

Curriculum Content Overview:

The AQA required practicals are embedded within the relevant theory sections throughout the GCSE and A level course.

	AQA GCSE Chemistry - 8462			AQA A level chemistry- 7405	
	Year 9	Year 10	Year 11	Year 12	Year 13
Autumn term	States of matter, elements compounds mixtures and separating techniques Atomic structure Isotopes and calculating RAM	Metals- bonding, alloys, rusting, reactivity series, reaction of metals with oxygen .acids, displacement, extraction of metals, Chemistry calculations part 1- RAM, Mr and atom economy	Organic chemistry, fractional distillation and crude oil, cracking, hydrocarbons, Alkenes and their reactions, polymerisation, carboxylic acids, alcohols, DNA and protein chemistry Acids and bases, reactions of acids, titration calculations, rates of reaction	Atomic structure Amount of Substance Bonding and structure, Introduction to organic chemistry Kinetics 1	Carbonyl chemistry 2 Amines, amino acids, polymers, reactions of carboxylic acids Isomerism Thermodynamics Electrochemistry Period 3 chemistry
Spring term	Ionic bonding, ionic formula, ionic structures, covalent bonding, covalent structures of simple molecules Giant covalent structures, nanoparticles Writing and balancing equations	Chemistry calculations part 2 % by mass, moles from mass, reacting masses, % yield, equations from moles, gas volumes and gas calculations Electrolysis, Batteries and fuel cells	Energy changes, bond enthalpy calculations, equilibrium, Haber process, NPK fertilisers, Ions and analysis, spectroscopy.	Reactions of haloalkanes, alkenes, alcohols, Energetics Equilibrium	Electrochemistry Transition metals Reactions of aqueous ions Biochemistry Organic synthesis, organic analysis
Summer term	History of the periodic table, Metals and non- metals, group 1, group7 group 0, transition metals, ionic equation and redox	Potable water Earths early atmosphere, Greenhouse gases, carbon footprints, life cycle analysis, sustainably, earth's resources and recycling.	Revision for exams	Group 2 and 7 Kinetics 2 Carbonyl chemistry 1	Revision for exams