Bishop Heber High School

Subject	Year	Term
Physics	9	1 & 2

Topic

Waves

Content (Intent)

Prior Learning (Topic) Electromagnets, SMSC Project & Revision

Unit 6: Waves

Students will revisit the basics on describing waves but will be introduced to the wave equation which will be used to in a required practical to find the velocity of water waves and waves along a solid material. A recap of reflection and refraction but with a more in-depth understanding of them using key words. A comparison of longitudinal and transverse waves will be done with the context of sound, ultrasound, seismic waves, and the E-M Spectrum.

Future Learning (Topic) Energy

What Knowledge and Skills will be taught (Implementation)	How will your understanding be assessed & recorded (Impact)
Understanding • Learning about frequency and wavelength to determine the velocity of waves, relating to the Forces topic (in terms of velocity calculations) • Identify parts of the EM spectrum and explain why they are used in different applications.	**Key Piece of work (Homework)** Pupils given a percentage and formative feedback. **End of topic test** Pupils given a percentage, formative feedback and GCSE equivalent grade. Formative feedback provided. **Year 9 end term 1 and end of year exams** Pupils given a percentage, formative feedback and GCSE equivalent grade.
Maths Skills • Applying new formula in familiar and unfamiliar contexts. • The application of collected data into graphs and for analysis. **Practical Skills** • Reading measuring equipment with accuracy and precision, taking repeats, following methods.	**Interleaving topic:** From Y8, the topic of electromagnets in the context of speakers will be used to relate to Waves – Sounds.

How can parents help at home?

Ensure all class booklets are complete and homework submitted on time
Assist in ensuring the active use of the EDUCAKE online learning platform where each pupil is given a personal log on from their teachers.
Encourage pupils to revise for tests and exams and to create revision resources such as flash cards and posters.
Ensure all pupils have all their resources required for science lessons, including Knowledge organisers, pens and calculators

Helpful further reading/discussion (including Reading and Vocabulary Lists)

Reading

AQA revision guides
AQA revision cards
EDUCAKE online learning platform.
GCSE POD
BHHS Knowledge organisers

Vocabulary Lists:

Transverse
Longitudinal
Frequency
Wavelength
Spectrum
Oscillation
Transmit
Propagate
Rarefaction
Compression