



Curriculum Overview – Biology (Year 7 – 11)

Year	Overview	Autumn 1 (Weeks 1 – 7)	Autumn 2 (Weeks 8 – 14)	Spring 1 (Weeks 15 - 20)	Spring 2 (Weeks 21 - 26)	Summer 1 (Weeks 27 - 32)	Summer 2 (Weeks 33 - 38)	Student Resources	
7	Year 7 will be covering a range of topics in biology, chemistry, and physics. The aim is to give the students a broad understanding of the sciences and develop practical skills. Topics are split into 6 lesson teaching blocks; each block provides opportunities for students to develop their scientific literacy and numeracy.	Organisms - why we have a skeleton and how it works together with your muscles. Look inside organisms to discover what plants and animals are made of.		Genes - identify why identical twins differ in some ways and how they're caused. Discovering how new life is created and develops, resulting in the birth of a baby.		Ecosystems - how organisms are connected and how they interact within ecosystems.			
		Assessment through end of topic test.							Assessment through end of topic test and end of year exam.
8	Year 8 will be covering a range of topics in biology, chemistry, and physics. The aim is to give the students a broad understanding of the sciences and develop practical skills. Topics are split into 6 lesson teaching blocks; each block provides opportunities for students to develop their scientific literacy and numeracy.	Organisms - looking at how we breathe, and then look at the damage that can be caused through smoking, drinking, and taking drugs. What makes a balanced diet and how your body breaks down the food you eat to release energy and the other nutrients you need to live and grow.		Ecosystems - how the body transfers energy from food, discover how anaerobic respiration in microorganisms, and how plants produce food by the process of photosynthesis.		Genes - how organisms that exist today have evolved, and how you inherit characteristics from your parents through genetic material.			
		Assessment through end of topic test.							Assessment through end of topic test and end of year exam.
9	Year 9 students begin following the AQA Biology GCSE course. They will cover all aspects of the course relating to paper 1 of their GCSEs.	Cell structure and transport - how microscopy techniques have developed, the differences in magnification and resolution between a light microscope, and how to calculate the magnification real size.	Organisation and the digestive system - how specialised cells become organised into tissues, and how several different tissues work together to form an organ.	Organising animals and plants - how substances are transported to and from the blood, the structure and function of the heart. The structure of the human gas exchange.	Communicable and non - communicable diseases - communicable diseases are caused by pathogens and can spread to other organisms, and non-communicable diseases are pathogens like heart disease or cancer.	Photosynthesis and respiration - the raw materials and energy source for photosynthesis, the equations that summarise photosynthesis.	The human nervous system – why it is important to control your internal environment, why you need a nervous system, what the main areas of the brain do, and the main parts of the human eye.		
		Assessment through end of topic test.							Assessment through end of topic test and end of year exam.
10	Year 10 students begin following the AQA Biology GCSE course. They will cover all aspects of the course relating to paper 2 of their GCSEs.	Hormonal coordination - what a hormone is, and the main organs of the endocrine system.	Reproduction - about the DNA that makes up the chromosomes, about meiosis in the cell division and the formation of gametes.	Genetics - about the work of Gregor Mendel and how Mendel's work fits in with modern ideas of genetics.	Variation - what makes you different from the rest of your family, why identical twins are now exactly the same in every way.	Adaptations, interdependence and completion - how to investigate and measure the distribution and abundance of species in a system.	Ecology - how to investigate and measure the distribution and abundance of species in a system.		
		Assessment through end of topic test.							Assessment through end of topic test and end of year exam.

11	Year 11 students continue the AQA Biology GCSE course. They will complete and review all aspects of the course relating to papers 1 and 2 of their GCSEs.	Organising an ecosystem - the importance of photosynthesis in feeding relationships, how the numbers of predators and prey in a community are related.	Biodiversity and ecosystems - how human activities pollute the land, and how human activities pollute the water.	Review - cells and organisation, disease and bioenergetics, ecology.	Review - biological responses, genetics, and reproduction.	Exam preparation for papers 1 and 2.	N/A	
			Mock examinations.	Mock examinations.	Mock examinations.		GCSE examination.	
Notes:			Examination Specification: AQA GCSE in Biology.			Homework Portal: Go4Schools and Kerboodle.		
						Further resources:		