



Subject – Chemistry Combined Foundation

Торіс	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 lons, 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							
C4.6 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							
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							
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						
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			
C14.5 Life cycle assessments			
C14.6 Reduce, reuse and recycle			