What do you do?

1. Remove the label from your plastic bottle if it has one.
2. To get the body of the Underwater Viewer you need to make a tube that's about 10cm in height and is an equal width from top to bottom. To start, ask an adult to carefully cut a circle around the base of the bottle using the Stanley knife or scissors, to remove the bottom of the bottle.
3. Next, ask the adult to carefully cut a circle below the neck of the bottle to remove the upper section. Try to make sure there aren't any sharp, jagged edges on your tube.
4. Roll out some cling-film along a table and place your new plastic tube upright in the centre. Use a scissors to cut the clingfilm so that there's about 10cm of clingfilm on either side of the tube.
5. Wrap the clingfilm up the sides of the tube so that one end now has a film of clingfilm across it. The clingfilm should cover at least half-way up the tube to ensure water won't leak in.
6. Gently pull the clingfilm so that it's tight across the bottom of the tube but be careful not to stretch it too much or it might break.



7. Place an elastic band over the bottom of the tube and roll it up so that it is tight around the end of the clingfilm.
8. Use a scissors to trim any loose bits of clingfilm still sticking out.
9. Well done! You can now test out your underwater viewer in a pond or for starters, the sink! Gently place the bottom (cling-film) side into the water.
Tip: It's best to place it in slowly and from an angle to stop bubbles forming under the viewer. Make sure you don't let the water go higher than the elastic band or your viewer may flood.
10. Look in from the open top of the viewer – try not to block the light with your shadow. You are now ready to explore!



Links:

Try to identify some of the freshwater wildlife you see through your viewer - have a look at this [Pond Wildlife Detective sheet](#) from Wildlife Trust UK; identify freshwater mini-beasts with [this chart](#) from the RSPB, and learn more with this wonderful guide from [Wild About Gardens UK](#).

