Edexcel International GCSE Chemistry 4CH1 Learning Plan

|  |  |  |
| --- | --- | --- |
|  **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 electricityPage 102 – Passing electricity through compounds: ElectrolysisPage 103 – The electrolysis of molten compoundsPage 104 – Electrolysis and RedoxPage 107 – The electrolysis of sodium chloride solutionPage 108 – The electrolysis of copper (II) sulphate solution using inert electrodesPage 109 – The electrolysis of dilute sulphuric acid using inert electrodesPage 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 questionsUnit 1-10 Electrolysis exam question - pdfUnit 1-10 Electrolysis exam question mark scheme – pdfUnit 1-10 Electrolysis Calculations exam question - pdfUnit 1-10 Electrolysis Calculations exam question mark scheme – pdfSection 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)