## 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 3.8 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

## **Topic 3.15 Structure Determination**

Using instrumentation to determine structure

#### **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.

Key Assessment 1	
Key Assessment 2	
Key Assessment 3	
Key Assessment 4	

#### Homework and Revision

Homework 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.

# nmer