

IGCSE CHEMISTRY EDEXCEL SPECIFICATION COVERAGE

TOPIC	SUB HEADING	KEYWORDS
Principals of Chemistry	States of Matter	states of matter, diffusion, solvent, solute, solution, saturated solution, solubility, solubility curve
Principals of Chemistry	Atoms, elements and compounds	atoms, elements, compounds, molecules, mixtures
Principals of Chemistry	Chromatography	chromatography, chromatogram, R _f value
Principals of Chemistry	Atomic structure	atomic structure, energy levels, atomic number, mass number, electronic structure
Principals of Chemistry	Isotopes	isotopes, atom, mass number
Principals of Chemistry	Atomic structure and the periodic table	metals, non-metals, transition metals, groups, periods
Principals of Chemistry	Chemistry concepts	chemical reactions, balancing equations
Principals of Chemistry	RAM	relative atomic mass, relative formula mass
Principals of Chemistry	Moles	Avogadro number, mole calculations
Principals of Chemistry	Yield in reactions	% yield

Principals of Chemistry	Calculating formulae	empirical formulae
Principals of Chemistry	Gas volumes	molar volume of a gas
Principals of Chemistry	Ionic and covalent bonding	ions, ionic, covalent, molecule, giant structure
Principals of Chemistry	Ionic compounds	ions, ionic, giant structure, lattice
Principals of Chemistry	Simple covalent molecules	covalent, molecule
Principals of Chemistry	Giant covalent structures	giant structure, covalent, diamond, graphite, fullerene
Principals of Chemistry	Metal structure and properties	delocalised electrons, conductor, giant structure
Principals of Chemistry	Electrolysis	anode, cathode, electrolyte
Inorganic Chemistry	Group 1 - alkali metals	properties
Inorganic Chemistry	Group 7 - halogens	properties, displacement reactions
Inorganic Chemistry	Group 0 - Noble gases	properties
Inorganic Chemistry	The Earth's atmosphere	gases in the air, carbon dioxide, greenhouse gases, climate change, acid rain
Inorganic Chemistry	Carbonates	thermal decomposition, lime water

Inorganic Chemistry	Reactions of metals	Rusting, galvanising, sacrificial protection, reactivity series, displacement reactions, thermal decomposition
Inorganic Chemistry	Extracting metals	reactivity series, reduction, carbon, electrolysis, oxidation
Inorganic Chemistry	Properties and uses of metals	steel, alloy
Inorganic Chemistry	Acids and bases	acid, alkali, base, hydrogen ion, indicators, neutralisation, pH
Inorganic Chemistry	Titrations	end-point, pH curve, indicator
Inorganic Chemistry	Making salts	salt, hydroxide, carbonate, oxide, precipitate, filtration, crystallisation
Inorganic Chemistry	Tests for ions	flame test, precipitate, tests for anions
Physical Chemistry	Exothermic and endothermic reactions	endothermic, exothermic, reversible
Physical Chemistry	Calculating energy changes in reactions	joule
Physical Chemistry	Energy diagrams	activation energy, energy level diagram
Physical Chemistry	Bond energies	bond making, bond breaking
Physical Chemistry	How fast?	rate of reaction, experiments
Physical Chemistry	Collision theory	activation energy, collision, kinetic theory, limiting factor

Physical Chemistry	Catalysts	hydrogen peroxide, activation energy
Physical Chemistry	Reversible reactions	Reversible reaction, dynamic equilibrium
Organic Chemistry	Crude oil	renewable, non-renewable, fossil fuels, hydrocarbons, alkanes
Organic Chemistry	Fractional distillation of oil	fractions, viscosity, flammability, hydrocarbon
Organic Chemistry	Burning fuels	combustion, particulates, fuel, methane, catalytic converter
Organic Chemistry	Cracking hydrocarbons	alkanes, alkenes, addition reaction, bromine water, double bond, saturated, unsaturated, homologous series
Organic Chemistry	Alcohols	ethanol, manufacture, fermentation, dehydration
Organic Chemistry	Weak and Strong acids	strong, weak, pH
Organic Chemistry	Esters	ethyl ethanoate
Organic Chemistry	Polymers	monomer, polymer, addition polymerisation, condensation polymerisation, biodegradable