

Subject	Year	Term
Science	11	2
Topic		
11C2 Electrolysis, energy changes and equilibrium		
Content (Intent)		
<p><b>Prior Learning (Topic)</b> KS2 national curriculum <b>Y5</b> properties and changes of materials, KS3 <b>Y7</b> 7C1 changing state, <b>Y8</b> 8C1 properties of elements, 8C2 Chemical reactions and the Earth, <b>Y9</b> C5 Energy changes <b>Y11</b> 11C1 structure and bonding</p>		
<ul style="list-style-type: none"> <li>Principles of electrolysis of molten and dissolved ionic compounds</li> <li>reversible reactions and dynamic equilibrium</li> <li>Le Chatellier's principle (HT only)</li> <li>How does changing temperature, pressure concentration effect equilibrium? (HT only)</li> <li>To explain the effect of a catalyst on equilibrium.</li> </ul>		
<p><b>Future Learning (Topic), Y12</b> 2.1.5 redox, 3.2.1 Enthalpy changes, 3.2.3 chemical equilibrium <b>Y13</b> 5.1.1 How fast? 5.1.2 How far? 5.1.3 Acids bases and buffers, 5.2.3 electrode potentials</p>		
How will knowledge and skills be taught? (Implementation)	How will your understanding be assessed & recorded (Impact)	
<p>Practical work: Electrolysis of ionic compounds in solution, prediction of what's made at each electrode when molten or dissolved Required practical 9 – Electrolysis</p> <p>Written Notes in book.</p>	<p>- 2 x standard homeworks (Level given. Written feedback. Response expected.) -1 x combined end of topic test with C8 (Level given. Verbal feedback to class and individuals.) -</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><b>Reading</b></p>	<p><b>Vocabulary Lists</b> Electrode Electrolyte Anode Cathode Energy change</p>	<p><b>Careers Links</b> Medicine Chemical analysis Engineer Chemical manufactory</p>

	Activation energy Catalyst Le Chatellier Reversible Reaction Dynamic equilibrium	
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