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| **What will we be learning?**  **Wave Properties**Wave with solid fill | **Why this? Why now?**  Previous Learning  Forces, Energy, Work, Heating & Cooling, Wave Effects  Future Learning  GCSE: Electricity, Energy  Enquiry Processes  Identify Variables, Collect Data, Present Data, Analyse Patterns, Draw Conclusions, Justify opinions and conclusions. | **Key Words:**  Frequency  Wave speed  Period  Wavelength  Peak  Trough  Amplitude  Transverse  Longitudinal  Refraction  Diffraction  Dispersion  Reflection  Absorption  Transmission  Spectrum |
| **What will we learn?**   * What the terms refraction, reflection, absorption and transmission mean when describing the properties of light. * How to carry out a practical to show how white light behaves when shone through a prism or a different coloured filter. * Why white light splits up into different colours when it passes through a prism.   **Misconceptions in this topic**   * Some people think that only shiny objects reflect light – only truly black objects do not reflect light… and you aren’t likely to see anything like this! * Some people think that the hotter an object is, the more light it reflects – the temperature of the object doesn’t affect it’s ability to reflect light. * Another common belief is that if an object reflects light, it cannot absorb it, this isn’t true, most object absorb and reflect light. | |
| **What opportunities are there for wider study?**  Careers - Engineer, Architect, Construction, Civil Engineering, Aviation, Automotive Engineer, Car mechanic, Production Engineer, Radio and Television Engineer, Sound and Acoustic Engineer, Defence Specialist.  STE(A)M – For details of courses and opportunities look at:  <https://highcliffe.sharepoint.com/sites/LearnSTEM> | |
| **How will I be assessed?**  End of Topic Assessment | |