Year 8				
	Biology			
Content: What will students know	**Variation** Types of variation, selective breeding, classification, DNA introduction, How science works - DNA discovery.	**Breathing and Respiration** - Aerobic and anaerobic respiration, breathing, respiratory system structure and function.	**Plants and Ecosystems -** Photosynthesis, parts of the plant, biodiversity, food chains and bioaccumulation.	**Bones and Muscles -** Structure of bone, skeleton, muscles, movement, muscle investigation, space travel and effect on bones and physiology.
Skills: What will students be able to do	Research skills - Rosalind Franklin, interpret data from graphs. Be able to select the correct graph type for a given set of data, classify animals using a key. Discuss ethical issues surrounding selective breeding	Investigation skills, exercise practical. Evaluating models - lung and bell jar model.	Use real life examples to illustrate issue with bioaccumulation. Discuss impact of biodiversity loss.	Label skeleton, make models of muscles to explain how antagonistic muscles work, test bone using flame tests - link to chem. Link to Physics space topic astronaut bone density issues.
Other: Literacy/ Numeracy/ Ethos	Graphs - continuous and discontinuous data. How science works - DNA discovery. Women in science.	Keywords used throughout. Links to health and real life experience.	Keywords. Use of pyramid diagrams to represent feeding relationships. Impact on environment - link to everyday life	Keywords used throughout, links to health and real life experiences.
Assessment:	End of topic test. Afl in lessons	End of topic test. Afl in lessons	End of topic test. Afl in lessons	End of topic test. Afl in lessons