

YEAR 11 A/D/E – CHEMISTRY (Girls)

WEEK 12 (15th November to 19th November)

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

Topic:– SC19b: Energy changes in reactions

Resources: Text book, Worksheet, Board works power point

Date	Topic	
15.11.20 Sunday 8 th period Mode of Teaching: Zoom	Learning Objective: Recall that the breaking of bonds is endothermic and the formation of bonds is exothermic. Learning Outcome: Correlate the concept of endothermic with breaking of bonds. Correlate the concept of exothermic with forming bonds.	Teacher uses power point presentation with interactive questions
16.11.20 Monday 4 th period Mode of Teaching: Zoom	Learning Objective: Recall that the overall heat energy change for a reaction is: a) exothermic if more heat energy is released in forming bonds in the products than is required in breaking bonds in the reactants b) endothermic if less heat energy is released in forming bonds in the products than is required in breaking bonds in the reactants Learning Outcome: Explain the theory of exothermic and endothermic reactions. Differentiate endothermic and exothermic reactions on the basis of breaking and forming of bonds.	Teacher uses power point presentation with interactive questions
18.11.20 Wednesday 8 th period Mode of Teaching: Zoom	Learning Objective: Calculate the energy change in a reaction given the energies of bonds (in kJ mol ⁻¹) Learning Outcome: Develop skill in calculating enthalpy change for the reaction using experimental data. Appreciate the use of sign +/- in enthalpy change calculation.	Teacher uses power point presentation with interactive questions
19.11.20 Thursday 5 th Period Mode of Teaching: Zoom	Learning Objective: Explain the term activation energy Draw and label reaction profiles for endothermic and exothermic reactions Learning Outcome: Understands the use of a spark for an exothermic reaction to take place. Develop skill in representing the energy profile using a graph. Interpret the ideas in graphical questions	Teacher uses power point presentation with interactive questions
19.11.20 Thursday 6 th Period Mode of Teaching: GC	Learning Objective: To answer the questions, on Energy changes in reactions, in the worksheet. Learning outcome: Students will be able to reinforce the concepts learned in the previous lesson by answering the questions in the worksheet.	Worksheet assigned through GC.

HOMEWORK: Complete the textbook Qs SC19b: Energy changes in reactions 146 – 147

YEAR 11 B/C/F – CHEMISTRY (Boys)

WEEK 12 (15th November to 19th November)

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

Topic:– SC19b: Energy changes in reactions

Resources: Text book, Worksheet, Board works power point

Date	Topic	
15.11.20 Sunday 1 st Period Mode of Teaching: Zoom	Learning Objective: Recall that the breaking of bonds is endothermic and the making of bonds is exothermic. Learning Outcome: Correlate the concept of endothermic with breaking of bonds. Correlate the concept of exothermic with forming bonds.	Teacher uses power point presentation with interactive questions
15.11.20 Sunday 2 nd Period Mode of Teaching: Zoom	Learning Objective: Recall that the overall heat energy change for a reaction is: a) exothermic if more heat energy is released in forming bonds in the products than is required in breaking bonds in the reactants b) endothermic if less heat energy is released in forming bonds in the products than is required in breaking bonds in the reactants Learning Outcome: Explain the theory of exothermic and endothermic reactions. Differentiate endothermic and exothermic reactions on the basis of breaking and forming of bonds.	Teacher uses power point presentation with interactive questions
16.11.20 Monday 3 rd Period Mode of Teaching: Zoom	Learning Objective: Calculate the energy change in a reaction given the energies of bonds (in kJ mol^{-1}) Learning Outcome: Develop skill in calculating enthalpy change for the reaction using experimental data. Appreciate the use of sign +/- in enthalpy change calculation.	Teacher uses power point presentation with interactive questions
17.11.20 Tuesday 7 th Period Mode of Teaching: Zoom	Learning Objective: Explain the term activation energy Draw and label reaction profiles for endothermic and exothermic reactions Learning Outcome: Understands the use of a spark for an exothermic reaction to take place. Develop skill in representing the energy profile using a graph. Interpret the ideas in graphical questions	Teacher uses power point presentation with interactive questions
19.11.20 Thursday 4 th Period Mode of Teaching: GC	Learning Objective: To answer the questions, on Energy changes in reactions, in the worksheet. Learning outcome: Students will be able to reinforce the concepts learned in the previous lesson by answering the questions in the worksheet.	Worksheet assigned through GC.

**HOMEWORK: Complete the textbook questions SC19b: Energy changes in reactions
146 – 147**

YEAR 11 G/H–CHEMISTRY (IGCSE)

WEEK 12 (15th Nov to 19th Nov)

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

Unit 3 – Topic: Acids, Alkalis and Salt Preparations/ Test for Ions

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

Date	Lesson	Topic	Mode of Teaching	
15.11.2020 Sunday	1 11H 6 11G	Lesson Objective: Define <i>acids</i> and <i>bases</i> in terms of proton transfer, limited to aqueous solutions Learning Outcome: Understand that an acid is a proton donor and a base is a proton acceptor	Google Meet zoom	Teacher uses power point to reinforce concepts of acids and bases .Interactive questions to assess the concept of acid as proton donor.
16.11.2020 Monday	2 11H 5 11G	Lesson Objective: Write balanced chemical equations for the reaction of acids with hydroxides, carbonates and oxides of the listed metals Learning Outcome: Describe the reactions of hydrochloric acid, sulfuric acid and nitric acid with metals, bases and metal carbonates (excluding the reactions between nitric acid and metals) to form salts	Google Meet zoom	Teacher uses a PowerPoint presentation/video that contains interactive questions
17.11.2020 Tuesday	3 11H 1 11G	Lesson Objective: Describe tests for different gases. Write the procedure for identifying metal ions. Learning Outcome: Explain the procedure to identify the gases. Define cations and anions with some examples. Predict the difference between	Google Meet zoom	Teacher uses a PowerPoint presentation/ video to explain identification of Ion

		qualitative and quantitative analysis.		
	411H 2 11G	<p>Lesson Objective: Describe how to carry out a flame test.</p> <p>Learning Outcome: Explain the procedure for the flame test using a nichrome wire.</p> <p>Reasons why flame test is a qualitative' method of analysis.</p> <p>Predict why ions must not give the same positive result with two or more different ions.</p>	GC	Instruction will be given in the GC room to complete the textbook and worksheet questions.
19.11,2020 Thursday	5 11H 4 11G	<p>Lesson Objective: Describe how to carry out a flame test.</p> <p>Learning Outcome: Understand precipitation reactions for the identification of positive and negative ions.</p> <p>Write balanced equations and ionic equations for all the reactions involved.</p>	Google Meet/ zoom	Teacher uses PowerPoint presentation and video or animation to demonstrate any reaction to explain the different terms. Solve worksheet file questions.