

Year 9 - AQA GCSE Chemistry 8462

Timing	Unit Title	Key Questions	Knowledge	Assessing understanding
Autumn Term	Atoms, Equations and the Periodic Table Chapter 1 and Chapter 2.1 and 2.2	How was the Periodic Table developed?	<ul style="list-style-type: none"> Comparison of Mendeleev's and Newlands' proposals Hypotheses, predictions and evidence 	<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 information</p> <p>Assessment point data based on:</p> <ul style="list-style-type: none"> Short written test on structure of the atom, separating mixtures and the Periodic Table Short written test on history and structure of the atom Required Practical 6 – Chromatography <p>These assessments will be used for the assessment point reported home.</p>
		How can mixtures of elements or compounds be separated? How can we analyse the components of a mixture?	<ul style="list-style-type: none"> Definitions of compounds and mixtures Separation techniques - filtration, distillation, chromatography Required Practical 6 Rf calculations, reproducibility 	
		What are the components of an atom? How do reactions make new substances?	<ul style="list-style-type: none"> Chemical formulae Conservation of mass and balanced equations Subatomic particles and isotopes Arrangement of electrons in atoms How theories of atomic structure have developed Peer review 	

	Introduction to Organic Chemistry: Alkanes Chapter 9	What is crude oil and how do we use it?	<ul style="list-style-type: none"> • Formulation and separation of crude oil • Naming and drawing alkanes • Properties of alkanes • Combustion of alkanes 	
Spring Term	Organic Chemistry: Alkanes Chapter 9 Alkenes Chapter 10.1 and 11.1	What is crude oil and how do we use it? What else can we make from crude oil?	<ul style="list-style-type: none"> • Pollution from burning fossil fuels • Cracking and the production of alkenes • Naming and drawing alkenes • Reactions of alkenes - hydration, hydrogenation, halogenation • Making polymers 	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 • Description • Explanation • Evaluation • Comparison • Planning and carrying out investigations • Chemical calculations Assessment information Student understanding will be checked using: <ul style="list-style-type: none"> • Short written test on alkanes and alkenes • Short written test on rates of reaction These will not be used to inform an assessment point reported home.

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				Assessment information Assessment point data based on: <ul style="list-style-type: none">● End of year exam This will be used to determine the grade used in the assessment point sent home.
	Earth's atmosphere Chapter 13	What is the composition of the Earth's atmosphere? How has it developed and changed?	<ul style="list-style-type: none">● Earth's atmosphere in the past● Earth's present atmosphere● Greenhouse gases● Development of theories and peer review	Student understanding will also be checked using: <ul style="list-style-type: none">● Required Practical 5 - Rates of reaction● Past paper questions on Chapter 13 These will not be used to determine the grade used in the assessment point sent home.