

## Year 11

All numbers refer to specification points

Timing	Unit Title	Key Question	Knowledge	Assessing understanding
Autumn 1 and Autumn 2	<b>4.6 Inheritance, variation and evolution</b>	<b>How and why do organisms differ, from each other and from their ancestors?</b>	<ul style="list-style-type: none"> <li>4.6.1.1 Sexual and asexual reproduction</li> <li>4.6.1.2 Meiosis ( and comparison with mitosis )</li> <li>4.6.1.3 Advantages and disadvantages of sexual and asexual reproduction (biology only)</li> <li>4.6.1.4 DNA and the genome</li> <li>4.6.1.5 <i>DNA structure (biology only) - recap from year 9</i></li> <li>4.6.1.6 Genetic inheritance</li> <li>4.6.1.7 Inherited disorders</li> <li>4.6.1.8 Sex determination</li> <li>4.6.2.1 Variation</li> <li>4.6.2.2 Evolution</li> <li>4.6.2.3 Selective breeding</li> <li>4.6.2.4 Genetic engineering</li> <li>4.6.2.5 Cloning (biology only)</li> <li>4.6.3.1 Theory of evolution (biology only)</li> <li>4.6.3.2 Speciation (biology only)</li> <li>4.6.3.3 The understanding of genetics (biology only)</li> <li>4.6.3.4 Evidence for evolution</li> <li>4.6.3.5 Fossils</li> <li>4.6.3.6 Extinction</li> <li>4.6.3.7 Resistant bacteria</li> <li>4.6.4 Classification of living organisms</li> </ul>	<p><b>How understanding is assessed</b></p> <p>Students will be assessed on their ability to:</p> <ul style="list-style-type: none"> <li>Recall the knowledge covered</li> <li>Interpret graphical and experimental data,</li> <li>Make connections between different areas of understanding,</li> <li>Explain the Biological processes covered.</li> </ul> <p>Assessment will take the form of written questions in a test.</p> <p><b>Skills</b></p> <ul style="list-style-type: none"> <li>Graphical interpretation</li> <li>Making connections</li> <li>Explanations</li> <li>Description</li> <li>Scientific literacy and development of use of key terminology</li> <li>Graph drawing</li> <li>Data analysis.</li> </ul>

Spring 1 and Spring 2 and summer 1	<b>4.5 Homeostasis and response</b>	<b>How do humans respond to their internal and external environment?</b>	<ul style="list-style-type: none"> <li>● 4.5.1 Homeostasis</li> <li>● 4.5.2 The human nervous system</li> <li>● 4.5.3 Hormonal coordination in humans</li> <li>● 4.5.4 Plant hormones (biology only )</li> </ul>	<p><b>How understanding is assessed</b></p> <p>Students will be assessed on their ability to:</p> <ul style="list-style-type: none"> <li>● Recall the knowledge covered</li> <li>● Interpret graphical and experimental data,</li> <li>● Make connections between different areas of understanding,</li> <li>● Explain the Biological processes covered.</li> </ul> <p>Assessment will take the form of written questions in a test.</p> <p>Students will also be assessed on their ability to effectively carry out the following :</p> <p><u>Required practical 7</u>: plan and carry out an investigation into the effect of a factor on human reaction time.</p> <p><u>Required practical 8</u> : Investigate the effect of light or gravity on the growth of newly germinated seedlings. Record results as both length measurements and as carefully, labelled biological drawings to show the effects.</p> <p><b>Skills</b></p> <ul style="list-style-type: none"> <li>● Graphical interpretation</li> <li>● Making connections</li> <li>● Explanations</li> <li>● Description</li> <li>● Scientific literacy and development of use of key terminology</li> <li>● Graph drawing</li> </ul>

				<ul style="list-style-type: none"><li>• Data analysis.</li></ul>