



YEAR 10

	Autumn Term	Spring Term	Summer Term	Rationale
Composites	Key concepts, Health & Disease & Plants	Homeostasis, Exchange & Transport	Growth, Genetic variation, natural selection & Mock exams	<p>Key concepts, which appear in both exams, are covered first in order to make sure all students have a firm foundation upon which to build a more complex understanding. Many of these key concepts are touched upon in year 9 where links are made to topics in order to support students in bridging the gap between KS3 and KS4.</p> <p>The Spring term focusses on new content being covered for the first time, introducing students to more challenging concepts than previously encountered.</p> <p>The summer term is spent developing previously met content in greater detail ensuring tier 3 language is being used effectively and with confidence. Time is spent preparing students for their mock exams at the end of the year, focusing on exam technique and breaking down exam questions.</p> <p>Throughout the year there are core practical lessons whereby students use their theory based knowledge and practical skills to create methods, manipulate data and analyse results.</p>
Key Components	Microscopes, Enzymes, Osmosis, Chemical & Physical barriers, Immunity, Monoclonal Antibodies, Photosynthesis, Limiting factors	Blood sugar levels, Osmoregulation, Alveoli, Heart, Carbon cycle, Nitrogen cycle	Mitosis, Nervous System, The eye, DNA, Inheritance, Evolution, Tissue Culture, Genetic Modification	
Tier 3 language	Acrosome, Ribosome, Active Site, Substrate, Resolution, Lymphocytes, Lysis, Hybridoma, Xylem, Phloem,	Negative Feedback, Vasodilation, Selective Reabsorption, Abiotic, Belt transect, Parasites, Mutualist	Restriction enzymes, ligase enzymes, Myelin Sheath, Mutation, Nucleotide, Allele, Pluripotent	
Assessment	Biology Paper 1 mock exam Low stakes testing	Biology Paper 2 mock exam Low stakes testing	Biology Paper 1 & 2 mock exam Low stakes testing	
The best that has been thought and said	Robert Brown, Robert Hooke, Alexander Fleming, Robert Koch, Charles Darwin, Frits Warmolt Went	David Attenborough	Human Genome Project, Stephen Hawking, Aristotle, Gregor Mendel, Mary Leakey & family, Charles Darwin, Carl Linnaeus.	

YEAR 11

Composites	Plant structures, Homeostasis, Exchange and transport	Ecosystems, Core practical Revision & Edexcel revision guides/workbooks	Revision	<p>The nature of our spiral curriculum ensures that certain key areas and common exam questions are built upon in the autumn term. This will include more complicated and challenging concepts that students have not met before such as the role of the loop of Henle. In the spring term key concepts which appear in both Paper 1 & 2 exams will be mastered and this foundation will support students to achieve the highest grades.</p> <p>In the Spring term revision begins with Core practical's being revisited challenging students to apply their existing knowledge and understanding to new concepts and scenarios. Walking talking mocks will take place showing students how to approach exam questions and showing them what a good answer looks like.</p> <p>The summer term is a time to revise the content most likely to appear in the exams, all key words are in students' long term memory and lots of opportunity for deliberate practice is given.</p>
Key Components	Photosynthesis, plant structures, plant adaptations, Glucose control, adrenaline, Respiration, Heart structure, Kidney function	Food tests, Enzyme clock, Osmosis, Antibiotic resistance, Light intensity & photosynthesis, Respiration rates, quadrats & transects	Preparation for GCSE examinations. Deliberate Practice & Retrieval Practice of key knowledge.	
Tier 3 language	Glucose, chloroplast, stomata, insulin, glycogen, adrenaline, aorta, pulmonary vein, plasma, haemoglobin, loop of Henle, diffusion	Variables, control, dependent, independent, precision, accuracy, Percentage change.		
Assessment	Biology Paper 1 mock exam Low stakes testing	Biology Paper 2 mock exam Walking Talking Mocks	GCSE Exams	
The best that has been thought and said	David Attenborough	Robert Brown, Robert Hooke, Alexander Fleming, Robert Koch, Charles Darwin, Frits Warmolt Went		