



## Key Stage 4 Science: Chemistry Curriculum Plan

**KS4 Curriculum Intent** - Students will have the knowledge, skills and desire to understand and question the world around them.

### Year 10 LTP

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>Unit Covered</b>	-The Periodic Table -Alkali Metals -Transition Metals -Halogens -Noble Gases -Chemical Bonding -Ionic Compounds -Simple Covalent Molecules	-Giant Covalent - Structures -Nanoparticles -Metals -States of Matter -Calculations Involving Moles	-Calculations Involving Solutions -Calculations Involving Gases -Efficiency of Chemical Reactions -Extracting Metals	-Titrations -Making Salts from Metals -Making Salts from Bases	-Electrolysis -Exothermic and Endothermic Reactions	-Determining Energy Changes in Reactions -Chemical and Fuel Cells
<b>Assessment</b>	Atomic Structure and the Periodic Table KLT	Bonding, Structure and the Properties of Matter KAT	Quantitative Chemistry KLT	Quantitative Chemistry KAT	Preparation for End of Year Assessment	End of Year Assessment
<b>Interleaving</b>	Atomic structure and development of the model of the atom from KS3.	Allotropes of carbon and states of matter from KS3.	Chemical formulae, equations and the conservation of mass law from KS3.	Acids and bases from KS3.	Ion formation from KS3.	Chemical changes from KS3.

### Year 11 LTP

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>Unit Covered</b>	-Rates of Reaction -Dynamic Equilibria -Hydrocarbons -Fractional Distillation -Cracking -Alkanes and Alkenes -Alcohols -Carboxylic Acids -Esters	-Types of Substances -Identification of Ions -Instrumental Analysis -Synthetic Polymers -Natural Polymers	Paper 1 and 2 Revision	Paper 1 and 2 Revision	-Working Scientifically and Maths Skills -Revision of Required Practicals	Paper 2 Revision
<b>Assessment</b>	-Rates of Reaction KLT -Carbon Compounds as Fuels and Feedstock KLT	-Mock Exam Paper 1 -Reactions of Alkenes and Alcohols KAT	Preparation for Mock Exam Paper 2	Mock Exam Paper 2	External Examination Paper 1	External Examination Paper 2
<b>Interleaving</b>	Chemical and physical changes from KS3.	Elements, compounds & mixtures and ion formation from KS3.	Selected year 10 work.	Selected year 10 work.	Selected year 10 work.	Selected year 10 work.