

Subject	Y11 Threshold Knowledge – Autumn/Spring/Summer term	How to support students' learning
Science - Biology	<p><b>Autumn Term</b>  <b>Inheritance, variation and evolution -</b></p> <ol style="list-style-type: none"> <li>1. Describe sexual and asexual reproduction.</li> <li>2. Describe meiosis.</li> <li>3. Describe DNA and the genome.</li> <li>4. Describe genetic inheritance.</li> <li>5. Recall inherited disorders.</li> <li>6. Describe sex determination.</li> <li>7. Describe variation.</li> <li>8. Describe evolution.</li> <li>9. Describe selective breeding.</li> <li>10. Describe genetic engineering</li> <li>11. Describe evidence for evolution.</li> <li>12. Describe what fossils show.</li> <li>13. Describe extinction.</li> <li>14. Explain how resistant bacteria form.</li> <li>15. Describe classification of living organisms.</li> <li>16. Describe advantages and disadvantages of sexual and asexual reproduction.</li> <li>17. Describe DNA structure.</li> <li>18. Describe cloning.</li> <li>19. Describe the theory of evolution and speciation.</li> </ol> <p><b>Spring Term</b>  <b>Ecology -</b></p> <ol style="list-style-type: none"> <li>20. Describe communities.</li> <li>21. Describe biotic factors.</li> <li>22. Describe abiotic factors.</li> <li>23. Describe adaptations.</li> <li>24. Describe levels of organisation.</li> <li>25. Describe how materials are cycled.</li> <li>26. Describe biodiversity.</li> </ol> <p><b>Summer Term</b>  <b>Ecology -</b></p> <ol style="list-style-type: none"> <li>27. Describe waste management.</li> <li>28. Explain land use.</li> <li>29. Explain deforestation.</li> <li>30. Explain global warming.</li> <li>31. Describe maintaining biodiversity.</li> <li>32. Describe decomposition. (Triple only)</li> <li>33. Explain the impact of environmental change. (Triple only)</li> <li>34. Describe trophic levels. (Triple only)</li> <li>35. Understand pyramids of biomass. (Triple only)</li> <li>36. Describe the transfer of biomass. (Triple only)</li> <li>37. Explain factors affecting food security. (Triple only)</li> <li>38. Describe farming techniques. (Triple only)</li> </ol>	<ul style="list-style-type: none"> <li>• Students follow the AQA specification. If students are studying for 'Combined Science' we follow AQA trilogy.</li> <li>• Students can set themselves questions on Educake using the revision wizard. They can also use their science revision guide which can be purchased on the school shop. In addition, the appropriate BBC bitesize links for topics are included below:</li> <li>• Triple - <a href="https://www.bbc.co.uk/bitesize/topics/zpb7cj6">https://www.bbc.co.uk/bitesize/topics/zpb7cj6</a></li> <li>• Combined - <a href="https://www.bbc.co.uk/bitesize/topics/zppffcw">https://www.bbc.co.uk/bitesize/topics/zppffcw</a></li> <li>• Triple - <a href="https://www.bbc.co.uk/bitesize/topics/zxfd3k7">https://www.bbc.co.uk/bitesize/topics/zxfd3k7</a></li> <li>• Combined - <a href="https://www.bbc.co.uk/bitesize/topics/zxxhh39">https://www.bbc.co.uk/bitesize/topics/zxxhh39</a></li> </ul>

	39. Describe sustainable fisheries. (Triple only) 40. Describe the role of biotechnology. (Triple only)	
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