

Forces – Knowledge Organiser Year 5 Summer 1

Vocabulary	
gravity	The force attracting two objects towards each other. It keeps the Moon and planets in orbit.
newton (N)	Unit of measurement of forces.
Force meter (newton meter)	An instrument with a spring for measuring forces.
mass	A measure of how much of something there is. Measured in g and kg.
weight	The force experienced when gravity pulls an object downwards.
friction	The force between two surfaces that causes moving objects to slow down. Creates heat.
lubrication	The addition of a fluid between moving surfaces to reduce friction.
air resistance	A type of friction caused by air pushing against a moving object.
water resistance	A type of friction caused by water pushing against a moving object.
streamlined	Being smooth, narrow or pointed in shape to reduce air or water resistance.
upthrust	Upwards force in a fluid. In water, this helps to keep swimmers and boats afloat.
load	An object with mass that is lifted (by a machine).
machine	Device that makes work easier (e.g., by reducing the effort needed to lift a load).
lever	Simple machine made of a long, rigid arm or bar that pivots around a fulcrum to lift a load.
pulley	Simple machine made of a grooved wheel on a fixed axle , which guides a rope or cable to lift a load.
gears	Simple machines made of toothed wheels slotting together. When one turns so does another. If the gears are different sizes, they can increase the power of a turning force.

