

Subject	Biology		
	Interpretation of National Curriculum into Year group Endpoints		
Year	Term 1	Term 2	Term 3
12	<p>Students will describe and explain the concepts of:</p> <p>3.1 Biological molecules</p> <ul style="list-style-type: none"> • Monomers and polymers • Carbohydrates, Lipids, Proteins, Enzymes, Nucleotides, Water and Inorganic Ions. <p>3.2 Cells</p> <ul style="list-style-type: none"> • Structure of prokaryotic and eukaryotic cells. • Microscopy • Cell cycle • Transport across membranes • Immune system 	<p>Students will describe and explain the concepts of:</p> <p>3.3 Organisms exchange substances with their environment</p> <ul style="list-style-type: none"> • Surface area to volume ratio • Gas exchange and digestion • Mass transport in animals and plants <p>3.4 Genetic information, variation and relationships between organisms</p> <ul style="list-style-type: none"> • DNA, genes and chromosomes • Protein synthesis • Genetic diversity - Mutation and meiosis, adaptation • Species and taxonomy, biodiversity 	<p>Students will spend some time reviewing the year's work and preparing and DIRTing PPE.</p> <p>Students will describe and explain the concepts of:</p> <p>3.7 Genetics, populations, evolution and ecosystems</p> <ul style="list-style-type: none"> • Inheritance, populations, evolution, speciation and populations in ecosystems. <p>Students will complete required practical 12 on a residential field trip.</p>