

Chemistry @ WBS Year 12 Roadmap

Subject Aim: To build on prior GCSE Knowledge in Chemistry and to introduce key areas of Physical, Inorganic, Organic and Analytical Chemistry and to become confident with key practical techniques. Topics will be split across two teachers. One will cover Organic and Calculations, the other Inorganic and Physical.

Autumn Term	Topic 1.0 – Core Chemistry
	Fundamentals of formulae and naming
	Topic 1.1 Atomic Structure
	Basics of atomic structure and mass spec
	Topic 1.2 Amount of substance
	Calculations
	Topic 1.3 Bonding
	Types of bonding and intermolecular forces
	Topic 2.1 Periodicity
	Trends across periods
Spring Term	Topic 1.4 Energetics
	Energies involved in reactions
	Topic 3.1 Intro to Organic Chemistry
	Basics of Carbon chemistry
	Topic 1.5 Kinetics
	How different factors affect the rate of rxn
	Topic 1.6 Equilibria
	Reversible reactions and the effects on them
	Topic 1.7 Redox
	Oxidation and Reduction in reactions
Summer Term	Topic 3.2 Alkanes
	Chemistry and reactions of the alkanes
	Topic 3.3 Haloalkanes
	Chemistry and reactions of the haloalkanes
	Topic 3.4 Alkenes
	Chemistry and reactions of the alkenes
TTP	Topic 3.5 Alcohols
	Chemistry and reactions of the alcohols
	Topic 2.2 Group 2
Chemistry & reactions of the group 2 elements	
Topic 2.3 Group 7	
Chemistry & reactions of the group 7 elements	
Topic 3.6 Organic Analysis	
Using instrumentation to determine structure	
At timetable promotion you will move on to Y13 content	

Assessment

There will be 5 formal Key Assessments in Y12. Each will be a test of all of the content you have covered up to that point in time. You will be given the topic titles that you need to revise 2-3 weeks prior to the assessment. You should also use your SIS to help you to prepare. You will be expected to revise independently outside of lesson time. The fifth assessment in Year 12 will be a formal mock exam.

Key Assessment 1	2/10/23
Key Assessment 2	30/11/23
Key Assessment 3	30/1/24
Key Assessment 4	24/4/24
Key Assessment 5	w/c 1/7/24

Independent Study and Revision

Independent Study is set by your class teacher on Brightspace. This will include the SIS, Quizzes and written homeworks.

Announcements regarding Key Assessments will be made by the Head of Chemistry on Brightspace several weeks before the test date. You will also be told about this in lessons.

You are strongly advised to revisit your notes often throughout the year to consolidate your learning and to make assessment preparation as straightforward as possible.

Enrichment themes

We will highlight links to careers in and utilising Chemistry throughout the year. You are encouraged to approach your Chemistry teachers for further advice on pursuing Chemistry at a higher level.

There will also be chance to take part in the RSC Chemistry Olympiad.

Where Next?

Year 13 to continue your studies and to find out more about life after school

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Homework and Revision

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