

## Glossary of scientific vocabulary

### Adaptation

**Adaptation** is the process by which living creatures (animals and plants) adapt or evolve to survive in their environment and to live amongst a specific group of other living things.

### Air resistance

**Air resistance** is the force on an object moving through air. Air resistance affects how fast or slowly objects move through the air.

### Battery

In an electrical circuit, the **battery** is the cell that turns chemical power into electricity.

### Canines

**Canines** are teeth used for tearing and ripping food.

### Carnivores

**Carnivores** are animals who eat mainly meat and hunt their prey.

### Circuit

A **circuit** is a closed loop for electricity to travel around. In primary school children learn about simple series circuits in which a single wire runs from a battery to a bulb and back again.

### Circulatory system

The **circulatory system** is the network of organs (including the heart) and vessels that allows the flow of blood, nutrients and oxygen around the body.

### Condensation

**Condensation** is to turn **from a gas into a liquid**. In the water cycle, the evaporated water in the air cools and turns back into a liquid.

### Conductor

A **conductor** is an object that allows electricity to flow through it easily. Objects made of metal are good conductors.

### Consumer

Within a food chain, a **consumer** consumes a producer (usually a plant) or another consumer by eating it. Consumers can be primary, secondary, tertiary, etc consumers depending on their position in the food chain. Consumers are also called predators of the animals they eat; animals eaten by other animals are prey.

### Current

**Current** is the amount of electricity flowing through a circuit. It is measured in amps.

### Deciduous trees

**Deciduous trees** are those that shed their leaves in winter; their leaves are usually wide and flat.

### Digestive system

The **digestive system** is made up of all the organs that help the body break down and process the food we eat.

### Dissolving

**Dissolving** is a way of mixing a solid and a liquid. When a solid dissolves in a liquid it creates a solution.

### Electricity

**Electricity** is a form of energy caused by electrons moving about.

## Evaporation

**Evaporation** is the process by which a liquid, when heated, changes into a gas and rises into the air. Evaporation is part of the water cycle as water from the earth's seas and oceans evaporates when is heated by the sun's rays.

## Evergreen trees

**Evergreen trees** (conifers) are those that keep their leaves all year around; they often have leaves shaped like needles.

## Evolution

**Evolution** is the process of change to animal and plant species over long periods of time, or how plant species and animals have developed from generation to generation.

## Fair test

A **fair test** is a controlled investigation used to answer a question in a scientific way.

## Filtering

**Filtering** is a method of separating mixtures of solids and liquids.

## Food chain

A **food chain** is a diagram that shows us how animals are linked by what they eat.

## Food web

A **food web** is a set of linked food chains.

## Force

**Forces** are the pushes and pulls which act on our bodies and the things around us to make things move and stop moving.

## Freezing

**Freezing** is the process of changing a liquid into a solid.

## Friction

**Friction** is a 'sticking' force – the resistance that a surface or object encounters when moving over another surface or object. Air resistance, water resistance and surface resistance are kinds of friction.

## Gas

**Gas** is one of the three states of matter on Earth. A gas can flow, expand and be squeezed.

## Germination

**Germination** is the process of a seed starting to grow to create a new plant.

## Gravity

**Gravity** is the pulling force acting between the Earth and a falling object. Gravity pulls objects to the ground.

## Habitat

A **habitat** is a home environment for plants and animals or other organisms.

## Herbivores

**Herbivores** are animals whose diet mostly consists of plants.

## Igneous rock

**Igneous rock** is one of the three kinds of rock present on Earth. It is formed when magma or lava from volcanoes cools; basalt and granite are both igneous rocks.

## Incisors

**Incisors** are teeth used for biting and cutting food. Children learn about them as part of their study of teeth and how to take care of them.

## Insulator

An **insulator** is an object that does not allow electricity to flow through it easily. Rubber, paper and some plastics are good insulators.

## Invertebrates

Animals who don't have a bony skeleton are called **invertebrates**; insects, spiders and crabs are invertebrates.

## Irreversible change

An **irreversible change** is a change that cannot be changed back again. Burning or mixing a liquid with bicarbonate of soda are examples of irreversible changes.

## Life cycle

A **life cycle** is the different stages of life for a living thing.

## Light

**Light** is the energy that allows us to see the world. A light source makes light by using another kind of energy (for example heat or nuclear energy).

## Liquid

**Liquid** is one of three states of matter on Earth. A liquid forms a pool, flows or runs but it can't be stretched or squeezed.

## Magnet

A **magnet** is an object that has a magnetic field (an invisible pattern of magnetism). A magnet attracts or repels other items.

## Magnetic force

**Magnetic force** is an invisible **force** created by electrons. Magnetic force controls magnetism and **electricity**.

## Magnetism

**Magnetism** is a **force** caused by the electrons in the atoms that make up everything around us.

## Material

**Materials** are the matter or substance that objects are made from. Examples of materials are metal, plastic, wood, glass, ceramics, synthetic fibres and composites. Different materials have different features, or properties, which make them suitable for different uses.

## Matter

**Matter** makes up our planet and the whole universe. On Earth, all matter exists in one of three different states: solid, liquid or gas.

## Melting

**Melting** is the process of changing a solid into a liquid.

## Micro-habitat

A **micro-habitat** is a very specific, small home environment (like a tree or a pond) for plants, animals and insects.

## Molars

**Molars** (and pre-molars) are teeth used for grinding and crushing food. Children learn about them as part of their study of teeth and how to take care of them.

## Moon

A **moon** is a celestial object that orbits a planet.

## Metamorphic rock

**Metamorphic rocks** like slate or marble are formed when other kinds of rock (**igneous** or **sedimentary**) are changed due to heat or pressure.

## Omnivores

**Omnivores** are animals who eat a mixture of plants and meat.

## Opaque

Things are **opaque** if light cannot pass through them.

## Photosynthesis

**Photosynthesis** is the process plants use to make food from sunlight; it also requires carbon dioxide (from the air), and water (from the soil).

## Pitch

**Pitch** is the quality of a sound. Depending on how fast or slowly something vibrates, a sound's pitch will be high or low.

## Planet

A **planet** is a celestial object that orbits a star, like our solar system's Sun.

## Pole

A **magnet's north pole** is the end of the magnet attracted to the Earth's north magnetic pole; a **magnet's south pole** is the end of the magnet attracted to the Earth's south magnetic pole.

## Precipitation

**Precipitation** is rain, sleet, hail or snow; the water droplets which fall from the sky.

## Producer

Within a food chain, a **producer** (usually a green plant) passes energy on to a consumer (an animal who eats the plant) through carbohydrates and proteins.

## Reflection

**Reflection** is when light hits the surface of an object and then that light travels to our eyes so we can see. Mirrors catch light rays in front of them and throw it back in the direction it came from.

## Reversible change

A **reversible change** is a change that can be changed back again. Melting and heating are examples of reversible changes.

## Season

The four **seasons** (autumn, winter, spring, summer) we experience on our planet are caused by the Earth's tilt as it rotates around the Sun.

## Sedimentary rock

**Sedimentary rocks**, like sandstone or chalk, are formed over millions of years when sediments (tiny pieces of rocks and organic matter) are pressed together.

## Senses

The body's five **senses** are hearing, sight, smell, touch and taste.

## Shadow

A **shadow** is the darkness formed when light rays cannot pass through something.

## Sieving

**Sieving** is a method of separating mixtures of solids and liquids.

## Simple machines

**Simple machines** work by turning small **forces** into larger ones, allowing us to perform tasks with more strength or speed. Examples of simple machines are levers, gears, pulleys, wheels and screws.

## Solid

**Solid** is one of the three states of matter on Earth. A solid can hold its shape.

## Sound

**Sound** is created when something vibrates and sends waves of energy (vibration) into our ears.

## States of matter

Matter makes up our planet and the whole universe. On Earth, **all matter exists in one of three different states: solid, liquid or gas**. Depending on its temperature, matter can change state; heating, cooling, evaporating and condensation are ways in which a material changes state.

## Sun

A **sun** is a star, a giant ball of hot gas. Our Sun makes life possible on Earth.

## Surface resistance

**Surface resistance** is the **force** on objects moving across a surface.

## Switch

A **switch** turns an electrical circuit on or off by starting or stopping a current flowing.

## Transparent

Things are **transparent** if most light can pass through them.

## Vertebrates

**Vertebrates** are animals with backbones / skeletons and include amphibians, birds, fish, mammals and reptiles.

## Voltage

**Voltage** is the amount of electrical energy used. It is measured in volts.

## Water cycle

The **water cycle** is the continuous journey water takes from the sea to the sky, to the land and back to the sea.

## Water resistance

**Water resistance** is the **force** on objects floating on or moving in water.