



Subject	Year	Term
Physics	9	3
Topic		
Particle Model of Matter (Part 1)		
Content (Intent)		
Prior Learning (Topic)	Energy	
<p>Unit 3: The Particle Model of Matter</p> <p>Students will revisit the basics with describing states of matter – solids, liquids, and gases. They will be introduced to the density equation which will be used to in a required practical to find the densities of regular and irregular shapes. Internal energy will be developed on from the topic of energy, describing why states of matter exist, referring to intermolecular forces. Specific heat capacity will be introduced here as it relates to the Energy topic and will be further supported by a required practical.</p>		
Future Learning (Topic) Particle Model of Matter (Part 2)		
What Knowledge and Skills will be taught (Implementation)	How will your understanding be assessed & recorded (Impact)	
<p>Finding innovative means to measure the density of objects – using measuring skills and the correct equipment. Know that different states of matter have different densities.</p> <p>Investigate what can affect the internal energy of a material and recording observations.</p> <p>Know what specific heat capacity is and know the required practical skills needed to investigate it.</p>	<p>Key Piece of work (Homework)</p> <p>Pupils given a percentage and formative feedback.</p> <p>End of topic test</p> <p>Pupils given a percentage, formative feedback and GCSE equivalent grade. Formative feedback provided.</p> <p>Year 9 end term 3 and end of year exams</p> <p>Pupils given a percentage, formative feedback and GCSE equivalent grade.</p>	
<p>Skills to be taught – learning new physics equations and applying them in familiar and unfamiliar contexts. The application of collected data into graphs and for analysis. Standard Practical Skills such as reading measuring equipment with accuracy and precision, taking repeats, following methods.</p> <p>Required Practical: To determine the density of objects.</p>	<p>Interleaving Topic:</p> <p>Unit 1: Energy – Reference to Stores of energy – KE and PEs, cross over with Specific Heat Capacity with an Energy focus. Revisiting the key Energy Formulae.</p>	
How can parents help at home?		
<p>Ensure all class booklets are complete and homework submitted on time</p> <p>Assist in ensuring the active use of the EDUCAKE online learning platform where each pupil is given a personal log on from their teachers.</p> <p>Encourage pupils to revise for tests and exams and to create revision resources such as flash cards and posters.</p> <p>Ensure all pupils have all their resources required for science lessons, including booklets, pens and calculators</p>		
Helpful further reading/discussion (including Reading and Vocabulary Lists)		
<p>Reading</p> <p>AQA revision guides</p> <p>AQA revision cards</p> <p>EDUCAKE online learning platform.</p> <p>GCSE POD</p>	<p>Vocabulary Lists</p> <p>Particles,</p> <p>internal energy,</p> <p>specific heat capacity ,</p> <p>latent heat,</p> <p>pressure,</p> <p>kinetic energy,</p> <p>density,</p> <p>volume,</p> <p>mass</p>	