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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 EffectsFuture Learning GCSE: Electricity, EnergyEnquiry ProcessesIdentify Variables, Collect Data, Present Data, Analyse Patterns, Draw Conclusions, Justify opinions and conclusions.  | **Key Words:**FrequencyWave speedPeriodWavelengthPeakTroughAmplitudeTransverseLongitudinalRefractionDiffractionDispersionReflectionAbsorptionTransmissionSpectrum |
| **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.
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| **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 |