WOODFALL PRIMARY SCHOOL
SCIENCE VOCABULARY KEY WORDS

absorbent	material that can soak up liquid
acid	a sharp, sour-tasting substance; vinegar and lemon juice contain acids
adapted/adaptation	how a living thing changes to suit its environment; a characteristic of a plant or animal, which helps it to survive in its habitat
adult	a person that is fully grown
aim	what you are trying to find out in an experiment
air	a mixture of gases including oxygen
air resistance	air pushing back against you when you move through it; a force which slows down moving objects
alcohol	a drug found in some drinks like wine and beer; too much can damage your heart, liver and stomach
amphibian	a cold blooded vertebrate e.g. frog, which is born with gills in water, but develops lungs and lives as an adult mostly on dry land
anthers	the tip of the male part of a flower (stamen), which contain the pollen
arachnid	8 legged invertebrate e.g. spider
arteries	blood vessel (tubes) in the body which carries oxygenated blood with food and oxygen away from the heart to the body
asexual reproduction	when part of a plant grows into a new plant e.g. from a cutting or bulb
atmosphere	the layer of gases which surrounds the Earth
attract	a north and south pole of two magnets pull towards one another; magnets also do this to iron and steel
axis	A scale at the side of a graph. The x-axis goes along the bottom of the graph and the y-axis up the side. You say one axis, but two axes.
axis	an imaginary line through the centre of the earth from the North pole to the South pole
baby	a very young animal
bacteria	very tiny living things which are all around us. Some cause disease; some are helpful in making food and decomposing dead matter
balanced diet	a diet which consists of the right amount of each food type in order to stay healthy and for the body to function correctly
balanced forces	two equal forces acting in opposite directions, cancelling each other out
battery	a component of a circuit sometimes called cells; the source of power (electricity)
bendy	can easily bend
bird	a warm-blooded, egg laying vertebrate, covered in feathers
block	to stop something; an opaque object does this to the sun, causing shadows
boiling	when a liquid is heated until it evaporates
boiling point	temperature at which a liquid boils (100 degrees Celsius for water)
brain	organ which controls the body
branch	part of a tree that grows out from the trunk and holds the leaves
bud	a part of a plant that opens out into a leaf, flower or shoot
bulb	a case that holds a store of food and the early part of a plant
bulb	a component of a circuit that will light up
buzzer	a component of a circuit that makes noise if it's properly connected
camouflage	colouring or markings which help animals hide against their background to protect them from predators
canines	long, pointed and sharp teeth that grip and tear food

capillaries	tiny blood vessels that allow food, water and waste products to move in and out of the blood
carbon dioxide	one of the gases in air, needed by plants but a waste gas in animals
carbohydrate	nutrient that gives the body energy (starches and sugars)
carnivore	meat eating animal
carpel	female part of a flower
celestial body	a natural object that is in the sky e.g. moons and planets
cell	tiny bits that all living things are made from
cell	the source of power (electricity); another word for battery
change of state	a change from solid to liquid, or liquid to gas (or the other way round)
characteristic	a feature of an organism e.g. freckles are a characteristic of some humans or having feathers is a characteristic of all birds
chlorophyll	the green substance in plants that is needed to make food (photosynthesis)
circuit diagram	diagram that uses symbols to show the position of components in an electrical circuit and how they are connected up
circulatory system	the system that transports substances around the body in the blood
classification	grouping similar organisms together by looking at their features
cold blooded	animals that cannot control their body temperature - they become hot or cold with surrounding temperature
colour filter	a piece of plastic that changes the colour of light that passes through it
component	something that does a job in a circuit e.g. a bulb, buzzer or motor
compressed	squeezed or squashed tightly together
concave	a surface that curves inwards, like the bowl of a spoon
conclusion	a sentence that sums up what you found out in an experiment, after looking at all the evidence
condense/ condensation	a gas turns into a liquid when it cools: for example, from water vapour to water droplets
condition	how things are e.g. cold, light, warm etc
conduct/conductor	a material that electricity or heat can pass through e.g. metal
conductivity	how well a material lets heat or electricity travel through it
conifer/coniferous	an evergreen tree such as a pine or a fir, which has needles instead of leaves and carries its seeds in cones
consumer	an animal in a food chain that consumes food and doesn't produce it
contract	muscles shorten and get harder
control	in an experiment, a control uses exactly the same set up as the main part of the experiment but without the independent variable (this is what you change)
convex	a surface that curves outwards like the back of a spoon
crystal	the small particles that make up rock (also called grains)
current	a flow of electricity
cutting	a piece cut from a plant
dairy food	milk, or a food that is made from milk e.g. cheese, butter
dark	when there is no light
datalogger	an electronic sensor device which can record scientific data e.g. temperature, light, sound
decay	a living thing rots when it has died, with the help of bacteria
deciduous	flowering trees which lose their leaves e.g. oak, chestnut
degrees Celsius	the unit of measure for temperature (°C)
dependent variable	a variable that depends on the changes of another variable. This is the variable that you measure in an experiment
desert	a habitat that's very dry and hot; only a few things can live there.
diet	the mixture of different foods you eat

digestive system The system in the body where food is broken down; organs that are part of the digestive system include the stomach and intestines
dilute mix a liquid with water
dissolve when a (soluble) solid breaks up completely in a liquid to make a solution
drug something (a substance) that can change how your body works
dull not shiny; a dull surface does not reflect light well

ear drum vibrating air hits this, causing it to vibrate so the brain can detect sound
electric shock when an electric current flows through the body; it is painful and can kill
electrical appliance a machine that uses electricity and carries out a function
electrical circuit a loop made of wire and components which electricity flows round
electrical component something that does a job in a circuit eg bulb, buzzer or motor
ellipse a shape that looks like a squashed circle
embryo tiny baby formed when sperm and egg meet and fertilisation takes place
environment the surroundings or conditions in which a person, animal, or plant lives
equator the imaginary line around the middle of the Earth
evaporate/ evaporation to turn liquid into a gas when it is heated up; for example, water turns into water vapour when heated up
evergreen a plant (tree) that keeps its green leaves throughout the year
evolution the process by which living things change over a long time
excretion getting rid of waste food and gases from the body
exercise an activity that helps you to keep fit and makes you healthy
exoskeleton/ external skeleton a skeleton on the outside of the body
expand to get bigger
extinct an animal or plant that has died out

fair test an experiment in which only one variable is changed at a time; all variables stay the same except for the one variable that you're changing
fat nutrient needed, in small amounts for energy, warmth and protection of the skeleton
fertilise/ fertilisation to join sperm with an egg so that a baby is made in an animal; or a pollen grain joins with an egg (ovule) so a seed is made in a plant
fibre nutrient needed to help the body move food through it and aid digestion
fish a scaly, cold blooded vertebrate with gills instead of lungs
filament holds the anthers up in the male part of a flower
filtering separating solid bits (insoluble solids) from a liquid
flexible bendy material
flower the colourful part of a plant that attracts insects; it contains the reproductive organs and is where reproduction takes place for making seeds
food chain diagram using arrows to show what is eaten by what; it shows how the feeding habits of animals and plants are related
food group a group of food that are all the same type e.g. dairy
food web more than one food chain linked up
force a push or a pull- can start or stop an object moving; slow it down and change its direction or change its shape
force meter a spring balance used to measure force, in Newtons (also called a Newton meter)
fossil a print/shape or the remains of a long-dead animal or plant, left behind in a rock; they are many thousands of years old
freeze/freezing a liquid cools and turns into a solid
freezing point the temperature at which a liquid freezes (zero degrees Celsius for water)
friction a force between touching surfaces that gives us grip; slows down movement and creates heat

fruit the part of a plant that can usually be eaten and contains the seeds
full moon when the whole of one side of the Moon can be seen from Earth
function the job something does
fungus a non-flowering plant such as mushroom, toadstool or mould

gas one of the states of matter- very light material and spreads out to fill a space
gear a wheel with teeth that fits together with others- when one turns, they all turn. A big gear will make a small gear turn faster
geocentric model a model of the solar system that has the Earth in the centre
germs tiny living things that can make you ill
gills the part of the body that fish use to breathe underwater
germinate/ germination when a seed starts to sprout and grow into a small plant (seedling); usually takes place in warm conditions with oxygen and water
grain the small particles that make up rock (also known as crystals)
grain a type of seed that is used for seed e.g. rice, oats, wheat, rye
gravity a force that pulls on all objects towards the centre of the Earth
growth a process that all living things go through in order to become adults and reproduce one day

habitat the place where a plant or animal lives
hands lens a magnifying glass held in your hand
hard something difficult to break, scratch, dent or crumble
heart organ which pumps blood around the body
heliocentric model a model of the solar system that has the Sun in the centre
helium a very light gas
hemisphere the Earth is split into two of these – northern and southern
herbivore plant eating animal
hibernate/ hibernation a deep sleep that lasts all winter
humid moist and damp conditions
humus dead and decaying plants and animals in the soil

identical exactly the same
identify/ identification action or process of identifying someone or something
impermeable a material (e.g. rock) which doesn't let water soak through it
incisors sharp and flat-edged front teeth that cut food
independent variable in an experiment this is the variable or thing that changes
inherited characteristic a characteristic that is passed from a parent to its offspring
insect 6 legged invertebrate with 3 body parts
insoluble a material that will not dissolve in water
insulation a layer of foam or other material which prevents heat escaping
insulator a material that heat or electricity cannot pass through
invertebrate animal with no backbone (insects, spiders, snails, slugs, worms)
irreversible change permanent chemical change where you can't get the starting materials back once the change has happened

key a set of questions that help you identify an unknown animal or plant
kidneys organs which help the body to get rid of waste
knowledge information, understanding or skill

large intestines	part of the digestive system (shaped like tubes) where water is absorbed into the body; they remove waste from the body
larva	a stage in the life cycle of an insect, between egg and pupa
leaf	part of a plant where sunlight is used to make food (during photosynthesis)
lens	a curved piece of glass used in cameras, telescopes or spectacles; the part of the eye which focuses the image
lever	a mechanism made from a pole and a pivot- it makes it easier to lift heavy objects
life cycle	the stages that a plant or animal goes through during its life (fertilisation to death)
light ray	a beam of light
light source	something that gives out its own light
liquid	one of the states of matter- runny, flows and takes the shape of its container
lungs	organs in which a gas exchange takes place – oxygen is taken in and sent around the body, carbon dioxide is brought back from the body and breathed out
magnetic/ magnetism	a material that is attracted to a magnet; a force which occurs in metals which contain iron; magnets attract (pull together) or repel (push apart) each other
mammal	a warm blooded animal covered with hair or fur; gives birth to live young and produces milk to feed them
man-made	materials that are made in a factory
material	what something is made from e.g. metal, wood – not another name for fabric!
meadow	a grassy environment
measuring cylinder	a piece of equipment used for measuring the volume of liquids
mechanism	a piece of machinery; has moving parts that performs a function
medicine	a useful drug that helps make you better when you're ill
melt/melting	when a solid is heated up and turns into a liquid
micro habitat	a small habitat e.g. a pile of leaves, under a rock or log
microbes/ micro-organism	tiny living things that can only be seen through a microscope e.g. bacteria, virus, fungi and yeast
migrate/migration	animals move from one habitat to another when the habitat no longer suits them
minerals	substances found in fruit and vegetables which keep organs healthy, strong and working correctly; also found in meat, fish, milk and nuts e.g. calcium, iron
minerals	substances found in the ground that plants need to help them grow; rocks and metals are minerals
mirror	something that reflects light very well
mixture	two or more substances mixed together that can be separated
molars	large teeth with a bumpy surface that grind food
mollusc	invertebrate often with a jelly like body and outer shell
moon	a rocky object that orbits (goes around) a planet
motor	a component of a circuit that turns if it's properly connected
mountain	a large steep hill rising from the earth, that is a habitat to living things
mouth	part of the digestive system that contains the teeth and tongue
muffle	make a sound quieter by stopping vibrations from travelling to the ear; ear defenders muffle sound
muscles	your muscles pull your bones to make them move and always work in pairs; muscles contract when they are doing work
natural	materials that come straight from the ground or from plants and animals
nature reserve	an area of land made by humans that provides a safe habitat for animals and plants
nectar	sugary substance found in plants
nest	birds make nests from grass and twigs to lay their eggs in
new moon	when none of the Moon can be seen from the Earth
Newton	the unit that forces are measured in

nicotine	a chemical in cigarettes that is addictive, so people who smoke find it hard to stop even if they want to
nocturnal	nocturnal animals are awake at night and sleep in the daytime.
non-magnetic	a material that's not attracted to a magnet
noon	the time at which the sun is at its highest point in the sky
note	a sound with a certain pitch; music is made up of different notes
nutrients	substances that a plant or animal needs to live and grow
nutrition	eating the foods you need to stay healthy by having a balanced diet
nylon	a man-made material used to make lots of things e.g. tights and carpets
ocean	a habitat that is a very large quantity of salt water with many living things
oesophagus	the pipe in the digestive system that transports food to the stomach
offspring	a person's child/children or an animal's young
omnivore	an animal that eats animals and vegetables; a person who eats all kinds of foods
opaque	a solid object that you cannot see through
orbit	the circular path of an object around another object in space
organ	part of the body with a special job to do
organic matter	dead and rotting material; it mixes with tiny bits of rock to make soil
organism	a living thing- all animals and plants
ovary	where eggs are made in an animal or plant
ovule	an egg in a plant or animal
oxygen	one of the gases in the air, needed by animals, given off as a waste gas by plants
particle	a tiny piece of something
pattern seeking	identifying relationships between data and their findings
periscope	a tube with two mirrors that lets you see over walls or around corners to see things out of sight
permeable	a material (e.g. rocks) which lets water soak through it
petal	colourful part of the plant that helps attract insects
photosynthesis	the way that plants make their own food, in their leaves, using energy from sunlight
pitch	how high or low a sound/note is
planet	a large spherical body in space, that orbits a star e.g. Earth orbits the sun; there are eight planets in our solar system
plaque	lots of bacteria cluster together to form this sticky substance which attacks enamel on teeth
polar	a cold habitat of land and water surrounding the North and South Poles
poles	the ends (North and South) of a magnet where the magnetic force is strongest
pollen	tiny yellow or orange grains produced by anthers, needed to make a new seed
pollinate/ pollination	to move pollen from the male part of a flower (anther) to the female part of the flower (stigma)
pollution	when harmful substances get into the environment e.g. air or water are spoilt
predator	animal that hunts and eats other animals
prediction	what you think will happen in an experiment
preserve	to prevent food from going bad by special preparation such as pickling, salting
prey	an animal killed and eaten by another animal (predator)
producer	an organism that produces (makes) its own food- always a green plant
property	what something is like or the quality of a material e.g. hard, shiny
protein	food that builds muscle, needed for growth and repair
puberty	when the human body changes and develops, usually between 10 and 18 years old, in preparation for adulthood
pulley	a mechanism made from rope running through a wheel- it makes it easier to lift heavy objects

pulse	a measure of the rhythm of the heart beating; movement of blood through blood vessels can be felt in your wrist and neck; a pulse is higher when exercising
pulse rate	how many times the heart beats in a minute (around 70 in an adult)
pupa	a stage in the life cycle of an insect, between larva and adult e.g. chrysalis
pupil	the hole in the centre of the coloured iris in your eye, which lets in light
pure	material which has not been mixed with other substances
rainforest	a forest habitat where it rains a lot. Tropical rainforests are very warm and full of different kinds of plants and animals.
ray	straight lines that light travels in
reflect/reflection	when light bounces off an object, at the same angle
relax	muscles lengthen when they are not being used – they work in pairs – while another contracts, one relaxes
repel	when both the two north poles or the two south poles of a magnet push away from one another
reproduce / reproduction	produce young to make a new generation – animals have babies, old plants grow new plants, usually from seed
reptile	cold blooded vertebrate, with scaly skin, that lays eggs on land
reversible change	a change in a material that can change back to how it started
rib cage	part of the skeleton that protects organs like the heart and lungs
rough	feels bumpy when you touch it
roots	part of a plant under the ground that takes in water and minerals from the soil; they support the plant by holding the plant in the ground
rotate	to spin or turn on an axis
sedimentary rock	type of rock made from layers of sand, mud or crushed seashell; they contain fossils
seed	the part of a plant that can grow into a new plant
seed dispersal	seeds are carried away and spread to new areas by animals, explosion and wind
seedling	a young plant
scientist	a person who is trained in a science and whose job involves doing scientific research or solving scientific problems
season	a year has four seasons- spring, summer, autumn and winter caused by the Earth orbiting the sun; each has different weather conditions and temperatures
senses	hearing using ears, seeing using eyes, smelling using nose, tasting using tongue and touching/feeling using your skin
sepals	outer protective covering of a flower bud and petals, which splits as the bud opens
sexual reproduction	when an egg is fertilised and grows into a new plant or animal
shadow	a dark area made when light rays from a source are blocked by an (opaque) object
shiny surface	a surface that reflects light well
sieving	separating big solids from the small solids or liquids
skeleton	a framework of lots of bones, which protects organs and supports the body
skull	the main head bone that protect the brain
slack	something that is loose; slack things make low-pitched sounds
small intestines	part of the digestive system (shaped like long tubes) where food is absorbed into the bloodstream
smooth	feels very flat when you touch it
soft	can be bent or dented easily
solar system	the Sun and the things, including the planets and moons, that orbit it
solid	one of the states of matter- a material which keeps its shape and you can hold it
solidify/ solidification	when a liquid turns into a solid as it cools
soluble	something that will dissolve in water

solubility	whether a material will dissolve in a liquid or not
solution	a mixture made when a solid dissolves in a liquid
sound	vibrations travelling through a material (such as air) and heard by the ears
source	something which gives out something e.g. light
spine	the bone that joins the skull to the hips; also called the backbone
squashing	pressing down on soft materials to change its shape
stamen	the male part of a flower, containing pollen
starchy	contains starch and gives the body energy e.g. pasta, bread, rich
states of matter	all materials exist in one state – solid, liquid or gas; materials can change from one of these states to another
stem	supports and holds a plant upright, allowing it to grow towards light and carries water and nutrients/minerals from the roots to the other parts of the plant
stiff	doesn't bend
stigma	the sticky tip of the carpel in the female part of a flower which pollen sticks to
stomach	part of the digestive system where food is churned up and starts to break down
streamlined	a smooth shape helps an object move easily through air or water as it lessens the effects of air or water resistance
stretchy	gets longer when you pull on each end
style	the part of the female part of a flower that holds the stigma up to catch the pollen
sun	a large star in the centre of our solar system
sundial	an early clock that shows the time using the direction of a shadow
sunrise	when our part of the Earth moves round so it's lit by the sun (light)
sunset	when our part of the Earth moves round so it isn't lit by the sun (dark)
switch	a component that turns a circuit 'on' or 'off'; it controls the flow of electricity
symbol	used in a diagram instead of a picture
teenager	a person that is aged between 13 and 19 years old
teeth	part of the digestive system in the mouth; used to chew and break up food
temperature	how hot or cold something is; it's measured in degrees Celsius (°c)
tendon	joins muscle to bone
tension	the amount of pull on something – e.g. how tight something is
thermal	word used to describe something to do with heat e.g. thermal conductor
thermometer	an instrument for measuring temperature in degrees Celsius (°c); a sensor is an instrument that automatically measures temperature
tobacco	a substance found in cigarettes and cigars that causes heart disease, lung cancer and breathing problems
toddler	a young person that is learning to walk
tongue	part of the digestive system in the mouth; used to chew, break up and swallow food
translucent	something that lets some light through but is not transparent
transmit	to pass through a material
transparent	something that lets light through so that objects can be clearly seen (see-through)
transported	to carry someone or something from one place to another
trunk	this holds the tree up and is covered in bark
tuning fork	a metal fork with two prongs; when you hit it against an object, the prongs vibrate and make a ringing sound
twisting	turning the ends of something in opposite directions to change its shape
upthrust	water pushes up against gravity causing some things to float on its surface
vacuum	where there is no air so keeps food fresh; no sound can be heard
vapour	the gas which a liquid turns into when it evaporates

variable	a factor in an investigation that can be changed or measured e.g. temperature, volume of water, length of time
variation	differences between living things
vein	blood vessel **(**tube) in the body that carries deoxygenated blood back to the heart from the body organs that have used the food and oxygen carried in the blood
vertebrate	an animal with a backbone
vibrate/vibration	something moving forwards and backwards very fast; vibration creates sound
virus	a microbe which causes disease
vitamins	substances, found in fruit and vegetables, which are essential for good health; also found in fish, milk and fats
voltage	the amount of power something has; the force of an electrical current that is measured in volts e.g. the higher the voltage of a battery, the more power it has
volume	how loud or quiet a sound is
warm-blooded	animal that can control its body temperature when the external temperature changes from hot to cold
water cycle	water is heated by the Sun and evaporates, then it condenses in the air to form clouds, then falls back to the ground as rain
waterproof	water can't pass through
water resistance	water pushing back at you as you move through it
weather	the temperature and other outside conditions (rain, cloudiness, etc.)
weight	the force pulling down on something because of gravity
wire	a thin, bendy strand of metal (normally covered in plastic) which electricity can flow through
working scientifically	observing over time, noticing patterns, grouping and classifying things, carrying out fair-tests and finding things out using a wide range of secondary sources of information

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