

Year 8 Science Vocabulary List

(Tier 2 and Tier 3)



Adaptation – a feature that enables an organism to survive and reproduce in their environment.

Aerobic – a type of respiration that occurs when oxygen is present.

Anaerobic – a type of respiration that occurs when there is a shortage of oxygen.

Chromatography – a separation method that separates substances in a mixture.

Conclusion – a summary of what was found in an investigation, using data collected to back up your statement.

Conduction – the transfer of heat or electricity via one atom to another.

Control variable – the variables that stay the same in an investigation to make it a fair test.

Current – the rate of flow of charge (in a wire this is a flow of electrons that carry the charge).

Dependent variable – the variable that is measured in an investigation.

Digestion – the breakdown of large insoluble molecules e.g., protein, into small soluble molecules e.g., amino acids.

Distillation – a separation method that separates one (or many) solvents from a mixture using evaporation and condensation.

Ecosystem – consists of all the organisms, their physical environment, and their interactions.

Energy – the ability to do work e.g., change or move.

Evaluation – an assessment of what went well during your investigation, what needs to be improved and what you can do to extend the investigation.

Food chain – a sequence of organisms that show the passage of nutrients from producer to consumers.

Hypothesis – an idea about how something works that is then tested in an investigation.

Independent variable – the variable that is changed in an investigation.

Insulation – the use of a material to stop or slow down the conduction of heat or electricity.

Interdependence – how organisms rely on each other for survival.

Nutrients – substances that help organisms with energy, nourishment, growth, development and reproduction.

Parallel circuit – a circuit where the components are on two or more loops, current has a choice of paths.

Photosynthesis – a chemical reaction that occurs in the chloroplasts of plant cells that creates glucose and oxygen from carbon dioxide and water, in the presence of light.

Potential difference - the amount of energy transferred by each unit of charge passing between two points of a circuit.

Resistance - a measure of how hard it is for the charge/current to flow through a component.

Respiration – a chemical reaction that occurs in the mitochondria of animal and plant cells that creates water and carbon dioxide from glucose and oxygen.

Solute – a substance that dissolves in the solvent.

Solution – a mixture created when a solute is dissolved in a solvent.

Solvent – the liquid that the solute dissolves in.

Series circuit – a circuit where the components are in a single loop, current has just one path to follow.

Variation – the differences in characteristics of a species due to inherited and environmental factors.