**Year 11 Medium Term Plan Chemistry (Scheme of Work Term 2)**

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| **Month** | **Week** | **Model of Learning** | **Unit/Subunit** | **Curriculum Standard** | | **Learning outcomes** | **Prior Learning** | **Cross curricular links** | **Resources** | **Home learning/ Homework** | | **Assessment Platform/ Apps for**  **AFL** | **Key vocabulary** | **End of Term reflection/ modification** |
| **January** | | | | | | | | | | | | | | | |
| January | Week 16  (3/01/2021-07/01/2021) | Blended learning | **Inorganic chemistry** | | Gases in the atmosphere | Students will be assessed on their ability to:  know the approximate percentages by volume of the four most abundant gases in dry  air  understand how to determine the percentage by volume of oxygen in air using  experiments involving the reactions of metals (e.g. iron) and non-metals  (e.g. phosphorus) with air  describe the combustion of elements in oxygen, including magnesium, hydrogen and  sulfur  describe the formation of carbon dioxide from the thermal decomposition of metal  carbonates, including copper(II) carbonate |  |  | Edexcel International GCSE Chemistry Student book. | | Past paper question Practice | Quizizz, Nearpod, Chat box in MS Teams, OneNote, Padlet, Microsoft/ Google Form or any other suitable, accessible app. |  |  |
| January | Week 17  (10/01/2021-14/01/2021) | Blended Learning | **Inorganic chemistry** | | Gases in the atmosphere  Extraction and uses of metals | Students will be assessed on their ability to:  know that carbon dioxide is a greenhouse gas and that increasing amounts in the  atmosphere may contribute to climate change  know that most metals are extracted from ores found in the Earth’s crust  and that unreactive metals are often found as the uncombined element  explain how the method of extraction of a metal is related to its position in  the reactivity series, illustrated by carbon extraction for iron and electrolysis  for aluminium  be able to comment on a metal extraction process, given appropriate  information  *detailed knowledge of the processes used in the extraction of a specific*  *metal is not required* |  |  | Edexcel International GCSE Chemistry Student Book | | Past paper question Practice | Quizizz, Nearpod, Chat box in MS Teams, OneNote, Padlet, Microsoft/ Google Form or any other suitable, accessible app. |  |  |
| January | Week 18  (17/01/2021-21/01/2021) | Mid Year Assessment | | | | | | | | | | | | |
| January | Week 19  (24/01/2021-28/01/2021) | Mid Year Assessment | | | | | | | | | | | | |
| January/Feb | Week 20  (31/01/2021-04/02/2021) | Blended Learning | **Inorganic chemistry** | | Extraction and uses of metals | Students will be assessed on their ability to:  explain the uses of aluminium, copper, iron and steel in terms of their  properties  *the types of steel will be limited to low-carbon (mild), high-carbon and*  *stainless*  know that an alloy is a mixture of a metal and one or more elements, usually  other metals or carbon  explain why alloys are harder than pure metals |  | Physics | Edexcel International GCSE Chemistry Student Book: Pages 158-159 | | Past paper question Practice | Quizizz, Nearpod, Chat box in MS Teams, OneNote, Padlet, Microsoft/ Google Form or any other suitable, accessible app. |  |  |
| February / March | | | | | | | | | | | | | | | |
| February | Week 21  (07/02/2021-11/02/2021) | Blended Learning | **Physical chemistry** | Reversible reactions and equilibria | | Students will be assessed on their ability to:  know that some reactions are reversible and this is indicated by the symbol ⇌ in  equations  describe reversible reactions such as the dehydration of hydrated copper(II) sulfate  and the effect of heat on ammonium chloride  know that a reversible reaction can reach dynamic equilibrium in a sealed  container |  | Physics | Edexcel International GCSE Chemistry Student Book: Pages 158-159 | Past paper question Practice | | Quizizz, Nearpod, Chat box in MS Teams, OneNote, Padlet, Microsoft/ Google Form or any other suitable, accessible app. |  |  |
| February | Week 22  (14/02/2021-18/02/2021) | Blended learning | **Physical chemistry** | Reversible reactions and equilibria | | Students will be assessed on their ability to:  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.  understand why a catalyst does not affect the position of equilibrium in a  reversible reaction |  | Physics | Edexcel International GCSE Chemistry Student Book: Pages 112-118 | Past paper question Practice | | Quizizz, Nearpod, Chat box in MS Teams, OneNote, Padlet, Microsoft/ Google Form or any other suitable, accessible app. |  |  |
| **Half Term Break For students 21st Feb To 23rd Feb** | | | | | | | | | | | | | | |
| February | Week 23  (21/02/2021-25/02/2021) | Blended Learning | **Physical chemistry** | Reversible reactions and equilibria | | Students will be assessed on their ability to:  know the effect of changing either temperature or pressure on the position  of equilibrium in a reversible reaction:  • an increase (or decrease) in temperature shifts the position of  equilibrium in the direction of the endothermic (or exothermic) reaction  • an increase (or decrease) in pressure shifts the position of equilibrium in  the direction that produces fewer (or more) moles of gas  *References to Le Chatelier's principle are not required* |  | Maths, biology | Edexcel International GCSE Chemistry Student Book: | Past paper question Practice | | Quizizz, Nearpod, Chat box in MS Teams, OneNote, Padlet, Microsoft/ Google Form or any other suitable, accessible app. |  |  |
| February | Week 24  (28/02/2021-04/03/2021) | Blended learning | **Physical chemistry** | Energetics | | Students will be assessed on their ability to:  know that chemical reactions in which heat energy is given out are described as  exothermic, and those in which heat energy is taken in are described as endothermic  describe simple calorimetry experiments for reactions such as combustion,  displacement, dissolving and neutralisation  calculate the heat energy change from a measured temperature change using the  expression *Q* = *m*cΔ*T* |  | Maths, biology | Edexcel International GCSE Chemistry Student Book: | Past paper question Practice | | Quizizz, Nearpod, Chat box in MS Teams, OneNote, Padlet, Microsoft/ Google Form or any other suitable, accessible app. |  |  |
| March | | | | | | | | | | | | | | | |
| March | Week 25  (07/03/2021-11/03/2021) | Blended learning | **Physical chemistry** | Energetics | | Students will be assessed on their ability to:  calculate the molar enthalpy change (Δ*H*) from the heat energy change, *Q*  draw and explain energy level diagrams to represent exothermic and  endothermic reactions  know that bond-breaking is an endothermic process and that bond-making is  an exothermic process |  | Maths, biology | Edexcel International GCSE Chemistry Student Book: | Past paper question Practice | | Quizizz, Nearpod, Chat box in MS Teams, OneNote, Padlet, Microsoft/ Google Form or any other suitable, accessible app. |  |  |
| March | Week 26  (14/03/2021-18/03/2021) | Blended learning | **Physical chemistry** | Energetics | | Students will be assessed on their ability to:  use bond energies to calculate the enthalpy change during a chemical  reaction  *investigate temperature changes accompanying some of the following types*  *of change:*  • *salts dissolving in water*  • *neutralisation reactions*  • *displacement reactions*  • *combustion reactions.* |  | Maths, biology | Edexcel International GCSE Chemistry Student Book: | Past paper question Practice | | Quizizz, Nearpod, Chat box in MS Teams, OneNote, Padlet, Microsoft/ Google Form or any other suitable, accessible app. | . |  |
| March | Week 27  (21/03/2021-25/03/2021) | Blended learning | **Physical chemistry** | Energetics | | Consolidation and Revision |  |  |  | Past paper question Practice | | Quizizz, Nearpod, Chat box in MS Teams, OneNote, Padlet, Microsoft/ Google Form or any other suitable, accessible app. |  |  |
|  | **Spring Break 28th March To 8th April** | | | | | | | | | | | | | |