FAIRFAX
SINCERITAS LABORIS

YEAR 10 CURRICULUM INFORMATION – Chemistry		
	Spring 1	Spring 2
What will students be learning?	**C8 - Rates of reaction** Students will learn about collision theory and surface area, temperature, pressure, concentration, and catalysts. They will them move onto reversible reactions and energy, dynamic equilibrium and then higher tier will also cover altering conditions.	**C8 - Rates of reaction** Students will learn about collision theory and surface area, temperature, pressure, concentration, and catalysts. They will them move onto reversible reactions and energy, dynamic equilibrium and then higher tier will also cover altering conditions.
How will students be assessed?	Required practical – How changes in concentration affect the rates of reactions by a method involving measuring the volume of a gas produced and a method involving a change in colour or turbidity	C8 (Rates of reaction) Checkpoint Required practical – How changes in concentration affect the rates of reactions by a method involving measuring the volume of a gas produced and a method involving a change in colour or turbidity
Literacy – What keywords will be taught?	Collision, Activation energy, Reactant, Product, Tangent, Gradient, Rate, Temperature, Concentration, Pressure, Surface area, Catalyst, Frequency, Successful, Reversible, Dynamic, Equilibrium, Endothermic, Exothermic, Le Chatelier's principle	Collision, Activation energy, Reactant, Product, Tangent, Gradient, Rate, Temperature, Concentration, Pressure, Surface area, Catalyst, Frequency, Successful, Reversible, Dynamic, Equilibrium, Endothermic, Exothermic, Le Chatelier's principle
What employability skills are being developed?	Skills such as investigative and analytical which can lead to careers as: Explosives engineer, Chemical manufacturer, Chemical engineer, Research scientist, Gas engineer	Skills such as investigative and analytical which can lead to careers as: Explosives engineer, Chemical manufacturer, Chemical engineer, Research scientist, Gas engineer
Wider Curriculum Links?	Biology (How different conditions impact on reactions) Food (How temperature affects food production) Maths (Interpreting and creating graphs, rearranging equations, tangents, creating and interpreting tables, fractions)	Biology (How different conditions impact on reactions) Food (How temperature affects food production) Maths (Interpreting and creating graphs, rearranging equations, tangents, creating and interpreting tables, fractions)
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 Separate Science: Trilogy (Oxford)	Textbooks: AQA Chemistry for GCSE Combined Science: Trilogy (Oxford) Textbooks: AQA Chemistry for GCSE Separate Science: Trilogy (Oxford)

What else can students be doing independently to develop their understanding of this topic?	Exam questions Numeracy practice	Exam questions Numeracy practice