FAIRFAX
SINCERITAS LABORIS

YEAR 10 CURRICULUM INFORMATION – Chemistry		
	Summer 1	Summer 2
What will students be learning?	**C9 - Crude oil and fuels** Students will learn about hydrocarbons and be introduced to the alkanes and fractional distillation. They should be able to identify alkanes from their formulae and be able to name and draw the displayed formula of the first four alkanes. Students will learn about some of the reactions of hydrocarbons, including combustion (both complete and incomplete) and cracking. All students should be able to write balanced symbol equations for the complete combustion of hydrocarbons and describe the conditions of cracking.	**C4 - Chemical calculations** Students will use calculations to work out how different chemicals can react together, establish patterns, and make predictions about chemicals in industry.
How will students be assessed?	C9 (Crude oil and fuels) checkpoint	
Literacy – What keywords will be taught?	Functional group, Homologous series, Alkenes, Addition reactions, Alcohol, Carboxylic acids, Esters, Combustion, Oxidation, Strong and weak acids, Ionise, Catalyst	Law of conservation of mass, reactant, product, relative formula mass, decomposition, uncertainty, moles, Avogadro's constant, balanced, ratio, limiting reactant, concentration, atom economy, yield, theoretical, volume, pressure
What employability skills are being developed?	Synthesis of organic compounds, analytical techniques	Analytical, mathematical, problem solving
Wider Curriculum Links?	Business (supply and demand) Analysis	Maths (manipulating data) Physics (conservation of mass)
What useful websites are there for this topic?	 Free science lessons  Primrose Kitten  Seneca  BBC Bitesize	 Free science lessons  Primrose Kitten  Seneca  BBC Bitesize
What wider reading could be done for this topic?	Textbooks: AQA Chemistry for GCSE Combined Science: Trilogy (Oxford)	Textbooks: AQA Chemistry for GCSE Combined Science: Trilogy (Oxford) Textbooks: AQA Chemistry for GCSE Separate Science (Oxford)

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What else can students be doing independently to develop their understanding of this topic?	Exam questions Numeracy practice	Exam questions Numeracy practice – ratios, uncertainty Rearrangement of equations Calculator skills