

Science

Glossary



Appliances

Equipment which has been designed to perform a certain task, e.g. kettle was designed to boil water.

Atmosphere

Gas layers that surround the planet.

Axis

Point on which the Earth rotates. The Earth rotates on its axis once every 24 hours.

Battery

A cell consisting of certain chemicals which combine to create electricity in a circuit.

Biodiversity

Variety of plants and animals in a particular environment.

Biomass

A renewable energy source, this burns organic materials, usually waste products, in order to generate electricity.

Body systems

Groups of tissues and organs within your body that carry out different functions, e.g. digestive system includes mouth, stomach, intestines etc.

Buoyancy

Ability of an object to float on a liquid or in the air.

Canine teeth

Sharp, pointed teeth used for ripping and tearing food. Humans have four canine teeth.

Carnivore

An animal which mainly eats meat and hunts for prey.

Chemicals

Substances that are used to create chemical reactions or in chemical processes.

Chemical reaction

When one or more substances transform into another substance.

Circuit

A closed loop for electricity to move around.

Climate

Weather conditions of an area.

Components

Element of an electrical circuit, e.g. lightbulb.

Compounds

Substances that have two or more elements in it.

Condensation

The process by which a gas turns into a liquid, due to a reduction in the energy in its particles.

Conductor

A material which allows heat and/or electricity to pass through it. Most metals are good electrical and thermal conductors.

Conservation

Prevention of factors which would deplete a natural resource or living creature.

Consumer

In a food chain, an animal (or occasionally plant) which eats another animal or plant. For example, when a cow eats grass, it is a consumer.

Crust

The outer layer of the Earth.

Current

An electrical flow through a circuit.

Decomposer

In a food chain, any plant or animal which eats dead and decaying material. For example, woodlice are decomposers as they eat dead leaves and other plant material.

Disease

An absence of health, generally when something is causing a disorder of function in a living organism.

Dissolving

A way of mixing a solid and a liquid. When a solid dissolves in a liquid, this creates a solution. Not all solids are soluble.

DNA

At the centre of the cells of living things, it determines the fundamental characteristics of the living organism, e.g. eye colour, height etc.

Ecosystems

A community of interacting organisms, plants and animals within an environment.

Electricity

A form of energy caused by the movement of electrons.

Electronic components

Parts of an electronic device which help to build an electronic circuit e.g. transistors, switches etc.

Electrostatic

Static electricity, so electricity that is not flowing.

Environment

The surroundings or conditions within which an organism lives.

Energy

Power. It is transferred by: radiation, conduction and convection. The amount of energy transferred is measured in joules.

Erosion

The action of elements such as wind or water in breaking down rocks and soils and moving them to other places.

Evaporation

The process by which a liquid turns into a gas as a result of increased energy in its particles.

Extinct

A species that has died out and that no longer exists, e.g. the dodo.

Fertilisers

Substances either natural or chemical that are added to soil to supply nutrients.

Food chains

In nature, a series of steps showing each item's dependence on the next for food, e.g. grass - rabbit - fox. In food production, it is the stages food goes through from its origin to our plate. This can include processing, packaging, transport and sale.

Food web

A set of linked food chains, often occurring within the same ecosystem.

Force

It is the push or pull which makes objects move or stop moving.

Fuel

Materials which are used to produce energy such as oil and coal.

Freezing

The process by which a liquid turns into a solid, as a result of lowered energy in its particles.

Friction

A force which is caused when two surfaces rub against one another. It is a 'sticking force', causing objects to slow down or stop. Air resistance, water resistance and surface resistance are all types of friction.

Gas

A material whose particles have high energy and large gaps between each other. A gas takes the shape of the container it is in and will flow. Unless it is trapped, it will not stay in a container but will rapidly move through a room.

Genetics

Part of biology which looks at characteristics which are passed on from parents and variants in a species.

Germination

How a seed begins to grow and develop into a plant. Most seeds need warmth and water to germinate but do not need light.

Gravity

A pulling force on everything, causing things to move towards the centre of the Earth.

Habitat

A home environment for plants and animals.

Hygiene

Practice of keeping something clean in order to prevent contamination and disease.

Hypothesis

A prediction of the outcome made at the beginning of an experiment or investigation.

Infection

An illness caused by bacteria.

Inheritance

Something which has been passed on from previous generations, in relation to science inheritance focuses on genetic characteristics.

Insulator

A material which does not easily allow heat and/or electricity to pass through it. Wood is an example of a good insulator.

Landscape

Physical features of an area of land.

Liquids

A material whose particles have gaps between them and moderate energy. A liquid takes the shape of the container it is in, it will flow but can be contained relatively easily.

Lunar

Relating to the moon, e.g. the lunar month is the length of time between two full moons.

Non-inherited characteristics

Genetic characteristics that have not been passed on from parents.

Non-renewable energy sources

Energy sources which once used up, they will be gone forever, e.g. coal, oil.

Nutrients

Particles in food that are needed by all living creatures and plants to provide them with energy.

Magnet

An object which has an invisible magnetic field and can attract or repel some materials.

Magnetic forces

An invisible force created by electrons. It controls and creates magnetism and electricity.

Micro-organisms

Organisms which are too small to be seen by the naked eye. Examples include mould spores, viruses and bacteria.

Moon

Celestial object that orbits a planet.

Orbit

Path that an object makes around a planet, star or moon.

Organs

Brain, lungs, skin etc. Parts of the body which perform certain functions.

Organisms

All living creatures, plants or animals.

Pitch

Relates to the highness or lowness of a sound. The pitch is ruled by the speed of vibrations.

Pole

One of two ends of a magnet, with magnets having a North and a South pole. Poles which are the same repel each other and opposites attract.

Precipitation

Rain, sleet, hail or snow. This is an element of the water cycle.

Predator

| An animal which hunts other animals or food.

Prey

| An animal which is hunted for food. An animal can be both predator and prey.

Producer

| In a food chain, an organism which provides food for another living thing but is not itself a consumer. Typically, producers are green plants.

Relative motion

| Movement of an object in relation to another moving object.

Renewable energy sources

| Energy sources which will not run out such as wind and solar power.

Reproduction

| The process by which an organism creates new versions of itself.

Sensory organs

| Parts of the body which perform specific function relating to the senses, e.g. eyes are used for seeing, ears are used for hearing etc.

Series circuit

| Electric circuit in which all of the parts are connected and so the current passes through each of the parts.

Shadow

| Created when an opaque material or object is placed in front of a light source and prevents the light from passing through.

Solar power

| A renewable energy source which harness the power of the sun.

Solar system

| The planets and moons which rotate round the sun.

Solid

| A material whose particles are closely packed together and have low energy. A solid holds its own shape. It can sometimes be stretched or squeezed but it does not run or flow.

Sun

| A star – a giant ball of hot gas and the nearest star to Earth. The centre of our solar system. Enables all life on Earth.

Survival

| Continuing to live even in the face of adverse situations.

Sustainability

| The attempt to ensure that natural resources are used carefully so that they do not run out.

Universe

| Everything that there is, all matter and space. It continues to expand.

Validity

| Process of ensuring that a result from an experiment is valid by ensuring things such as it being a fair test, the sample size etc.

Variable

Any one of the elements of an experiment which could be changed. In a fair experiment, only one variable is allowed and all others have to be kept the same. For example, if testing whether seeds need warmth to germinate, only the temperature could vary. Any other elements which may influence germination, such as water or light, have to be kept constant.

Vibration

Very quick movement of an object back and forth, which in turn creates waves of energy in the air, typically sound.

Water cycle

The process of precipitation, evaporation and condensation which explains such events as cloud formation and weather patterns. Water evaporates from large bodies such as oceans and lakes, turning into water vapour and rising up, where it cools and condenses into tiny droplets (clouds). When the droplets combine and become larger, they fall to earth as rain, snow or hail (precipitation), back into rivers, lakes and oceans and the cycle continues.

Water vapour

Water in the form of a gas. Water vapour is invisible and should not be confused with steam, which is actually lots of tiny droplets of water.