

SC14a Yields

Word	Pronunciation	Meaning
actual yield		The actual amount of product obtained from a chemical reaction.
percentage yield		The actual yield divided by the theoretical yield, as a percentage.
side reactions		A reaction which takes place at the same time as another main reaction.
theoretical yield		The maximum calculated amount of a product that could be formed from a given amount of reactants.
yield		The amount of product formed in a reaction.

SC14b Atom economy

Word	Pronunciation	Meaning
atom economy		The percentage, by mass, of reactants that are converted into useful products.
by-product		Any product formed in a reaction in addition to the required product.

SC14c Concentrations

Word	Pronunciation	Meaning
calibrated		Marked with a scale for accurate readings.
volumetric flask		A flask which is accurately calibrated to hold a given volume of solution.

SC14d Titrations and calculations

Word	Pronunciation	Meaning
mole ratio		The ratio between the amounts, in moles, of substances in a balanced equation.

SC14e Molar volume of gases

Word	Pronunciation	Meaning
Avogadro's law		The law that states that, if the temperature and pressure are the same, equal volumes of different gases contain an equal number of molecules.
molar gas volume		The volume occupied by one mole of molecules of any gas. It is 24 dm^3 , or $24\,000 \text{ cm}^3$, at room temperature and pressure.

SC15a Fertilisers and the Haber process

Word	Pronunciation	Meaning
batch process		A method in which substances are made in separate stages, rather than constantly.
continuous process		A method in which substances are made constantly.
fertiliser		Soluble compound added to soil to replace the minerals used up by plants.
Haber process		A reversible reaction between nitrogen and hydrogen which forms ammonia.
nitrogenous	<i>ny-troj-en-us</i>	Containing or supplying nitrogen, for example in a fertiliser.
reversible reaction		A chemical reaction that can work in both directions.

SC15b Factors affecting equilibrium

Word	Pronunciation	Meaning
by-product		Substance produced in a chemical reaction in addition to the desired product.
closed system		System in which no substances may enter or leave, such as a stoppered flask.
dynamic equilibrium		Situation in which the forward and backward reactions in a reversible reaction continue at the same rate as each other, and the concentrations of all reacting substances do not change.
reaction pathway		Series of reactions needed to make a particular product.
yield		Mass of useful product made in a process.

SC16a Chemical cells and fuel cells

Word	Pronunciation	Meaning
by-product		Substance produced in a chemical reaction in addition to the desired product.
chemical cell		A device that produces a voltage due to reactions between reactants stored inside it, until one of the reactants is used up.
fuel cell		A device that produces a voltage due to reactions involving a fuel and oxygen, for as long as these reactants are supplied.
greenhouse gas		A gas, such as carbon dioxide, water vapour or methane, in the Earth's atmosphere, which absorbs energy emitted from the Earth's surface and then emits it back to the surface.