



Curriculum Overview



SUBJECT:	SCIENCE	YEAR:	10
INTENT:	To create engaging lessons that deliver the key knowledge in a memorable way and promote an understanding of the core concepts in science that will lead to exam success. The inspiring curriculum will lay down the foundations required for progressing in science in the world of work or further study. KS4 topics are intrinsically linked to prior knowledge and skills from KS3 and build in terms of complexity, skills and application. Students will leave being able to understand and explain the world around them in scientific terms and will be able use critical thinking, problem solving and evaluation to deal with the 'big' moral questions of their future.		

UNITS OF WORK

AQA Biology paper 1 content understanding and skills development	AQA Chemistry paper 1 content understanding and skills development	AQA Physics paper 1 content understanding and skills development	AQA Physics paper 2 content understanding and skills development
--	--	--	--

Key Knowledge/Development	Key Skills Development	Assessment
<ul style="list-style-type: none"> AQA Biology statements 4.1-4.4 (4.1-4.4 triple) AQA Chemistry statements 5.1-5.5 (4.1-4.5 triple) AQA Physics statements 6.1-6.4 (4.1-4.4 triple) AQA Biology statements 4.5-4.7 (4.5-4.7 triple) 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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.
EDI/SMSC/British Values/Careers	Literacy/Numeracy	Curriculum Enrichment
<ul style="list-style-type: none"> Health and infection control Health and society All lesson to be linked to careers where possible 	<ul style="list-style-type: none"> Subject specific key words Command words Graph skills Data handling eg. calculating means Equations 	<ul style="list-style-type: none"> Most able extended thinking articles Afterschool masterclasses



Curriculum Overview



SUBJECT:	SCIENCE	YEAR:	11
INTENT:	To create engaging lessons that deliver the key knowledge in a memorable way and promote an understanding of the core concepts in science that will lead to exam success. The inspiring curriculum will lay down the foundations required for progressing in science in the world of work or further study. KS4 topics are intrinsically linked to prior knowledge and skills from KS3 and build in terms of complexity, skills and application. Students will leave being able to understand and explain the world around them in scientific terms and will be able use critical thinking, problem solving and evaluation to deal with the 'big' moral questions of their future.		

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
<ul style="list-style-type: none"> 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) 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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
<ul style="list-style-type: none"> Conservation and sustainability Advances in genetics Contraception and fertility All lesson to be linked to careers where possible 	<ul style="list-style-type: none"> Subject specific key words Command words Graph skills Data handling eg. calculating means Equations 	<ul style="list-style-type: none"> Most able extended thinking articles Afterschool masterclasses

