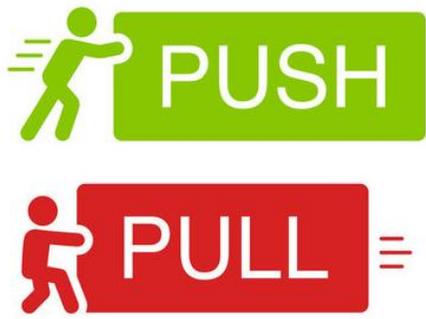




Vocabulary	
air resistance	friction caused when something moves through the air
force	a force is a push or pull (which can cause an object to start or stop moving or change its speed, direction or shape)
friction	a force that slows down moving objects
gravity	a force that pulls everything towards the Earth
mass	the measure of the amount of matter within an object (measured in grams, g, or kilograms, kg)
newton (N)	the units used for measuring forces and weight
water resistance	friction caused when something moves through the water
weight	the force of gravity pulling on something

Forces



Forces can make an object:

- start to move.
- move more slowly.
- stop moving.
- change its shape.
- move faster.
- change direction.

Issac Newton

Sir Isaac Newton, an English mathematician and physicist, who lived from 1642-1727, is famously thought to have developed his theory of gravity when he saw an apple fall to the ground from an apple tree.



Air Resistance



Air resistance is a type of friction. It is caused when air pushes against any moving object.

It is helpful when it stops a skydiver hitting the ground at high speed.

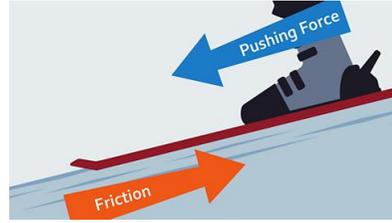
Water Resistance



Water resistance is a type of friction. It is caused when water pushes against any moving object.

It is unhelpful when it slows down a swimmer in a race.

Friction



Friction is a force that acts between two surfaces or objects which are moving or trying to move, across each other.

It is helpful when it slows down a skier when they are sliding down a slippery slope.