

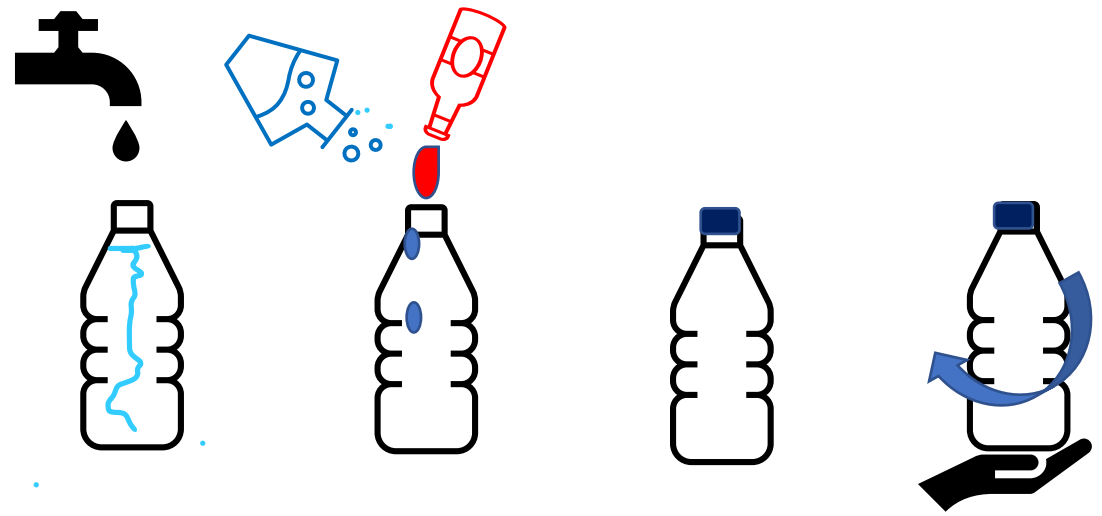
Tornado in a Bottle

What you need:

- One plastic bottle with screw lid (labels removed)
- Water
- Food colouring or glitter
- Washing up liquid

What you do:

- Pour the water into bottle leave about 6cm of air at the top.
- Add two squirts of washing up liquid.
- Add some glitter or food colouring.
- Put the lid on and screw it as tight as possible on to the bottle. The tornado will not work well unless the bottle is completely airtight.
- Spin the bottle by holding at the bottom and make circular movement with your hand so that the water begins to swirl around inside the centre of your bottle.



The Science

A tornado in a bottle is generated by the spinning water. The water is responding to a force called centrifugal force. Here the water spins around forming a whirlpool, the centre of which is the 'vortex' which in this case is in the middle of the bottle.

