Chemistry @ WBS Year 13 Roadmap

Subject Aim: To build on Year 12 Chemistry knowledge and to develop confidence in further areas of Physical, Inorganic, Organic and Analytical Chemistry and to use key practical techniques confidently. Topics will be split across two teachers. One will cover Organic and Calculations, the other Inorganic and Physical. (*The order is correct, not all in numerical order*)

Topic 1.8 Thermodynamics

Looking at different factors that affect rxns

Topic 1.9 Rate equations

Looking at rates quantitatively

Topic 1.10 Kp

Calculating equilibrium constants for gases

Topic 1.12 Acids + bases

Reactions of acids, bases and buffers

Topic 1.11 Electrochemical Cells

The chemistry of batteries and fuel cells

Topic 3.7 Naming and Isomerism

Chemistry of Isomers & naming compounds

Topic 3.15 Structure Determination

Using instrumentation to determine structure

Topic 3.8 Aldehydes and ketones

Chemistry of aldehydes and ketones

Topic 3.9 Carboxylic acids

Chemistry of carboxylic acids

Topic 3.10 Aromatic Chemistry

Chemistry of aromatic compounds

Topic 3.11 Amines

Chemistry of amines

Topic 3.12 Polymerisation

Chemistry of polymers

Topic 2.4 Period 3

Chemistry and trends of Period 3

Topic 2.5 Transition metals

Chemistry of Transition metals

Topic 2.6 Reactions of aqueous ions

Chemistry of aqueous metal ions

Topic 3.13 Amino acids, proteins and DNA

Chemistry of amino acids, proteins and DNA

Topic 3.14 Organic Synthesis and Analysis

Links all Organic Chemistry (Topic 3) together

Topic 3.16 Chromatography

Analysing mixtures

Practical Questions

Review of all the Required practical's

Revision

Review all content from year 12+13

Assessment

There will be formal Key Assessments throughout Y13. 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 second, third and fourth

assessment in Year 13 will be mock exams.

Extra Assessment if needed	4/9/23
Key Assessment 1	7/11/23
Key Assessment 2	11/1/24
Key Assessment 3	w/c 4/3/24

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.

Rev

Where Next?

University degree, higher level Apprenticeship or gap year - enjoy-