

Subject	Y11 Core Knowledge – Autumn/Spring/Summer term	How to support students' learning
Science - Physics	<p>Autumn Term Waves -</p> <ol style="list-style-type: none"> 1. Describe transverse and longitudinal waves. 2. Describe the properties of waves. 3. Recall the types of electromagnetic waves. 4. Recall the properties of electromagnetic waves. 5. Describe uses and applications of electromagnetic waves. 6. Describe reflection of waves. 7. Describe sound waves. 8. Describe how waves are used for detection and exploration. 9. Understand lenses. 10. Understand visible light. 11. Understand emission and absorption of infrared radiation. 12. Understand perfect black bodies and radiation. <p>Spring Term Magnetism and Electromagnetism -</p> <ol style="list-style-type: none"> 13. Understand the poles of the magnet. 14. Describe a magnetic field. 15. Understand electromagnetism. <p>Space -</p> <ol style="list-style-type: none"> 16. Describe the main components of the solar system. (Triple only) 17. Describe the life cycle of a star. (Triple only) 18. Describe the similarities and distinctions between the planets, their moons, and artificial satellites. (Triple only) 19. Describe the Big Bang theory. (Triple only) 20. Describe the evidence which supports the Big Bang theory including red shift. (Triple only) <p>Summer Term Magnetism and Electromagnetism -</p> <ol style="list-style-type: none"> 21. Understand and use Fleming's left-hand rule. (HT only). 22. Understand electric motors. (HT only). 23. Describe how a loudspeaker works. (Triple only). 24. Describe uses of the generator effect. (Triple only). 25. Describe how a microphone works. (Triple only). 26. Describe how transformers work. (Triple only). 	<ul style="list-style-type: none"> • Students follow the AQA specification. If students are studying for 'Combined Science' we follow AQA trilogy. • 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: • Autumn – Triple - https://www.bbc.co.uk/bitesize/topics/zcwkgdm • Combined - https://www.bbc.co.uk/bitesize/topics/z2j22nb • Spring – Triple - https://www.bbc.co.uk/bitesize/topics/z39ry4j • Combined - https://www.bbc.co.uk/bitesize/topics/zwkww6f