Edexcel International GCSE Chemistry 4CH1 Learning Plan

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| **Unit: 3. Physical Chemistry** | | **Chapter: 21. Reversible Reactions and Equilibria** | | **Hours: 4** |
| Content coverage | Learning outcomes | Resources | Assessment | |
| **Section 3: Physical chemistry**  (c) Reversible reactions and equilibria | Students will be assessed on their ability to:  3.17 know that some reactions are reversible and this is indicated by the symbol ⇌ in equations  3.18 describe reversible reactions such as the dehydration of hydrated copper(II) sulfate and the effect of heat on ammonium chloride.  **3.19C know that a reversible reaction can reach dynamic equilibrium in a sealed container**  **3.20C know that the characteristics of a reaction at dynamic equilibrium are:**   * **the forward and reverse reactions occur at the same rate** * **the concentrations of reactants and products remain constant**   **3.21C understand why a catalyst does not affect the position of equilibrium in a reversible reaction**  **3.22C predict, with reasons, the effect of changing either pressure or temperature on the position of equilibrium in a reversible reaction; *references to Le Chatelier's principle are not required.*** | Video: Section 4 Lesson 4 – Reversible Reactions  Powerpoint: Section 4 Lesson 4 - Equilibria  Textbook pages:  Page 240 – Reversibility and dynamic equilibria  Page 241 – Reversible reactions in a sealed container  Page 242 – The position of equilibrium  Page 243 – How to predict the effect of changing conditions on the position of the equilibrium  Page 245 – An example to illustrate how changing reaction conditions can affect the position of equilibrium in a reversible reaction | Pages 246 – 247 Qs (1) to (5)  End of Unit Questions: Pages 248 – 253 Qs. (1) to (7)  Chapter 21 Answers to textbook questions  Unit 3-21 Reversible Reactions and Equilibria exam question - pdf  Unit 3-21 Reversible Reactions and Equilibria exam question mark scheme – pdf  Section B15 - 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)