Edexcel International GCSE Chemistry 4CH1 Learning Plan

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| **Unit: 2. Inorganic Chemistry** | | **Chapter: 14. Reactivity Series** | | **Hours: 4** |
| Content coverage | Learning outcomes | Resources | Assessment | |
| **Section 2: Inorganic chemistry**  (d) Reactivity series | 2.15 understand how metals can be arranged in a reactivity series based on their reactions with:   * water * dilute hydrochloric or sulfuric acid   2.16 understand how metals can be arranged in a reactivity series based on their displacement reactions between:   * metals and metal oxides * metals and aqueous solutions of metal salts   2.17 know the order of reactivity of these metals: potassium, sodium, lithium, calcium, magnesium, aluminium, zinc, iron, copper, silver, gold  2.21 *practical: investigate reactions between dilute hydrochloric and sulfuric acids and metals (e.g. magnesium, zinc and iron).*  2.18 know the conditions under which iron rusts  2.19 understand how the rusting of iron may be prevented by:   * barrier methods * galvanising * sacrificial protection   2.20 in terms of gain or loss of oxygen and loss or gain of electrons, understand the terms:   * oxidation * reduction * redox * oxidising agent   reducing agent, in terms of gain or loss of oxygen and loss or gain of electrons. | Video: Section 2 Lesson 4  Powerpoint: Section 2 Lesson 4  Textbook pages:  Page 146 – Displacement reactions involving metal oxides  Page 147 – Oxidation and reduction  Page 148 – Displacement reactions involving solutions of salts  Page 149 – The reaction between copper and silver nitrate solution  Page 150 – Reactions of metals with water  Page 152 – Reactions of metals with dilute acids  Page 154 – A general summary  Page 155 – Finding the approximate position of a metal in the reactivity series using water and dilute acids  Page 155 – Making predictions using the reactivity series  Page 156 – Rusting of iron | Pages 157 – 159 Qs (1) to (10)  Chapter 14 Answers to textbook questions  Unit 2-14 The Reactivity Series exam question - pdf  Unit 2-14 The Reactivity Series exam question mark scheme – pdf  Section B8 - 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)