

A-Level Chemistry Year 13	Subject:	Term 1:	Term 2:	Term 3:	Term 4:	Term 5:	Term 6:	
Subject Concepts: 	<ul style="list-style-type: none"> <li>Physical Chemistry</li> <li>Organic Chemistry</li> <li>Inorganic Chemistry</li> </ul>	Kinetics: Rate orders, constants and reaction mechanisms	Equilibria, Kc and Kp	Acids, Bases, Buffers	Energy and entropy concepts			
		Aromatic Chemistry	Carbonyls and carboxylic acids, acid anhydrides, acyl chlorides and esters	Amines, amino acids and proteins	Organic Synthesis	Chromatography: TLC, GC and spectroscopy: IR and NMR		
					Redox and electrochemistry	Transition metals		
Personal Skills: 	Leadership	PAG planning and group practical work leads	PAG planning and group practical work leads	PAG planning and group practical work leads	PAG planning and group practical work leads	PAG planning and group practical work leads		
	Organisation	File maintenance, note taking, PAG planning	File maintenance, note taking, PAG planning	File maintenance, note taking, PAG planning	File maintenance, note taking, PAG planning			
	Resilience		Mock planning and revision time pressure		Mock planning and revision time pressure	Exam build-up programme.		
	Initiative	Research industry catalysts and processes	Unstructured PAG - developing and undertaken self-researched practicals	Chirality Project	Unstructured PAG - developing and undertaken self-researched practicals	Unstructured PAG - developing and undertaken self-researched practicals. Research: Uses of TM complexes in medicine and industry		
	Communication				Chirality project presentation			
Work Skills: 	Creativity	Reaction mechanism modelling: Research projects: Chirality, TM complexes, Green chemistry polymers.						
	Collaboration	PAG research and practical work	PAG research and practical work	PAG research and practical work	PAG research and practical work	PAG research and practical work		
	Critical Thinking	Complex multifaceted problems - using numeracy skills, deductive powers, logic and literacy.	Complex multifaceted problems - using numeracy skills, deductive powers, logic and literacy.	Complex multifaceted problems - using numeracy skills, deductive powers, logic and literacy.	Complex multifaceted problems - using numeracy skills, deductive powers, logic and literacy.			
	Careers Skills							
Literacy/Numeracy Skills: 	Literacy	Complex practical comprehension, class presentation of projects. Flipped learning. Unstructured long answer exam questions.						
	Numeracy	Arrhenius equation manipulation, rate equations	Equilibria constants	Acid dissociation constants, Kw, pOH	Gibbs free energy and mathematical links to electrode potentials, rates and enthalpy and entropy.	Yield and atom economy		
Extra-Curricular: 								

