

## Learn about: How forces affect buoyancy

# Buoyancy Explained

**When something is in the water, two forces are acting on it.**

- The weight of the object upon the water
- The force of the water pushing up against the object; upthrust

**So, if the weight of the object is equal to or less than the Upthrust it floats. This is called buoyancy.**

**If the weight is greater than the upthrust, it sinks.**

## You will need:

- Large bowl for water
- Lollypop stick / Plastic Spoon
- Pebble / Coin

## What to do:

1. Fill the bowl with water
2. Drop the lollypop stick or plastic spoon into the bowl. Did it float or sink?
3. Now drop the pebble or coin into the water into the water

## Did it float or sink?

**Conclusion:** The Lollypop stick or plastic spoon floated because the weight of them was less than or equal to the upthrust of the water.

The pebble or coin was heavier than the upthrust of water.



The item has sunk because it is heavier than the upthrust of water



The item floats because the weight of it is less or equal to the upthrust of water