

CHEMISTRY – Year 10 2023-2024

Course title: GCSE Chemistry	Exam board: AQA	Specification code: 8462
How will students be assessed?		
<p>Students will sit two external exams at the end of Year 11. Each paper is worth 50% of their final GCSE grade. Both exams will be 1 hour and 45 minutes in length requiring students to answer multiple choice, structured, closed short answer and open response questions. Questions will be knowledge based as well as drawing on the practical work that students have completed throughout the course.</p> <p>Paper 1: This will assess the topic areas of atomic structure, the periodic table, bonding, structure, the properties of matter; quantitative chemistry, chemical changes and energy changes.</p> <p>Paper 2: This will assess the topic areas of organic chemistry, the rate and extent of chemical change, chemical analysis, chemistry of the atmosphere and how we use natural resources.</p> <p>In year 9 students began the GCSE course and studied atomic structure, the periodic table and had an introduction to chemical bonding.</p> <p>At the end of each topic students will carry out a STAR assessment in class.</p>		

Half term	Key content
1	<p>Atomic Structure, Bonding, structure and the properties of matter</p> <p>Students will analyse structures that show atoms arranged as molecular or giant structures. Theories of bonding explain how atoms are held together in these structures.</p>
2	<p>Chemical Changes (Part 1)</p> <p>Students will learn about the reactions of a number of groups of chemicals including acids, metals and salts. They will complete a large quantity of practical experiments and analyse their observations, writing chemical equations to support their analysis.</p> <p>Required practical 1</p>
3	<p>Chemical Changes (Part 2)</p> <p>Students will learn how electrolysis involves using electricity to break down electrolytes to form elements. The products of electrolysis can be predicted for a given electrolyte.</p> <p>Required practical 3</p>
4	<p>Organic Chemistry</p> <p>Students will learn about the chemistry of carbon compounds including how they are modified in many ways to make new and useful materials such as polymers, pharmaceuticals, perfumes and flavourings, dyes and detergents.</p>
5	<p>Quantitative Chemistry</p> <p>Students will use quantitative analysis to determine the formulae of compounds and the equations for reactions. Given this information, students can then use quantitative methods to determine the purity of chemical samples and to monitor the yield from chemical reactions.</p> <p>Required practical 2</p>
6	<p>Chemistry of the Atmosphere</p> <p>Students will learn how the Earth's atmosphere is dynamic and forever changing. They will study the impact of human activity on the atmosphere and the effect this is having on our environment.</p>

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