



Year 11 Chemistry Course outline

Students have two lessons per cycle taught by specialist Chemistry teachers. Homework is set once per cycle.			
	Topic and approximate duration	Key learning areas	Assessed Homework
Autumn term 1	Topic: Organic Chemistry (Part 1)	Organic chemistry is the study of carbon based compounds; the very study of life. We will start by looking at crude oil as a source of hydrocarbons, including how it is made and how it is extracted and separated, using fractional distillation. We will then look at the properties of alkanes and how we can crack these to make alkenes. We will discuss the reactions of both of these class of compounds, comparing them both. Students will study alcohols, carboxylic acids and esters, looking at the reactivity, properties and structures of each. We will also compare them to each other.	
	Nature of landmark assessment	Longer answer question mid topic assessment and short and longer answer questions end of topic assessment	
Spring Term	Topic: Organic Chemistry (Part 2)	In the next part of organic chemistry, we will turn our attention to biological molecules. We will discuss the structure of DNA and natural polymers, and compare addition polymerisation to condensation polymerisation.	
	Nature of landmark assessment	Mock Examinations during assessment weeks	
Spring term 1	Topic: Using resources	How we get the resources that we need for everyday life is at the forefront of the chemical industry. We will discuss the difference between finite and renewable resources, and look at life cycle assessments as a method for evaluating these. We will also study water, and how to treat waste water. Then we will look at metals again, this time discussing rusting, alloys and metal extraction when we have a growing demand and diminishing supply. Students will also compare glass, ceramics and composites. Finally, we will look at how to make ammonia via the haber process. Required practical 8 – purify and test water	
	Nature of landmark assessment	Longer answer question mid topic assessment and short and longer answer questions end of topic assessment on all topics studied in Year 9 and Year 10 during assessment week.	

Summer Term 2 onwards	Topic: Revision	Revision of course for GCSE examinations	
	Nature of landmark assessment	Longer answer question mid topic assessment and short and longer answer questions end of topic assessment	