

# A level Chemistry

Students study the AQA A level Chemistry specification. This will be delivered by 3 teachers in line with the following curriculum plan and using the AQA scheme of work and Kerboodle resources.

## Year 12

Term	Teacher A		Teacher B	
	Content	Required practical	Content	Required practical
1	3.1.1 Atomic structure 3.1.2 Amount of substance	1 Make up a volumetric solution and carry out a simple acid-base titration	3.1.3 Bonding 3.1.5 Kinetics	3 Investigation of how the rate of a reaction changes with temperature
2	3.1.4 Energetics	2 Measurement of an enthalpy change	3.3.1 Introduction to organic chemistry	
3	3.1.6 Chemical equilibria and Le Chatelier's principle and $K_c$		3.3.2 Alkanes 3.3.3 Halogenoalkanes	
4	3.1.7 Oxidation, reduction and redox equations 3.2.1 Group 2, the alkaline earth metals	4 Carry out simple test-tube reactions to identify cations and anions in aqueous solution	3.3.4 Alkenes 3.3.5 Alcohols	5 Distillation of a product from a reaction
5	3.2.3. Group 7 (17) the halogens, 3.2.1 Periodicity		3.3.6 Organic analysis	6 Tests for alcohol, aldehyde, alkene and carboxylic acid
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Term	Teacher A		Teacher B	
No of weeks	Content	Required practical	Content	Required practical
1	3.1.8 Thermodynamics		3.3.7 Optical isomerism 3.3.8 Aldehydes and ketones	
2	3.1.12 Acids and Bases	9 Investigate how pH changes when a weak acid reacts with a strong base and when a strong acid reacts with a weak base	3.3.9 Carboxylic acids and derivatives	10 Preparation of a pure organic solid and test its purity a pure organic liquid
3	3.1.11 Electrode potentials and electrochemical cells 3.2.5 Transition metals	8 Measuring the EMF of an electrochemical cell	3.1.9 Rate equations 3.3.10 Aromatic chemistry 3.3.11 Amines 3.3.12 Polymers	7 Measuring the rate of a reaction by an initial rate method by continuous monitoring method
4	3.2.6 Reactions of ions in aqueous solutions	11 Carry out simple test-tube reactions to identify transition metal ions in aqueous solution	3.3.13 Amino acids, proteins and DNA	
5	3.2.4 Properties of period 3 elements and their oxides		3.1.10 Equilibrium constant for homogenous systems 3.3.15 Nuclear magnetic resonance spectroscopy	12 Separation of species by thin-layer chromatography

			3.3.16 Chromatography 3.3.14 Organic synthesis	
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