

Science Curriculum Maps 2021-2022

Key Stage 4

Year		Half term 1	Half term 2	Half term 3	Half term 4	Half term 5	Half term 6
10	Biology	Ecology <ul style="list-style-type: none"> Adaptations, interdependence and competition 	Ecology <ul style="list-style-type: none"> Organising an ecosystem Biodiversity and ecosystems 	Disease & Bioenergetics <ul style="list-style-type: none"> Communicable diseases Non-communicable diseases 	Disease & Bioenergetics <ul style="list-style-type: none"> Preventing and treating disease 	Biological Responses <ul style="list-style-type: none"> The human nervous system Hormonal coordination 	Revision for end of year exams and Practical Skills
	Chemistry	Chemical changes 1 <ul style="list-style-type: none"> The reactivity series Displacement reactions 	Chemical changes 2 <ul style="list-style-type: none"> Neutralisation reactions 	Electrolysis <ul style="list-style-type: none"> Electrolysis and its applications 	Energy changes <ul style="list-style-type: none"> Exothermic and endothermic reactions 	Rates and equilibrium <ul style="list-style-type: none"> Collision theory Dynamic equilibrium 	
	Physics	Molecules and matter (review) <ul style="list-style-type: none"> States of matter and changes of state Forces in balance <ul style="list-style-type: none"> Equilibrium and non-equilibrium of forces 	Motion <ul style="list-style-type: none"> Distance Speed Acceleration 	Forces and motion <ul style="list-style-type: none"> Force Momentum 	Electric circuits <ul style="list-style-type: none"> Electric charge, current, potential difference and resistance 	Electricity in the home <ul style="list-style-type: none"> Using and measuring electricity in appliances 	

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11	Biology	Biological Responses <ul style="list-style-type: none"> The human nervous system Hormonal coordination 	Genetics & Reproduction <ul style="list-style-type: none"> Reproduction 	Genetics & Reproduction <ul style="list-style-type: none"> Variation and evolution Genetics and evolution 	Revision	GCSE Exams	
	Chemistry	Chemistry Practical work <ul style="list-style-type: none"> Electrolysis Making Salts Displacement Temperature Changes Chemical Calculations Review Crude oil and fuels <ul style="list-style-type: none"> Hydrocarbons Chemical analysis <ul style="list-style-type: none"> Chromatography 	The Earth's atmosphere <ul style="list-style-type: none"> Evolution of the atmosphere Pollution The Earth's resources <ul style="list-style-type: none"> Finite and renewable resources 	Rates and equilibrium <ul style="list-style-type: none"> Collision theory Dynamic equilibrium 			
	Physics	Wave properties <ul style="list-style-type: none"> Wave behaviour 	Electromagnetic waves and electromagnetism <ul style="list-style-type: none"> Electromagnetic spectrum Magnetic fields 	Radioactivity <ul style="list-style-type: none"> Nuclear radiation 			