

NANOGIRLS

GREAT SCIENCE ADVENTURES

Here's Nanogirl's trick for making a ping pong ball fly...

INGREDIENTS

A ping pong ball
A hair dryer

METHOD

Grab your ping pong ball in one hand and the hair dryer in the other.

Point the hair dryer upwards towards the sky. That will create the fast-flowing air inside a column and low pressure air on the outside of the column.

Now, try to balance your ball in the stream of air and see if you can walk around with it. Tip the hair dryer sideways a little bit and see if the ball remains in the column of air.

This is a simple and very fun way to illustrate Bernoulli's principle, which states that if air speeds up, pressure is lowered creating lift.

You can see this with the wing of an aeroplane, the shape of the wing makes fast flowing air go over the top of the wing, and slow-moving air go underneath - low pressure on top, high pressure underneath – and that pushes the plane up.

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