

	Outline	KS3 topics revisited
Y10 Half Term 1	Lifestyle and non-communicable diseases Health issues Lifestyle and non-communicable disease Cancer x2 Cell division DNA, chromosomes and genes Cell cycle Stem cells Therapeutic cloning	<ul style="list-style-type: none"> Heart, blood and blood vessels Coronary heart disease The digestive system and enzymes Nutrition and digestion Cell structure Organ systems and principles of hierarchy Movement, breathing and respiration
Y10 Half Term 2	Plant organisation Plant organs Xylem and phloem Leaf and transpiration Observing a leaf using a microscope Communicable diseases Infectious disease Viral Diseases Bacterial diseases Culturing microorganisms Investigate the effect of antiseptics or antibiotics on bacterial growth – practical Fungal diseases Protist diseases	<ul style="list-style-type: none"> Organ systems and principles of hierarchy Using a microscope Photosynthesis and interdependence Cell transport Eukaryotes and prokaryotes
Y10 Half Term 3	Defence Mechanisms Human defence systems Immune system Vaccinations Antibiotics and painkillers Drug development Producing monoclonal antibodies Uses of monoclonal antibodies Plant diseases Plant defences	<ul style="list-style-type: none"> Cells The circulatory system Photosynthesis and interdependence
Y10 Half Term 4	Bioenergetics Photosynthesis reaction Effect of light intensity on rate photosynthesis – practical Uses of glucose Aerobic and anaerobic respiration Responses to exercise Metabolism Investigate the effect of pH on the rate of reaction of amylase enzyme – practical	<ul style="list-style-type: none"> Photosynthesis and interdependence Cell transport Movement, breathing and respiration Nutrition and digestion The digestive system and enzymes The circulatory system
Y10 Half Term 5	Homeostasis Homeostasis Overview Structure & function nerves (x2) Effect of a factor on human reaction time – practical The brain The eye x2 Control of body temperature	<ul style="list-style-type: none"> Organ systems and principles of hierarchy Cell transport
Y10 Half Term 6	Human endocrine system Control of glucose concentration Diabetes	<ul style="list-style-type: none"> Organ systems and principles of hierarchy Nutrition and digestion

BIOLOGY

GCSE AQA SPECIFICATION

	Diabetes (treatment) Maintaining water & nitrogen balance Hormones in reproduction Contraception Hormones to treat fertility Negative feedback	<ul style="list-style-type: none"> • The digestive system and enzymes • Cell transport • Reproduction • The circulatory system
Y11 Half Term 1	Plant Hormones Plant Control & coordination Investigate the effect of light or gravity on the growth of newly germinated seedlings – practical Use of plant hormones Inheritance Sexual and asexual reproduction Meiosis DNA & the genome DNA structure Mutations Genetic inheritance & Sex determination Inherited disorders (x2)	<ul style="list-style-type: none"> • Photosynthesis and interdependence • Reproduction • Variation and inheritance • Cell structure
Y11 Half Term 2	Variation Variation Natural selection & resistance Theory of evolution Speciation Evidence for evolution Fossils & Extinction Classification Evolutionary trees	<ul style="list-style-type: none"> • Variation and inheritance
Y11 Half Term 3	Genetics & Evolution Understanding of genetics Selective breeding Genetic engineering (x2) Cloning (x2) Adaptations & Ecology Communities Abiotic factors & Biotic factors Adaptations Levels of organisation Measure the population size of a common species in a habitat – practical	<ul style="list-style-type: none"> • Variation and inheritance • Genetically modified organisms • Photosynthesis and interdependence • Movement, breathing and respiration
Y11 Half Term 4	Adaptations & Ecology How materials are cycled Decomposition Biodiversity Impact of environmental change Biodiversity Waste management Land use & Deforestation Global warming Maintaining biodiversity Trophic levels Food security	<ul style="list-style-type: none"> • Photosynthesis and interdependence
Y11 Half Term 5	Consolidation and revision	Any required