



Physics Key Words

Currently, within the Physics section of the app, we have the following units:

- Forces
- Earth and Space
- Energy
- Waves
- Electricity

Forces Keywords and Definitions

Word	Definition
gravity	Gravity is the universal attraction between objects.
weight	Weight is a force caused by the effect of gravity on a mass.
mass	Mass is the amount of matter something contains.
kilogram	A kilogram is the SI base unit of mass.
air resistance	Air resistance is the force of friction produced when an object moves through the air.
speed	Speed is the rate at which something moves.
distance	Distance is a measure of how far apart objects are.
motion	The word motion means movement or moving.
force	A force is a push, pull or twist on an object, changing the motion or shape of it.
contact	The word contact means to touch surfaces.
balanced	When balanced, the forces pulling on an object in opposite directions are the same size.



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unbalanced	When unbalanced, the forces pulling on an object in opposite directions are different sizes.
newton	The newton is the SI unit of force.
pivot	A pivot is the central point something turns around.
acceleration	The word acceleration means speeding up.
deceleration	The word deceleration means slowing down.
stationary	The word stationary describes an object which is not moving.
magnetic field	The magnetic field is the area of force around a magnet which affects other objects.
attract	Two or more things attract when they are pulled together because of a force between them.
repel	Two or more things repel when they push apart because of a force between them.
opposite	The word opposite means the reverse of something, e.g. positive and negative.
upthrust	Upthrust is an upwards force acting on a object floating on a liquid or gas.
resultant force	A resultant force is a single force representing the sum of all the forces acting on an object.
moment	A moment is the turning effect of a force.
pole	A pole is the end of a magnet where the magnetic force is strongest.
electric field	An electric field is an area of force around an electric charge which can affect other objects.
charge	In this topic, a charge can be positive or negative and can be generated by rubbing together two insulators.
density	Density is mass divided by volume.



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volume	The volume is the amount of space something occupies.
irregular	The word irregular means not even or balanced in shape.
orbit	An orbit is the path of an object around a star, planet or moon.
field	In this subject, a field is an area around an object where it can affect other objects.
compass	A compass is an object which detects magnetic fields and can be used to navigate or plot a field.

Earth and Space Keywords and Definitions

Word	Definition
star	A star is a large ball of gases which generates light and other energy.
Sun	The Sun is the star at the centre of our solar system.
centre	The word centre means the place in the middle of something.
asteroid	An asteroid is a small rock orbiting a star.
comet	A comet orbits a star, it is made of ice and dust and may have a tail of gas when near a star.
moon	A moon is a natural satellite which orbits a planet.
planet	A planet is a large object which orbits a star.
season	A season is a quarter of an Earth's year. Seasons occur because the Earth is tilted on its axis.
axis	An axis is an imaginary line around which something rotates.
rotates	When an object rotates, it moves in a circle around an axis or centre.



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tilted	Tilted means in a sloped position, not upright.
year	A year is the time taken for a planet to complete one orbit of the Sun.
satellite	A satellite is something which orbits a planet, it can be natural or artificial.
galaxy	A galaxy is a group of billions of stars.
universe	The word universe refers to everything in existence.
light year	A light year is the distance light travels in a vacuum, in a year.
greenhouse	The greenhouse effect is a process where gases in the atmosphere absorb and emit effect energy, warming the planet.
combustion	Combustion refers to burning in oxygen or air.
deforestation	The word deforestation means clearing a wide area of trees.
global warming	Global warming is the rise in average temperature of the Earth's surface.
absorb	The word absorb means to take in or soak up.
crust	The crust is the surface of the Earth, which is divided into tectonic plates.
mantle	The mantle is the hot layer beneath the Earth's crust.
magma	Magma is liquid rock in the mantle.
tectonic plates	Tectonic plates are large pieces of the Earth's crust.
core	The core is the centre of the Earth.
fossil fuels	Fossil fuels are non-renewable fuels, for example oil and coal.
Climate change	Climate change is a change in the weather patterns and environmental conditions over climate change time.



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Energy Keywords and Definitions

Word	Definition
chemical energy	A chemical energy store is energy stored in food or fuels. store
kinetic energy	A kinetic energy store is the energy stored in a moving object. store
gravitational	A gravitational energy store is the energy stored because of the position of the object energy store above ground.
elastic potential	An elastic potential energy store is the energy stored in a compressed or twisted elastic energy store material.
compressed	The word compressed means flattened by pressure, squeezed or pressed together.
internal energy	Internal energy is the energy stored in the system by particles.
dissipated	Dissipated energy has been transferred and stored in a less useful way.
energy transfer	Energy transfer means moving energy from one store to another.
transfer	The word transfer means to move something from one place to another.
temperature	Temperature is a measure of how hot something is.
conduction	Conduction is a method of transferring heat in solids.
convection	Convection is a method of transferring heat in liquids and gases.
radiation	Radiation is a method of transferring heat which does not need particles.
joule	The joule is the SI unit of energy.
renewable	The word renewable describes energy resources which can be replaced.



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non-renewable	Non-renewable describes energy resources which will run out.
fuel	A fuel is something which is burned to produce heat or power.
surroundings	The surroundings are the things and conditions around something.

Waves Keywords and Definitions

Word	Definition
reflection	Reflection occurs when a wave bounces off a surface.
boundary	A boundary is the surface between two different media.
medium	A medium is a substance through which the wave passes.
frequency	The frequency is the number of waves per second past a certain point.
amplitude	The amplitude of a wave is the maximum displacement of the wave from its resting position.
hertz	The hertz is the unit of frequency.
echo	An echo is a reflection of a sound wave from a surface.
ultrasound	Ultrasound is sound with a frequency greater than 20,000Hz.
vacuum	A vacuum is a space containing no matter.
refraction	During refraction, the wave changes speed and direction when entering a different medium.
spectrum	A spectrum is separated white light, it contains the colours of the rainbow.
white light	White light contains all the colours of the spectrum.
prism	A prism is a glass block which can separate white light into a spectrum.



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specular reflection	Specular reflection occurs when all reflected waves are reflected in one direction.
diffuse scattering	Diffuse scattering occurs when the waves are reflected from a surface in all directions.
transparent	A transparent substance allows light to pass through it so objects behind can be clearly seen.
translucent	A translucent object allows light to pass through, but detailed shapes cannot be seen.

Electricity Keywords and Definitions

Word	Definition
electric current	Electric current is the flow of charge around a circuit.
ampere	The ampere is the unit of current.
component	The word component means part of a larger circuit.
circuit	A circuit is a closed loop of wires and components.
series	Series is used to describe a single loop of components in a circuit.
parallel	In this topic, the word parallel is used to describe a circuit with more than one loop of components connected in parallel to each other.
potential difference	Potential difference is a measure of the difference in energy between two parts of a circuit.
volts	Volts are the unit of potential difference.
resistance	Resistance is opposition to the movement of electrical charge around a circuit.
ohm	The ohm is the unit of resistance.
conductor	A conductor is a substance which allows charge to easily pass through it.



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insulator	An insulator is a substance which does not allow charge to easily pass through it.
ammeter	An ammeter is a meter which measures electric current.
voltmeter	A voltmeter is a meter which measures potential difference.
cell	A cell is a single electrical energy source which stores internal energy.
battery	A battery contains two or more cells, it is a supply of electrical energy.