



## Year 11 Chemistry (Combined) Course outline

	<p><b>Students have two lessons per cycle taught by specialist Chemistry teachers.</b></p> <p><b>Homework is set once per cycle.</b></p>		
	<b>Topic and approximate duration</b>	<b>Key learning areas</b>	<b>Assessed Homework</b>
<b>Autumn term 1</b>	<b>Topic: Organic Chemistry</b>	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.	
	<b>Nature of landmark assessment</b>	Longer answer question mid topic assessment and short and longer answer questions end of topic assessment	
<b>Autumn Term 2</b>	<b>Revision for Mocks</b>	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.	
		<b>Assessed practical: 8 – purify and test water</b>	
	<b>Nature of landmark assessment</b>	Mock examinations during assessment week(s)	
<b>Spring term 1</b>	<b>Topic: Using resources</b>	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.	

	<b>Nature of landmark assessment</b>	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.	
<b>Spring Term 2 onwards</b>	<b>Topic: Revision</b>	Revision of course for GCSE examinations	
	<b>Nature of landmark assessment</b>	Longer answer question mid topic assessment and short and longer answer questions end of topic assessment	