

Combined Chemistry Year 11 Curriculum Overview

What is the Year 11 Chemistry curriculum aiming to achieve?

What do we want our Year 10 Scientists to be like?	How are we building on prior learning?	How can parents/carers support their child's learning?
<ul style="list-style-type: none"> • Be excited and enthusiastic about the scientific world around us • Be safe and competent practical scientists • Be able to make links between observations and scientific theory • Be good verbal and written communicators using key terms • Have furthered their understanding of key concepts in Chemistry 	<ul style="list-style-type: none"> • We will make links to and build on the Chemistry topics from Year 10 and KS3 • We will build on our working scientifically skills in the areas of analysis, communication, enquiry and problem solving 	<ul style="list-style-type: none"> • Talk to the pupils about what they are learning about in lessons • Be curious about the world around you and discuss with your child • Support your child with homework tasks • Help your child consolidate their school learning e.g. using BBC Bitesize or watching scientific documentaries

How are we organising the Year 11 Chemistry curriculum?

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topics	The rate and extent of chemical change	Revision for December PPEs	Organics Chemistry	Chemistry of the atmosphere	Revision programme	GCSEs
Threshold Concepts	The speed of a chemical reaction can be manipulated by different factors		Crude oil is a mixture that can be separated into many useful products	The Earth's atmosphere is dynamic and always changing. Some of these changes are natural others are man-made.		
Skills	Plan experiments to make observations to test hypotheses		Use scientific vocabulary, terminology and definitions	Use scientific vocabulary, terminology and definitions		
Enrichment within the curriculum	All Personalised Learning Checklists have QR codes for each topic that will take them to the relevant GCSEpod video to support learning in lessons. Practical experiments will take place whenever necessary					
Cross curricular links	<ul style="list-style-type: none"> • Geography? – crude oil? • Mathematics – rearranging equations, drawing tangents to curves, calculating surface areas and volumes of cubes (rates) 					
Extra-curricular opportunities	<p>Chemistry staff are available each week at Year 11 Core Revision Café. In addition to this there are also online platforms where you can visit to get some extra help with Chemistry. GCSE Pod is brilliant to use as revision. BBC Bitesize and Seneca learning websites below are also very helpful. There are also the CGP revision guides we recommend that can help with homework tasks and revising for exams. These are available on Parent Pay and you can collect your guides if you bring a copy of your receipt to the Science workroom. If you want to check out some careers in Chemistry click on this link Chemistry job profiles RSC Education</p> <p><u>Helpful websites</u></p> <ol style="list-style-type: none"> 1. BBC Bitesize Chemistry : GCSE Chemistry (Single Science) - BBC Bitesize Combined Chemistry Trilogy : Chemistry (Combined Science) - GCSE Combined Science Revision - AQA Trilogy - BBC Bitesize 2. Seneca learning Chemistry : Seneca - Learn 2x Faster (senecalearning.com) <p>Combined Chemistry Trilogy</p>					

Foundation : [Seneca - Learn 2x Faster \(senecalearning.com\)](https://www.senecalearning.com)
 Higher : [Seneca - Learn 2x Faster \(senecalearning.com\)](https://www.senecalearning.com)

What are the intended outcomes of the Year 11 Chemistry curriculum?

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Opportunities to show progress (Assessments)	End of topic test Organics CTG HWKS	End of topic tests rates CTG HWK PPE 1 (paper 1)	Regular revision tests HWK CTG	Regular revision tests HWK CTG PPE 2 (paper 2)	Regular revision tests	GCSE examinations
Impact on personal development (SMSC)	Spiritual understanding – science is the study of nature and the curriculum aims to bring about the awe and wonder of the natural world. Moral – The environmental implications of burning crude oil Social – working together in groups to investigate science practically and understand how science affects society.					
Preparation for the next stage of education	<i>Topics taught over the GCSE topic lead onto A-Level Chemistry in particular; The rate and extent of chemical change, organic chemistry and quantitative chemistry.</i>					