COMBINED SCIENCE STATEMENT OF AIMS

THE AIM OF THE KS4 CURRICULUM IS TO DEVELOP...

SUCCESSFUL LEARNERS

Studying Biology develops successful learners by training them to analyze complex, interconnected systems and interpret qualitative and quantitative data, fostering the sharp evaluative skills needed to decipher the living world.

Mastering Chemistry builds strong cognitive pathways in abstract reasoning and problem-solving, as students learn to seamlessly bridge the gap between observable macroscopic phenomena and subatomic models.

Engaging with Physics cultivates advanced mathematical literacy and logical deduction, empowering learners to methodically break down complex physical problems and apply universal laws to real-world technological challenges.

CONFIDENT, INSPIRED INDIVIDUALS

Biology inspires a deep sense of wonder about the natural world and the complexity of life, building the confidence students need to understand their own bodies and passionately advocate for the future of our planet.

Exploring Chemistry demystifies the very fabric of the universe, inspiring learners by showing them how humanity can manipulate atoms to create life-saving medicines and revolutionary materials, which instills the confidence to innovate.

Engaging with Physics transforms students from passive observers into inspired thinkers who can look at the cosmos, renewable energy, and modern technology and confidently declare that they understand the fundamental laws that govern them.

ASPIRING, RESPONSIBLE CITIZENS

Biology nurtures responsible citizens by providing the scientific literacy needed to make ethical decisions on global issues like biodiversity loss, public health crises, and the sustainable management of our planet's ecosystems.

Studying Chemistry empowers learners to critically evaluate the environmental footprint of human industry, allowing them to engage responsibly in debates surrounding green chemistry, plastic pollution, and the sustainable use of finite resources.

Engaging with Physics equips students to act as forward-thinking citizens who can objectively analyze energy consumption, debate the transition to renewable technologies, and understand the global impact of our collective carbon footprint.

CURRICULUM MAP KS4

	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
Y10	*Transport in cells Disease Reactivity of Metals Bonding Particle model of matter*	*Transport systems, The periodic table Electrical Circuits*	*The digestive system Quantitative Chemistry Acids and Bases Radioactivity*	*Bioenergetics Energy Changes Forces in action*	*Defense against Disease Using Resources Chemical Analysis Forces in Action*	*The nervous system Chemistry in the Atmosphere Energy Transfers*
ASSESSMENT	Cumulative assessment of Autumn term		PPE - Paper 1 Biology, Chemistry and Physics			
Y11	*Genetics, Electrochemistry, Electricity in the home*	*Homeostatis, rates, waves, Electromagnetism*	*Sustainabilty, Organic, Acceleration*	*Paper 1 Preperation, Biology, Chemistry and Physics*	*Paper 2 Preperation, Biology, Chemistry and Physics*	*Final exam*
ASSESSMENT	PPE - Paper 1 Biology Chemistry and Physics					

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