

# Glossary Year 4

## Disciplinary vocabulary (the words used when working scientifically)

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| accurate                       | an adjective used to describe a measurement or observation that is exact                   |
| bar chart                      | a diagram which displays information (data) by using rectangular bars of different heights |
| branching key                  | a way of sorting a small number of items using yes/no questions                            |
| Carroll diagram                | a chart used to classify objects using two or more criteria                                |
| classify                       | to organise things into scientific groups  |
| comparative test               | a science enquiry to compare different materials or events                                 |
| conclude/<br>conclusion        | to draw together evidence to find patterns and answers                                     |
| control variable               | a variable that is kept the same   |
| data                           | information (observations and measurements) collected during an enquiry                    |
| data logger                    | a device using sensors to make measurements, including sound, light and temperature        |
| degree Celsius<br>(°C)         | a unit of temperature  |
| diagram                        | a drawing that shows the parts of something or how the parts work together                 |
| enquiry                        | a method scientists use to collect evidence to answer questions                            |
| evaluate                       | to consider how well something has been done   |
| evidence                       | information, from observations and measurements, that supports or disproves ideas          |
| explain/<br>explanation        | to give reasons, from scientific knowledge, for observations and conclusions               |
| fair                           | when everything is kept the same except the thing that is being compared                   |
| fair test                      | an enquiry to find out how changing one variable affects something else                    |
| identify                       | to know and say what something is  |
| identifying<br>and classifying | an enquiry to identify or test for features to distinguish between different things        |
| interval                       | the distance between two readings  |
| investigate                    | to find out more about a process or object by measuring or observing it                    |
| measure/<br>measurement        | to use equipment to find the size or weight of something on a numbered scale               |
| model                          | something to show how a system or process works  |
| observe/<br>observation        | to use senses or instruments to obtain data  |
| observing<br>over time         | an enquiry where observations are made over a fixed period of time                         |
| pattern                        | a relationship between variables   |
| predict/<br>prediction         | to use what you already know to suggest what might happen in an enquiry                    |
| rank                           | to put things in an order  |
| refute                         | to use evidence to show that a statement is incorrect                                      |
| research                       | to find information  |

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| scale        | a set of numbered marks made at evenly spaced points                     |
| sensor       | a device that detects and responds to certain changes in the environment |
| sequence     | an arrangement of numbers or processes in a particular order             |
| support      | to use evidence to show that a statement is correct                      |
| temperature  | a measure of how hot or cold something is, measured in degrees Celsius   |
| test         | to carry out a science enquiry to find something out                     |
| thermometer  | a piece of equipment used to measure temperature                         |
| variable     | something that can be changed, measured or observed in an enquiry        |
| Venn diagram | a diagram where circles are used to group things                         |
| volume       | how much space an object or material takes up                            |
| weight       | a measure of how heavy an object is                                      |

## Conceptual vocabulary (the Physics, Biology or Chemistry words)

|                       |  |
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| air                   | the invisible gas surrounding the Earth  |
| amphibian             | an animal (vertebrate) that lives in water or on land but must return to the water to reproduce  |
| annelid               | an invertebrate group with segmented bodies, no legs, no antennae, usually have bristles although these may be too small to see            |
| anus                  | the muscle which is relaxed in order to release poo  |
| arachnid              | an invertebrate group with eight jointed legs, no wings and two body parts: head and abdomen   |
| battery               | a component that can be used to provide electricity  |
| biodegradable         | an adjective used to describe a material that breaks down or decays naturally through the action of micro-organisms                        |
| bird                  | an animal (vertebrate) that has feathers and lays eggs with hard shells  |
| boil                  | to change from liquid to gas, when the liquid is heated to a specific temperature known as its boiling point; occurs throughout the liquid |
| boiling point         | the temperature at which a liquid turns into a gas   |
| bubble                | a ball of gas within a liquid  |
| bulb                  | a device that requires electricity to light up   |
| buzzer                | a component that makes a sound   |
| canine                | a curved, pointed tooth  |
| carbon dioxide        | a gas in the air   |
| carnivore             | an animal which only eats other animals (meat)   |
| cell<br>(electricity) | the scientific name for a single battery   |
| change of<br>state    | moving between solid, liquid and gas as a result of heating or cooling   |
| chemicals             | tiny substances that all materials are made of; they each have specific properties   |
| circuit               | the circular arrangement of components required to enable electricity to flow  |
| closed circuit        | a circuit that creates a complete loop so the electricity can flow   |
| cloud                 | a visible group of small droplets of water or ice floating in air  |
| cold-blooded          | unable to regulate their own body temperature and so it changes with the surroundings  |
| compost               | a mixture of decaying organic matter, used for fertilising soil  |

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| compress                  | to make something smaller by squeezing it   |
| condense/<br>condensation | to change from gas to liquid  |
| connection<br>points      | the places on electrical components where wires can be attached   |
| constipation              | having hard, dry poo that is difficult to pass  |
| consumer                  | a living thing which has to eat other animals or plants to gain its food  |
| crustacean                | an invertebrate group with ten or more pairs of jointed legs, no wings, three body parts (head, thorax and abdomen) protected by a harder outer shell, a segmented body and two pairs of antennae; most live in water |
| decay                     | the rotting of once-lived things through the action of bacteria and fungi   |
| decibel                   | the unit of measurement for sound, abbreviated as dB  |
| deciduous                 | the group of plants containing trees which lose all of their leaves in the autumn   |
| decompose                 | the process where bacteria and worms break down natural materials into tiny pieces that help new plants grow  |
| decomposer                | a living thing that breaks down things that once lived  |
| dehydrated                | when a living body has not had enough water   |
| depend                    | to rely on something from an outside source in order to live  |
| diarrhoea                 | liquid poo  |
| diet                      | the kind of food an animal usually eats   |
| digestion                 | the process of breaking down food into smaller parts so the body can use it for energy and growth   |
| electrical<br>appliance   | an object that needs electricity to do its job  |
| electrical<br>component   | an object making up part of a circuit   |
| electrical<br>conductor   | a material that allows electricity to flow through it   |
| electrical<br>insulator   | a material that does not allow electricity to flow through it   |
| electricity               | what is required to make an electrical appliance work   |
| energy                    | the power to be active (in context of food and nutrition)   |
| environment               | the natural world of land, sea, air, plants and animals   |
| evaporate/<br>evaporation | to change from liquid to gas; occurs at the surface of the liquid   |
| evergreen                 | the group of plants containing trees which appear to have leaves all year round   |
| exoskeleton               | an external supporting structure for the body of a living thing   |
| expand                    | to change in shape and volume to fill a space   |
| extinct                   | a type of animal that no longer exists  |
| filter                    | to use a special tool or process to separate materials  |
| fish                      | an animal (vertebrate) which lives in water and has gills and fins  |
| flexible                  | able to bend easily without breaking  |
| flower                    | the part of a plant which produces seeds  |
| flowering<br>plant        | a plant that produces flowers and fruit   |

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| food chain           | a series of living things where each one is food for the next  |
| food web             | a network of food chains   |
| fossil               | the preserved remains or trace of any once-living thing  |
| freeze               | to change from liquid to solid, due to cooling (used at lower temperatures)  |
| freezing point       | the temperature at which a liquid becomes a solid  |
| fungi                | a group of living things including mould, mushrooms and yeast  |
| gas                  | a state of a material where it changes in shape and volume to fill the space it is in; gases flow  |
| granule/<br>granular | a small piece or grain   |
| habitat              | a natural environment where an animal or plant finds the things it needs to live and grow  |
| hardness             | how resistant a material is to scratching (not how easily it breaks)   |
| heat-sensitive       | responsive to changes temperature  |
| helium               | a gas that is lighter than air and doesn't have any colour, taste or smell   |
| herbivore            | an animal that only eats plants  |
| ice                  | water in a solid, frozen state   |
| incisor              | a sharp front tooth  |
| insect               | an invertebrate group of small animals with bodies divided into three parts, with three pairs of jointed legs, usually one or two pairs of wings and one pair of antennae  |
| invertebrate         | an animal that has no internal backbone  |
| jaw                  | the bone in which teeth grow   |
| large intestine      | a wider tube leading from the small intestine; this is where water is absorbed into the blood  |
| liquid               | a state of a material where it flows freely and takes the shape of its container   |
| mains                | electricity that can be used by plugging an electrical device into a socket  |
| mammal               | an animal (vertebrate) that is covered in hair or fur; the female gives birth to live young and feeds her babies on milk from her own body   |
| material             | the substance something is made of   |
| mechanical           | parts moving together  |
| melt                 | to change from a solid state to a liquid state   |
| melting point        | the temperature at which a solid become a liquid   |
| micro-organism       | any living thing too small to be viewed by the unaided eye   |
| milk teeth           | the first set of teeth   |
| molar                | a large, flat tooth  |
| mollusc<br>foot      | an invertebrate group of soft-bodied animals with no legs, no segments, no wings, a muscular<br>and most have tentacles and shells   |
| motor                | a component that has a part that turns   |
| myriapod             | an invertebrate group of typically small animals with two body parts (head and abdomen, which has many segments), more than nine pairs of legs, with each segment having one or two pairs of legs, and one pair of antennae; they live on land |
| nutrient             | a substance that is essential for life and health  |
| oesophagus           | the tube connecting the mouth to the stomach   |
| omnivore             | an animal that eats both plants and other animals  |
| opaque               | the property of blocking light by absorbing or reflecting all of the light that falls on it  |

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| open circuit          | a circuit that does not create a complete loop, so the electricity cannot flow   |
| organic               | made from the remains of living things   |
| organism              | a living thing   |
| oxygen                | a gas in the air which most living things need to survive  |
| palaeontologist       | someone who studies fossils  |
| pitch                 | how high or low a sound is; in music, what note it is  |
| pollution             | the introduction of harmful, non-biodegradable materials into the environment  |
| powder                | fine, loose grains that are made when a solid material has been ground/crushed   |
| predator              | an animal that hunts or catches other animals to eat   |
| prey                  | an animal that is hunted, killed and eaten by another animal   |
| producer              | a living thing, such as a plant, which makes its own food  |
| property              | a characteristic of a material   |
| rain                  | drops of water which fall to Earth when clouds become saturated with water droplets  |
| rectum                | the part of the large intestine where poo is stored  |
| recycle               | to turn waste materials into new materials and objects   |
| reptile               | a cold-blooded animal (vertebrate) which has dry, scaly skin and lays eggs on land   |
| saliva                | a liquid in the mouth that helps us to swallow and aids digestion  |
| seed                  | a plant part from which a new plant germinates and grows   |
| skeleton              | a structure that provides support, shape and protection for the body of a living thing   |
| small intestine       | a long tube connecting the stomach to the large intestine; this is where nutrients are absorbed into the blood                           |
| snow                  | water in clouds that is frozen and falls to Earth as crystals  |
| soil                  | the top layer of the Earth's surface; a mixture of bits of rock , and remains of living things that have died                            |
| solid                 | a state of a material which retains its shape unless a force is applied to it; solids have a constant volume                             |
| solidify              | to change from liquid to solid, due to cooling (used at higher temperatures)   |
| sound                 | vibrations that can be detected by the ear   |
| sound source          | an object creating a sound by vibrating  |
| steam                 | water in a gas state   |
| stomach               | the organ that receives food that has been swallowed and begins to digest it   |
| switch                | a component that turns another component on or off, by opening or closing a circuit, controlling whether the electricity can flow or not |
| transparent           | the property of allowing almost all light that falls on it to pass through, enabling a clear view of what lies behind it                 |
| vertebrate            | an animal that has an internal backbone for support  |
| vibrate/<br>vibration | to move backwards and forwards at high speed without changing location   |
| viscous               | having a thick, sticky consistency   |
| volume                | the loudness of a sound  |
| vomit                 | partly digested food ejected from the stomach  |
| warm-blooded          | having a body temperature that does not change whatever the surrounding temperature  |
| water vapour          | water in a gas state; slightly cooler than steam and appears as a mist or fog  |