

Chemistry Year 10	Curriculum intent: The Science curriculum across key stage 4 enables students to further develop their scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics. It enables them to develop their understanding of the nature, processes and methods of science that help them to answer scientific questions about the world around them. This then equips them with the scientific skills required to understand the uses and implications of science today and in the future.											
Term	1			2				3				
Interleaving	Key knowledge from previously studied topics			Key knowledge from previously studied topics				Key knowledge from previously studied topics				
Knowledge Separate Chemistry	Bonding and Structure, Properties of Matter Quantitative Chemistry Chemical Changes 1			Chemical Changes 2 Energy Changes				Rate and Extent of Chemical Change				
Understanding Separate Chemistry	Apply Knowledge in a range of different contexts opportunities to include: Explaining how fractional distillation can be used to separate different hydrocarbons Analysing evidence that links the greenhouse effect to global warming Investigating the use of a range of exothermic and endothermic chemical reactions			Apply Knowledge in a range of different contexts opportunities to include: Investigating the relationship between exothermic and endothermic reactions and bond energy Investigating how the rate of a variety of chemical reactions can be changed and measured				Apply Knowledge in a range of different contexts opportunities to include: Examining the wide range of ways the reactivity series enables us to extract metals from their ores; methods include displacement, reduction and electrolysis Investigating how the voltage produced by a cell is dependent on the type of metal.				
Knowledge Combined Chemistry	Bonding and Structure, Properties of Matter Quantitative Chemistry Chemistry of the Atmosphere			Chemical Changes 2 Energy Changes				Rate and Extent of Chemical Change				
Understanding Combined Chemistry	Apply Knowledge in a range of different contexts opportunities to include: Explaining how fractional distillation can be used to separate different hydrocarbons Analysing evidence that links the greenhouse effect to global warming			Apply Knowledge in a range of different contexts opportunities to include: Investigating the use of a range of exothermic and endothermic chemical reactions Investigating how the rate of a variety of chemical reactions can be changed and measured				Apply Knowledge in a range of different contexts opportunities to include: Investigating how the rate of a variety of chemical reactions can be changed and measured				
Skills	Scientific thinking Experimental skills Analysis and evaluation Scientific vocabulary			Scientific thinking Experimental skills Analysis and evaluation Scientific vocabulary				Scientific thinking Experimental skills Analysis and evaluation Scientific vocabulary				
Assessment	End of topic Tests			End of topic Tests				End of topic Tests				