



## Water bottle pressure

One of the reasons the America's Cup boats foil is due to the difference in air pressure acting on the surface of the foils.

You'd think that putting holes in the bottle would cause the water to leak but when the lid is on tight, air pressure can't get into the bottle to push on the surface of the water.

The water molecules work together to form a seal over the holes, this is called surface tension.

When the lid is opened, air goes inside pushes down on the water along with gravity causing water to spray out!

- **Health & Safety** - if under 18 please make sure you have adult supervision.
- **Equipment** - an empty plastic bottle with a lid, water, marker pen or sharpie and a drawing pin.