

Subject	Year	Term
Science	9	3
Topic		
C5 energy Changes		
Content (Intent)		
<p>Prior Learning (Topic) 7C1 -lesson 7 Physical and chemical changes, 8C1 Properties of Elements(Lessons 2 &3 – Exo and Endo reactions), 8C2 Chemical reactions & the Earth(Lessons 6-8)</p>		
<p>Exothermic and endothermic reactions Energy profile diagrams Bond energies Using bond energies to calculate the energy change of a reaction Understand the meaning of the energy changes calculated</p>		
<p>Future Learning (Topic) C6 Rate and Extent of chemical change, C5 continued in Year 11</p>		
How will knowledge and skills be taught? (Implementation)	How will your understanding be assessed & recorded (Impact)	
<p>Demos Calcium reacting with hydrochloric acid – exo Barium hydroxide and ammonium nitrate – endo</p> <p>Practical work Investigating exothermic and endothermic reactions Using molymods to visualise bond making /breaking in a reaction</p> <p>Written Energy changes and linking to energy profile diagrams Calculating energy changes using bond energies</p>	<p>- 1 x standard homework (Level given. Written feedback. Response expected.) -energy profile diagrams_: in exercise book. Marked and feedback given. -bond enthalpy calculations_: in exercise book. Marked and feedback given.</p>	
How can parents help at home?		
<p>Look at the topic specific resources on the VLE Use appropriate youtube channels: cognito, primrosekitten, khan academy, freesciencelessons. Take an interest! Ask your children what they have learnt and be curious about their learning.</p>		
Helpful further reading/discussion		
<p>Reading</p>	<p>Vocabulary Lists Exothermic Endothermic Profile diagram Activation energy</p>	<p>Careers Links Research scientist Chemical engineer</p>

	Bond energy Reactants Products Energy changes	
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