Word	Pronunciation	Meaning
abdomen		Rear or bottom end of an animal's main body.
abrasion		When rock fragments bump into each other and wear away.
Absorb energy		To take in energy.
Absorb		To take in, e.g. when soluble substances pass through the wall of the small intestine and into the blood.
absorb		This means to 'soak up' or 'take in'. If something absorbs light it soaks it up and does not let it back out.
absorb		Soak up.
absorbed		When soluble substances go through the wall of the small intestine into the blood.
accelerate	*ack-* ***sell*** *-er-ate*	Change speed.
acetic acid	*a-* ***see*** *-tick*	The old name for ethanoic acid. It is the acid in vinegar.
acid		A substance that turns litmus red. It has a pH of less than 7.
acid rain		Rain that is more acidic than usual (pH less then 5.6) due to high amounts of dissolved acidic gases.
acne	***ack*** *-nee*	Spots on the skin.
adaptation	*add-app-* ***tay*** *-shun*	The features of an organism that allow it to live in its environment.
adaptations	*add-app-* ***tay*** *-shuns*	The features that plants and animals have to help them live in a particular place.
adapted , organism		When the features of an organism help it to survive in a habitat, it is adapted to that habitat.
adapted , cells		When something has a particular shape to help it do a function (job). A root hair cell has a shape that helps it absorb water and is said to be 'adapted to its function'.
addictive		If something makes you feel that you need to have it, it is said to be addictive.
adolescence	*add-ol-* ***less*** *-sense*	Time when both physical and emotional changes occur in humans.
aerobic respiration	*air-* ***rO*** *-bick res-per-ay-shun*	A type of respiration that needs oxygen. Releases energy from a sugar (glucose) and produces carbon dioxide as a waste gas.
afterbirth		When the placenta is pushed out through the vagina.
air pollution		Substances released into the atmosphere which should not be in air.
air resistance		A force that tries to slow down things that are moving through the air. It is a type of friction.
air sacs		Groups of alveoli in the lungs where oxygen comes out of the air and goes into the blood. Carbon dioxide is also transferred from the blood to the air in these.
alkali	***alk*** *-al-lie*	Substance that turns litmus blue. Has a pH of more than 7.

Word	Pronunciation	Meaning
alloy		A mixture of different metals.
alternative energy resources		Another name for renewable energy resources.
altitude sickness		An illness caused by very low air pressure. It can be fatal.
alveoli		Pockets in the lungs where oxygen comes out of the air and goes into the blood. Carbon dioxide is also transferred from the blood to the air in alveoli. (Singular = alveolus.)
alveolus	*al-vee-**O**-lus*	Small, round pocket that is grouped with other alveoli to form air sacs in the lungs. Plural = alveoli.
amino acids	*am-**mee**-no **ass**-ids*	The building blocks of proteins.
ammeter		Measures how much electricity is flowing around a circuit.
amnion	***am**-nee-on*	Bag containing amniotic fluid.
amniotic fluid	*am-nee-**ot**-tick*	Liquid surrounding the growing embryo and protecting it.
amp (A)		The unit for current.
amphibian	*am-**fib**-ee-an*	Vertebrate with moist skin, e.g. a frog.
amplitude		Half the height of a wave.
amylase	am-e-laze	An enzyme found in saliva that breaks starch down into sugar.
anaerobic respiration	***an**-air-rO-bick*	A type of respiration that does not need oxygen.
angle of reflection		The angle between the normal and the ray of light leaving a mirror.
angle of refraction		Angle between the light ray and the normal as it passes from one transparent material into another.
animal kingdom		The group of organisms that contains all vertebrates and invertebrates.
antacid	*ant-**ass**-id*	A medicine containing an alkali used to cancel out some of the acid in the stomach to treat heartburn.
antagonistic pair	*ant-tag-on-**iss**-tick*	Two muscles that work a joint by pulling in opposite directions, e.g. biceps and triceps.
ante-natal class		A pregnant woman and the father of the baby attend this to find out more about what happens during pregnancy and childbirth.
antenna		Something sticking out of an animal's head which is used to sense things. The plural is antennae.
anther		Part of the stamen. It produces pollen grains.
antibiotic	*ant-ee-by-**ot**-tick*	Medicine that can kill bacteria but not viruses.
antibodies		Substances produced by white blood cells that help to fight microbes which might cause diseases.
anticlockwise moment		The moment of a force in an anticlockwise direction around a pivot.

Word	Pronunciation	Meaning
antiseptic		Weak disinfectant safe to use on human skin.
anus		The opening at the end of the gut.
appendix		Small tube branching off the large intestine. It has no function in humans.
arachnid	*ar-* ***ack*** *-nid*	Type of arthropod with four pairs of legs, e.g. a spider.
armature		The iron part of a relay that moves when electricity is flowing in the solenoid (or electromagnet)
arteriosclerosis	*are-tir-* ***ee*** *-O-skluh-* ***rO*** *-sis*	Thickening and hardning of artery walls. May be due to a build up of a fatty substance inside the arteries.
Artery		Blood vessel that carries blood away from the heart.
arthropod	***arth*** *-row-pod*	Invertebrate with jointed legs, e.g. a fly or spider.
artificial satellite		A satellite made by humans.
asteroid	***ass*** *-ter-oyd*	A small lump of rock orbiting around the Sun
atom		The smallest part of an element.
atomic energy		Another name for nuclear energy.
attract		Two things pulling towards each other.
average speed		The total distance something travels divided by the total time taken allows you to calculate the thing's mean or average speed.
axis	***acks*** *-iss*	Imaginary vertical line that goes from one pole of the Earth to the other. The Earth spins around its axis.
bacterium		A type of microbe bigger than viruses. (plural = bacteria)
balanced diet		Eating a wide variety of foods to give us all the things that we need.
balanced forces		When two forces are the same strength, but working in opposite directions.
bar magnet		A straight magnet, shaped like a small bar.
basalt	***ba*** *-salt*	An igneous rock with very tiny crystals.
base		A chemical which reacts with an acid to form a salt.
bends		Another name for decompression sickness.
biological weathering		When rocks are worn away or broken up due to the activities of living things. For example, growing plant roots can split rocks apart.
biomass	***bi*** *-O-mass*	Any fuel that comes from plants, animals, or their wastes (e.g. wood, methane from rotting plants, etc.).
biomass		The mass of material (except water) that makes up an organism.

Word	Pronunciation	Meaning
Bird		Vertebrate with feathers, e.g. eagle.
blood		Contains cells and a liquid called plasma. It flows around the body carrying various substances which are either made by the body or needed by the body.
blood vessel		Tubes in which blood flows. There are capillaries, veins and arteries.
blue		One of the three primary colours of light.
boiling point		When a liquid is at its boiling point it is as hot as it can get. It is evaporating as fast as it can.
bond		Force holding atoms together.
brain		Organ that controls what the body does.
braking distance		The distance a car travels while the brakes are trying to stop it.
breathing		Moving muscles to make air flow into and out of the lungs.
breathing rate		The number of times that you breathe in and out in one minute.
breathing system		Set of organs (lungs, windpipe, diaphragm) that allow air to be taken into and out of the body.
breed		A set of animals that are in some way different from other members of the same species.
breeding		To mate two organisms of the same species to produce offspring.
brine		A solution of common salt and water.
bronchus		Tube in the lungs that connects the windpipe to the air sacs. Plural = bronchi.
budding		The way yeast cells divide. A new small cell (a bud) starts to grow out from another cell.
caffeine	***caff*** *-een*	A stimulant that increases the speed at which nerves carry impulses. Found in coffee, tea and cola drinks.
calcium		A metal which reacts easily with water.
Capillaries	*cap-* ***ill*** *-arr-ees*	The smallest blood vessels. Substances enter and leave the blood through the thin walls of capillaries.
carbohydrate	*car-bO-* ***high*** *-drate*	Substance found in food that is used for energy.
carbon dioxide		A gas which will put out a lighted splint and turn limewater milky. It is slightly acidic gas formed when carbon reacts with oxygen (and during respiration).
carnivore		An animal that only eats other animals.
carpel	***car*** *-pull*	Female reproductive organ found in flowers. It is made of a stigma, style and ovary.
catalytic converter		A device fitted to a car's exhaust to change harmful gases into harmless gases.
cell	*sell*	The basic unit which living things are made of.

Word	Pronunciation	Meaning
Cell	*sell*	It contains a store of chemical energy that can produce electricity. Cells push electrons round a circuit.
cell division		When a cell splits in two. Cells are made using cell division.
cell surface membrane	***mem*** *-brain*	Controls what goes into and out of a cell.
cell wall		Tough wall around plant cells. Helps to support the cell.
cellulose		A substance used to make cell walls.
centipede	***sent*** *-ip-eed*	Type of arthropod with long thin body divided into sections. One pair of legs on each body section.
chalk		Soft white or grey rock formed from the shells of small sea animals.
Chamber		The heart contains four compartments called chambers.
characteristics		The features of an organism.
chemical energy		The kind of energy stored in chemicals. Food, fuels and electrical cells all contain chemical energy.
chemical formula		A combination of symbols and numbers that shows how many atoms of different kinds are in a particular molecule. In compounds that do not form molecules, it shows the ratio of elements in the compound.
chemical reaction		A change where new substances are formed.
chemical weathering		When rocks are broken up or worn away by chemical reactions, usually with rainwater.
chlorophyll	***klor*** *-O-fill*	Green substance found inside chloroplasts. It absorbs light.
chloroplast	***klor*** *-O-plast*	Green disc containing chlorophyll. Found in plant cells. Where the plant makes food using photosynthesis.
choice chamber		Equipment that allows scientists to test how environmental factors affect organisms.
chromatogram	*krow-* ***mat*** *-O-gram*	The dried piece of paper produced by chromatography.
chromatography	*krow-mat-* ***og*** *-graph-ee*	Separating dissolved solids from one another. The solids are usually coloured.
cilated epithelial cell	***sil*** *-lee-ay-ted eppy-theel-ee-al*	Cells with cilia that are found in the lungs.
cilia	***sil*** *-lee-a*	Small hairs growing from some cells. They wave to move mucus up and out of the trachea to be swallowed.
ciliated	***sil*** *-lee-ayted*	Having cilia.
ciliated epithelial cells	***sil*** *-lee-ay-ted eppy-theel-ee-al*	Cells in the trachea which have microscopic hairs (cilia) growing from them.
circuit	***sir*** *-kit*	A complete loop that electricity flows around.

Word	Pronunciation	Meaning
circulatory system	*serk-you-late-or-ee*	System containing the heart and blood vessels.It carries oxygen and food around the body.
circumcision	*sir-cum-* ***siz*** *-shun*	Removal of the foreskin.
classification	*clas-if-ik-* ***ay*** *-shun*	Sorting things into groups.
Clay		Very fine particles of rock.
clockwise moment		The moment of a force in a clockwise direction around a pivot.
clot		When blood becomes solid. Makes a 'scab' when it is on the surface of the skin.
coal		A fossil fuel made from the remains of plants.
cobalt	***cO*** *-balt*	A metal that is a magnetic material.
cocaine	*cO-* ***cane***	Very powerful and harmful stimulant that causes blocked arteries and mental problems.
combination reaction		When chemicals join to form new substances.
combustion		A burning reaction, when a fuel combines with oxygen and releases energy.
common salt		A chemical we use to make things taste 'salty'.
communications		A satellite used to transmit TV programmes or telephone calls.
community	*com-* ***mew*** *-nit-ee*	All the plants and animals that live in a habitat.
compass		A magnetised piece of metal that can swing around – it points north.
compete		All organisms need some of the same things and so each organism has to try to get these things before another organism does. For example, plants compete with one another for light.
competition	*comp-pet-* ***tish*** *-un*	Organisms compete with each other for food, light and space in a habitat.
component	*com-* ***po*** *-nent*	Something in a circuit, like a bulb, switch or motor.
compound		Substance that can be split up into simpler substances.
compounds		Substances that can be split up into simpler substances.
compressed		Squeezed together.
Condense		When a gas turns into a liquid.
condensing		A gas turning into a liquid.
Conduction	*con-* ***duck*** *-shun*	The way heat travels through solids.
Conductor, thermal		A material which lets energy flow through it easily.
conductor, electrical		A material that lets electricity flow through it.
Cone		Something used to carry the seeds of conifers.
Conifer		Plant with needle-shaped leaves. Reproduces using seeds found in cones.
constellation	*con-stell-* ***ay*** *-shun*	A pattern of stars.

Word	Pronunciation	Meaning
constipation	*con-stip* ***-ay*** *-shun*	When the intestines get blocked up.
consumer	*con-* ***syou*** *-mer*	An organism that has to eat other organisms to stay alive. Animals are consumers.
contact force		A force that needs to touch an object before it can affect it (e.g. friction).
Contract		Get smaller.
contracting		Making something smaller or shorter.
contractions	*con-* ***track-*** *shuns*	The uterus starts to push out the baby during labour.
Convection	*con-* ***vek*** *-shun*	The transfer of heat in fluids.
convection current	*con-* ***veck*** *-shun*	A flow of liquid or gas caused by part of it being heated or cooled more than the rest. It is created by heat causing changes in the density of a fluid.
cord		Carries food, oxygen and waste between the placenta and the growing fetus.
core		A solid bar inside an electromagnet – usually made of iron.
correlation		Same as a relationship
corrode		When something (such as stone or metal) reacts with chemicals in the air or water and gets worn away.
corrosion		When stone or metal reacts with chemicals in air or water and is worn away or changed into a different substance.
corrosive	*cor-* ***row*** *-sive*	Substances that attack metals, stonework and skin are called corrosive.
coverslip		Thin piece of glass used to hold a specimen in place on a slide.
cross-breeding		When different varieties or breeds are mated with one another.
crust		The solid rocks at the surface of the Earth.
crustacean	*crust-* ***ay*** *-shun*	Type of arthropod with a chalky shell and 5–7 pairs of legs, e.g. a lobster.
crystals	***kris*** *-tals*	Pieces of a mineral with sharp edges.
current		The flow of electrons around a circuit.
Cuticle		Layer of cells on leaves that is waterproof.
cyan	*sye-an*	Secondary colour made by mixing green and blue light (greeny-blue).
cytoplasm	***site*** *-O-plaz-m*	Jelly inside a cell where the cell's activities happen.
daily changes		Changes in the physical environmental factors which happen during a day (e.g. it gets dark at night).
data		Results of an experiment.
daughter cell		The two new cells made by cell division are called daughter cells.

Word	**Pronunciation**	**Meaning**
day		24 hours, the time it takes the Earth to spin once on its axis.
decibel (dB)	***dess*** *-i-bell*	Unit for measuring the loudness of a sound.
deciduous tree	*dess-* ***idd*** *-you-us*	Tree that drops its leaves in winter (e.g. oak tree).
decompose		Break down into simpler parts.
decomposer		Something that eats dead plants.
decomposers		Microbes and other smaller organisms which break down dead plants and animals, and animal waste, e.g. bacteria and fungi.
decomposition		The process of something decomposing.
decompression sickness		Bubbles in the blood caused if divers come to the surface too quickly. It can be fatal.
deficiency disease		Disease caused by not having enough of something in your diet.
degrees Celsius (°C)	***sell*** *-see-us*	The units for measuring temperature.
dense		Something which is heavy for its volume.
Density		The amount of mass that $1cm^3$ of a substance has. Measured in g/cm^3.
deposits		When moving water drops rock fragments or grains.
depressant		Drug that decreases the speed at which nerves carry impulses, e.g. alcohol.
diaphragm	***dye*** *-a-fram*	Sheet of muscle underneath the lungs. It helps to work the lungs during breathing.
diet		The food that you eat.
diffusion	***diff*** *-you-shun*	The natural movement of particles from a place where there are a lot of them to a place where there are fewer of them.
digestion	*dye-jes-jun*	Process that breaks food into soluble substances in our bodies.
digestive juices	*die-jest-iv*	A liquid containing enzymes that break down food.
digestive system		The group of organs that carries out digestion.
dilute	*die-* ***loot***	We dilute a solution by adding more of the solvent to it.
disease		When some processes that happen in the body do not work in the way they should.
disinfectant		Strong chemical used to kill microbes.
dispersion		The separating of the colours in light, for example when white light passes through a prism.
displace		When one element takes the place of another in a compound – a type of substitution.
displacement		The volume of water pushed out of the way by an object.
displacement		A reaction that occurs when a more reactive metal ‘pushes’ another metal out of a compound and takes its place.

Word	Pronunciation	Meaning
displacement reaction		A reaction where one element takes the place of another in a compound.
dissolving	*diss-* ***olv*** *-ing*	When a solid splits up and mixes with a liquid to make a solution.
distance–time graph		A graph that shows how far something has moved in a certain time.
distillation	*dist-till-* ***ay*** *-shun*	The process of separating a liquid from a solution by evaporating the liquid and then condensing it.
distribution	*diss-trib-* ***you*** *-shun*	The places where an organism can be found in a habitat.
DNA		A large molecule that contains genes.
Drag		Air resistance and water resistance are both sometimes called drag.
Drug		Substance that affects the way your body works.
eardrum		A thin membrane inside the ear which vibrates when sound reaches it.
Earth		The planet we live on.
Earth observation		A satellite used to take pictures of the Earth – for instance to help forecast
earth wire		The green and yellow wire in a cable or plug.
echinoderm	*ek-* ***eye*** *-no-derm*	Invertebrate with a body in five parts, e.g. a starfish.
ecologist		A person who studies the environment.
ecstasy		A stimulant that can cause depression, mental illness and even death.
efficiency	*e-* ***fish*** *-en-see*	A way of saying how much energy something wastes.
effort		The force put on a lever to put a force on something else.
egestion	*ee-jes-jun*	When faeces are pushed out of the anus.
egg cell		The female sex cell.
ejaculation	*edge-ack-you-* ***lay*** *-shun*	Semen is pumped out of a man's penis into the top of the vagina during sexual intercourse.
elastic		Any substance that will return to its original shape and size after it has been stretched or squashed.
Elastic Potential Energy		The kind of energy stored in stretched or squashed things which can change back to their original shapes.
electric current		The flow of electricity around a circuit.
electric shock		When electricity flows through the body.
electrical conductor		Something which allows electricity to flow through it easily.
electrical energy		The kind of energy carried by electricity.
electrolysis		A process where electricity is used to split compounds apart, normally to produce an element.

Word	Pronunciation	Meaning
electromagnet		A coil of wire with electricity flowing in it. An electromagnet has a magnetic field like a bar magnet.
electron		Tiny particle that flows around a circuit.
element		All the atoms in an element are the same. A substance that cannot be split up into anything simpler by chemical reactions.
elliptical	*e-* ***lip*** *-tick-al*	Oval shaped. The shape of a planet's orbit around the Sun.
embryo	***em*** *-bree-O*	Tiny plant, found inside a seed, with a very small shoot and a very small root.
embryo	***em*** *-bree-O*	Tiny new human life which grows by cell division from a fertilised egg cell.
Emit	*ee-* ***mit***	To give out energy.
energy flow diagram		A way of showing energy changes as a flow chart.
engulf		When a white blood cell completely surrounds a microbe and destroys it, it is said to engulf the microbe.
Environment		The conditions around an organism caused by physical environmental factors.
environmental factors		Things in an environment that can change something about an organism.
environmental variation		Differences between organisms caused by environmental factors.
enzyme		A chemical that can break up large molecules.
Equator	*ee-* ***kwate*** *-er*	An imaginary line around the middle of the Earth.
erection		When the penis becomes stiff.
erosion	*e-* ***row*** *-shun*	The movement of pieces of rock by the wind, water, etc.
estimate		Provide a rough idea about the numbers of something or the size of something.
ethanoic acid	*eth-an-* ***know*** *-ic*	The acid in vinegar.
ethanol		Often just called 'alcohol'. Produced by yeast when they ferment sugar.
Evaporate		When a liquid turns into a gas.
evaporation	*ev-app-or-* ***ay*** *-shun*	A liquid turning into a gas.
evergreen tree		Tree that keeps its leaves in winter (e.g. pine tree).
evidence		Results of experiments that support or disprove a theory.
exert		Push on something.
exhalation		Breathing out.
exhale		To breathe out.
exhaled air		Air that is breathed out.

Word	Pronunciation	Meaning
Exoskeleton	*ex-O-* ***skel*** *-e-ton*	Thick outer covering found in arthropods.
expand		Get bigger.
external fertilisation		When fertilisation happens outside the bodies of the parents.
eyepiece lens		Part of the microscope you look down.
faeces	*fee-sees*	Waste food material produced by the intestines.
fat		Substance needed by living things to make cell membranes. Our bodies also use fats as a store of energy and to keep warm.
feeding		Putting food into your mouth. Also called ingestion.
fermentation		The type of anaerobic respiration carried out by yeast. It produces carbon dioxide and ethanol.
Fern		Plant that has many small waterproof leaves. Reproduces using spores.
fertilisation	*fert-ill-eyes-* ***ay*** *-shun*	Joining of a male sex cell with a female sex cell.
fertilised egg cell		What is produced when a male sex cell fuses with an egg cell.
fertilisers		Something that can be added to soil to increase the amount of nutrients available in the soil.
fetus	***fee*** *-tus*	After an embryo has grown all its organs it is called a fetus. This is usually at about 10 weeks.
fever		A high body temperature.
fibre	***feye*** *-ber*	Substance found in food which cannot be used by the body. It helps to keep our intestines clean.
filament		Part of the stamen. It supports the anther.
filament		Thin piece of wire inside a light bulb that glows when electricity is flowing through it.
filter		Something which only lets certain colours through and absorbs the rest.
filtering		Separating things that have not dissolved from a liquid. The liquid is passed through a filter to do this.
fish		Vertebrate with wet scales, fins and gills, e.g. a salmon.
Fitness		If you are able to do all the things that your lifestyle needs you to do, you are fit.
flow		Move.
flower		Organ system containing reproductive organs – carpel (female), stamen (male).
flowering plant		Plant with large, flat leaves. Reproduces using seeds found in fruits. Fruits and seeds form inside flowers.
Fluid		A gas or a liquid.
focusing wheel		Wheel on a microscope that moves parts of the microscope to get the image into focus.
food chain		A way of showing what eats what in a habitat.

Word	Pronunciation	Meaning
food web		Many food chains linked together.
Force		A push or a pull.
force meter		Piece of equipment containing a spring, used to measure forces.
force multiplier		A lever used to turn a small force into a larger one.
foreskin		A covering of skin protecting the head of the penis.
fossil		The remains of a dead animal or plant that became trapped in layers of sediment and turned into rock.
fossil fuels		Coal, oil and natural gas – all fuels that were formed from the remains of dead plants and animals.
fossils		Any sign of past life that has been preserved in a rock.
freeze–thaw action		A type of physical weathering that happens when water gets into a crack in a rock and freezes. The freezing water expands and makes the crack bigger.
freezing point		The temperature at which a liquid turns into a solid.
frequency	***free*** *-kwen-see*	The number of waves each second.
friction		A force that tries to slow things down when two things rub against each other.
Fruit		Something used to carry the seeds of flowering plants. Can be fleshy or dry.
fuel		Anything that stores energy that can be converted into heat energy – includes fossil fuels and nuclear fuel.
fulcrum		A point around which something turns. Another name for a pivot.
full moon		The phase of the Moon when it looks like a bright, full circle.
function		Something's job.
Fungus		Organisms which are different from animals, plants and bacteria. Examples include mushrooms and yeasts. (plural = fungi)
fuse		When two sex cells join together to form a fertilised egg cell they are said to fuse.
fuse		A piece of wire that melts if too much electricity flows through it.
galaxy		Millions of stars grouped together.
gamete	***gam*** *-meet*	Scientific word for sex cell.
Gas		Something made of particles that are very spread out and not attached to each other. A gas does not have a fixed shape or volume and is easy to squash.

Word	Pronunciation	Meaning
gas exchange		Process where oxygen diffuses into the blood and carbon dioxide diffuses out of the blood. It happens in the alveoli.
gene	*jeen*	A length of DNA that controls one inherited characteristic of an organism.
generate		Make electricity by turning a magnet inside coils of wire.
generator		Large coil of wire with a magnet inside. When the magnet is turned, electricity is produced in the coil of wire.
genetic information		The instructions that control your characteristics. These instructions are found on genes.
geostationary orbit		An orbit where a satellite takes exactly 24 hours to circle the Earth, so it always stays over the same part of the Earth.
geothermal power	*ge-O-* ***therm*** *-al*	Making electricity using heat from hot rocks underground.
gestation period	*jess-* ***tay*** *-shun*	The length of time from fertilisation to birth.
gill		A series of flaps of tissue with a good blood supply just behind the head of an organism which is used to take oxygen out of water. Fish have gills.
glands		The glands in the male reproductive system add a special liquid to the sperm cells to make semen. There are other sorts of glands in the body.
global warming		The process of the Earth's atmosphere warming up. It is partly caused by an increase in carbon dioxide in the air.
Glucose		Type of sugar made during photosynthesis.
glucose		A type of sugar made during photosynthesis.
grain		Tiny, rounded piece of rock.
granite	***gran*** *-it*	An igneous rock with large crystals.
gravitational potential en	*grav-it-* ***ay*** *-shon-al po-* ***ten*** *-shall*	The kind of energy stored by anything that can fall down.
gravity		The force of attraction between any two objects.
green		One of the three primary colours of light.
greenhouse effect		The Sun's energy being trapped by gases in the atmosphere, thought to lead to global warming.
guard cells		Cells which open and close the stomata.
gullet		Tube that goes from the mouth to the stomach. Sometimes called the 'food pipe' but properly called the oesophagus.
gut		All the organs of the digestive system apart from the mouth.

Word	Pronunciation	Meaning
habitat		The place an organism lives in (e.g. woodland).
harmful		Another word for irritant.
head		Front or top end of an animal's body.
Heart		Organ that pumps blood around the body.
heart attack		When the heart stops pumping.
heart beat rate		The number of times your heart beats in one minute.
heart disease		Disease caused by narrowing of the arteries carrying blood to the muscles of the heart. The heart does not receive enough oxygen and some of the cells die.
heat conductor		Something which allows heat to flow through it easily.
heat energy		The hotter something is, the more heat energy it has.
heat insulator		A material that does not let heat energy flow through it easily.
hemispheres	***hem*** *-ee-sfears*	The two halves of a sphere – the shape you would get if you cut a solid ball in half.
herbicide		A chemical that kills weeds. Also called a weedkiller.
herbivore		An animal that only eats plants.
Heroin		A very dangerous depressant drug. Causes vomiting and severe headaches.
hertz (Hz)		The unit for frequency. 1 hertz means one wave per second.
hibernation	*high-ber-* ***nay*** *-shun*	When animals hide during the winter and go to sleep.
high blood pressure		When the pressure of blood in the blood vessels gets too high.
high melting point		Something with a high melting point has to be at a very high temperature before it melts. It is a solid at room temperature.
humidity		The amount of water vapour in the air.
humus	***hew*** *-mus*	A mixture of rotting plant material and animal remains found in soil.
hydraulic	*hi-* ***draw*** *-lick*	A system which works by transmitting pressure through pipes containing a liquid.
hydrocarbon		A chemical compound containing only hydrogen and carbon.
hydrochloric acid		A common acid that is also found in your stomach.
hydroelectric power	*hi-drO-el-* ***eck*** *-trick*	Making electricity by letting falling water (usually from a reservoir) turn turbines and generators.
hydrogen		A gas which is given off when metals react with acids. It burns with a squeaky pop.
hydrogencarbonate		An indicator that can be used to show how much carbon dioxide there is in
igneous rock	***igg*** *-nee-us*	A rock formed when magma or lava cooled down and solidified.
image		What you see down a microscope.

Word	Pronunciation	Meaning
image		A picture which forms in a mirror, or on a screen, or is made by lenses.
immune	*imm-**you'n***	If you cannot get a disease you are said to be 'immune' to it.
immunisation	*imm-you'n-eyes-**ay**-shun*	Making people immune to diseases.
implantation	*im-plant-**ay**-shun*	When an embryo sinks into the soft lining of the uterus.
impulse		Electrical signal carried by a nerve cell.
in equilibrium		In balance.
in parallel		A circuit is in parallel when the current divides, a part going through each component, then joins up to complete the circuit.
incident ray	***in**-sid-dent*	Light ray hitting a mirror.
indicator	***ind**-ic-ay-ter*	A dye that will change colour in acids and alkalis.
infect		When a microbe gets into your body you are 'infected' by it.
infectious	*in-**feck**-shus*	A disease that can be spread from person to person or from animal to person is infectious.
infrared radiation		A type of wave in the electromagnetic spectrum. It can travel through transparent things and a vacuum (empty space).
ingestion	*in-jes-jun*	Putting food into your mouth.
inhalation		Breathing in.
inhale		To breathe in.
inhaled air		Air that is breathed in.
inherited		Passed on to an organism from its parents.
inherited variation		Differences between organisms passed to organisms by their parents in reproduction.
inner planets		Mercury, Venus, Earth and Mars. The inner planets are all rocky planets.
insect		Type of arthropod with three pairs of legs, e.g. a fly.
insecticide		A chemical that kills insects.
insoluble		Something that does not dissolve is said to be insoluble.
Insulator, thermal		A material which does not let energy flow through it easily.
insulator, electrical		A material that does not let electricity flow through it.
intensity		The loudness or volume of a sound.
interface		The boundary between two materials.
interlocking		When crystals fit together with no gaps between them.
internal fertilisation		When fertilisation happens inside the bodies of the parents.

Word	Pronunciation	Meaning
intestine, Large	*in-* ***test*** *-in*	The large intestine is an organ which removes water from unwanted food.
intestine, small	*in-* ***test*** *-in*	The small intestine is an organ used to digest and absorb food.
invertebrate	*in-* ***vert*** *-eb-rate*	Animal with no backbone.
Invertebrate	*in-* ***vert*** *-eb-rate*	Animal without a backbone.
iron		A metal that is a magnetic material.
iron filings	*f-* ***eye*** *-lings*	Tiny pieces of iron that are sometimes used to find the shape of a magnetic field.
irreversible action		A reaction in which what you end up with cannot be turned back into what you started with.
irreversible change		Permanent change.
irritant		Something that irritates the skin and eyes.
joule (J)	***jool***	The unit for measuring energy.
kidneys		Organs used to clean the blood and make urine.
kilogram		A unit for measuring mass (kg). There are 1000 g in 1 kg.
kilojoule (kJ)	***kill*** *-O-jool*	There are 1000 joules in 1 kilojoule.
kilometres per hour (km/h)		Units for speed when the distance is measured in kilometres and the time is measured in hours.
kinetic energy	*kin-* ***et*** *-ick*	The kind of energy in moving things.
kingdom		Largest groups that living things are sorted into. The two biggest are the plant and animal kingdoms.
kwashiorkor	*kwa-she-* ***or*** *-ker*	Deficiency disease caused by a lack of protein.
labour		Time when the baby is about to be born.
large intestine		Organ that takes water out of waste food.
laser	***lay*** *-zer*	Something which produces a narrow beam of light of one pure colour (short for Light Amplification by Stimulated Emission of Radiation).
lava	***lar*** *-va*	Molten rock that runs out of volcanoes.
law of conservation		The idea that the total mass of all the reactants in a chemical reaction is the same as of mass the total mass of all the products.
law of conservation of energy		The idea that energy can never be created or destroyed, only changed from one form into another.
leaf		Plant organ used to make food using photosynthesis.
leap year		A year with 366 days in it. We have a leap year every 4 years.
lever		A simple machine which can increase the size of a force.

Word	Pronunciation	Meaning
light energy		The kind of energy given out by light bulbs, candles, etc.
light year		The distance that light travels in one year.
lime		Calcium oxide (made by roasting limestone or chalk).
limestone		A sedimentary rock made from the shells of dead sea creatures consisting mainly of calcium carbonate.
limewater		A chemical that goes cloudy when carbon dioxide is bubbled through it.
limiting factor		Something that stops a population growing.
Liquid	lick-wid	Something made of particles that are fairly close together, but attached weakly so that they can move past each other. A liquid has a fixed volume but not a fixed shape.
litmus		A simple kind of indicator. It turns red in acids and blue in alkalis.
live wire		The brown wire in a cable or plug.
liver		Organ used to make and destroy substances in our bodies.
load		The weight or force on something.
loam		The best soil for growing plants. Mixture of humus, clay and sand.
loudness		How loud a sound is; the volume of a sound.
low boiling point		Something with a low boiling point will turn into a gas at a relatively low temperature. It can be a solid, liquid or gas at room temperature.
low melting point		Something with a low melting point turns into a liquid at a relatively low temperature. It can be a solid, liquid or gas at room temperature.
lubricant	***loo*** *-brick-ant*	A substance (normally a liquid) used to reduce friction.
lubrication	*loo-brick-* ***ay*** *-shun*	Adding a lubricant to something.
luminous		Gives out light.
luminous sources	***loo*** *-min-us*	Objects which create light.
lunar eclipse		When the Moon moves into the shadow of the Earth.
lunar month		28 days – the time it takes the Moon to orbit around the Earth once.
lungs		Organs used to take oxygen out of the air and put waste carbon dioxide into the air.
machine		Something that changes energy from one form to another.
magenta	*ma-* ***jen*** *-ta*	Secondary colour made by mixing red and blue light (pinkish red).
magma		Molten rock beneath the surface of the Earth.
magnet		Something that can attract magnetic materials.

Word	Pronunciation	Meaning
magnetic		A metal (iron, nickel or cobalt) that can be magnetised or attracted to a magnet.
magnetic field		The space around a magnet where it can affect magnetic materials or other magnets.
magnetic materials		Materials that are attracted to a magnet, iron, cobalt, nickel and steel are all magnetic materials.
magnetism		A non-contact force.
magnetism		A force that attracts objects made out of iron.
magnification	*mag-nif-ick* ***-ay*** *-shun*	How much bigger a microscope makes something appear.
mains (electricity)		Alternating current at 230 V provided to houses, shops etc.
make and break		The switch in an electric bell that opens and closes. It is operated by an
mammal		Vertebrate with hair, which also produces milk, e.g. a human.
mammary glands		Glands contained in the breasts of women which produce milk after childbirth.
mantle	***man*** *-tel*	The part of the Earth below the crust.
marble		A metamorphic rock formed from limestone.
marijuana	*ma-roo-* ***arn*** *-a*	A depressant which can cause memory loss.
mass		The amount of matter that something is made of. Measured in grams (g) and kilograms (kg). Your mass does not change if you go into space or to another planet.
mature		Another word for develop.
medicine	***med*** *-iss-in*	A drug that helps the body to ease the symptoms of a disease or cure the disease.
Medium		Any substance.
Melt		When a solid turns into a liquid.
melting point		The temperature at which a solid turns into a liquid.
menopause	***men*** *-O-paws*	When the ovaries in women stop releasing eggs.
menstrual cycle	***men*** *-strew-al*	Series of events lasting about a month, happening in the female reproductive system. The cycle causes ovulation and the lining of the uterus is replaced.
menstruation	*men-strew-* ***ay*** *-shun*	When the lining of the uterus and a little blood pass out of the vagina as part of the menstrual cycle.
metals		Elements that are shiny, conduct heat and electricity well, and often have high melting and boiling points.
metamorphic	*met-a-* ***mor*** *-fik*	A word meaning ‘changed’.
metamorphic rocks	*met-a-* ***mor*** *-fik*	Rocks that have been formed by changing igneous or sedimentary rocks.

Word	Pronunciation	Meaning
methane		The gas that is ‘natural gas’. Also formed in large amounts in the digestive systems of cows. Methane absorbs heat and so helps global warming.
metres per second (m/s)		Units for speed when the distance is measured in metres and the time is measured in seconds.
microbe		Short for micro-organism.
microhabitat		Small areas of a habitat with certain conditions (e.g. under a log in a woodland habitat).
micro-organism		A very small living thing.
microscope	***my*** *-crow-scope*	Used to magnify small things.
migration	*my-* ***gray*** *-shun*	When animals move to different areas of the world depending on the season.
miles per hour (mph)		Units for speed when the distance is measured in miles and the time is measured in hours.
Milky Way		The galaxy that our Solar System is in.
millipede	***mill*** *-ip-eed*	Arthropod with long, thin body divided into sections. Two pairs of legs on each body section.
mineral		Properly called a ‘mineral salt’ and found in food. Needed in small quantities for health (e.g. calcium).
Mineral		A chemical found in rocks. Rocks are mixtures of minerals.
mineral salts		Chemicals found in the soil which plants need for good growth. Can also mean chemicals found in our food which are needed in small quantities for health.
minerals		The chemicals that rocks are made from.
mixture		Two or more different kinds of particles that are not chemically joined to each other.
model		A scientific way of thinking about how things happen.
molar		Grinding tooth at the back of the mouth.
molecule		Two or more atoms joined together.
mollusc	***moll*** *-usk*	Invertebrate that crawls on a fleshy pad, e.g. a snail.
moment		The turning effect of a force. It is calculated using: moment = force x distance of force from pivot.
Moon		A moon is a large lump of rock orbiting around a planet. The Moon is the moon that orbits the Earth.
Moss		Plant with many thin leaves but without roots and xylem. Reproduces using spores.
mucus	***mew*** *-cus*	Sticky substance used to trap microbes and dust. Found in nose and trachea.
muscle cell	***muss*** *-ell*	Cell that can change its length and so help us to move.
National Grid		System of overhead and underground cables that carry electricity around the country.

Word	Pronunciation	Meaning
natural defences		Your body's way of trying to keep microbes out (e.g. skin) or killing them if they get inside you (eg stomach acid).
natural gas		Fossil fuel formed from the remains of dead plants and animals that lived in the sea.
natural satellite		A satellite that has not been made by humans. The Moon is a natural satellite of the Earth.
navel	***nave*** *-ell*	Scar left by the cord. Often called the 'belly-button'.
nerve		Carries messages around the body.
nerve cell		Cell that carries messages around the body.
nervous system	***nerve*** *-us*	Carries messages around the body.
neurone		Another name for a nerve cell.
neutral		Substance that is not an acid or an alkali. Has a pH of 7.
neutral wire		The blue wire in a cable or plug.
neutralisation		Mixing an acid and a base together to make a solution with a pH of 7.
neutralise		When an acid is added to a base (or alkali) a neutral substance is produced.
new moon		The phase of the Moon when we cannot see the lit-up side.
newton (N)		The unit of force.
newton meter		Another name for a force meter.
newton metre (Nm)		The unit for the moment of a force.
nickel		A metal that is a magnetic material.
nicotine	***nick*** *-O-teen*	Poisonous, addictive drug found in cigarettes.
nitrate	***night*** *-rate*	Mineral salt that plants need to make proteins.
nitric acid		A common acid.
nitrogen oxides		Acidic gases formed when nitrogen reacts with oxygen. Includes nitrogen dioxide (NO_2).
nocturnal animals	*nock-* ***tur*** *-nal*	Animals that are active at night.
noise		Unpleasant sound.
non-contact force		A force that can affect something from a distance (e.g. gravity).
non-metals		Elements that are not shiny, and do not conduct heat and electricity well.
non-renewable energy resource		Any energy resource that will run out and we cannot renew our supplies of it (e.g. oil).
normal		An imaginary line at right angles to a mirror, where a ray of light hits the mirror.
north magnetic pole		The place on the Earth where compasses point (it is not in the same place as the North Pole marked on maps).

Word	Pronunciation	Meaning
north pole		One end of a magnet. This ends points north if the magnet can move.
northern hemisphere		The half of the Earth with the North Pole in it. The UK is in the northern hemisphere.
north-seeking pole		The end of a magnet that points north if the magnet can move freely. Often just called the north pole.
nuclear energy		Energy stored inside the particles that things are made out of.
nuclear power		Making electricity by using the nuclear energy stored inside uranium.
nucleus	***new*** *-clee-us*	Controls what a cell does.
nutrient		Substance needed in your diet to keep you healthy.
nutrition information	*new-* ***trish*** *-un*	Information label found on a food packet to tell you what is in the food.
obese		Someone who is very heavy for their size is said to be obese.
obesity		The condition when someone is obese.
objective lens		Part of the microscope that is closest to what you are looking at.
observation		Looking carefully at things and recording what you see or measure.
offspring		Any plant or animal formed by reproduction. Offspring are produced by their parents.
Oil		Fossil fuel formed from the remains of dead plants and animals that lived in the sea.
oil		Liquid fat, often found in nuts and seeds.
omnivore		An animal that eats both plants and other animals.
opaque	*O-* ***pake***	Material which does not let light through.
optimum temperature		The best temperature for a plant to grow in.
orbit		The path that a planet takes around the Sun, or the path that a moon or satellite takes around a planet.
organ		A large part of a plant or animal that does a very important job.
organ systems		Collection of organs working together to do an important job.
Organism		A living thing.
oscilloscope	*oss-* ***ill*** *-O-skope*	An instrument which shows a picture of a wave on a screen.
outer planets		Jupiter, Saturn, Uranus, Neptune and Pluto. All the outer planets except Pluto are made of gas.
ovary	***O*** *-very*	Part of the carpel. It contains ovules, each of which contains an egg cell.
ovary	***O*** *-very*	Female reproductive organ. Produces egg cells.
oviduct		Carries egg cells from the ovaries to the uterus in women. Fertilisation happens here.
ovulation	*ov-you-* ***lay*** *-shun*	Releasing of an egg cell from an ovary in women.

Word	Pronunciation	Meaning
ovule	***ov*** *-you'll*	Contains egg cells. Is found in the ovary.
ovule	***ov*** *-you'll*	Contains egg cells in plants. Found in the ovary.
oxidation		A reaction that occurs when an element or compound combines with oxygen.
oxide	***ocks*** *-eyed*	A compound formed when something reacts with oxygen.
oxidised	***ocks*** *-ee-dysed*	When a substance reacts with oxygen to form an oxide.
palisade cell	***pal*** *-iss-aid*	Cell found in leaves which contains many chloroplasts.
parallel circuit		A circuit with two or more wires running next to each other.
parent		An organism that has had offspring.
partial eclipse		A solar eclipse when the Moon only covers part of the Sun.
particles		The tiny pieces that everything is made out of.
pascal (Pa)		A unit for pressure. 1 Pa = 1 N/m^2.
pasteurisation	*pas-ter-eyes-* ***ay*** *-shun*	Milk is heated up to 70°C for about 15 seconds which is enough to kill the most harmful bacteria in it.
Periodic Table	*peer-ee-* ***od*** *-ick*	Table that shows all the elements.
permanent change		A change in which what you ended up with cannot be turned back into what you started with.
permanent magnet		A magnet that keeps its magnetism – it does not depend on electricity.
persistent		If something does not get broken down easily in nature very quickly and stays around for a long time, it is said to be persistent.
pest		An organism that damages crops that humans grow.
pesticide	***pest*** *-iss-ide*	Chemical that kills pests.
pH scale		A numbered scale from 1–14 showing the strengths of acids and alkalis. Numbers below 7 are acids. Numbers above 7 are alkalis. pH 7 is neutral.
phases of the Moon		The different shapes the Moon seems to have at different times.
phloem tube	***flow*** *-em*	Tube made from chains of living phloem cells. Carries glucose and other soluble substances up and down the plant.
photosynthesis	*foto-* ***sinth*** *-e-sis*	Process that plants use to make their own food. It needs light to work. Carbon dioxide and water are used up. Food (a sugar called glucose) and oxygen are produced).
physical		The non-living conditions in the environment of an organism, e.g. temperature, light.
physical change	***fizz*** *-ick-al*	A change that does not involve new chemicals. Melting and freezing are examples of physical changes.

Word	Pronunciation	Meaning
physical environmental factors		The non-living conditions in the environment of an organism (e.g. temperature, light).
physical weathering		When rocks are worn away or broken up by physical processes such as changes in temperature.
pitch		How high or low a note sounds.
pitfall trap		Sampling method used to collect small animals that live on the ground.
pivot		Another name for a fulcrum.
placenta	*plas-* ***en*** *-ta*	Attached to the uterus wall, this takes oxygen and food out of the mother's blood and puts waste materials into the mother's blood.
plane		Smooth and flat.
plane mirror		Smooth, flat mirror.
plant kingdom		Group of organisms that are able to produce their own food and have specialised cells.
Plasma		Part of the blood. A liquid that surrounds the blood cells.
plotting compass		A small compass used for finding the direction of a magnetic field.
pneumatic	*new-* ***mat*** *-ick*	Containing air or gas under pressure, eg tyres.
polar orbit		An orbit where a satellite passes over the North and South Poles. It will pass over all parts of the Earth during several orbits.
pollen		The male sex cell (gamete) in plants.
pollen grain		The male sex cell in plants.
pollen tube		Tube that grows from a pollen grain down through the stigma and style and into the ovary.
pollination	*poll-in-* ***ay*** *-shun*	Transfer of pollen from an anther to a stigma.
pond dipping		Sampling method used to collect organisms from ponds.
pooter		A small container connected to two tubes. Used to catch tiny animals.
population		Total number of individuals of the same species in a habitat.
porous	***poor*** *-us*	Porous rocks can soak up water.
potassium		Soft, shiny, reactive, silver-coloured metal.
power pack		A source of electricity with a low energy (low voltage).
precipitate	*pre-* ***sip*** *-it-ate*	Insoluble solid produced by mixing two solutions.
predator		An animal that catches and eats other animals.
prediction	*pred-* ***ick*** *-shun*	An idea about what will happen when you change something.
pregnant		When a woman has an embryo growing inside her uterus.
premature baby		A small baby born early.

Word	Pronunciation	Meaning
pressure		The force on a certain area, measured in newtons per square metre (N/m^2), newtons per square centimetre (N/cm^2), or pascals (Pa).
prey	*pray*	An animal that is caught and eaten by another animal.
primary colours		The three main colours which can make white light (red, green and blue).
primary consumer		The first animal in a food chain.
principle of moments		The principle of moments states that when something is in equilibrium (in balance), the clockwise moment is equal to the anticlockwise moment.
prism		A block of clear, colourless glass which is usually triangular.
producer	*prod-**you**-sur*	An organism that is able to make its own food. Plants are producers.
product		New chemical formed in a chemical reaction.
properties		Ways of describing a substance.
property		A description of how a material behaves and what it is like. Hardness is a property of some solids.
property		Something that is used to describe how a material behaves and what it is like. Hardness is a property of some solids.
protein		A substance made from amino acids. Proteins are needed for growth and repair.
puberty	***pew**-bert-ty*	Time when physical changes happen in the body between the ages of about 11 and 15.
Pulse		The feel of your blood being pumped.
pulse rate		The number of times you can feel your blood being pumped in one minute.
pure		A substance that does not have anything else in it.
pyramid of numbers		Way of showing the numbers of different organisms in a food chain.
quadrat		A square frame, thrown randomly on the ground, which is used to sample the plants in an area.
Radiation		The transfer of heat energy by electromagnetic waves.
raw material		Something used up in a chemical reaction. Also called a reactant.
ray		A beam of light drawn on diagrams as a straight line, and showing which way it is travelling.
ray diagram		A diagram showing the passage of light rays.
Reactant		Chemical that is used up in a chemical reaction.
reactant		Something used up in a chemical reaction. Also called a raw material.
reactants		Chemicals that join together to form a new substance.
reactive		A substance that reacts with many other substances, or reacts very easily.

Word	Pronunciation	Meaning
Reactivity Series		A list of metals which shows them in order of their reactivity, with the most reactive at the top.
rechargeable	*ree-* ***charge*** *-ab-el*	Cells that can have more energy stored in them after they have been used are said to be rechargeable.
recreational drug	*reck-ree-* ***ay*** *-shun-al*	A drug that is legal. Caffeine, nicotine and alcohol are all recreational drugs.
rectum		Organ that stores faeces before they are egested.
red		One of the three primary colours of light.
red blood cells		Cells in the blood that carry oxygen.
reed switch		A switch made from two thin pieces of metal, which closes when it is in a magnetic field.
reflect		To bounce off something.
reflect		Light bounces back from a surface instead of passing through it.
reflected ray		The ray of light bouncing off the mirror.
reflection		Light bouncing back from a surface instead of passing through it.
refraction		The change in direction when light goes from one transparent material to another.
relationship		A link between two things shown on a graph.
relax		When a muscle stops contracting it relaxes.
relay		A switch that is switched on and off by electricity.
renewable energy resource		An energy resource that will never run out (e.g. solar power).
repel		Push away.
reproductive organ		Organ that produces sex cells.
reproductive organs		Organs used in sexual reproduction.
reproductive system		All the reproductive organs.
reptile		Vertebrate with dry scales, e.g. a snake.
resistance		A way of saying how difficult it is for electricity to flow through something.
resistant		Something that is not affected by disease is said to be resistant to it.
resistor		A component that makes it difficult for electricity to flow – resistors are used to control the size of the current in a circuit.
respiration	*ress-per-ay-shun*	Process that uses up oxygen to release energy from food. Carbon dioxide is produced as a waste gas.
respiratory system		Made up of the trachea, bronchi and lungs. Gets oxygen into the blood and takes carbon dioxide out of the body.

Word	Pronunciation	Meaning
reversible change		A change in which what you end up with can easily be turned back into what you started with.
rock cycle		All the processes which form sedimentary, igneous and metamorphic rocks, linked together.
Root		Plant organ used to take water out of the soil.
root hair cell		Cell found in roots. The root hair has a large surface area to help the cell absorb water quickly.
root hair tissue		Found in roots. Takes in water from the soil.
rust		Substance formed when iron or steel reacts with oxygen and water.
saliva	*sall-eye-va*	A digestive juice. It contains an enzyme that breaks down starch into sugar.
salivary gland	*sall-eye-vor-ee*	Found in the mouth. It makes saliva.
salts		Chemicals from rocks that have dissolved in water.
salts		Compounds made in some reactions involving acids. They have a metal part and a non-metal part. The non-metal part is usually chloride, sulphate or nitrate (e.g. potassium sulphate).
sample		A small part of something. If you sample something you take a small part of it. You use your results from the small part to suggest what the rest of it is like.
sandstone		A sedimentary rock made from rounded grains of sand.
sandy soil		A soil that contains larger particles than clay soils. Water passes through it easily.
satellite		Anything that orbits a planet.
saturated		A solution that contains as much dissolved solid as it possibly can.
scab		A dry blood clot on the surface of the skin.
scatter		When light rays bounce off something in all directions.
scrotum	***scrow*** *-tum*	Bag of skin containing the testes in males.
seasonal changes		Changes in the physical environmental factors of an environment which happen during the course of a year (e.g. it gets colder in winter).
secondary colours		The colours made when two primary colours mix.
secondary consumer		The second animal in a food chain.
sediment		Rock grains and fragments dropped on the bottom of a river, lake or sea.
sedimentary rock		Rock formed from layers of sediment.
sedimentation		Depositing of broken up pieces of rock, sand and clay.
seed		Contains a plant embryo and a store of food.
seed coat		Hard outer covering of a seed.
Seeds		Grow into new plants. Made by conifers and flowering plants.

Word	Pronunciation	Meaning
segment		Some animals have bodies that are divided into obvious sections called segments.
selective breeding		When humans choose certain animals and plants that have useful characteristics and breed more of these organisms.
semen	***see*** *-men*	A mixture of sperm cells and special fluids released by men during sexual intercourse.
series circuit		A circuit where there is only one loop of wire.
sex cell		A cell used for sexual reproduction.
sex hormones	***hor*** *-moans*	Chemicals released in our bodies that control the menstrual cycle and puberty.
sexual reproduction		Producing new organisms by the joining of two sex cells.
S-factors		Four factors that describe how fit you are: suppleness, strength, stamina and speed.
shadow		A place where light cannot get to, because an opaque object is stopping the light.
shale		A sedimentary rock.
shiny		Reflects light well.
side-effect		Harmful or unpleasant effects caused by drugs.
skin		Organ used for protection and feeling.
slate		A metamorphic rock with tiny crystals, formed from mudstone.
slide		Glass sheet that a specimen is put on.
small intestine		Organ where most digestion happens. The soluble substances produced by digestion are absorbed into the body here. It is about 6.5 m long in adults.
sodium chloride	***sow*** *-dee-um* ***klor*** *-ide*	Chemical name for common salt.
soil		A mixture of rock fragments, humus, air, water and dissolved minerals.
solar cells		Flat plates that convert light energy into electrical energy.
solar eclipse		When the Moon is between the Sun and the Earth, and casts a shadow on part of the Earth.
solar panels		Flat plates that use the Sun's energy to heat water.
solar power		Making electricity by using light or heat energy from the Sun.
solar system		A star with planets and other objects orbiting it.
solenoid		A coil of wire.
Solid		Something made of particles that are very close together and attached so that they cannot move past each other. A solid has a fixed shape and volume.
solubility	*sol-you-* ***bill*** *-ity*	The amount of a solid that will dissolve in 100g of a liquid.
soluble	***sol*** *-you-bull*	A solid that can dissolve in a liquid. Salt is soluble in water.

Word	Pronunciation	Meaning
solute		The solid that has dissolved in a liquid to make a solution.
solution	*sol-* ***oo*** *-shun*	When a solid has dissolved in a liquid.
solvent		The liquid that has dissolved a solid to make a solution.
solvent abuse		Sniffing solvents used in glue and other things.
sound energy		The kind of energy made by anything that is making a noise.
sound energy		The kind of energy that is made by anything that is making a noise.
sound intensity meter		A meter which measures the loudness of a sound.
source		An object which creates something.
south pole		One end of a magnet.
south-seeking pole		The end of a magnet that points south if the magnet can move freely. Often just called the south pole.
species	***spee*** *-shees*	A group of organisms that can reproduce with each other to produce offspring that will also be able to reproduce.
specific pesticide		A pesticide that is harmful to only a few pests.
specimen	***spess*** *-im-men*	What you look at down a microscope.
spectrum		The seven colours of light.
speed		How fast something is moving. Often measured in metres per second (m/s), miles per hour (mph) or kilometres per hour (km/h).
sperm cell		The male sex cell.
sperm duct		Tube that carries sperm from the testes to the urethra.
sphere	***sfear***	A shape like a ball.
Spore		Very small part of a plant that can grow into a new plant. Made by mosses and ferns.
stage		Part of the microscope. You put slides on it.
stain		Dye used to colour parts of a cell to make them easier to see.
stamen	***stay*** *-men*	Male reproductive organ found in flowers. It is made of an anther and a filament.
Stamina		How long your body can exercise for.
star		A huge ball of gas that gives out heat and light energy.
starch		Insoluble carbohydrate made from glucose and used as a storage material in plants.
states of matter		There are three different forms which a substance can be in; solid, liquid or gas. These are the three states of matter.

Word	Pronunciation	Meaning
stationary		Not moving.
steam		Water as a gas. Also called water vapour.
steel		A mixture made mainly from iron; it is a magnetic material.
stem		Plant organ used to take water to the leaves and to support the leaves.
stigma		Part of the female reproductive organs in a plant. It is where pollen lands.
stimulant	***stim*** *-you-lant*	Drug that increases the speed at which nerves carry messages, e.g. caffeine.
stoma	***stO*** *-ma*	Singular of stomata.
stomach	*stum-uck*	Organ containing strong acid which mixes food up and digests proteins.
stomata	*stom-* ***mart*** *-a*	Small holes on the underside of leaves which let gases into and out of the leaf.
stopping distance		The distance a car moves while it is stopping. The stopping distance is equal to the thinking distance and the braking distance added together.
streamlined		Giving something a smooth shape to reduce the air resistance or water resistance.
Strength		How strong your body is.
style		Part of the carpel connecting the stigma to the ovary.
sugar		Type of soluble carbohydrate. Glucose is an example of a sugar.
sulphates		Compounds containing sulphur and oxygen. They are the type of salt formed when a reaction with sulphuric acid occurs.
sulphur		A yellow, non-metal element. Solid at room temperature
sulphur dioxide (SO2)		An acidic gas formed when sulphur reacts with oxygen.
sulphuric acid		A common acid. Used in car batteries.
Sun		The star that the Earth orbits around.
suppleness		How easily your body can bend and twist.
sweepnet		A net which is swept through long grass to catch tiny animals.
sweepnet		Sampling method used to collect small animals from long grass.
switch		Turns electricity on or off, by closing or opening a gap in a circuit.
symbol		The letter or letters that represent an element.
symbol equation		A way of writing out what happens in a chemical reaction using the symbols that represent the substances involved.
symptoms		The effects that a disease has on your body.
tar		A poisonous, black, sticky substance found in cigarette smoke.

Word	Pronunciation	Meaning
Temperature		How hot something is, measured in °C.
tendon		Tissue connecting a bone to a muscle.
terminal velocity		The maximum speed of an object. Usually only applies to falling objects when the downward force is balanced by drag.
tertiary consumer	***tersh*** *-ary*	The third animal in a food chain.
testis		Male reproductive organ. Produces sperm cells. Plural = testes.
texture		The scientific word used to describe the shapes and sizes of the crystals or grains in a rock.
theory	***thear*** *-ree*	An idea about why things work the way they do. Scientists use their imaginations to come up with a theory.
Thermal (heat) energy		The hotter something is the more heat energy it has.
thinking distance		The distance a car travels while the driver is deciding to press the brake pedal.
thorax		Middle part of an animal's main body. In insects the legs are attached to the thorax.
threshold of hearing		The quietest sound that can be heard.
tidal power		Making electricity using the moving (kinetic) energy from the tides.
tissue		Organs are made of different tissues.
tissue	***tiss*** *-you*	A group of the same cells all doing the same job.
tissue fluid		The liquid formed when plasma leaks out of capillaries, carrying oxygen and digested food to cells.
top predator		The last animal in a food chain.
total eclipse		A solar eclipse when the Moon completely blocks out light from the Sun.
toxic		Another word for poisonous.
trachea		Another name for the windpipe.
transfer		When energy is changed from one form into another we say it is transferred.
translucent	*trans-* ***loo*** *-sent*	Material through which a glow of light can be seen.
transmit		To send along or pass through.
transparent		Material which light can travel through.
transport		The movement of rock grains and fragments by wind or water.
tree beating		Hitting the branches of a tree and collecting small animals that fall out.
Tullgren funnel		Sampling method used to collect small animals from samples of, for example, leaves.

Word	Pronunciation	Meaning
turbine		A machine that is turned by a moving liquid or gas. Turbines are used to turn generators in power stations.
turning effect		The moment of a force. The way in which a force turns something around a pivot.
umbilical cord	*um-* ***bill*** *-ick-al*	See ‘cord’.
unbalanced forces		When two forces working in opposite directions are not the same strength.
uneven distribution		When a plant or animal is not found all over a habitat, only in certain places where the habitat is suitable.
universal indicator		A mixture of indicators giving a different colour depending on how weak or strong an acid or alkali is.
Universe		All the galaxies and the space between them make up the Universe.
unreactive		A substance that reacts with few other substances, or reacts very slowly or not at all.
upthrust		A force that pushes thing up.
uranium	*yer-* ***rain*** *-ee-um*	A fuel used in nuclear power stations.
urethra	*you-* ***ree*** *-thra*	A tube carrying semen or urine running down the centre of the penis in males. A tube carrying urine in females.
uterus	***you*** *-ter-ous*	A reproductive organ in female mammals where her fertilised egg cells grow and develop.
vaccine	***vack*** *-seen*	A mixture containing microbes which normally cause disease, which have been treated so that they don’t. Injected into people to make them immune.
vacuole	***vack*** *-you-oll*	Storage space in plant cells.
vacuum	***vack*** *-yoom*	A completely empty space.
vagina	*vaj-* ***eye*** *-na*	Tube in females. The penis is placed here during sexual intercourse.
variable	***vair*** *-ri-able*	A factor in an experiment that can change.
variable resistor		A resistor that can be adjusted to change the amount of resistance it has.
variation		The differences between things or organisms.
variety		A set of plants that are in some way different from other members of the same species.
Vein	*vane*	Blood vessel that carries blood to the heart.
ventilation		The movement of air into and out of the lungs.
vertebrate	***vert*** *-eb-rate*	An animal with a backbone.
vibrate		Move backwards and forwards.
vibrate		Move backwards and forwards.

Word	Pronunciation	Meaning
villi	*vill-ee*	Small finger-like parts of the small intestine. They increase the surface area so that digested food is absorbed more quickly. Singular = villus.
virus		The smallest type of microbe. Many people think that they are not living because they do not carry out the seven life processes for themselves.
vitamin		Substance found in food that is needed in small quantities for health (e.g. vitamin C).
vix	***sir*** *-vicks*	Ring of muscle at the bottom of the uterus in females.
volcano		A place where lava flows out of the Earth.
volt (V)		The unit for voltage.
voltmeter		A component that measures voltage.
wasted energy		Energy that is not useful.
water		A compound made of hydrogen and oxygen which the body uses as a solvent.
water resistance		A force that tries to slow things down that are moving through water. It is a type of friction.
water vapour	***vay*** *-per*	Water as a gas. Also called steam.
wave		A way of transferring energy. Waves can be side to side or backwards and forwards movements.
wavelength		The distance between the top of one wave and the top of the next.
weathered		Rocks that have been worn away or broken up by chemical, biological or physical processes.
weathering		The break up of rocks into smaller pieces by natural processes.
weedkiller		A chemical that kills weeds. Also called a herbicide.
weight		The amount of force with which gravity pulls something towards the Earth. It is measured in newtons (N).
white blood cell		A type of blood cell which helps to destroy microbes. They either engulf microbes or make antibodies.
white light		Normal daylight, or the light from light bulbs, is white light.
wilting		When a plant does not have enough water and droops.
wind turbine		A kind of windmill that generates electricity using energy from the wind.
word equation		A way of writing out what happens in a chemical reaction.
xylem tissue		Found in roots, stems and leaves. Transports water.
xylem tubes	***zy*** *-lem*	Tube made from chains of dead, hollow xylem cells. Carries water and dissolved mineral salts up a plant.
xylem vessel		Transports water through a plant.

Word	Pronunciation	Meaning
year		The length of time it takes a planet to go around the Sun. One year on Earth is 365.25 days.
yeast		A type of fungus with only one cell and therefore a microbe. They are bigger than bacteria.
yellow		Secondary colour made by mixing red and green light.
yield		How much of something useful to humans that an organism produces.

Word	Pronunciation	Meaning