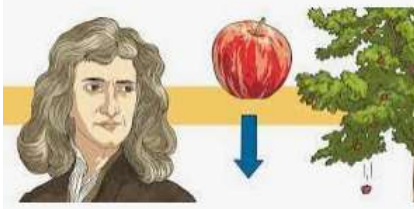


Knowledge Organiser Y5 Forces

Key Knowledge

Mass is how much matter is inside an object. It is measured in Kilograms (KG) and weight is how strongly gravity is pulling an object down. It is measured in Newton. (N)

Isaac Newton



Isaac Newton is famously thought to have developed his theory of gravity when he saw an apple fall to the ground from a tree.

Vocabulary

forces	Pushes or Pulls
gravity	A pulling force exerted by the Earth
earth's gravitation pull	The pull that the Earth exerts on an object, pulling it towards the Earth's centre.
weight	The measure of a force of gravity on an object.
mass	A measure of how much matter is inside an object.
air resistance	A type of friction caused by air pushing against any moving object.
friction	A force that acts between two surfaces or objects that are moving, or trying to move, across each other.
water resistance	A type of friction caused by water pushing against any moving object.
up thrust	A force that pushes objects up.

Forces in action

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.



Levers, Pulleys and Gears

All these mechanisms make it easier to move or lift.

