	Year:10 Subject: Chemistry (Trilogy) **IMPLEMENTATION**					
INTENT (including key concepts and skills)	**Half Term 1** **Context:** C3 Chemical Changes **Key Vocabulary:** Metal ore, reactivity series, oxidation, reduction, displacement reaction, pH scale, neutralisation, indicator **Prior Learning** Y7 R1 Acids and Alkalis Y8 R4 Reactivity Y9 R5 Reactions with Metals **Cultural Capital:** How commonly used metals are extracted	**Half Term 2** **Context:** C3 Electrolysis **Key Vocabulary:** Electrolysis, electrolyte, electrode, anode, cathode, aqueous solutions, half equation, oxidation and reduction in terms of electrons, aqueous solution, aluminium, molten **Prior Learning** C2 Ionic Compounds **Cultural Capital:** How useful aluminium is extracted and the environmental implications	**Half Term 3** **Context:** C3 Energy Changes **Key Vocabulary:** Energy transfer, exothermic, endothermic, reaction profile, bond energy **Prior Learning** C2 Covalent Bonding **Cultural Capital:** Everyday applications of exothermic and endothermic reactions	**Half Term 4** **Context:** C4 Rate of reaction **Key Vocabulary:** Rate of reaction, gradient, tangent, particle, collision theory, activation energy surface area, concentration, pressure, temperature, catalyst **Prior learning:** Y7 P1 Particles and States of Matter C2 Reaction profiles and activation energy **Cultural Capital**: How conditions can change the rate of everyday reactions	**Half Term 5** **Context:** C4 Rate of reaction **Key Vocabulary:** Rate of reaction, gradient, tangent, particle, collision theory, activation energy surface area, concentration, pressure, temperature, catalyst **Prior learning:** Y7 P1 Particles and States of Matter C2 Reaction profiles and activation energy **Cultural Capital**: How catalysts can be used to improve the rate and profit of chemical reactions.	**Half Term 6** **Context:** C4 Reversible Reactions and Equilibrium **Key Vocabulary:** Reversible reaction, hydrated, anhydrous, equilibrium, Le Chatelier's Principle (HT only) **Prior Learning** C3 Endothermic and Exothermic Reactions **Cultural Capital:** Use of anhydrous copper sulfate as a test for water. How altering conditions in industrial processes can affect yield (HT only)
Applying knowledge and understanding to explain observations	X	X	X	X	X	X
Use different types of scientific enquiry to answer scientific questions	X	X	X	X	X	X
Use technical terminology with confidence accuracy and precisely	X	X	X	X	X	X
Apply mathematical knowledge to scientific understanding	X	X	X	X	X	X
Aware of some of the social and economic implications of science	X	X	X	X	X	X
IMPACT	Assessment: At end of C3	Assessment: At end of C3	Assessment: C3 End of Topic Test	Assessment: At end of C4	Assessment: At end of C4	Assessment: C4 End of Topic Test Summer Summative on Paper 1 Content.

Cultural Capital is the body of knowledge a student needs so that they can flourish in the future and not be left behind.