

UNSPILLABLE WATER TRICK

What you need:

A glass

Water

An index card or piece of cardstock

What you do:

1. Fill the glass up with water. Make sure the lip of the glass gets fully wet.
2. Lay the index card on top of the glass and press it into the wet lip.
3. Working quickly, hold your hand over the index card and flip the cup upside down.
4. Remove your hand from the index card, and watch your friends “ooooh” and “aaaah”.



What is happening:

From www.fizzicseducation.com.au: “Air molecules are constantly pushing into things, in every direction imaginable. In other words, air has pressure. If you look at your thumbnail, you have the equivalent of around 1 kg of weight pushing down on that body part alone!

Inside the cup there was no air, so the weight inside the cup was coming only from the water. Depending on the size of your cup, the weight of the water may have been around 250g. The air below the card was pushing up into the card. The upwards air pressure was much greater than that of the pressure of the water pushing towards the ground – keeping the water in the cup.”

<https://www.fizzicseducation.com.au/150-science-experiments/force-movement-experiments/upside-down-water-cup/>