

Upthrust and water displacement

When an object floats on water the force keeping the object afloat is called **upthrust** and this balances the weight of the object.

An object doesn't sit flat on the surface of water, like it would on a table for example. It sinks into the water slightly moving some of the water out of the way or **displacing** some water.



The weight of water displaced is equal to the weight of the object.

We can use water to measure weight and volume.

Weight: by measuring how much water level has risen with object floating on it we can calculate the volume and therefore ~~weight~~ weight of water displaced which is equal to the weight of the object.

Volume: if we submerge an object the water level rises. By calculating the change of volume we find the volume of the submerged object.