Edexcel International GCSE Chemistry 4CH1 Learning Plan

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| **Unit: 1. Principles of Chemistry** | | **Chapter: 10. Electrolysis** | | **Hours: 4** |
| Content coverage | Learning outcomes | Resources | Assessment | |
| **Section 1: Principles of chemistry**  (i) Electrolysis | **1.55C understand why covalent compounds do not conduct electricity**  **1.56C understand why ionic compounds conduct electricity only when molten or in aqueous solution**  **1.57C know that anion and cation are terms used to refer to negative and positive ions respectively.**  **1.58C describe experiments to investigate electrolysis, using inert electrodes, of molten compounds (including lead(II) bromide) and aqueous solutions**  **(including sodium chloride, dilute sulfuric acid and copper(II) sulfate) and to predict the products**  **1.59C write ionic half-equations representing the reactions at the electrodes during electrolysis and understand why these reactions are classified as oxidation or reduction**  **1.60C *practical: investigate the electrolysis of aqueous solutions.*** | Video: Section 1 Lesson 5 – Metallic Crystals and Electrolysis – 02:35 to end.  Powerpoint: Section 1 Lesson 4 – Slides 8 to end.  Textbook pages:  Page 101 – Why things conduct electricity  Page 102 – Passing electricity through compounds: Electrolysis  Page 103 – The electrolysis of molten compounds  Page 104 – Electrolysis and Redox  Page 107 – The electrolysis of sodium chloride solution  Page 108 – The electrolysis of copper (II) sulphate solution using inert electrodes  Page 109 – The electrolysis of dilute sulphuric acid using inert electrodes  Page 109 – The electrolysis of some other solutions using inert electrodes | Pages 112 – 113 Qs (1) to (6)  Pages 114 – 121 End of Unit Questions (1) to (11)  Chapter 10 Answers to textbook questions  Unit 1-10 Electrolysis exam question - pdf  Unit 1-10 Electrolysis exam question mark scheme – pdf  Unit 1-10 Electrolysis Calculations exam question - pdf  Unit 1-10 Electrolysis Calculations exam question mark scheme – pdf  Section B13 - Talking paper video  Section E24 - Talking paper video | |

Videos – [www.igcsesciencecourses.com](http://www.igcsesciencecourses.com)

Textbook Ref: Edexcel International GCSE (9-1) Chemistry Student Book - Pearson (Clark, Owen and Yu)