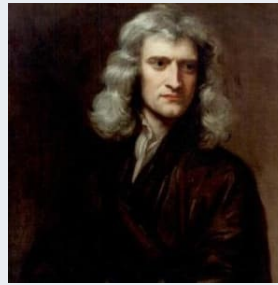


Science Year 5 Autumn: Forces

Key vocabulary to learn and use in my learning.

Word	Definition
forces	Pushes or pulls.
gravity	A force that attracts the body to the centre of
resistance	The use of force to oppose something.
friction	The resistance that an object encounters when
lever	A rigid bar resting on a pivot used to lift a heavy
gear	A toothed wheel that works with others to alter
pulley	A wheel over which a belt , rope or chain is
force	Strength or energy that can make things move, change their speed or direction.
upthrust	The upward force that a liquid or gas exerts on a body floating in it.

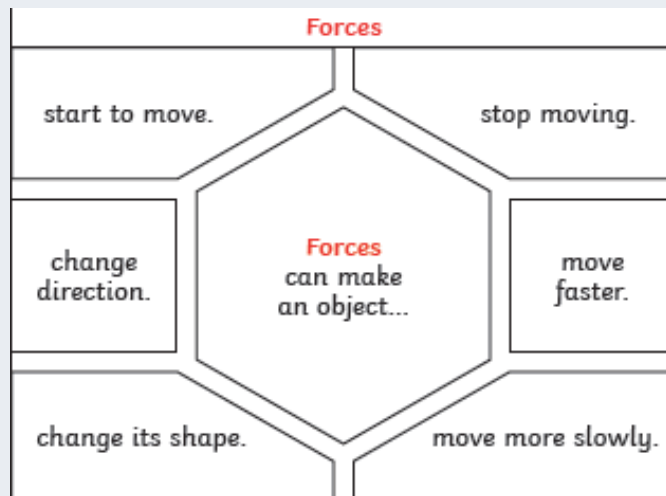


Sir Isaac Newton—(born December 25, 1642 ,Leicestershire—died March 20 , 1727, London), English physicist and mathematician, who was the culminating figure of the scientific revolution of the 17th century. In mechanics, his three laws of motion, the basic principles of modern physics, resulted in the formulation of the law of universal gravitation.

Key knowledge to learn



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 a skydiver from hitting the ground at high speed. Friction on a bike chain can make the bike harder, so it is unhelpful.



Pulleys
Pulleys can be used to make a small force lift a heavier load. The more wheels in a pulley, the less force is needed to pull the weight.

Gears/Cogs
Gears or cogs can be used to change the speed, force or direction of a motion. When two gears are connected, they always turn in the opposite direction from each other.

Levers
Levers can be used to make a small force lift a heavier load. A lever always rests on a pivot.