YEAR 11 A/D/E – CHEMISTRY (Girls)

WEEK 10 (1st November to 5th November)

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

Topic:– SC18b: Factors affecting reaction rates
SC18c: Catalysts and activation energy

Resources: Text book, Worksheet, Board works power point

Date	Topic	
1.11.20 Sunday 8th period **Mode of Teaching:** Zoom	**Learning Objective:** Explain the effects on rates of reaction of changes in temperature, concentration, surface area to volume ratio of a solid and pressure (on reactions involving gases) in terms of frequency and/or energy of collisions between particles. **Learning Outcome:** Investigate the effect of changes in temperature, concentration and surface area of a solid on the rate of reaction. Predict the ways by which we can increase the rate of a given reaction.	Teacher uses power point presentation with interactive questions
2.11.20 Monday 4th period **Mode of Teaching:** Zoom	**Learning Objective:** Interpret graphs of mass, volume or concentration of reactant or product against time **Learning Outcome:** Evaluate the experimental data to explain effect of various factors on the rate of the reaction.	Teacher uses power point presentation with interactive questions
04.11.20 Wednesday 8th period **Mode of Teaching:** Zoom	**Learning Objective:** Describe a catalyst as a substance that speeds up the rate of a reaction without altering the products of the reaction, being itself unchanged chemically and in mass at the end of the reaction **Learning Outcome:** Define catalyst. Recognise catalysts in the reaction. Explain the effect of catalyst on the rate of reaction	Teacher uses power point presentation with interactive questions
05.11.20 Thursday	**Learning Objective:** Explain how the addition of a catalyst increases the rate of a	Teacher uses powerpoint presentation with

5th Period **Mode of Teaching:** Zoom	reaction in terms of activation energy Recall that enzymes are biological catalysts and that enzymes are used in the production of alcoholic drinks **Learning Outcome:** Explain the working of catalyst to effect the rate of reaction. Appreciate the use of biocatalysts in our daily life	interactive questions
05.11.20 Thursday 6th Period **Mode of Teaching:** GC	**Learning Objective:** To answer the questions, on Factors affecting rates of reaction and catalysts, 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 SC18b: Factors affecting reaction ratespage 138 - 139

YEAR 11 B/C/F – CHEMISTRY (Boys)

WEEK 10 (1st November to 5th November)

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

Topic:– SC18b: Factors affecting reaction rates
SC18c: Catalysts and activation energy

Resources: Text book, Worksheet, Board works power point

Date	Topic	
1.11.20 Sunday 1st Period **Mode of Teaching:** Zoom	**Learning Objective:** Explain the effects on rates of reaction of changes in temperature, concentration, surface area to volume ratio of a solid and pressure (on reactions involving gases) in terms of frequency and/or energy of collisions between particles. **Learning Outcome:** Investigate the effect of changes in temperature, concentration and surface area of a solid on the rate of reaction. Predict the ways by which we can increase the rate of a given reaction.	Teacher uses power point presentation with interactive questions

1.11.20 Sunday 2nd Period **Mode of Teaching:** Zoom	**Learning Objective:** Interpret graphs of mass, volume or concentration of reactant or product against time **Learning Outcome:** Evaluate the experimental data to explain effect of various factors on the rate of the reaction.	Teacher uses power point presentation with interactive questions
2.11.20 Monday 3rd Period **Mode of Teaching:** Zoom	**Learning Objective:** Describe a catalyst as a substance that speeds up the rate of a reaction without altering the products of the reaction, being itself unchanged chemically and in mass at the end of the reaction **Learning Outcome:** Define catalyst. Recognise catalysts in the reaction. Explain the effect of catalyst on the rate of reaction	Teacher uses power point presentation with interactive questions
3.11.20 Tuesday 7th Period **Mode of Teaching:** Zoom	**Learning Objective:** Explain how the addition of a catalyst increases the rate of a reaction in terms of activation energy Recall that enzymes are biological catalysts and that enzymes are used in the production of alcoholic drinks **Learning Outcome:** Explain the working of catalyst to effect the rate of reaction. Appreciate the use of biocatalysts in our daily life	Teacher uses power point presentation with interactive questions
5.11.20 Thursday 4th Period **Mode of Teaching:** GC	**Learning Objective:** To answer the questions, on Factors affecting rates of reaction and catalysts, 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 SC18b: Factors affecting reaction rates - page 138 - 139

YEAR 11 G/H–CHEMISTRY (IGCSE)

WEEK 10 (1st Nov to 5th Nov)

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

Unit 3 – Topic: Acids, Alkalis and Titration.

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

Date	**Lesson**	**Topic**	**Mode of Teaching**	
01.11.2020 Sunday	1 11**H** 6 **11G**	**Lesson Objective** Describe how to carry out an acid-alkali titration **Learning Outcome**: **Experiment** the titration of hydrochloric acid with sodium hydroxide with methyl orange as the indicator. **Observe** the colour change at the end-point of the titration. Repeat the experiment till concordant results are obtained. **Predict** that the salt is obtained by evaporation.	**Google Meet** **zoom**	Teacher uses power point to explain acid ,bases and neutral solutions . Interactive questions to assess the concepts of neutralization
02.11.2020 Monday	2 **11H** 5 **11G**	**Lesson Objective:** To calculate an unknown concentration of a solution **Learning Outcome:** Carry out simple calculations using the results of titrations to calculate an unknown concentration of a solution or an unknown volume of solution required.	**Google Meet** **zoom**	Teacher uses a PowerPoint presentation/video that contains interactive questions
03.11.2020 Tuesday	3 **11H** 1 **11G**	**Lesson Objective:** Identify the soluble salts from a set of examples. Recall acids as proton donor and a base as an proton acceptor **Learning Outcome:** know the general rules for predicting the solubility of ionic compounds in water:	**Google Meet** **zoom**	Teacher uses a PowerPoint presentation/ video to explain identification of soluble salts.
	4**11H**	**Lesson Objective:** Understand that an acid is a proton donor and a base is a	**Google Meet**	Instruction will be given in the GC room to

	2 **11G**	proton acceptor Write balanced chemical equations for the reaction of acids with hydroxides, carbonates and oxides of the listed metals. Know that metal oxides, metal hydroxides and ammonia can act as bases, and that alkalis are bases that are soluble in water **Learning Outcome**: Define *acids* and *bases* in terms of proton transfer, limited to aqueous solutions 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. Classify oxides as either acidic or basic, related to metallic and non-metallic character Differentiate alkalis are bases based on solubility.	**zoom**	complete the textbook and worksheet questions.
05.11.2020 Thursday	5 **11H** 4 **11G**	**Lesson Objective: Assessment 3** **Learning Outcome**: Reinforce the concepts of chemical equilibrium and acids and salts with multiple choice and structured questions.	**Google Meet** **zoom**	Teacher uses Google forms to assess the students.