

Subject	Year	Term										
Physics	9	2 & 3										
Topic												
Energy												
Content (Intent)												
<p>Prior Learning (Topic) Waves</p> <hr style="border-top: 1px dashed black;"/> <p>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.</p>												
Future Learning (Topic) The Particle Model of Matter												
What Knowledge and Skills will be taught (Implementation)	How will your understanding be assessed & recorded (Impact)											
<p>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.</p>	<p>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 2 and end of year exams Pupils given a percentage, formative feedback and GCSE equivalent grade.</p>											
<p>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. Required Practical: Investigate the effect of insulation on rates of energy transfer.</p>	<p>Interleaving Topic: Unit 6: Waves – reference to Waves method of energy transfer, referring to the Wave Equation and the definition of the types of waves with examples.</p>											
How can parents help at home?												
<p>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.</p>												
Helpful further reading/discussion (including Reading and Vocabulary Lists)												
<p>Reading AQA revision guides AQA revision cards EDUCAKE online learning platform. GCSE POD BHHS Knowledge organisers</p>	<p>Vocabulary Lists</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">Stores</td> <td style="width: 50%;">Kinetic</td> </tr> <tr> <td>Energy Transfer</td> <td>Potential</td> </tr> <tr> <td>Efficiency</td> <td>Work</td> </tr> <tr> <td>Power</td> <td>Dissipation</td> </tr> <tr> <td>Resources</td> <td>Renewable</td> </tr> </table>		Stores	Kinetic	Energy Transfer	Potential	Efficiency	Work	Power	Dissipation	Resources	Renewable
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