

Levitating Ball Trick

You will need:

- Plastic or glass bottle
- Ping pong ball
- Water

If you're having difficulties with this, slightly roll the ball while it is upside down before letting go.

1. Fill the bottle so that the water is almost overflowing.
2. Place your ping pong ball over the opening and push down.
3. While holding the ball, turn the bottle upside down.
4. Let go of the ball and watch it stay in place!



THE SCIENCE

This is similar to the upside down glass of water trick (refer to that one for the Science behind air pressure). Just like the glass of water, the air pressure outside the bottle is higher than inside so the ball stays in place. But can't air get through the gap between the opening and the ball? The small water particles on the surface of water cling together very strongly. This property of water is called a strong "surface tension". The weaker this surface tension is, the easier air can pass through the surface. The surface tension of water is big enough and the slit between ball and bottle small enough that air can't penetrate the surface and get into the bottleneck.



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