



Knowledge Bank: Year 6 Science – It is all Greek to me.

Key Vocabulary:

independent variable	What you have decided to change.
dependent variable	What you are measuring.
control variable	What you are keeping the same to ensure a fair test.
prediction	A statement suggesting what will happen in the future.
hypothesis	A proposal to attempt to explain observations.
buoyancy	The ability for an object to float on water.
water resistance	Friction between an object and the water particles.
gravity	The force that pulls things to the ground on Earth (and other planets) is called gravity.
friction	Friction is the resistance of motion when one object rubs against

What I should already know:

Some objects float on water whereas others may sink.

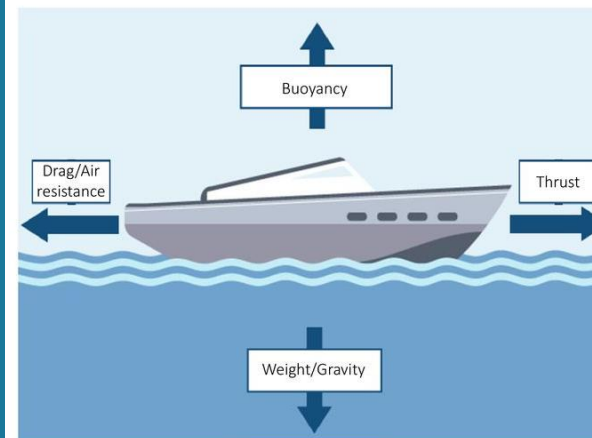
Objects fall to Earth because of the force of gravity between Earth and the falling object.

Water and air resistance will slow objects down.

A test needs to be repeated in the same way to be fair.

Diagrams/Images:

Scientific Variable	Mnemonic Device/Sound
Controlled Variables	"CON"trolled variables stay "CON"stant
Independent Variable	"I", the scientist, only change this
Dependent Variable	The "D"ependent variable is your "D"ata



Key Facts:

When something is in water, there are 2 forces acting on it. Its weight and the force of the water pushing it up (upthrust).

If the weight is equal to or less than the up thrust, it floats. Things that float are buoyant. If the weight is greater than the upthrust, it sinks.

The larger the object's surface area the larger the weight distribution. This causes more water to be displaced therefore increasing the object's buoyancy.

Forces are shown in diagrams and are represented using arrows. The arrows represent both the magnitude and the direction of the force.

Speed can be predicted by dividing the distance by the time it took.