

| Subject | Year 11 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. (Triple only). 7. Describe sound waves. (Triple only). 8. Describe how waves are used for detection and exploration. (Triple only). 9. Understand lenses. (Triple only). 10. Understand visible light. (Triple only). 11. Understand emission and absorption of infrared radiation. (Triple only). 12. Understand perfect black bodies and radiation. (Triple only). <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. 16. Understand and use Fleming's left-hand rule. (HT only). 17. Understand electric motors. (HT only). 18. Describe how a loudspeaker works. (Triple only). 19. Describe uses of the generator effect. (Triple only). 20. Describe how a microphone works. (Triple only). 21. Describe how transformers work. (Triple only). | <p>Students follow the AQA specification. If students are studying for 'Combined Science' we follow AQA trilogy.</p> <p>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:</p> <p>Autumn – Triple - https://www.bbc.co.uk/bitesize/topics/zcwkgdm</p> <p>Combined - https://www.bbc.co.uk/bitesize/topics/z2j22nb</p> <p>Spring – Triple - https://www.bbc.co.uk/bitesize/topics/z39ry4j</p> <p>Combined - https://www.bbc.co.uk/bitesize/topics/zwkww6f</p> |