Combined Science – Chemistry

Topic	Done in Class	RAG	Revised	RAG
C1 Atomic Structure – Paper 1				
Atoms				
Chemical Equations				
Separating Mixtures				
Fractional Distillation and Paper Chromatography				
History of the Atom				
Structure of the Atom				
Iona, Atoms and Isotopes				
Electronic Structures				
C2 The Periodic Table – Paper 1				
Development of the Periodic Table				
Electronic Structures and the Periodic Table				
Group 1 – The Alkali Metals				
Group 7 – The Halogens				
Explaining Trends				
C3 Structure and Bonding – Paper 1				
States of Matter				
Atoms into Ions				
Ionic Bonding				
Giant Ionic Structures				
Covalent Bonding				
Structure of simple Molecules				
Giant Covalent Structures				
Fullerenes and Graphene				
Bonding in Metals				
Giant Metallic Structures				
C4 Chemical Calculations – Paper 1				
Relative Masses and Moles				
Equations and Calculations (HT)				
From Masses to Balanced Equations (HT)				
C5 Chemical Changes – Paper 1				
The Reactivity Series				
Displacement Reactions				
Extracting Metals				
Salts from Metals				
Salts from Insoluble Bases				
Making More Salts				
Neutralisation and the pH Scale				
Strong and Weak Acids (HT)				
C6 Electrolysis – Paper 1				
Electrolysis Basics				
Changes at the Electrodes				
The Extraction of Aluminium				
Electrolysis of Aqueous Solutions				
C7 Energy Changes – Paper 1				
Exothermic and Endo thermic Reactions				
Using Energy Transfers from Reactions				
Reaction Profiles				
Bond Energy Calculations (HT)				

Topic	Done in Class	RAG	Revised	RAG
C8 Rates and Equilibrium – Paper 2				
Rate of Reaction				
Collision Theory and Surface Area				
The Effect of Temperature				
The effect of Concentration and Pressure				
The Effect of Catalysts				
Reversible Reactions				
Energy and Reversible Reactions				
Dynamic Equilibrium				
Altering Conditions (HT)				
C9 Crude Oil and Fuels – Paper 2				
Hydrocarbons				
Fractional Distillation of Oil				
Burning Hydrocarbon Fuels				
Cracking Hydrocarbons				
C10 Organic reaction – Paper 2 Triple only				
C11 Polymers – Paper 2 Triple only				
C12 Chemical Analysis – Paper 2				
Pure Substances, Mixtures and Formulations				
Analysing Chromatograms				
Testing for Gases				
C13 The Earth's Atmosphere – Paper 2				
History of Our Atmosphere				
Our Evolving Atmosphere				
Greenhouse Gases				
Global Climate Change				
Atmospheric Pollutants				
C14 The Earth's Resources – Paper 2				
Finite and Renewable Resources				
Water Safe to Drink				
Treating Waste Water				
Extracting Metals from Ores (HT)				
Life Cycle Assessments				
Reduce, Reuse, Recycle				

Topic	Done in Class	RAG	Revised	RAG
Required practicals paper 1				
Making salts (chemical changes)				
Electrolysis (electrolysis)				
Temperature Changes (energy changes)				
Required practicals paper 2				
Rates of reaction (rates and equilibrium)				
Chromatography (chemical analysis)				
Water purification (the Earth's resources)				