

Knowledge Organiser - Science (physics) - Year 5

Forces - Can you feel the force?



STICKY KNOWLEDGE

<ul style="list-style-type: none"> Gravity is a force which draws objects towards the centre of a planet or other body and was discovered by Sir Isaac Newton 	<ul style="list-style-type: none"> Air resistance is a type of friction between air and another material 	<ul style="list-style-type: none"> Friction is the resistance of motion when one object rubs against another
<ul style="list-style-type: none"> Water resistance is a type of friction which acts on an object as it moves through water 	<ul style="list-style-type: none"> Levers and pulleys use a range of forces to create movement 	<ul style="list-style-type: none"> Gears are toothed wheels which mesh together to create interconnecting motion when they turn

KEY VOCABULARY

Air Resistance	A force that is caused by air with the force acting in the opposite direction to an object moving through the air
Friction	The resistance that one surface or object encounters when moving over another
Gravity	The force that attracts a body towards the center of the earth
Upthrust	The upward force that a liquid or gas exerts on a body floating in it.
Water Resistance	A force that is caused by water with the force acting in the opposite direction to an object moving through the water
Newton	The unit of measurement force is measured in

Forces in Action



Key Scientist: Sir Isaac Newton



Sir Isaac Newton developed his theory of gravity.

Mechanisms

A wheel over which a belt, rope, or chain is pulled to lift or lower a heavy object.



A bar that rotates around a point. They make it easier to lift a heavy load.



Wheels that mesh together, they rotate in opposite directions.

