

Science at Home – Week 6

Why not try out this trick at home!? Can you fill your glass with different amounts of water to see if the trick still works? Don't forget to share your learning via your year group page on our school website!
Mrs Walker

Upside Down Glass of Water Trick

You will need:

- Glass
- Card big enough to cover the top of the glass (a playing card is good)
- Water

Try filling your glass with different amounts of water and see if the trick still works.

1. First, check the card is big enough to completely cover the opening of the glass.
2. Fill your glass with water almost to the top.
3. Place the card over the opening of the glass and tip the glass upside down (with your hand on the card).
4. When you're feeling brave, remove your hand. Make sure you practice over the sink a few times first!
5. Mastered the technique? Hold it over someone's head!



THE SCIENCE

In fact, this isn't a trick at all – it's all to do with air pressure! Even though it doesn't feel like it, the air around us pushes in all directions. The water acts as a 'seal' between the glass and the card. The air pushing up from underneath the paper is strong enough to stop the weight of the water from pushing the card down. Because of this air pressure, the card will stay on the glass and the water will not spill out. When the seal is broken (even a tiny bit), air enters into the cup and gravity pushes the water out.