Bishop Heber High School

Subject	Year	Term
Physics	9	1

Topic

Energy Stores and Transfers

Content (Intent)

Prior Learning (Topic) **Motion and Pressure**

Unit 1: Energy

Students will revisit the basics on describing stores of energy but will be introduced to the equations for kinetic and potential energies. A detailed focus on how energy is transferred, looking at the mechanisms of transfer in a mechanical and heating context. A recap of energy resources but with a more in-depth understanding of them using key words and evaluating their effectiveness for UK purposes. Being able to understand and calculate efficiencies will work alongside the experimental element of power and energy transfers.

Future Learning (Topic) **Waves**

What Knowledge and Skills will be taught (Implementation)	How will your understanding be assessed & recorded (Impact)
Knowledge There will be a sequence of approximately ten lessons which will include the following themes: Systems and stores of energy; Calculating energy within different stores; Work done and energy transfer; Power; Dissipation of energy; Energy Efficiency; Energy Resources; and Evaluating global energy supplies.	**Formative Feedback Task (End of Unit tests)** Pupils given formative feedback on: Physics – Energy stores and transfers **Assessment 1 and 2 (December and June):** Summative assessment including: • Energy Stores and Transfers • Motion and Pressure (Year 8 Term 3 content) Cumulative assessment will include Forces (Contact Forces and Gravity, Speed and Pressure) from year 7 and year 8.
Maths Skills– learning new physics equations and applying them in familiar and unfamiliar contexts. The application of collected data into graphs and for analysis. **Practical Skills** -reading appropriate measuring equipment with accuracy and precision, taking repeats, following methods. Practical: Investigate the effect of insulation on rates of energy transfer.	

How can parents help at home?

Ensure all class work is completed 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, exercise books, pens and calculators.

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

Reading
EDUCAKE online learning platform.
BHHS Knowledge organisers
Resources on TEAMS
Glossaries

Vocabulary Lists

Stores	Kinetic
Energy Transfer	Potential
Efficiency	Work
Power	Dissipation
Resources	Renewable