

KEY INFORMATION AND FACTS

KEY VOCABULARY

force A force is a push or a pull. Forces make objects start moving, stop moving, speed up, slow down or change direction.

forcemeter Piece of equipment used to measure the size of a force. Newton (N) The unit for measuring force.

air resistance The force that slows down objects that move through air.

water resistance A force that slows down objects moving through water.


friction When one surface moves against another, the rubbing force that tries to stop them is called friction. It gives us grip.

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.

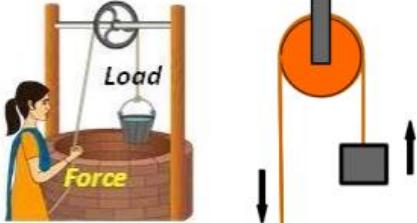
gravity A force which pulls things down towards the centre of the Earth.

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.



Load Force

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.



Seeds fall to the ground because of gravity.

Sir Isaac Newton
(1642-1726)



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

Real-life examples of forces in action



A skydiver falls fast until they open their parachute.



Dolphins have a streamlined shape.



A non-slip mat uses friction.

