Department: Science A Level Chemistry	Year 12

Plan Of Learning For The Year (Unit/Topic/Project Context)	
Half Term 1 • **Atomic Structure** • **Amount of substance** **Half Term 2** • **Redox equations** • **Halogens** • **Amount of substance** **Half Term 3** • **Energetics** • **Equilibria** • **Group 2 , the alkali earth metals** • **Periodicity**	**Half Term 4** • **Kinetics** • **Bonding** **Half Term 5** • **Introduction to Organics** • **Bonding** • **Alkanes** • **Halo Alkanes** **Half Term 6** • **Alcohols** • **Analysis** • **Alkenes**

Feedback, Retrieval & Assessment	Super curriculum opportunities / extra-curricular activities	Cultural Capital, SMSC, Careers and Futures
• Regular self and peer assessment • Regularly assessed homework • Termly Teacher Assessment • Termly Formal Assessment (FA) • Learning logs used to guide feedback and develop students' mindset	• Visits to local university • Visits to local Mine to evaluate salt formation	• Application of Chemistry in real life contexts embedded throughout the course • Development of skills to meet the practical endorsement to allow students to progress to onto practical based degrees • Careers session run with the university

Common misconceptions	Connecting New Knowledge	Challenge for all
• Neutralisation is the breakdown of an acid or something changing from an acid; • Just how big Avogadro's number is • All molecules that contain the C=O group should undergo nucleophilic addition reactions, as it is unsaturated	• Linking GCSE knowledge to new A Level ideas to build upon prior knowledge • Notes provided to students on content • Spaced retrieval homework that covers a wide selection of knowledge to develop deeper understanding of content	• Support is given in lesson for those students who have not taken A Level Mathematics • Modelling in lessons is key to showing students the steps involved in each process • Students are encouraged to question everything to build a deep understanding of the knowledge