

Subject	Year 10 Core Knowledge – Autumn/Spring/Summer term	How to support students' learning
Science – Biology	<p>Autumn Term Infection and Response –</p> <ol style="list-style-type: none"> 1. Describe a communicable disease. 2. Understand viral diseases. 3. Understand bacterial diseases. 4. Understand fungal diseases. 5. Understand protist diseases. 6. Describe the first line of defence. 7. Describe the second line of defence. 8. Describe the third line of defence. 9. Describe how vaccination works. 10. Compare antibiotics and painkillers. 11. Describe the process for discovery and development of drugs. 12. Describe production of monoclonal antibodies (Triple only). 13. Describe uses of monoclonal antibodies (Triple only). 14. Describe the detection and identification of plant diseases (Triple only). 15. Describe plant defence responses (Triple only). <p>Spring Term Bioenergetics –</p> <ol style="list-style-type: none"> 16. Describe photosynthesis including the use of a balanced formula equation. 17. Describe rates of photosynthesis. 18. Recall uses of glucose from photosynthesis. 19. Describe aerobic respiration. 20. Describe anaerobic respiration. 21. Describe and explain the body's response to exercise. 22. Define metabolism. <p>Summer Term Homeostasis and Response –</p> <ol style="list-style-type: none"> 23. Describe the human endocrine system. 24. Describe the control of blood glucose concentration. 25. Describe the role of hormones in human reproduction. 	<p>Students can revise on the following websites:</p> <ul style="list-style-type: none"> • Educake: www.educake.co.uk • Oak academy lessons: https://continuityoak.org.uk/lessons • Free science lessons: https://www.youtube.com/c/freesciencelessons • BBC bitesize- select Biology (Single science) and then AQA if studying for Triple Science or Combined and then select AQA Trilogy if studying Combined Science and then select the relevant topics – https://www.bbc.co.uk/bitesize/levels/z98j.mp3 • Save my exams - https://www.savemyexams.com/gcse/ • Primrose Kitten - https://www.primrosekitten.com/collections/gcse • Past paper questions can be found on the Physics and Maths Tutor website for all three science subjects - https://www.physicsandmathstutor.com/

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| | <ol style="list-style-type: none">26. Describe what happens at a synapse.27. Explain what a stimulus is.28. Explain what an effector is/give examples.29. Describe what happens in a reflex arc.30. Describe the role of contraception.31. Describe the use of hormones to treat infertility. (HT only)32. Describe negative feedback. (HT only)33. Describe maintaining water and nitrogen balance in the body. (Triple only)34. Describe control and coordination. (Triple only)35. Describe the use of plant hormones. (Triple only)36. Explain the roles of the cerebrum, cerebellum and medulla. (Triple only)37. Understand how we know the roles of different parts of the brain. (Triple only)38. Explain how the lens helps us to focus. (Triple only)39. Label a diagram of the eye. (Triple only)40. Explain how the pupil reflex works. (Triple only)41. Understand what causes shortsightedness and long sightedness and explain how they might be corrected. (Triple only)42. Evaluate the various treatments for eye defects. (Triple only) | |
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