## Forces

Unit Vocabulary — Join them up with the correct definition once you have learned it,

force
gravity

Gravitational pull
weight
mass
friction
Air resistance
Water resistance
streamlined
upthrust
bouyancy

A type of friction caused by water pushing against any moving object.

A force that pushes objects up, usually in water.

The measure of the force of gravity on an object

An object is buoyant if it floats. This is because the weight of the object is equal to the upthrust.

Pushes or pulls.

When an object is shaped to minimise the effects of air or water resistance

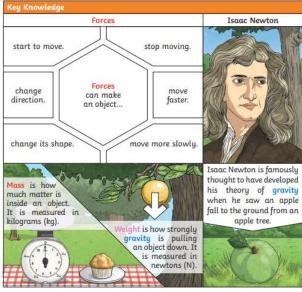
A pulling force exerted by the Earth (or anything else which has mass).

A measure of how much matter (or 'stuff') is inside an object.

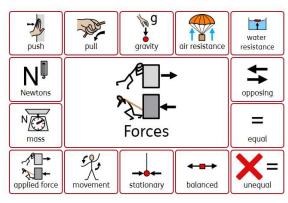
A type of friction caused by air pushing against any moving object

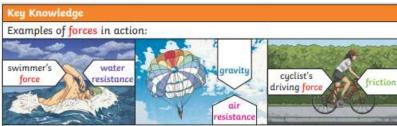
The pull that Earth exerts on an object, pulling it towards Earth's centre.

A force that acts between two surfaces or objects that are moving, or trying to move, across each other









Water resistance and air resistance are forms of friction. Friction is sometimes helpful and sometimes unhelpful. For example, air resistance is helpful as it stops the skydiver hitting the ground at high speed. Friction on a bike chain can make the bike harder to pedal so it is unhelpful.

## Scientific Enquiries

- 1. What forces act on objects?
- 2. What is gravity?
- 3. How does air resistance affect a falling object?
- 4. How does water resistance affect a moving object?

