

Chemistry Year 11 Mock revision list Nov 2025

Foundation

Topic 1 – Atomic structure and the periodic table

- Atoms, elements, compounds, chemical equations, mixtures, separation techniques, the history of the atom, electronic structure, development of the periodic table, the periodic table, metals and non metals, group 1, group 7, group 0

Topic 2 Bonding, Structure and properties of matter

- Ions, ionic bonding, ionic compounds, covalent bonding, simple molecular substances, polymers and giant covalent structures, allotropes of carbon, metallic bonding, states of matter, changing state

Topic 3 – Quantitative chemistry

- Relative formula mass, percentage composition, conservation of mass, concentration of solution

Topic 4 - Chemical changes

- Acids and bases, Reactions of acids, reactivity series, separating metals from metal oxides, electrolysis

Topic 5- energy changes

- Exo and endothermic reactions, reaction profiles, measuring energy change,

Topic 9 – Chemistry of the atmosphere

- The evolution of the atmosphere, Climate change and greenhouse gases, carbon footprints, air pollution

Higher

Topic 1 – Atomic structure and the periodic table

- Atoms, elements, compounds, chemical equations, mixtures, separation techniques, the history of the atom, electronic structure, development of the periodic table, the periodic table, metals and non metals, group 1, group 7, group 0

Topic 2 Bonding, Structure and properties of matter

- Ions, ionic bonding, ionic compounds, covalent bonding, simple molecular substances, polymers and giant covalent structures, allotropes of carbon, metallic bonding, states of matter, changing state

Topic 3 – Quantitative chemistry

- Relative formula mass, percentage composition, **Moles and equations**, conservation of mass, **limiting reactants**, concentration of solution

Topic 4 - Chemical changes

- Acids and bases, **Strong and weak acids**, Reactions of acids, reactivity series, separating metals from metal oxides, **Redox reactions**, Electrolysis, **half equations**

Topic 9 – Chemistry of the atmosphere

- The evolution of the atmosphere, Climate change and greenhouse gases, carbon footprints, air pollution