## GLOSSARY

abdomen back part of an insect's body

acicular when a leaf is shaped like a needle

ammonite fossilised shell of an extinct sea mollusc that lived 240 to 65 million years ago

**antennae** two long, thin parts attached to the head of an insect and some sea animals. They are used to feel.

anther part of the male part of a flower that holds pollen

anus opening on the body where solid waste comes out

arachnid living thing, such as a spider, that has a two-part body and eight legs

bar chart a graph drawn using rectangular bars to show how large each value is

biodiversity range of animals and plants living naturally in an ecosystem

boil to heat a liquid so that it turns into a gas

**boiling point** temperature at which a liquid gets so hot it becomes a gas

**butterfly** a nectar-feeding insect with two pairs of large, usually brightly coloured wings that are covered with microscopic scales

calibrate a mark (on a gauge or instrument) with a standard scale of readings

calories units of measurement used to work out how much energy a particular food supplies

canine type of tooth used for grasping and tearing food

carbohydrate substance that provides energy found in foods such as bread

carbon dioxide type of gas found in the air

carpel female part of a flowering plant, which contains an ovary, style and stigma

Carroll diagram diagram used for grouping items using questions with Yes/No answers

cell in a circuit, another word for a battery

**change of state** a **change** from one **state** (solid or liquid or gas) to another without a **change** in chemical composition

chemical change when one or more substances are changed into other substances at molecular level

chemical a substance that is distinct from any other

electrical circuit when components form a complete path through which electricity can flow

**classification** key way of identifying species or materials through choosing one of two answers to a statement and then moving progressively through sets of statements until an identification is made

clay fine-grained material that is found as soil or rock

cold-blooded having a body temperature that changes with the surroundings

complete circuit circuit that has all the correct parts so that electricity can flow around it

**compound leaf** leaf that has two or more leaflets on the same leafstalk

condensation when a gas cools to to become liquid

consumer animal that feeds on other living things, such as plants and other animals

crustacean sea creature with a hard shell, such as a crab or barnacle

crystal solid substance with sides and faces that are the same size and shape

## **data logger** an electronic device that records data over time or in relation to location either with a built-in instrument or sensor or via external instruments and sensors.

diaphragm a muscle in the human body used in breathing

echolocation how some living things, such as dolphins, detect objects by making high squeaks and listening for their echoes, usually in darkness or poor visibility

electrical conductor something that allows electrical current to flow along it

electrical insulator something that does not allow electrical current to flow along it

electron particle smaller than an atom with a negative electric charge

**enzyme** proteins that speeds up the rate of a chemical reaction in a living organism, for example enzymes are used when the body digests food

erosion the wearing away of land and rocks over time by wind, water or other natural agent

**evaporation** when a liquid changes to a gas at a temperature below the boiling point. It happens at the surface.

**fair test** a test in which only one (independent) variable is changed to test the impact on the dependent variable, with all other (control) variables kept the same

filament part of a plant that supports the anther

food chain a series of organisms each dependent on the next as a source of food

food web a system of interlocking food chains

force a push or pull upon an object, that can cause it to change its shape, direction of movement or shape

fossil remains or impression of an animal or plant that lived millions of years ago turned to stone

freeze to pass from liquid state to solid by loss of heat

freezing point temperature at which a liquid becomes a solid

fruit part of a plant where seeds develop

gas state of matter where particles move about freely with no fixed shape or volume

germinate when a seed begin to put out roots and shoots to sprout or grow

graph diagram that shows the relationship between two sets of data

**hastate** when a leaf has a narrow triangular shape; spearlike

helium a colourless, odourless, tasteless, non-toxic, inert gas

impermeable a substance that does not allow liquid or gas to move through it

incisor tooth used for cutting or gnawing food

**infrared** type of light that we cannot see without special equipment. Infrared light is given out by heated objects.

insect small living thing that usually has a three-part body, three pairs of legs and two pairs of wings

**invertebrate** animal without a backbone

key way of sorting a small number of items using Yes/No questions

**lanceolate** when a leaf has a narrow oval shape that forms a point; lancelike

**large intestine** the lower part of the intestine that takes in water from food and sends solid waste to the rectum

leaf (plural: leaves) the usually flat part of a plant that makes food for the plant

leaf skeleton part of a leaf that is left after the soft parts have been removed

leaflet each of the different parts that make up a compound leaf

**linear** leaves that are narrow with almost parallel edges

**loam** soil made up of clay, sand and decaying plant or animal material

**lobed** leaves that have projections along the edge of a leaf. The lobes are not separated down to the stalk.

magnet a metal object that possesses an attractive force to other metals

magnetic Capable of being magnetized or attracted by a magnet

**mammal** warm-blooded animal that is covered in hair or fur. Female gives birth to live young and feeds her babies on milk from her own body.

mechanical process the action of a force on a material such as the wearing away of rock

melt to heat a solid so that it turns into a liquid

melting point temperature at which a solid becomes a liquid

- **metal** usually a strong, hard and shiny material that allows electricity and heat to move through it. Most metals can be shaped when heated.
- mineral substance in the earth that does not come from animals or plants

molar type of tooth used for grinding food

molluscs group of soft-bodied animals, such as octopuses, snails and slugs

**myriapod** living thing that has a body made up of many parts and at least nine pairs of legs, for example a centipede

nutrients substance that is essential for life and growth

nutrition act of eating and using the goodness in food to grow and stay healthy

oesophagus tube that connects the throat to the stomach

opaque a material that does not let light pass through it

organic matter created from once-living things, plants and animals

**ovary** part of a flower that contains seeds

ovate oval or egg-shaped

oxygen gas that is needed by all living things

**peat** brown material that includes rotting plant matter and water

permeable a material that allows liquid or gas to move through it

pictogram chart on which symbols stand for information

**pitch** the high or low quality of a sound, particularly a musical note

**pollen** fine, yellow powder made by the anthers of flowering plants to help them make new plants

**pollination** the movement of pollen from the anther to the stigma of a plant so that new seeds will be produced

pollinator animal whch transfers pollen from the anther to the stigma of a flower

premolar type of tooth used to crush and grind food

press switch switch that opens or closes an electrical circuit when it is pressed

producer living thing, such as a plant, that is food for consumers further up the food chain

**property** (plural: **properties**) a characteristic of a material

**protein** substance that the body needs for growth and repair.

**rectum** part of the large intestine that connects to the anus

root part of a plant that grows into the ground, anchors it and takes up water and nutrients

root hair thin hair that grows from a plant's root and takes in water and nutrients for the plant

**roughage** material found in fruits and vegetables that is not broken down by the body and aids the passage of food and waste products

scale set of evenly spaced marks made on something such as a ruler to allow measurement

sediment matter that settels to the bottom of a liquid

seed small part that is made by flowers and from which a new plant can grow

seed-head part of a flower or fruit that contains seeds

seedling young plant

seed dispersal the movement of seeds away from the parent plant

**sensor** equipment that detects or measures a physical property such as movement, light or sound in its surroundings

**sepal** leaf-shaped part of a plant that can be seen at the bottom of a flower. Sepals protect buds.

simple leaf with only one leaflet on the leaf stem

- **small intestine** part of the body that connects the stomach and the large intestine, where food is broken up and nutrients are taken into the blood
- solid something that is hard or firm, holds its shape and can be measured
- **spinal column** row of bones that runs along the centre of a human's or animal's back enclosing the spinal cord; also known as the spine or backbone
- stamen male part of a flower made up of a filament and an anther, which makes pollen
- states of matter the distinct forms that matter takes. The three main states of matter are solid, liquid and gas.
- **stem** the part of a plant that supports the branches, leaves and flowers. It helps to take water and nutrients around the plant.

stigma part of a flower that receives pollen

style in a flower, the narrow part of the ovary holding the stigma

switch device that can be used to open or close the flow of electricity in a circuit

tally chart collection of marks made to count frequency of something

tendon band of tissue that joins a muscle to a bone

terminal device at the end of a wire that allows electricity to flow through a circuit

thorax middle part of an insect's body

toggle switch switch that has a lever that can be moved up or down

translucent material that lets only some light through

transparent a material that lets light pass through it

ultraviolet type of light that we cannot see without special equipment

variable something in an experiment that can be changed

variation differences in the same type of plant or animal

veins - animals: tubes that form a branching system and carry blood to the heart

veins - leaves: tubes that support a leaf and carry food, water and minerals

## GLOSSARY

**Venn diagram** way of sorting things by placing them in different parts of overlapping circles within a rectangle. Those that have something in common go in the overlapping area.

vertebrate animal that has a backbone

warm-blooded having a body temperature that does not change whatever the surrounding temperature

water vapour water has a gas dispersed in the air below boiling point

weathering change to rock, land or buildings as a result of the weather

whorled way that a leaf is arranged on a stalk in spirals or concentric circles