Part 1: Glossary

Key word	Definition
acid	An acid is a solution with a pH value less than 7.
alkali	An alkali is a soluble base.
base	A substance that neutralises an acid – those that dissolve in water are called alkalis.
chemical property	How a substance behaves in its chemical reactions.
chemical reaction	A change in which atoms are rearranged to create new substances.
chemical symbol	A one- or two-letter code for an element that is used by scientists in all countries.
concentrated	A solution is concentrated if it has a large number of solute particles per unit volume (litre or cubic metre).
concentration	A measure of the number of particles in a given volume.
corrosive	A substance is corrosive if it can burn your skin or eyes.
dilute	A solution is dilute if it has a small number of solute particles per unit volume (litre or cubic metre).
displace	A more reactive metal displaces – or pushes out – a less reactive metal from its compound.
displacement	Reaction where a more reactive metal takes the place of a less reactive metal in a compound.
element	A substance that cannot be broken down into other substances.
indicator	Substances used to identify whether unknown solutions are acidic or alkaline. The colour of an indicator is different in acidic and alkaline solutions.
irritant	A substance that makes your skin itch or swell up a little.
litmus	An indicator. Blue litmus paper goes red on adding acid. Red litmus paper goes blue on adding alkali.
metal	Elements on the left of the stepped line of the Periodic Table. Most metals are shiny, good conductors of electricity and heat, malleable and ductile, and solid at room temperature.

neutral	Describes an object or particle that has no charge, or in which positive and negative charges cancel out, giving no overall charge.
neutralisation	In a neutralisation reaction, an acid cancels out a base or a base cancels out an acid.
non-metal	Elements on the right of the stepped line of the Periodic Table. Most non-metals are dull, poor conductors of electricity and heat, brittle, and solid or gaseous at room temperature.
oxidation	A chemical reaction in which a substance combines with oxygen.
oxide	A substance made up of a metal or non-metal element joined to oxygen.
Periodic table	A table of all the elements, in which elements with similar properties are grouped together.
pH scale	The pH scale shows whether a substance is acidic, alkaline, or neutral. An acid has a pH between 0 and 7. An alkaline has a pH between 7 and 14. A solution of pH 7 is neutral.
physical change	A change that is reversible, in which new substances are not made. Examples of physical changes include changes of state and dissolving.
physical property	A property of a material that you can observe or measure.
product	A substance that is made in a chemical reaction.
reactant	A starting substance in a chemical reaction.
reactive	A substance is reactive if it reacts vigorously with substances such as dilute acids and water.
reactivity	The tendency of a substance to undergo a chemical reaction.
reactivity series	A list of metals in order of how vigorously they react.
reversible	A change in which it is possible to get back to the original substances. Examples include dissolving and changes of state.

Part 1: Glossary

salt	A salt is a compound in which the hydrogen atoms of an acid are replaced by atoms of a metal element.
strong acid	An acid in which all of the acid particles split up when it dissolves in water.
thermite reaction	Reaction of aluminium with iron oxide to make aluminium oxide and iron.
universal indicator	An indicator that changes colour to show the pH of a solution. It is a mixture of dyes.
weak acid	An acid in which only some of the acid particles split up when it dissolves in water.
word equation	A way of representing a chemical reaction simply. The reactants are on the left of an arrow, and the products are on the right. The arrow means <italic>reacts to make</italic>.