



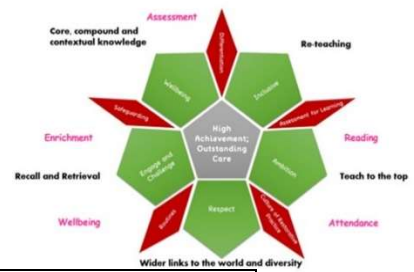




## Curriculum Overview for Biology

### Year 11

<p><b>Half Term 1 and 2:</b></p>		<p>Skim and Scan of source information Decoding terms Etymology of key terms</p>	
<p><b>Homeostasis and response</b></p>			<p>Embryo, genotype, genetic engineering, enzyme, cloning, surrogate, fossil, extinction, resistance, classification, nucleotide, stem cell, variation, evolution, natural selection, selective breeding</p>
<p><b>Substantive Knowledge:</b></p>			
<ul style="list-style-type: none"> <li>• Homeostasis system components</li> <li>• The Nervous System <ul style="list-style-type: none"> <li>• Central Nervous system</li> <li>• Triple: The brain</li> <li>• Triple: The Eye and defects of the eye</li> <li>• Reflex arcs</li> <li>• Body temperature control</li> </ul> </li>   <li>• The Endocrine System <ul style="list-style-type: none"> <li>• Parts of the Endocrine system</li> <li>• Hormones</li> <li>• Blood glucose control</li> <li>• Triple: Water control and ADH</li> <li>• Reproductive hormones</li> <li>• Menstrual cycle</li> <li>• Use of reproductive hormones</li> <li>• Triple: Plant hormones and their uses</li> </ul> </li> </ul>			
<p style="text-align: center;"><b>Disciplinary Knowledge:</b></p> <ul style="list-style-type: none"> <li>• Reaction times investigation: variables, methods, collecting data, risk, evaluation</li> <li>• Triple: Plant hormone investigation: variables, methods, collecting data, risk, evaluation</li> <li>• Measuring time (scales)</li> <li>• Ethics in science (controlling fertility, organ transplants)</li> </ul>			



**Inheritance, Variation and Evolution**

**Substantive Knowledge:**

Describe evolution and explain how it occurs through natural selection  
 Describe the main steps in genetic engineering  
 Triple: Explain different methods of cloning, evaluate theories of evolution. Explain speciation.

**Disciplinary Knowledge:**

Make informed judgements about the economic, social and ethical issues concerning embryo screening  
 Extract information from evolutionary trees