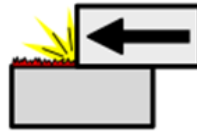




Isaac Newton



laws of
motion



friction



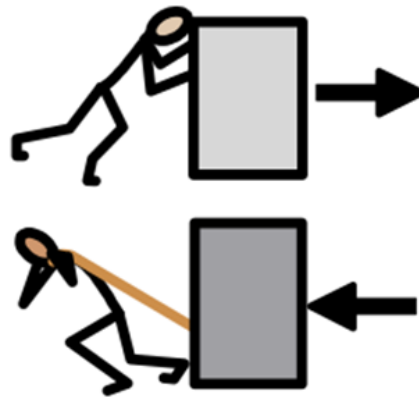
pull



push



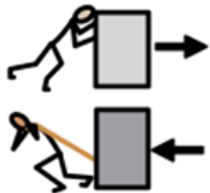
Newton
meter



forces



unbalanced



force



balanced



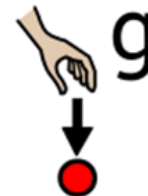
up thrust



buoyance



air resistance

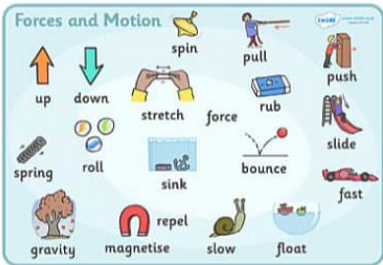
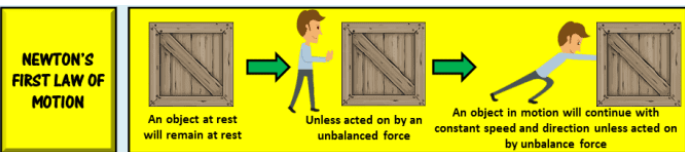
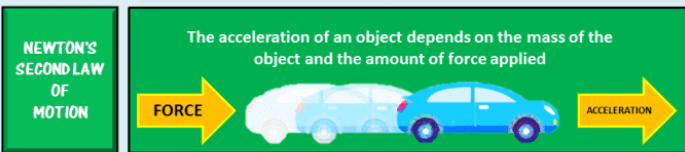

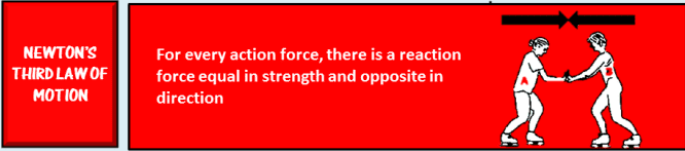


gravity



motion

Y5 Science: Forces - Topic Vocabulary Mat

Subject Specific Vocabulary		Relevant Pictures	Websites
force	A force is a push or pull upon an object resulting from the object's interaction with another object. Whenever there is an interaction between two objects, there is a force upon each of the objects.		Forces - KS2 The World Around Us - BBC Bitesize Unit - Oak National Academy (thenational.academy) Isaac Newton Biography, Facts, Discoveries, Laws, & Inventions Britannica
gravity	The force that attracts an object towards the centre of the earth, or towards any other physical object having mass.		
gravitational force	The weight of an object is the gravitational force between the object and the Earth. The more mass the object has the greater its weight will be.		
unbalanced force	Unbalanced forces are not equal, and they always cause the motion of an object to change the speed and/or direction that it is moving.		Other Information 
balanced force	When two forces act upon each other in opposite directions, and they are both the same size, we say they are balanced. You can see balanced forces at play in a tug-of-war game when the rope is not moving.		
mass	The amount of matter an object contains . The more matter something has, the more it will weigh.		
weight	A measure of the force of gravity pulling on an object. Weight is measured in Newton's.		Key Knowledge
friction	A force between two surfaces that are sliding, or trying to slide, across each other.		<ul style="list-style-type: none"> • Unsupported objects fall to Earth because of the force of gravity acting between the earth and the falling object • To know and be able to identify the effects of air resistance, water resistance and friction on moving objects. • Some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect. • We can measure the weight of an object using a spring balance force meter and record the measurement in Newtons. • To know how to create balanced and unbalanced forces. • To know some of the effects of air resistance in a range of contexts e.g. parachutes, spinners, sails on boats. • To know that Isaac Newton helped develop the theory of gravitation. • Isaac Newton developed 3 laws of motion
air resistance	A force that slows objects down when they are moving through the air.		
buoyance	The term used to describe how something can float . If something is buoyant then that means it can float or partially float in water. Boats are an example of something that is buoyant because even though they are very large, they can still float in water.		
		What I've learnt already. Y5 Autumn: <ul style="list-style-type: none"> • The planets orbit the sun as they are attracted by its gravity. • The moon orbits the Earth because it is attracted by the Earth's gravity. Y3: <ul style="list-style-type: none"> • Friction affects the way that things move on different surfaces. • Some forces need contact between two objects, but magnetic forces can act at a distance. • Magnets attract or repel each other and attract some materials and not others. 	