

# Year 7 Science Vocabulary List

*(Tier 2 and Tier 3)*



1. **Acid** - A substance that has a pH value between 1-6.
2. **Alkali** - A substance that has a pH value between 8-14.
3. **Atom** - The smallest particle of an element and the most basic unit of matter. Everything is made up of atoms.
4. **Beaker** - A glass container with a pouring lip. Used to hold, mix or heat substances.
5. **Bunsen burner** - A device for combining a flammable gas with controlled amounts of air to produce a flame.
6. **Cell membrane** - The outer layer that surrounds the cell and controls which substances can pass into and out from it.
7. **Cell wall** - A tough outer layer of the cell, which contains cellulose to provide strength and support. Not found in animal cells.
8. **Compound** - A substance that is made from more than one element that are chemically bonded together. They are difficult to separate.
9. **Control variable** - The variables that are kept the same during a scientific experiment.
10. **Cytoplasm** - A jelly-like substance in cells where chemical reactions happen.
11. **Dependent variable** - The variable being measured during the experiment.
12. **Element** - A substance that cannot be broken down into any other substance and is made up of only one type of atom.
13. **Friction** - A contact force which acts against the movement of an object.
14. **Independent variable** - The variable that is being changed during the experiment.
15. **Indicator** - A chemical that can show if a substance is acidic or alkaline by changing colour.
16. **Length** - A measurement, which identifies the distance between two points, measured in metres (m).
17. **Magnification** - A measure of the size of an image compared to the size of the object.
18. **Mass** - A measure of the amount of matter an object is made from, measured in grams (g) or kilograms (kg).
19. **Measuring cylinder** - A container used to measure volumes of liquid.
20. **Microscope** - An instrument used to magnify small objects.
21. **Mitochondria** - An organelle that releases energy through aerobic respiration.
22. **Neutral** - A substance that is neither acidic nor alkaline. It has a pH of 7.

- 23. Nucleus** - An organelle which controls what happens in the cell. It contains DNA.
- 24. Observation** - The use of your senses to gather information.
- 25. Organelle** - Small organ-like structures that you can find inside of cells. They each have a specific function or job.
- 26. Prediction** - Using scientific evidence to suggest what you might observe in an experiment and what your results may look like.
- 27. Temperature** - How hot a substance is. Measured in degrees Celsius (°C).
- 28. Volume** - The amount of space a 3D shape takes up. You can work out the volume of a shape by multiplying height × width × depth.