



GCSE Revision Topics 2017 - 2019 Chemistry Combined Higher

Topic	Tick/date when revised				
C1 Atomic Structure					
C1.1 Atoms					
C1.2 Chemical equations					
C1.3 Separating mixtures					
C1.4 Fractional distillation and paper chromatography					
C1.5 History of the atom					
C1.6 Structure of the atom					
C1.7 Ions, atoms, and isotopes					
C1.8 Electronic structures					
C2 The Periodic Table					
C2.1 Development of the periodic table					
C2.3 Group 1 – the alkali metals					
C2.4 Group 7 – the halogens					
C2.5 Explaining trends					
C3 Structure and Bonding					
C3.1 States of matter					
C3.2 Atoms into ions					

C3.3 Ionic bonding					
C3.4 Giant ionic structures					
C3.5 Covalent bonding					
C3.6 Structure of simple molecules					
C3.7 Giant covalent structures					
C3.8 Fullerenes and graphene					
C3.9 Bonding in metals					
C3.10 Giant metallic structures					
C4 Chemical Calculations					
C4.1 Relative masses and moles					
C4.2 Equations and calculations					
C4.3 From masses to balanced equations					
C4.6 Expressing concentrations					
C5 Chemical Changes					
C5.1 The reactivity series					
C5.2 Displacement reactions					
C5.3 Extracting metals					
C5.4 Salts from metals					
C5.6 Making more salts					
C5.7 Neutralisation and the pH scale					
C5.8 Strong and weak acids					

C6 Electrolysis

C6.1 Introduction to electrolysis

C6.2 Changes at the electrodes

C6.3 The extraction of aluminium

C6.4 Electrolysis of aqueous solutions

C7 Energy Changes

C7.1 Exothermic and endothermic reactions

C7.2 Using energy transfers from reactions

C7.3 Reaction profiles

C7.4 Bond energy calculations

C8 Rates and Equilibrium

C8.1 Rate of reaction

C8.2 Collision theory and surface area

C8.3 The effect of temperature

C8.4 the effect of concentration and pressure

C8.5 The effect of catalysts

C8.6 Reversible reactions

C8.7 Energy and reversible reactions

C8.8 Dynamic equilibrium

C8.9 Altering conditions

C9 Crude Oil and Fuels

C9.1 Hydrocarbons					
C9.2 Fractional distillation of oil					
C9.3 Burning hydrocarbon fuels					
C9.4 Cracking hydrocarbons					
C12 Chemical Analysis					
C12.1 Pure substances and mixtures					
C12.2 Analysing chromatograms					
C12.3 Testing for gases					
C13 The Earth's Atmosphere					
C13.1 History of our atmosphere					
C13.2 Our evolving atmosphere					
C13.3 Greenhouse gases					
C13.4 Global climate change					
C13.5 Atmospheric pollutants					
C14 The Earth's Resources					
C14.1 Finite and renewable resources					
C14.2 Water safe to drink					
C14.3 Treating waste water					
C14.4 Extracting metals from ores					
C14.5 Life cycle assessments					
C14.6 Reduce, reuse and recycle					

