Curriculum Overview

SUBJECT:	SCIENCE	YEAR:	11
INTENT:	Our goal is to make science exciting and engaging for all students, ensuring they grasp essential knowledge in a way that sticks with them. We aim to foster a deep understanding of core scientific concepts that will help your child succeed in exams and beyond. Our inspiring curriculum is designed to lay a strong foundation for future studies or careers in science. The topics covered at Key Stage 4 (KS4) are carefully linked to what students learned at Key Stage 3 (KS3), gradually increasing in complexity and skill application. By the time students leave our school, they will be able to understand and explain the world around them scientifically. They will also develop critical thinking, problem-solving, and evaluation skills, which will help them tackle significant moral questions they may face in the future. We are committed to preparing your child for a successful and thoughtful future in science and beyond.		

UNITS OF WORK

AQA Biology paper 2 content, understanding and skills development	AQA Physics paper 2 content, understanding and skills development	AQA Chemistry paper 2 content, understanding and skills development	Planned revision programme of content, retrieval, and skills consolidation as well as exam practise on the Unit 1 topics taught in Y10

Key Knowledge/Development	Key Skills Development	Assessment
• AQA Biology statements 4.5 – 4.7 (4.5 – 4.7 triple) • AQA Physics statements 6.5 – 6.7 (4.5 – 4.8 triple) • AQA Chemistry statements 5.6-5.10 (4.6 - 4.10 triple)	• Writing a fair and valid scientific plan • Producing a results table of reliable data • Collecting valid data in the classroom and in the field • Accurate graph drawing (bar chart and line graph) • Identifying trends, patterns and anomalies • Evaluating limitations and suggesting how to improve	• Retrieval questions/activities to reinforce key knowledge at the beginning of every lesson. • Past paper questions are used at the end of some lessons to test understanding and to practise application of knowledge. These are also set as homework using 3 representative questions for each topic. • Where appropriate within lessons students will work on developing a specific science skill eg. graph drawing and these can be self/peer /teacher assessed • At the end of each teaching unit there is a summative sheet which requires recall and application of the main curriculum statements for that unit. • Students will be set a program of Seneca Learning activities to test and reinforce knowledge. This will generally be 30 minutes per week completed at home. This is tracked and used to find gaps in knowledge. • At the end of each of the major units B1, C1, P1 and P2 there will be a full GCSE paper.
SMSC/British Values/Careers	**Literacy/Numeracy**	**Curriculum Enrichment**
• Conservation and sustainability • Advances in genetics • Contraception and fertility • All lesson to be linked to careers where possible	• Subject specific key words • Command words • Graph skills • Data handling eg. calculating means • Equations	• Most able extended thinking articles • Afterschool masterclasses