**Year 10 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** | **Reactivity series** | Students will be assessed on their ability to:understand how metals can be arranged in a reactivity series based on their reactionswith:• water• dilute hydrochloric or sulfuric acid.understand how metals can be arranged in a reactivity series based on theirdisplacement reactions between:• metals and metal oxides• metals and aqueous solutions of metal salts. know the order of reactivity of these metals: potassium, sodium, lithium, calcium,magnesium, aluminium, zinc, iron, copper, silver, goldknow the conditions under which iron rustsunderstand how the rusting of iron may be prevented by:• barrier methods• galvanising• sacrificial protection.understand the terms:• oxidation• reduction• redox• oxidising agent• reducing agentin terms of gain or loss of oxygen and loss or gain of electrons. | Alkali Metals And halogens  | Biology,maths  | 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.  | galvanisingsacrificiaprotectionoxidationreductionredoxoxidising agentreducing agent |  |
| January | Week 17(10/01/2021-14/01/2021) | Blended Learning  | **Principles of chemistry** | **Chemical formulae, equations** | Students will be assessed on their ability to:Write word equations and balanced chemical equations (including state symbols):• for reactions studied in this specification• for unfamiliar reactions where suitable information is provided.calculate relative formula masses (including relative molecular masses) (*M*r) fromrelative atomic masses (*A*r) | Ionic Bonding, Covalent bonding and formula writing  | Math , biologyMathematical skills | 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.  | Relative formula mass |  |
| 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  | **Principles of chemistry** | **Electrolysis** | Students will be assessed on their ability to:know that covalent compounds do not usually conduct electricityunderstand why covalent compounds do not conduct electricityunderstand why ionic compounds conduct electricity only when molten or in aqueous solutionknow that anion and cation are terms used to refer to negative and positive ions respectively. | Ionic bonding Covalent bonding  | 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.  | Cation , anions, covalent bonding, ionic bonding, aqeous , molten |  |
| **February / March**  |
| February  | Week 21(07/02/2021-11/02/2021) | Blended Learning | **PRINCIPLES OF CHEMISTRY** | **Electrolysis**  | Students will be assessed on their ability to: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 | Ionic bonding Covalent bonding  | 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.  | Aqueous soltuions |  |
| February | Week 22(14/02/2021-18/02/2021) | Blended learning  | **PRINCIPLES OF CHEMISTRY** | **Electrolysis**  | write ionic half-equations representing the reactions at the electrodes during electrolysis and understand why these reactions are classified as oxidation or reduction | Ionic bonding Covalent bonding  | 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.  | Oxidation, reduction |  |
| **Half Term Break For students 21st Feb To 23rd Feb** |
| February | Week 23(21/02/2021-25/02/2021) | Blended Learning | **Physical chemistry** | **Rates of reaction** | Students will be assessed on their ability to:describe experiments to investigate the effects of changes in surface area of a solid,concentration of a solution, temperature and the use of a catalyst on the rate of areactiondescribe the effects of changes in surface area of a solid, concentration of a solution,pressure of a gas, temperature and the use of a catalyst on the rate of a reaction | Principles of chemistry  | 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.  | Catalyst, concentration, surface area, pressure |  |
| February | Week 24(28/02/2021-04/03/2021) | Blended learning  | **Physical chemistry** | **Rates of reaction** | Students will be assessed on their ability to:explain the effects of changes in surface area of a solid, concentration of a solution,pressure of a gas and temperature on the rate of a reaction in terms of particlecollision theoryknow that a catalyst is a substance that increases the rate of a reaction, but ischemically unchanged at the end of the reactionknow that a catalyst works by providing an alternative pathway with lower activationenergydraw and explain reaction profile diagrams showing Δ*H* and activationenergy | Principles of chemistry  | 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.  | Particle collision theory, surface area, concentration |  |
| **March**  |
| March  | Week 25(07/03/2021-11/03/2021) | Blended learning  | **Inorganic chemistry** | Acids, alkalis and titrations | Students will be assessed on their ability to:describe the use of litmus, phenolphthalein and methyl orange to distinguish betweenacidic and alkaline solutionsunderstand how to use the pH scale, from 0–14, can be used to classify solutions asstrongly acidic (0–3), weakly acidic (4–6), neutral (7), weakly alkaline (8–10) andstrongly alkaline (11–14)describe the use of universal indicator to measure the approximate pH value of anaqueous solution | Principles of chemistry  | 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.  | Indicators, Titration |  |
| March  | Week 26(14/03/2021-18/03/2021) | Blended learning  | **Inorganic chemistry** | Acids, alkalis and titrations | Students will be assessed on their ability to:know that acids in aqueous solution are a source of hydrogen ions and alkalis in aaqueous solution are a source of hydroxide ionsknow that alkalis can neutralise acids**describe how to carry out an acid-alkali titration** | Principles of chemistry  | 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.  | Neutralization, aqueous solutions. |  |
| March  | Week 27 (21/03/2021-25/03/2021) |  | **Inorganic chemistry** | Acids, alkalis and titrations |  Class Test and consolidation  | Principles of chemistry  | 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.  | Acid , Alkalis, Titration. |  |
|  | **Spring Break 28th March To 8th April**  |