

DO TRY THIS AT HOME

Issue #123

Featuring: **Marvin and Milo**

What you need: • A ping-pong ball
• A plastic cup • Water

Milo: where is it easier to keep a ball still— on top of a hill of water or in the middle of a well?

Fill the cup almost full and float the ping-pong ball on it — it should be impossible to stop it drifting to the rim.

The water's surface tension pulls down on the ball but water is also attracted to it and climbs up its sides overall the pull is diagonally down.

Near the rim, the water between ball and rim flattens, so overall pull is towards the rim. But in a bulging cup, the water's surface is almost vertical at the rim, so the overall force pulls the ball to the centre.

Add more water until the cup almost overflows and the surface is raised. Now you should be able to keep the ball in the centre, though it looks unstable.

Vic Le Billon