

KS5 Year 12 Chemistry

We follow the AQA A level Chemistry curriculum. Please refer to the [AQA A level Chemistry page](#) for more information

<https://www.aqa.org.uk/subjects/science/as-and-a-level/chemistry-7404-7405/introduction>

Autumn Term		Spring Term		Summer Term			
<p>Key knowledge: Physical Chemistry: 3.1.1 Atomic structure 3.1.2 Amount of substance 3.1.3 Bonding</p> <p>Organic Chemistry: 3.3.1 Into to organic Chemistry 3.3.2 Alkanes 3.3.3 Halogenoalkanes</p> <p>Please refer to the specification from AQA: https://filestore.aqa.org.uk/resources/chemistry/specifications/AQA-7404-7405-SP-2015.PDF</p>		<p>AAFPOL 1</p> <p>Week beginning 03/12/2024</p> <p>Atomic structure Amount of substance Intro to organic chem Alkanes Halogenoalkanes</p>	<p>Key knowledge: Physical chemistry: 3.1.4 Energetics 3.1.5 Kinetics 3.1.6 Chemical equilibria, Le Chatelier's principle and Kc</p> <p>Inorganic: 3.2.1 Periodicity</p> <p>Organic Chemistry: 3.3.4 Alkenes 3.3.5 Alcohols</p> <p>Please refer to the specification from AQA: https://filestore.aqa.org.uk/resources/chemistry/specifications/AQA-7404-7405-SP-2015.PDF</p>		<p>Key Knowledge: Physical: 3.1.7 Oxidation, reduction and redox equations 3.1.7 Thermodynamics (A level content)</p> <p>Inorganic: 3.2.2 Group 2 (alkaline Earth metals) 3.2.3 Group 7 (17), (the halogens)</p> <p>Organic Chemistry: 3.3.6 Organic analysis 3.3.7 Optical isomerism (A level content)</p> <p>Please refer to the specification from AQA: https://filestore.aqa.org.uk/resources/chemistry/specifications/AQA-7404-7405-SP-2015.PDF</p>		<p>AAFPOL 2 Full AS paper All year 12 content</p>
<p>Assessment: Required practicals Assessed homework PAR tasks</p>	<p>Required practicals Titrations</p>		<p>Assessment: Required practicals Assessed homework PAR tasks</p>	<p>Required practicals: Enthalpy change Effect of temperature on rate of reaction. Distillation of a product from a reaction</p>	<p>Assessment: Required practicals Assessed homework PAR tasks</p>	<p>Required practicals: Identifying anions and cations</p>	
<p>Enrichment Opportunities: Access to practical techniques used in lab</p>			<p>Enrichment Opportunities:</p>		<p>Enrichment Opportunities:</p>		
<p>Useful websites:</p> <p>Chemistry guide: https://www.chemguide.co.uk/ Maths and physics tutor: https://www.physicsandmathstutor.com/chemistry-revision/a-level-aqa/ Chemistry student: https://www.chemistrystudent.com/</p>							

Year 13 Chemistry

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Autumn Term		Spring Term		Summer Term	
<p>Key knowledge:</p> <p>Physical Chemistry: 3.1.9 Rate equations 3.1.10 Equilibrium constant K_p for homogeneous systems</p> <p>Inorganic: 3.2.4 Properties of Period 3 elements and their oxides</p> <p>Organic Chemistry: 3.3.8 Aldehydes and ketones 3.3.9 Carboxylic acids and derivatives 3.3.10 Aromatic chemistry 3.3.11 Amines</p> <p>Please refer to the specification from AQA: https://filestore.aqa.org.uk/resources/chemistry/specifications/AQA-7404-7405-SP-2015.PDF</p>		<p>AAFPOL 1 W/B 20/01/2025</p> <p>All year 12 content PLUS Thermodynamics Optical isomerism Rate equation Aldehydes and ketones Carbox acids Arenes</p> <p>Key knowledge:</p> <p>Physical chemistry 3.1.11 Electrode potentials and electrochemical cells 3.1.12 Acids and bases</p> <p>Inorganic: 3.2.5 Transition metals 3.2.6 Reactions of ions in aqueous solution</p> <p>Organic Chemistry: 3.3.12 Polymers 3.3.13 Amino acids, proteins and DNA 3.3.14 Organic synthesis 3.3.15 NMR 3.3.16 Chromatography</p> <p>Please refer to the specification from AQA: https://filestore.aqa.org.uk/resources/chemistry/specifications/AQA-7404-7405-SP-2015.PDF</p>		<p>AAFPOL 2</p> <p>Full paper 1, 2, and 3</p> <p>Key Knowledge:</p>	
<p>Assessment: Required practicals Assessed homework PAR tasks</p>	<p>Required practicals: Test for aldehydes, alcohols, alkene and carboxylic acid Measuring the rate of reaction Preparation of a organic solid and test its purity Preparation of a pure organic liquid</p>	<p>Assessment: Required practicals Assessed homework PAR tasks</p>	<p>Required practicals: Measuring EMF Investigate how pH changes when a weak acid reacts with a strong base and also strong acid with a weak base. Testing for transition metal ions in aqueous solution Thin layer Chromatography</p>	<p>Required practicals:</p>	
<p>Enrichment Opportunities:</p>		<p>Enrichment Opportunities:</p>		<p>Enrichment Opportunities:</p>	
<p>Useful websites:</p> <p>Chemistry guide: https://www.chemguide.co.uk/ Maths and physics tutor: https://www.physicsandmathstutor.com/chemistry-revision/a-level-aqa/ Chemistry student: https://www.chemistrystudent.com/</p>					