

## YEAR 11 G/H-CHEMISTRY (IGCSE)

WEEK 8 (18<sup>th</sup> Oct to 22<sup>nd</sup> Oct)

Work Sent to the students through Google classroom/Zoom Learning Platform

Unit 3 – Topic: Reactivity Series

Resources: Text book, Worksheet, IGCSE science free lesson video, power point.

Date	Lesson	Topic	Mode of Teaching	
18.10.2020 Sunday	1 11H 6 11G	<b>Lesson Objective:</b> Understand how metals can be arranged in a reactivity series based on their reactions with: water, dilute hydrochloric or sulfuric acid <b>Learning Outcome:</b> Arrange the metals in the order of reactivity. Write word equations for the reaction. Write balanced symbol equation for the reaction.	<b>Google Meet / zoom</b>	Teacher uses power point presentation to explain the reactivity series.
19.10.2020 Monday	2 11H 5 11G	<b>Lesson Objective:</b> Understand how metals can be arranged in a reactivity series based on their displacement reactions between: <ul style="list-style-type: none"><li>metals and metal oxides</li><li>metals and aqueous solutions of metal salts</li></ul> <b>Learning Outcome:</b> Arrange the metals in the order of reactivity. Deduce the relative reactivity of some metals, by their reactions with water, acids and salt solutions.	<b>Google Meet/ zoom</b>	Teacher uses a PowerPoint presentation/video that contains interactive questions to find the order of reactivity of metals.

<p>20.10.2020</p> <p>Tuesday</p>	<p>3 <b>11H</b></p> <p>1 <b>11G</b></p>	<p><b>Lesson Objective:</b></p> <p>Know the order of reactivity of these metals: potassium, sodium, lithium, calcium, magnesium, aluminum, zinc, iron, and copper, silver, gold.</p> <p><b>Learning Outcome:</b></p> <p>Deduce the relative reactivity of some metals, by their reactions with water, acids and salt solutions.</p>	<p><b>Google Meet/ zoom</b></p>	<p>Teacher uses a PowerPoint presentation/ video to explain the effect of change in concentrations on the rate of reaction.</p>
	<p>4<b>11H</b></p> <p>2 <b>11G</b></p>	<p><b>Lesson Objective:</b></p> <p>Know the conditions under which iron rusts</p> <p><b>Learning Outcome:</b></p> <p>Understand air/ oxygen and water as a condition for rusting.</p>	<p><b>Google Meet/ zoom</b></p>	<p>Instruction will be given in the GC room to complete the textbook and worksheet questions.</p>
<p>22.10. 2020</p> <p>Thursday</p>	<p>5 <b>11H</b></p> <p>4 <b>11G</b></p>	<p><b>ASSESSMENT 2</b></p> <p><b>Portion - Ch. 20 Rates of Reaction</b></p> <p><b>Learning Objective: (Assessment)</b></p> <p>To be able to apply the knowledge and understanding of the concepts of rate of reactions and factors affecting equilibrium, to answer the questions in the assessment.</p> <p><b>Learning Outcome:</b></p> <p>Students will be able to recall the concepts learned in the previous lessons and apply their knowledge and understanding to answer the questions, in the assessment.</p>	<p><b>Google Meet zoom</b></p>	<p>Teacher will conduct the <b>assessment</b> through Google forms and monitor the students on Zoom.</p>

## YEAR 11 A/D/E – CHEMISTRY (GCSE)

**WEEK 8 (18<sup>th</sup> October to 22<sup>nd</sup> October)**

**Work Sent to the students through Zoom Learning Platform / Google classroom**

**Topic:**– SC16a: Chemical and fuel cells

**Resources:** Text book, Worksheet, Board works power point

Date	Topic	
<p><b>18.10.20</b> Sunday 8<sup>th</sup> period</p> <p><b>Mode of Teaching:</b> Zoom</p>	<p><b>Learning Objective:</b> Recall that a chemical cell produces a voltage until one of the reactants is used up.</p> <p><b>Learning Outcome:</b> Define cell as device that converts chemical energy to electrical energy. Explain that cell keeps on producing energy till reactants are present.</p>	<p>Teacher uses power point presentation with interactive questions on chemical cells.</p>
<p><b>19.10.20</b> Monday 4<sup>th</sup> period</p> <p><b>Mode of Teaching:</b> Zoom</p>	<p><b>Learning Objective:</b> Recall that in a hydrogen–oxygen fuel cell hydrogen and oxygen are used to produce a voltage and water is the only product</p> <p><b>Learning Outcome:</b> Describe the use of hydrogen – oxygen fuel cell as alternative fuels. Describe <b>some</b> advantages and disadvantages of hydrogen – oxygen fuel.</p>	<p>Teacher uses power point presentation with interactive questions</p>
<p><b>21.10.20</b> Wednesday 8<sup>th</sup> period</p> <p><b>Mode of Teaching:</b> Zoom</p>	<p><b>Learning Objective: (Assessment)</b> To be able to apply the knowledge and understanding of the concepts of fertilisers, Haber Process, Dynamic Equilibrium and Factors affecting equilibrium, to answer the questions in the assessment.</p> <p><b>Learning Outcome:</b> Students will be able to recall the concepts learned in the previous lessons and apply their knowledge and understanding to answer the questions, in the assessment.</p>	<p>Teacher will conduct the <b>assessment</b> through Google forms and monitor the students on Zoom.</p>
<p><b>22.10.20</b> Thursday 5<sup>th</sup> Period</p> <p><b>Mode of Teaching:</b> Zoom</p>	<p><b>Learning Objective:</b> Evaluate the strengths and weaknesses of fuel cells for given uses</p> <p><b>Learning Outcome:</b> Analyses the use of fuel cell by giving its advantages and disadvantages.</p>	<p>Teacher uses power point presentation with interactive questions</p>
<p><b>22.10.20</b> Thursday 6<sup>th</sup> Period</p> <p><b>Mode of Teaching:</b> GC</p>	<p><b>Learning Objective:</b> To answer the questions, on Chemical and Fuel Cells, in the worksheet.</p> <p><b>Learning outcome:</b> Students will be able to reinforce the concepts learned in the previous lesson by answering the questions in the worksheet.</p>	<p>Worksheet assigned through GC. Instruction will be given in the GC to complete the worksheet.</p>

**HOMEWORK:** Complete the textbook questions SC16a:Chemical and fuel cells - page 124 - 125

## YEAR 11 B/C/F – CHEMISTRY (GCSE)

**WEEK 8 (18<sup>th</sup> October to 22<sup>nd</sup> October)**

**Work Sent to the students through Zoom Learning Platform / Google classroom**

**Topic:**– SC16a: Chemical and fuel cells

**Resources:** Text book, Worksheet, Board works power point

<b>Date</b>	<b>Topic</b>	
<b>18.10.20</b> Sunday 1 <sup>st</sup> Period  <b>Mode of Teaching:</b> Zoom	<b>Learning Objective: (Assessment)</b> To be able to apply the knowledge and understanding of the concepts of fertilisers, Haber Process, Dynamic Equilibrium and Factors affecting equilibrium, to answer the questions in the assessment.  <b>Learning Outcome:</b> Students will be able to recall the concepts learned in the previous lessons and apply their knowledge and understanding to answer the questions, in the assessment.	Teacher will conduct the <b>assessment</b> through Google forms and monitor the students on Zoom.
<b>18.10.20</b> Sunday 2 <sup>nd</sup> Period  <b>Mode of Teaching:</b> Zoom	<b>Learning Objective:</b> Recall that a chemical cell produces a voltage until one of the reactants is used up.  <b>Learning Outcome:</b> Define cell as device that converts chemical energy to electrical energy. Explain that cell keeps on producing energy till reactants are present.	Teacher uses power point presentation with interactive questions to understand the concept of chemical cell.
<b>19.10.20</b> Monday 3 <sup>rd</sup> Period  <b>Mode of Teaching:</b> Zoom	<b>Learning Objective:</b> Recall that in a hydrogen–oxygen fuel cell hydrogen and oxygen are used to produce a voltage and water is the only product  <b>Learning Outcome:</b> Describe the use of hydrogen – oxygen fuel cell as alternative fuels. Describe <b>some</b> advantages and disadvantages of hydrogen – oxygen fuel.	Teacher uses power point presentation with interactive questions
<b>20.10.20</b> Tuesday 7 <sup>th</sup> Period  <b>Mode of Teaching:</b> Zoom	<b>Learning Objective:</b> Evaluate the strengths and weaknesses of fuel cells for given uses  <b>Learning Outcome:</b> Analyses the use of fuel cell by giving its advantages and disadvantages.	Teacher uses power point presentation and uses textbook questions.
<b>22.10.20</b> Thursday 4 <sup>th</sup> Period  <b>Mode of Teaching:</b> GC	<b>Learning Objective:</b> To answer the questions, on Chemical and Fuel Cells, in the worksheet.  <b>Learning outcome:</b> Students will be able to reinforce the concepts learned in the previous lesson by answering the questions in the worksheet.	Worksheet assigned through GC. Instruction will be given in the GC to complete the worksheet.

**HOMEWORK:** Complete the textbook questions SC16a: Chemical and fuel cells - page 124 - 125

