

Fold

Magnitude

The size of a physical quantity.



Physical quantity

Something that can be measured and expressed as a numerical value. Eg distance, energy, force, speed, temperature and voltage are all physical quantities.



Scalar

A physical quantity that has magnitude (size) only. Eg energy, temperature, mass, distance.

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Vector

A physical quantity that has both magnitude (size) and direction. Eg force, velocity, displacement, acceleration.



Contact forces

Force exerted between two objects when they are touching.



Force

A push or a pull. The unit of force is the newton (N).

Non-contact forces

A force that affects an object without coming into contact with that object, eg magnetism.



Attraction

When two or more things come together, eg the north pole of a magnet is attracted to the south pole of a magnet.



Repulsion

When two or more things are forced apart, eg the north pole of a magnet is repelled by the north pole of another magnet.

Gravitational field strength

The downward force of gravity on a mass of 1 kg. Near the Earth's surface the gravitational field strength, $g = 10 \text{ N/kg}$.



Weight

The force acting on an object due to the pull of gravity from a massive object like a planet. The force acts towards the centre of the planet and is measured in newtons (N).



Mass

The amount of matter an object contains. Mass is measured in kilograms (kg) or grams (g).

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Work done

The amount of energy it takes to do a task. Measured in joules (J). For example, the work done in raising a mass 10 m would be equal to the gain in potential energy of the mass.



Elastic

Elastic materials return to their original shape and size after being stretched or squashed.



Inelastic

Inelastic materials do not return to their original shape and size after being stretched or squashed.