## **Glossary Year 4**

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

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/

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

(°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/

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

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/

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/

observation to use senses or instruments to obtain data

observing

over time an enquiry where observations are made over a fixed period of time

pattern a relationship between variables

predict/

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

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)

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

(electricity) the scientific name for a single battery

change of

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

compress to make something smaller by squeezing it

condense/

condensation to change from gas to liquid

connection

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

appliance an object that needs electricity to do its job

electrical

component an object making up part of a circuit

electrical

conductor a material that allows electricity to flow through it

electrical

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/

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

plant a plant that produces flowers and fruit

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/

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 foot an invertebrate group of soft-bodied animals with no legs, no segments, no wings, a muscular

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

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/

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