Science - Biology



Key Stage 4 - Year 10 - Triple Award

Term One	Term Two	Term Three
The Heart & Respiration	Communicable and Non- Communicable Disease	Homeostasis – The Brain and Eye
 Heart and Blood Vessels Review Heart and CHD Review Treating the Heart Gas Exchange Aerobic Respiration Anaerobic Respiration and Exercise Metabolism and Anaerobic Respiration in Plants Investigating Respiration Linking Respiration to the Heart 	 Vaccines Treating Disease with Medicines Developing Drugs Monoclonal Antibodies Uses of Monoclonal Antibodies Cancer Non-Communicable Disease 	 The brain The eye Accommodation and light Problems with the eye
Photosynthesis & Organisation in Plants	Homeostasis – Nervous Response	Homeostasis – Hormonal Control
 Structure of the Leaf Photosynthesis Factors Affecting Photosynthesis Speeding Up Photosynthesis Uses of Glucose Organisation in Plants Plant disease Transpiration Factors Potometers 	 Principles of Homeostasis Nervous Response Reflex Response Synapses 	 Hormonal Control Negative feedback Thermoregulation Glucoregulation Diabetes Treating Diabetes

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Plants Pathogens and Their Disease	Homeostasis – Hormonal Control
 Types of Pathogens Primary Defence to pathogens White Blood Cell Response 	 The kidney Problems with the kidney Treating the kidney

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Key Stage 4 - Year 11 – Triple Award

Term One	Term Two	Term Three
Homeostasis – Hormonal Control	Evolution, Speciation, Selective Breeding & Genetic Modification	The Earth's Resources and Ecosystems
 Hormones in Puberty Menstrual Cycle Contraceptives Fertility Treatments Plant hormones Plant hormone uses 	 Fossils as Evidence Selective Breeding Genetic Engineering Uses of GM Animal Cloning Plant Cloning Extinction Speciation Antibiotic Resistance 	 Food Security Farming Techniques Fisheries Biotechnology Investigating Ecosystems Factors Affecting Ecosystems
Reproduction and Inheritance• Asexual and Sexual Reproduction• Meiosis• DNA and the Genome• Protein synthesis• Mutations• Mendel and evidence for inheritance• Genetic Inheritance (sex)• Genetic Inheritance (disease)• Evolution	 Ecosystems and Cycles in Biology Classification Animal and Plant Adaptations Carbon and Water Cycle Decay Cycle Factors Affecting Decay 	• Revision and exams