

Year 9 Biology Curriculum



Year 9 Biology						
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Content: What will students know	Healthy Body Module. How drugs, alcohol and smoking affect health.	B1 - Microscopes, cells, electron microscopes, primitive cells, DNA structure and function, enzymes, respiration.	B1 -Food testing PAGs and photosynthesis	B1 How to test a leaf for starch, photosynthesis limiting factors.	B2 - Diffusion, osmosis, completing the osmosis PAG	B2 Active transport, cell division, stem cells. Revision for end of year exam.
Skills: What will students be able to do	Interpret data on health from a variety of different graphs. To be able to recognise trends in data and use their biological knowledge to explain them. To be able to justify a scientific opinion using data and develop their evaluation skills	How to use a microscope correctly. How to stain and prepare samples to be seen under the microscope. How to draw from a microscope, how to calculate magnification and image size. How to conduct enzyme experiments, variables and data interpretation.	Qualitative testing of foods, data interpretation, forming conclusions, making predictions.	Focus on practical skills and data interpretation.	Define osmosis and make predictions about loss and gain of water in a given scenario. Calculate percentage difference and make comparisons.	Research skills - stem cell technologies
Other: Literacy/ Numeracy/ Ethos	Graphical data interpretation. Reading and comprehension information on drugs. Wider social impact of drugs and doping in sport. Keywords.	Keywords for the topic highlighted each lesson. Graph drawing and data interpretation. Standard form and rearranging equations for magnification. Orders of magnitude.	Graphs, data interpretation. Keywords for the topic highlighted each lesson.	Data interpretation. Inverse law for light intensity	Percentage difference, accuracy, variables	Keywords for the topic.
Assessment:	Healthy body topic test and AFL task	Mini test Christmas. Educake homeworks	AFL, homeworks educake	B1 end of unit assessment	AFL, homeworks, educake	End of year exam