



Biology (Combined Science)

Year 10 (4 lessons over 2 weeks)

	Topics											
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Term 1	Cell structure and transport Microscopes, cells, transport, exchanging materials					Cell division Cell division, stems cells		Organisation and the digestive system Tissues and organs, the digestive system, enzymes			Assessment	
Term 2	Organising animals and plants Blood, heart, breathing and gas exchange, tissues and organs in plants, transpiration				Disease Recap of communicable disease, and preventing infections			Non communicable disease Cancer, coronary heart disease, risk factors, lifestyle, diet, alcohol, smoking, causal mechanisms.			Assessment	
Term 3	Photosynthesis			Respiration			Assessment		The human nervous system (paper 2) The structure and function of the nervous system and reflex actions			



Biology (Combined Science) Year 11 (4 lessons over 2 weeks)

Topics													
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	
Term 1	Hormonal coordination Controlling glucose levels, the menstrual cycle, fertility				Reproduction Meiosis, DNA and the genome, inheritance, screening for disorders.								
Term 2	Variation and evolution Variation, evolution, natural selection, genetic engineering, ethics.			Genetics and evolution Evidence of evolution, extinction, antibiotic resistance, classification					Ecology Communities, competition, adaptations				
Term 3	Ecology continued Cycles, feeding relationships, human population- impact on the environment, pollution, global warning, acid rain, biodiversity.					Revision for Summer GCSE exams							



Biology (Separate Science)

Year 10 (5 lessons over 2 weeks)

Topics												
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Term 1	Cell structure and transport Microscopes, cells, transport, exchanging materials					Cell division Cell division, stems cells		Organisation and the digestive system Tissues and organs, the digestive system, enzymes			Assessment	
Term 2	Organising animals and plants Blood, heart, breathing and gas exchange, tissues and organs in plants, transpiration				Communicable Disease Recap of communicable disease, and preventing infections <i>Separates only- growing bacteria and preventing bacterial growth. Plant diseases and defence responses. Making and using monoclonal antibodies</i>		Non communicable disease Cancer, coronary heart disease, risk factors, lifestyle, diet, alcohol, smoking, causal mechanisms.			Assessment		
Term 3	Photosynthesis			Respiration			Assessment		The human nervous system (paper 2) The structure and function of the nervous system and reflex actions <i>Separates only- The brain and the eye.</i>			



Biology (Separate Science) Year 11 (5 lessons over 2 weeks)

Topics												
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Term 1	Hormonal coordination Separates only- Plant hormones and responses				Homeostasis Separates only- Controlling body temperature, the kidney and dialysis, transplants			Reproduction Separates only- asexual reproduction compared to sexual. DNA structure, protein synthesis, gene mutations,				
Term 2	Variation and evolution Separates only- Adult cell cloning			Genetics and evolution Separates only- The history of genetics, theories of evolution, Darwin, evolution and speciation						Ecology		
Term 3	Ecology continued Separates only- Rates of decay, impact of changes, biomass and trophic levels, food security, sustainable food production.				Revision for Summer GCSE exams							