

	Term 1		Term 2		Term 3	
Key focus	Atomic Structure Amount of Substance Bonding	Oxidation, Reduction and Redox Energetics Periodicity Group 2 Group 7	Kinetics Equilibria Introduction to Organic Chemistry	Alkanes Halogenalkanes Alkenes	Alcohols Organic Analysis	Thermodynamics Periodicity Revision
Purpose of the scheme	The purpose of this course is to explore the difference between organic and inorganic chemistry, and consider the theory that links them all together.					
Pre read (suggested)	Look at non-newtonian substances. How do space probes test different planet's atmosphere and terrain.	Look into drone synchronised light shows.	The morals of using thermobaric weapons	Biofuels – use in Brazil Alternatives to fossil fuels in light of fuel insecurity in the world.	Real life forensics – identifying unknown substances.	Hydrogen: fuel of the future? The Economist - YouTube
Key knowledge and skills	Make up a volumetric solution and carry out a simple acid-base titration.	Measurement of an enthalpy change. Carry out simple test-tube reactions to identify cations and anions in aqueous solution.	Investigation of how the rate of a reaction changes with temperature.	Distillation of a product from a reaction.	Tests for alcohol, aldehyde, alkene and carboxylic acid.	Carry out simple test-tube reactions to identify transition metal ions.
Key words/ vocabulary	Mole Isotopes Spectrometry Ionisation Avogadro's constant Empirical and molecular Atom economy Percentage yield Covalent, ionic, metallic Bonding Lattice Macromolecular	Thermochemical Hess' Law Equilibria Oxidation Reduction Redox Halogens Halides	Exothermic Endothermic Enthalpy Max-Boltzmann Nomenclature Isomerism Distillation Halogenoalkanes	Halogenoalkanes Nucleophilic substitution Mechanism Alkanes Alkenes Elimination Addition	Alcohols Aldehyde Carboxylic acids Distillation Analysis	Thermochemical cycle Born-Haber cycle Enthalpy Free energy Entropy
Exam board	AQA A-Level Chemistry					
End point	A-Level Chemistry Exam Paper 1, 2 and 3	A-Level Chemistry Exam Paper 1, 2 and 3	A-Level Chemistry Exam Paper 1, 2 and 3	A-Level Chemistry Exam Paper 1, 2 and 3	A-Level Chemistry Exam Paper 1, 2 and 3	A-Level Chemistry Exam Paper 1, 2 and 3
Assessment method	<ul style="list-style-type: none"> PRP Assessment Intervention 	<ul style="list-style-type: none"> PRP Assessment Mock assessment Intervention 	<ul style="list-style-type: none"> PRP Assessment Classroom Mocks Intervention 	<ul style="list-style-type: none"> PRP Assessment Mock assessment Intervention 	<ul style="list-style-type: none"> PRP Assessment Intervention 	Internal Exams

Wider reading / links / research	Maths – significant figures, means, inequalities, rearranging equations	Maths – $y = mx + c$, scatter graphs, gradients, tangents,	Technology – plastics Geography – sustainability Maths – natural logs	Maths – decimals, standard form	Maths – significant figures, means, inequalities, rearranging equations	Maths - significant figures, rearranging equations, logs
Careers links	Lab technician Materials scientist	Army chef, drugs analyst, forensic scientist	Nuclear scientist Brewer	Vinegar producer Organic chemist	Electrochemist Analytical chemist	Colour technologist