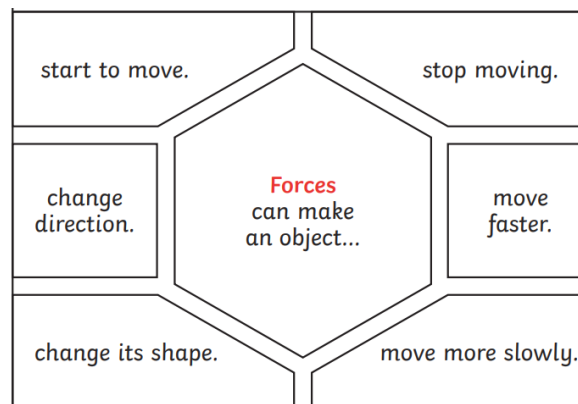


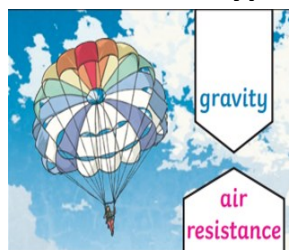
Key vocabulary

force	A force is a push or a pull. Forces make objects start/stop moving, speed up/slow down or change shape/direction.
force meter	Piece of equipment used to measure the size of a force.
gravity	A force which pulls things down towards the centre of the Earth.
Newton (N)	The unit for measuring force.
air resistance	A type of friction caused by air pushing against a moving object.
water resistance	A type of friction caused by water pushing against a moving object.
friction	A force that acts between two surfaces or objects that are moving, or trying to move across each other.
mechanisms	A device that allows a small force to be increased to a larger force.
simple machines	Levers, pulleys and gears are all types of simple machines.
weight	The measure of a force of gravity on an object.
mass	A measure of how much matter (stuff) is inside an object.

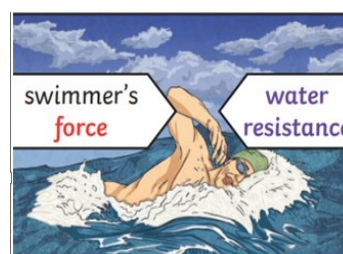
Year 5 Forces.



Types of friction



Air resistance



Water resistance

Significant scientists

Galileo Galilei
(1564-1642)



He discovered that if two objects of similar shape and size are dropped, they will fall at the same rate.

Sir Isaac Newton
(1642-1726)



He 'discovered' the concept of gravity when sitting under a tree and an apple fell to the ground near him.

Simple machines

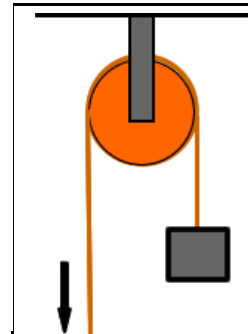
These are used to make tasks easier. This means you need to use less force.



Force

Pivot

A **lever** tilts on a pivot which is nearer to the end of the pivot with a heavy load.



Pulleys have a rope or cable which goes over a wheel. This is pulled to lift, lower or move heavy objects.



Gears are toothed wheels which lock together and turn each other to form simple machines.