

Key Stage 4 Curriculum Overview for Triple Biology - 2023 to 2024

Year	Half Term 1	Half Term 2	Half Term 3	Half Term 4	Half Term 5	Half Term 6
10	Unit B3: Infection and response	Unit B4: Bioenergetics - <i>photosynthesis</i>	Unit B4: Bioenergetics - respiration	Unit 5: Homeostasis – nervous response	Unit 5: Homeostasis – <i>hormonal response: insulin, menstrual hormones</i>	Unit 5: Homeostasis – <i>hormonal response: ADH (inc kidney function), plant hormones</i>
	Assessments <ul style="list-style-type: none"> Mid Topic and End of Unit assessments Digital Platforms: Seneca Homework, Sparx Science, Carousel Learning and Bedrock Mapper Biology Required Practical: Rates of photosynthesis; reaction times 			Exams <u>End of Year Exam (Term 3)</u> <ul style="list-style-type: none"> Biology Paper 1: Units 1-4 - 1h45min 100 % of end of year grade 		
11	Unit B7: Ecology - adaptations and competition	Unit B7: Ecology - recycling nutrients and energy in food chains	Unit B6: Inheritance, variation and evolution - Reproduction and cell	Unit B6: Inheritance, variation, and evolution -	Consolidation, revision, and Exam Technique	Exam season
	Assessments <ul style="list-style-type: none"> Mid Topic and End of Unit assessments Digital Platforms: Seneca Homework, Carousel Learning and Bedrock Mapper Biology Required Practical: Investigating populations; rates of decay 			Mock 1 (Term 1) <ul style="list-style-type: none"> Biology Paper 1: Units 1-4 - 1h45min, 100% of overall Mock 1 Grade Mock 2 (Term 2) <ul style="list-style-type: none"> Biology Paper 2: Units 5-7 - 1h45min, 50% of overall Mock 2 Grade (other 50% is from Mock 1 Paper 1) 		

Key Stage 4 Curriculum Overview for Triple Chemistry - 2023 to 2024

Year	Half Term 1	Half Term 2	Half Term 3	Half Term 4	Half Term 5	Half Term 6
10	C3: Chemical calculations	C4.1: Chemical Change	C4.2: Electrolysis	C5: Energy Changes	C6: Rates	C6: Rates
	Assessments <ul style="list-style-type: none"> Mid Topic and End of Unit assessments Digital Platforms: Seneca Homework, Sparx Science, Carousel Learning and Bedrock Mapper Chemistry Required Practical: Making Salt, Electrolysis, Temperature Changes, Rates of Reaction, Neutralisation 			Exams <u>End of Year Exam (Term 3)</u> <ul style="list-style-type: none"> Chemistry Paper 1: Units 1-4 - 1h45min 100 % of end of year grade 		
11	C7: Crude oil & fuel, organic reactions, and polymers	C8: Chemical Analysis	C10.1: The Earth's Resources	C9: Atmosphere	C7: Crude oil & fuel	C8: Chemical Analysis
	Assessments <ul style="list-style-type: none"> Mid Topic and End of Unit assessments Digital Platforms: Seneca Homework, Carousel Learning and Bedrock Mapper Chemistry Required Practical: Chromatography, Water Purification, Identifying ions 			Mock 1 (Term 1) <ul style="list-style-type: none"> Chemistry Paper 1: Units 1-4 - 1h45min, 100% of overall Mock 1 Grade Mock 2 (Term 2) <ul style="list-style-type: none"> Chemistry Paper 2: Units 5-7 - 1h45min, 50% of overall Mock 2 Grade (other 50% is from Mock 1 Paper 1) 		

Key Stage 4 Curriculum Overview for Triple Physics – 2023 to 2024

Year	Half Term 1	Half Term 2	Half Term 3	Half Term 4	Half Term 5	Half Term 6
10	Electricity, circuits, series and parallel.	Electricity in the home, AC and DC circuits, wiring a plug, and static electricity.	The particle model of matter, density, pressure.	Radioactivity, the model of the atom, atomic structure, isotopes, fission and fusion.	Forces in balance, Newton's Laws, moments, levers and gears.	Forces in motion, acceleration, motion graphs.
	Assessments <ul style="list-style-type: none"> Mid Topic and End of Unit assessments Digital Platforms: Seneca Homework, Sparx Science, Carousel Learning and Bedrock Mapper Physics Required Practical: Resistance of a wire, series and parallel circuits, density investigation 			Exams <u>End of Year Exam (Term 3)</u> <ul style="list-style-type: none"> Physics Paper 1: Units 1-4 - 1h45min 100 % of end of year grade 		
11	Forces and motion, terminal velocity, momentum, braking and safety, Hooke's Law and Elasticity.	Forces and pressure, atmospheric pressure, deep ocean pressure. Waves properties, sound, seismic waves, refraction.	The electromagnetic spectrum, communications, waves in medicine.	Electromagnetism, magnets, the motor effect, electromagnets.	Astrophysics, big bang theory, the life cycle of stars. Revision and exam preparation.	Exam season
	Assessments <ul style="list-style-type: none"> Mid Topic and End of Unit assessments Digital Platforms: Seneca Homework and Carousel Learning Physics Required Practical: acceleration, Hooke's Law, ripple tank and waves in a solid, refraction, infrared radiation 			Mock 1 (Term 1) <ul style="list-style-type: none"> Physics Paper 1: Units 1-4 - 1h45min, 100% of overall Mock 1 Grade Mock 2 (Term 2) <ul style="list-style-type: none"> Physics Paper 2: Units 5-8 - 1h45min, 50% of overall Mock 2 Grade (other 50% is from Mock 1 Paper 1) 		