

Subject:

Chemistry



HECKMONDWIKE
GRAMMAR SCHOOL

KS4 - Year 11 Curriculum Overview

	Topics being taught	What you will be assessed on	How you can support at home
Autumn Term	C6 Rate and extent of reactions Reversible reactions and Le Chateliers principle. The Haber process and manufacture of fertilisers and their use.	Y11 Mock 1 – will cover all work studied in GCSE Chemistry so far- C1,2,4,5,6,8,9,10	Use the AQA specification to review your knowledge and focus on gaps in knowledge
	C7 Organic Chemistry Crude oil and reactions of alkanes including combustion and cracking. Reactions of alkenes, alcohols, carboxylic acids and formation of esters. Polymerisation and life cycle assessment of products.	C7 Organic Chemistry – Separation of crude oil and fractional distillation. Equations for combustion of alkanes and cracking of alkanes.	Regular low stakes testing on Educake and Seneca can help you remember more!
		C7 Organic Chemistry - Addition reactions of alkenes. Formation and reactions of alcohols with oxygen, water and sodium metal. Properties of carboxylic acids and formation of esters. Addition and condensation polymerisation including formation of proteins and DNA	Read Organic chemistry notes on bitesize and watch free science lessons organic chemistry videos....
			Think about products you use at home and assess their life cycles! Think about the raw materials, manufacturing, use and disposal

CHRISTMAS HOLIDAYS - CHRISTMAS HOLIDAYS - CHRISTMAS HOLIDAYS - CHRISTMAS HOLIDAYS

	Topics being taught	What you will be assessed on	How you can support at home
Spring Term	C3 Quantitative Chemistry Conservation of mass and mass changes when a reactant or product is a gas. Moles and their use in calculating amounts of reactants and products in chemical reactions. Yields and atom economy. Concentrations of solutions and titration calculations. Volumes of gases and amount of substance.	How mass is conserved in a range of chemical reactions. Calculating the Mr and moles of a substance. Reacting mass calculations including the idea of a limiting reactant. Atom economy and percentage yield.	Bitesize AQA quantitative Chemistry
		Y11 Mock 2 All GCSE units covered except the later content in C3 concentration calculations and gas calculations	Videos at free science lessons on this topic
			How to do titrations!
			Gas volumes and calculations

EASTER HOLIDAYS - EASTER HOLIDAYS - EASTER HOLIDAYS - EASTER HOLIDAYS - EASTER HOLIDAYS

	Topics being taught	What you will be assessed on	How you can support at home
Summer Term	Final exam preparation and revision in class	Paper 1 – Units 1 through 5	Encourage students to practise past paper questions (Higher tier) from the AQA website
		Paper 2 – Units 6 through 10 plus relevant content from Unit ½ and 3 (see specification for more detail)	Continue to use educake to help you remember more!