

Year 9 - AQA GCSE Chemistry 8462

Timing	Unit Title	Key Question	Knowledge	Assessing understanding
Autumn Term	Atomic Structure Chapter 1	What makes an atom?	<ul style="list-style-type: none"> • Atoms and isotopes • Arrangement of electrons in atoms • How theories of atomic structure have developed • History of the Periodic Table 	<p>How understanding is assessed</p> <p>Students will be assessed on their ability to:</p> <ul style="list-style-type: none"> • Recall the knowledge covered • Explain chemical phenomena • Interpret graphical and experimental data • Plan and describe valid experiments • Evaluate experimental procedures and results. <ul style="list-style-type: none"> • Description • Explanation • Evaluation • Comparison • Planning and carrying out investigations <p>Assessment point information</p> <p>Based on:</p> <ul style="list-style-type: none"> • Written test on structure of the atom • Required Practical 6 – Chromatography • Teacher continuous assessment.
	Separation Chapter 1	How can mixtures of elements or compounds be separated?	<ul style="list-style-type: none"> • Compound and mixtures • Separation techniques • Required Practical 6 - Chromatography 	
	Introduction to Organic Chemistry: Alkanes Chapter 9	Why is society so reliant on non-renewable crude oil?	<ul style="list-style-type: none"> • Nomenclature and Formulation of alkanes • Properties of alkanes • Introduction to Crude Oil 	

Spring Term	Alkanes Chapter 9	Why is society so reliant on non-renewable crude oil?	<ul style="list-style-type: none"> Fractional distillation of crude oil Properties and uses of crude oil fractions Combustion of hydrocarbons Cracking and the production of alkenes 	How understanding is assessed Students will be assessed on their ability to: <ul style="list-style-type: none"> Recall the knowledge covered Explain chemical phenomena Interpret graphical and experimental data Plan and describe valid experiments Evaluate experimental procedures and results. <ul style="list-style-type: none"> Description Explanation Evaluation Comparison Planning and carrying out investigations Chemical calculations Assessment point information Based on: <ul style="list-style-type: none"> Written test on alkanes and alkenes Teacher continuous assessment.
	Alkenes Chapter 10.1 and 11.1	How are plastics made?	<ul style="list-style-type: none"> Reactions of alkenes Making polymers 	
	Earth's atmosphere Chapter 13	What gases are in the atmosphere and how did they get there?	<ul style="list-style-type: none"> Earth's atmosphere in the past Earth's present atmosphere Greenhouse gases Atmospheric pollutants 	

Summer Term	Review and end of year exam Rate of reaction Chapter 8	How can we apply the chemical ideas we have learned so far? Why is it important to know how fast a reaction goes?	<ul style="list-style-type: none">● Revision and exam paper practice ● Collision theory● Effect of concentration, temperature, pressure, surface area and catalyst on rate● Experimental investigation of rate● Graphical analysis of rate data	How understanding is assessed Students will be assessed on their ability to: <ul style="list-style-type: none">● Recall the knowledge covered● Explain chemical phenomena● Interpret graphical and experimental data● Plan and describe valid experiments● Evaluate experimental procedures and results. <ul style="list-style-type: none">● Description● Explanation● Evaluation● Comparison● Planning and carrying out investigations Assessment point information Based on: <ul style="list-style-type: none">● End of year exam● Required Practical 5 – Effect of concentration on the rate of reaction.
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