Year 9 Science Mix-and-Match Activity

Instructions

Cut out each term and its corresponding definition. Mix them up and have students match the terms to the appropriate definitions.

Terms and Definitions

Volume	The amount of space that a substance or object occupies.	**Heat**	Energy that is transferred between objects with different temperatures.
Mass	The measure of the amount of matter in an object or substance.	**Temperature**	A measure of how hot or cold something is.
Measuring Cylinder	A piece of laboratory equipment used to accurately measure liquid volumes.	**Beaker**	A cylindrical glass container with a flat bottom, used for holding liquids.
Variable	A factor that can be changed in an experiment to test a hypothesis.	**Method**	A set of instructions designed to perform a specific task in an experiment.
Materials	The substances or objects required for an experiment or activity.	**Thermometer**	Equipment used to measure temperature.
Bunsen burner	Equipment used to heat something using the combustion of gas.	**Combustion**	A chemical reaction where a fuel and oxygen are reacted. It produces large amounts of heat and light.

Atom	The basic unit of a chemical element, consisting of a nucleus of protons and neutrons, with electrons in orbitals.	**Ion**	An atom with an electric charge.
Reaction	The chemical change where reactants turn into products.	**Control Variable**	A variable that is kept constant (does not change) during an experiment.
Independent Variable	The variable that you are changing on purpose in an experiment.	**Dependent Variable**	The variable that changes because you change the independent variable.
Solution	A mixture where everything is mixed in so well that it looks like one thing. For example, when salt is fully mixed into water.	**Thermal Conductor**	A material that allows the flow of heat.
Thermal Insulator	A material that does not easily allow the flow of heat.	**Element**	A substance made up of only one type of atom.

Compound	A substance made when two or more elements are chemically bonded together.	**Mixture**	When different materials are put together but do not join or bond.
Melting Point	The temperature at which a solid becomes a liquid.	**Boiling Point**	The temperature at which a liquid becomes a gas.
Hypothesis	A guess you can test about what might happen in an experiment.	**Observation**	Something you notice about an experiment using your senses. Examples include colour change, heating up, bubbles forming.
Data	The information you collect during an experiment.	**Conclusion**	The final answer or result you get from an experiment.
Bond	A connection between atoms or molecules. Bonds must be broken to start reactions.	**Exothermic**	A reaction that produces energy.
Endothermic	A reaction that takes in energy from the outside. It feels cold.	**Activation Energy**	The amount of energy a reaction needs to break bonds in the reactants and start.