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GCSE Chemistry Revision Checklist - Paper 1

Tick each item as you revise. Use the confidence boxes to spot what is secure and what needs another pass.

Atomic structure and the periodic table

Done	Revision point	Confidence
[ ]	Describe atoms, elements, compounds and mixtures.	[ ] [ ] [ ]
[ ]	Explain the development of the atomic model and subatomic particles.	[ ] [ ] [ ]
[ ]	Use atomic number and mass number, including isotopes and relative atomic mass.	[ ] [ ] [ ]
[ ]	Explain electronic structure and how it links to the periodic table.	[ ] [ ] [ ]
[ ]	Describe Group 1, Group 7 and Group 0 trends and properties.	[ ] [ ] [ ]

Bonding, structure and properties of matter

Done	Revision point	Confidence
[ ]	Explain ionic, covalent and metallic bonding.	[ ] [ ] [ ]
[ ]	Relate bonding and structure to melting point, conductivity and state.	[ ] [ ] [ ]
[ ]	Compare simple molecules, giant covalent structures, polymers and metals.	[ ] [ ] [ ]
[ ]	Use particle models to explain changes of state and limitations of models.	[ ] [ ] [ ]
[ ]	Understand nanoparticles, their properties, uses and possible risks.	[ ] [ ] [ ]

Confidence key: [ ] Needs work [ ] Nearly there [ ] Exam ready

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GCSE Chemistry Revision Checklist - Paper 1 continued

Tick each item as you revise. Use the confidence boxes to spot what is secure and what needs another pass.

Quantitative chemistry

Done	Revision point	Confidence
[ ]	Calculate relative formula mass (Mr) from atomic masses.	[ ] [ ] [ ]
[ ]	Use conservation of mass and explain apparent mass changes in reactions.	[ ] [ ] [ ]
[ ]	Calculate moles, masses and reacting quantities from equations.	[ ] [ ] [ ]
[ ]	Work with concentration, percentage yield and atom economy.	[ ] [ ] [ ]
[ ]	Use gas-volume relationships where required by your course.	[ ] [ ] [ ]

Chemical changes and energy changes

Done	Revision point	Confidence
[ ]	Use the reactivity series to predict reactions and extraction methods.	[ ] [ ] [ ]
[ ]	Write and interpret ionic equations for displacement and neutralisation.	[ ] [ ] [ ]
[ ]	Explain acids, alkalis, salts, pH and methods for preparing soluble salts.	[ ] [ ] [ ]
[ ]	Explain electrolysis of molten and aqueous ionic compounds.	[ ] [ ] [ ]
[ ]	Identify exothermic and endothermic reactions from energy changes.	[ ] [ ] [ ]
[ ]	Interpret reaction profiles and calculate bond-energy changes.	[ ] [ ] [ ]

Paper 1 check: revisit any row that is not yet 'Exam ready' before moving on.

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GCSE Chemistry Revision Checklist - Paper 2

Tick each item as you revise. Use the confidence boxes to spot what is secure and what needs another pass.

Rates, organic chemistry and chemical analysis

Done	Revision point	Confidence
[ ]	Explain how concentration, pressure, surface area, temperature and catalysts affect rate.	[ ] [ ] [ ]
[ ]	Use collision theory and interpret rate graphs.	[ ] [ ] [ ]
[ ]	Understand reversible reactions, equilibrium and changes in conditions.	[ ] [ ] [ ]
[ ]	Describe crude oil, hydrocarbons, fractional distillation and cracking.	[ ] [ ] [ ]
[ ]	Recognise key organic compounds and polymers required by your specification.	[ ] [ ] [ ]
[ ]	Use chromatography and gas tests to identify substances and assess purity.	[ ] [ ] [ ]

Atmosphere and using resources

Done	Revision point	Confidence
[ ]	Describe the evolution and present composition of Earth's atmosphere.	[ ] [ ] [ ]
[ ]	Explain greenhouse gases, climate change evidence and carbon footprints.	[ ] [ ] [ ]
[ ]	Identify common atmospheric pollutants, their sources and effects.	[ ] [ ] [ ]
[ ]	Distinguish finite and renewable resources and explain sustainable use.	[ ] [ ] [ ]
[ ]	Understand potable water, wastewater treatment and life-cycle assessments.	[ ] [ ] [ ]
[ ]	Review recycling, corrosion, alloys, ceramics, polymers and composite materials.	[ ] [ ] [ ]

Final check: focus your next revision session on every item marked 'Needs work' or 'Nearly there'.