

# Brookfield Primary School Knowledge Organiser

Year 5: Science - Forces

Science is the study of the world around us through observation, description, investigation and experimentation.

## **Key Facts:**

- Gravity is the force that pulls things to the ground. It also holds Earth and other planets in their orbits around the sun.
- The mass of an item is how much matter is inside an boject and can be measured in grams and kilograms.
- Weight is how strongly gravity is pulling an object down and is measured in Newtons.
- Sir Isaac Newton developed his theory of gravity.
- Galileo conducted experiments to test mass.
- 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.

#### Where to look:



- BBC Bitesize
- Photographs
- Library



Things to find out about:



What is balanced force and unbalanced force?

Galileo Galilei

## General Scientific Words/Phrases:

Enquire, investigate, observe, explore, experiment, describe, record, analyse, compare, evidence, record

### Key Vocabulary to use in this topic:

	<u>key vocabulary to use in this topic:</u>				
	Word:	<u>Definition:</u>			
	Parachute	A device, usually made from cloth, designed to create air resistance and slow descent.			
	Friction	The resistance of motion when one object rubs against another.			
	Gravity	Force which draws objects towards the centre of a planet.			
	Water resistance	Friction which acts on an object as it moves through water.			
	Lever	Long arm that rests on a support called a fulcrum.			
	Streamlined	An object that is shaped to travel through air or water with little resistance.			
	Pulley	A wheel over which a belt, rope, or chain is pulled to lift or lower a heavy object.			
	Buoyant	To float.			
	Upthrust	Any force that is causing something to be pushed upwards.			
	Newton	The international metric unit of force.			
	Sir Isaac Newton	An English physicist and mathematician.			

An Italian scientist, and the first astronomer.

