

acid

A substance that can dissolve some metals.

air resistance

A frictional force that slows an object down as it moves through the air.

alloy

A metal that is created by combining two or more metals, or a metal with a non-metal.

attract

To pull or draw things together.

balance

A state in which things are of equal force or weight.

emboss

To decorate the surface of an object with a design that is raised to stand out.

engineer

A person who designs and builds engines and machines.

force

A push or a pull that can make an object speed up, slow down or change direction.

force meter

An instrument that is used to measure the strength of forces, in newtons.

friction

A force that is created when two surfaces rub against each other. It makes things slow down and warms them up.

gravity

A force that, on Earth, pulls everything down to the ground.

lever

A bar or handle that moves around a fixed point and, when pushed or pulled, increases the force, making it easier to move something. Scissors and toilet handles are examples of levers.

magnetic

Acting as a magnet, attracting iron and steel objects.

magnetic pole

The north or south pole of a magnet, or the Earth.

magnetism

Being able to attract iron and steel objects.

malleable

Capable of changing shape and not breaking when hammered or pressed.

metal

A solid material that conducts heat and electricity and that is usually hard, strong and shiny.

metallic

Like a metal or partly made of metal.

mineral

A solid substance that naturally forms into crystals in the ground. Some metals are contained in ore rocks as minerals.

molten

In a liquid state, due to great heat. Metals become molten when heated in a furnace.

motion

The action of moving or being moved.

newton

Forces are measured in newtons (N). 100 N is a greater force than 10 N.

oxidise

To combine with oxygen. For example, iron can oxidise to form rust.

pivot

A fixed point on which something else turns or balances.

precious

Of great value. A precious object is expensive, rare or important, such as the precious metal, gold.

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properties

The qualities of a substance or a material that help us decide how it can be used.

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prototype

The first version of a machine or vehicle on which further versions are based.

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pull

A force that moves something towards a person, animal or object. The harder the pull, the further it goes and the faster it moves.

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push

A force that moves something away from a person, animal or object. The harder the push, the further it goes and the faster it moves.

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repel

A force acting between things, pushing them apart.

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rust

A reddish-brown substance that forms when iron and steel oxidise with air and water.