



KS4 Curriculum Plan Science Department

Students in Key Stage 4 follow The Oxford University Press 'Kerboodle' Science Scheme of work which was introduced in 2015. This links directly to the 2013 National Curriculum Science Programme of Study written by the Department for Education.

Year 9	
Biology	Cells and Organisation Cell division Digestive system Animals and plants
Chemistry	Atomic structure The periodic table Structure and bonding Chemical calculations
Physics	Conservation and dissipation of energy Energy transfer by heating Energy resources Electrical energy Electricity in the home

All year 9 students will start with a fortnight of lessons which will cover the skills required for students to learn effectively at KS4. Upon completion of these lessons, students will begin to study for AQA's new 9-1 graded GCSE. Most students will spend 3 years studying the 'Trilogy' course which gives students the opportunity to gain two Science GCSEs. Some higher ability students will study the 'Triple Science' route which gives students the opportunity to gain three separate Science GCSEs.

All topics are assessed through progress tasks and end of topic tests. Students in Year 9 also have a formal 'End of Year 9' test which, along with data from throughout the year, will inform our decision about sets in Year 10.



Year 10		
Biology	Communicable disease Preventing and treating disease Non-communicable diseases Hormonal control	Photosynthesis Respiration The nervous system
Chemistry	Atomic structure The periodic table Structure and bonding	Chemical calculations Chemical changes
Physics	Electrical energy Electricity in the home Molecules and matter Radioactivity	Forces in balance Motion Force and motion

Students in Year 10 continue their study of AQA's new 9-1 graded GCSEs. Most students will spend 3 years studying the 'Trilogy' course which gives students the opportunity to gain two Science GCSEs. Some higher ability students will study the 'Triple Science' route which gives students the opportunity to gain three separate Science GCSEs.

All topics are assessed through progress tasks and end of topic tests. Students in Year 10 also have a formal 'End of Year 10' exam which, along with data from throughout the year, will inform our decision about sets in Year 11.



Year 11		
Biology	Respiration	Genetics and evolution
	The nervous system	Adaptions and competition
	Hormonal control	Organising an ecosystem
	Reproduction	Biodiversity
	Variation and evolution	
Chemistry	Crude oil and fuels	The Earth's atmosphere
	Chemical analysis	The Earth's resources
Physics	Molecules and matter	Electromagnetic waves
	Radioactivity	Electromagnetism
	Wave properties	

Students in Year 11 finish their study of AQA's new 9-1 graded GCSEs. Most students will be entered for the 'Trilogy' course which gives students the opportunity to gain two Science GCSEs. Some higher ability students who have studied the 'Triple Science' route will have the opportunity to gain three separate Science GCSEs.

All topics are assessed through progress tasks and end of topic tests. Students in Year 11 also have trial Science exams in November and February. Final official examinations occur between 15th May 2018 and 15th June 2018.