SCIENCE: Year 11 CHEMISTRY and PHYSICS Course Outline

Half term	TOPIC	CONTENT
1	**C2-2 Structure and Properties**	Giant ionic structures/ simple molecules/ giant covalent structures/ giant metallic structures/ the properties of polymers/ nanoscience.
	C2_3 How Much?	The mass of atoms/ masses of atoms and moles/ percentages and formulae/ equations and calculations/ the yield of a chemical reaction/ reversible reactions/ analysing substances/ instrumental analysis.
OCTOBER HALF TERM HOLIDAY		
2	**C2_4 Rates and Energy**	How fast?/ collision theory and surface area/ the effect of temperature/ the effect of concentration/ the effect of pressure/ the effect of catalysts/ catalysts in action/ exothermic and endothermic reactions/ energy and reversible reactions/ using energy transfers from reactions.
CHRISTMAS HOLIDAY		
3	**C2_5 Salts and Electrolysis**	Acids and alkalis/ making salts from metals or bases/ making salts from solutions/ electrolysis/ changes at the electrodes/ the extraction of aluminium/ the electrolysis of brine/ electroplating.
	P2_4 Current Electricity	Electrical charges/ electric circuits/ resistance/ current-potential difference graphs/ series circuits/ parallel circuits.
FEBRUARY HALF TERM HOLIDAY		
4	**P2_4 Current Electricity continued**	Electrical charges/ electric circuits/ resistance/ current-potential difference graphs/ series circuits/ parallel circuits.
	P2_5 Mains Electricity	Alternating current/ cables and plugs/ fuses/ electrical power and potential difference/ electrical energy and charge/ electrical issues.
	P2_6 Radioactivity	Observing nuclear radiation/ the discovery of the nucleus/ nuclear reactions/ alpha, beta and gamma radiation/ half-life/ radioactivity at work.
EASTER HOLIDAYS		
5	**P2_7 Energy from the Nucleus**	Nuclear fission/ nuclear fusion/ nuclear issues/ the early universe/ the life history of a star/ how the chemical elements formed.
	Revision	Recap y10 and y11 work and exam practice
	GCSE exams	C2 and P2 GCSE exam papers (1 hour each)
MAY HALF TERM HOLIDAY		
6	**GCSE exams continued**	C1 and P1 GCSE exam papers (1 hour each)