

Year 8 – Forces Glossary (Part 1: Gravity and Weight)

Key word	Definition
acceleration	How quickly speed increases or decreases.
air resistance	The force on an object moving through the air that causes it to slow down (also known as drag).
average speed	The overall distance travelled divided by overall time for a journey.
balanced (forces)	Forces acting on an object that are the same size but act in opposite directions.
contact force	Force that acts by direct contact, e.g., friction.
distance–time graph	A graph that shows how far an object moves each second.
driving force	The force that is pushing or pulling something.
equilibrium	State of an object when all forces are balanced.
field	The region where other objects feel a gravitational force.
friction	Force opposing motion which is caused by the interaction of surfaces moving over one another. It is called 'drag' if one is a fluid.
gravitational field strength	The force from gravity on 1 kg (N/kg).
gravity/gravitational force	A non-contact force that acts between two masses.
interaction pair	When two objects interact there is a force on each one that is the same size but in opposing directions.
kilogram	A unit of mass, symbol kg.
mass	The amount of stuff in an object (kg).
metres per second	A unit of speed.

newton	Unit for measuring forces (N).
newtonmeter	A piece of equipment used to measure weight in newtons.
non-contact force	Force that acts without direct contact, e.g., magnetism.
pull	A type of force.
push	A type of force.
relative motion	Different observers judge speeds differently if they are in motion too, so an object's speed is relative to the observer's speed.
resistive force	Any force that acts to slow down a moving object.
resultant force	Single force that can replace all the forces acting on an object and have the same effect.
speed	How much distance is covered in a given time.
unbalanced (forces)	Opposing forces on an object that are unequal.
weight	The force of gravity due to the Earth (or other planet or moon) on an object (N).