YEAR 11 A/D/E – CHEMISTRY (Girls)

WEEK 9 (25th October to 28th October)

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

Topic:– SC18a: Rates of reaction
SC18b: Factors affecting reaction rates

Resources: Text book, Worksheet, Board works power point

Date	Topic	
25.10.20 Sunday 8th period **Mode of Teaching:** Zoom	**Learning Objective:** Explain how reactions occur when particles collide and that rates of reaction are increased when the frequency and/or energy of collisions is increased **Learning Outcome:** Explain the collision theory of reactions. Understand what is meant by successful collisions. Understand the role of energy in collisions during the reaction. Correlate the collision frequency with rate of a reaction.	Teacher uses power point presentation with interactive questions
26.10.20 Monday 4th period **Mode of Teaching:** Zoom	**Learning Objective:** Suggest practical methods for determining the rate of a given reaction **Learning Outcome:** Select a correct practical method for determining the rate of a given reaction	Teacher uses power point presentation with interactive questions
28.10.20 Wednesday 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

HOMEWORK: Complete the textbook questions SC18a: Rates of reaction - page 136 - 137

YEAR 11 B/C/F – CHEMISTRY (Boys)

WEEK 9 (25th October to 28th October)
Work Sent to the students through Zoom Learning Platform / Google classroom
Topic:– SC18a: Rates of reaction
SC18b: Factors affecting reaction rates

Resources: Text book, Worksheet, Board works power point

Date	Topic	
25.10.20 Sunday 1st Period **Mode of Teaching:** Zoom	**Learning Objective:** Explain how reactions occur when particles collide and that rates of reaction are increased when the frequency and/or energy of collisions is increased **Learning Outcome:** Explain the collision theory of reactions. Understand what is meant by successful collisions. Understand the role of energy in collisions during the reaction. Correlate the collision frequency with rate of a reaction.	Teacher uses power point presentation with interactive questions
25.10.20 Sunday 2nd Period **Mode of Teaching:** Zoom	**Learning Objective:** Suggest practical methods for determining the rate of a given reaction **Learning Outcome:** Select a correct practical method for determining the rate of a given reaction	Teacher uses power point presentation with interactive questions
26.10.20 Monday 3rd Period	**Learning Objective:** Explain the effects on rates of reaction of changes in temperature and concentration, in terms of frequency and/or energy of collisions between particles.	Teacher uses power point presentation with interactive

Mode of Teaching: Zoom	**Learning Outcome:** Investigate the effect of changes in temperature and concentration on the rate of reaction. Predict the ways by which we can increase the rate of a given reaction.	questions
27.10.20 Tuesday 7th Period **Mode of Teaching:** Zoom	**Learning Objective:** Explain the effects on rates of reaction of changes in 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 surface area of a solid and pressure (on reactions involving gases) 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

HOMEWORK: Complete the textbook questions SC18a: Rates of reaction - page 136 - 137

YEAR 11 G/H–CHEMISTRY (IGCSE)

WEEK 9 (25th Oct to 28th Oct)

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	
25.10.2020 Sunday	1 11**H** 6 **11G**	**Lesson Objective**: Describe the use of litmus, phenolphthalein and methyl orange to distinguish between acidic and alkaline solutions. **Learning Outcome**: Define acid Define alkali. Classify the nature of substances as	**Google Meet** **zoom**	Teacher uses power point to explain acid ,bases and neutral solutions . Interactive questions to assess the concepts of acid ,base and neutral solutions.

		acidic, basic or neutral. Define indicator. Cite some examples of indicators. Carry out the identification of different types of acids and alkalis using different types of indicators.		
26.10.2020 Monday	2 **11H** 5 **11G**	**Lesson Objective:** Understand how to use the pH scale, from 0–14, can be used to classify solutions as strongly acidic (0–3), weakly acidic (4–6), neutral (7), weakly alkaline (8–10) and strongly alkaline (11–14) **Learning Outcome:** Define pH. Understand the pH of different types of solutions. Analyze that a neutral solution has a pH of 7 and that acidic solutions have lower pH values and alkaline solutions higher pH values.	**Google Meet** **zoom**	Teacher uses a PowerPoint presentation/video that contains interactive questions on strong and weak acids.
27.10.2020 Tuesday	3 **11H** 1 **11G**	**Lesson Objective:** Know that acids in aqueous solution are a source of hydrogen ions and alkalis in aqueous solution are a source of hydroxide ions **Learning Outcome:** Describe that a base is any substance that reacts with an acid to form a salt and water only. Define alkali. Differentiate between alkali and base**.** Understand that alkalis are a source of hydroxide ions. **Analyze** that the higher the concentration of hydrogen ions in an acidic solution, the lower the pH; and the higher the concentration of hydroxide ions in an alkaline solution, the higher the pH. Establish the relationship between	**Google Meet** **zoom**	Teacher uses a PowerPoint presentation/ video to explain the effect of indicator on acid and base.

		hydrogen ion concentration in a solution and the pH of the solution.		
	4**11H** 2 **11G**	**Lesson Objective:** Know that alkalis can neutralize acids. **Learning Outcome**: Explain the general reactions of aqueous solutions of acids with: metals; metal oxides; metal hydroxides; metal carbonates to produce salts. Write word equations for the reaction. **Write a balanced symbol equation for the reaction.**	**Google Meet**	Instruction will be given in the GC room to complete the textbook and worksheet questions.