YEAR 9 A to F – CHEMISTRY

WEEK 41 (6th June to 10th June)

Work Sent to the students through Group email/ Google classroom

Topic:– Acids, Alkalis and Indicators

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

Date	Lesson	Topic	Mode of Teaching	
6th Jun Sunday **(girls)**	**6**	**Learning Objective : Reinforce** • Describe the use of hazard symbols on containers (a) to indicate the dangers associated with the contents (b) to inform people about safe-working precautions with these substances in the laboratory. • Recall the effect of acids and alkalis on indicators, including litmus, methyl orange and phenolphthalein. **Success Criteria:** • Describe what the main hazard symbols mean. • Describe the safety precautions that should be observed when handling different acids and alkalis. What are the effects of acids and alkalis on some common indicators?	**Zoom**	PPT on hazard symbols and indicators
07th Jun Monday **(boys)**	**7**			
07th Jun Monday **(girls)**	**5**	**Learning Objective : Reinforce** Recall that: (a)acids in solution are sources of H^+ ions and alkalis in solution are sources of hydroxide ions (b) a neutral solution has a pH of 7 and that acidic solutions have lower pH values and alkaline solutions higher pH values. **Success Criteria:** • Name the ions present in all acidic and all alkaline solutions. • State the pH values associated with acidic, alkaline and neutral solutions. • Explain the link between pH and concentration of ions • What does the pH tell us about the ions in a solution?	**Zoom**	PPT to explain the link between pH and concentration.
07th Jun Monday **(boys)**	**8**			
07th Jun Monday **(girls)**	**6**	**Learning Objective : Reinforce** To answer the questions, on acids, alkalis and indicators in the worksheet. **Success Criteria:** • Students will be able to reinforce the concepts learned in the previous lesson by answering the questions in the worksheet.	**GC**	Worksheet SC8a
9th Jun Wednesday – **(boys)**	**1**			

Home work: Solve S1 and E1 questions : SC8a (Pg53)

YEAR 10 A – F – CHEMISTRY

WEEK 41 (6th June to 10th June)

Work Sent to the students through Google classroom

Topic: Early atmosphere,Core practical:Electrolysis

Resources: Text book, Worksheet, power point &video

Date	Lesson	Topic	Mode of Teaching	
6/6/2021 Sunday 10/6/2021 Thursday	0 2	**Learning Objective:** 1. Recall that the gases produced by volcanic activity formed the Earth's early atmosphere. 2.Describe that the Earth's early atmosphere was thought to contain: a little or no oxygen b a large amount of carbon dioxide c water vapour d small amounts of other gases and interpret evidence relating to this. **Learning Outcome:** • Describe how the Earth's early atmosphere was formed. • State the names and relative amounts of the gases found in the Earth's early atmosphere. • Draw conclusions from evidence about the Earth's early atmosphere.	**GM** **Zoom**	Teacher uses powerpoint presentation tha contains Interactive questions.
7/6/2021 Monday 6/6/2021 Sunday & 9/6/2021 Wednesday	1&2 3 & 3	**Learning Objective:** **Core Practical: Investigate the electrolysis of copper sulfate solution with inert electrodes and copper electrodes.** **Learning Outcome:** • Write down the observation of the experiment. • Explain the formation of the products in the electrolysis of copper sulfate solution, using copper electrodes, and how this electrolysis can be used to purify copper. • Analyse the formation of the products in the electrolysis of copper sulfate solution, using copper electrodes, and how this electrolysis can be used to purify copper.	**GM** Zoom	Teacher uses video on electrolysis of copper sulphate solution with inert electrodes and copper electrodes.
6/6/2021 Wednesday 10/6/2021 Thursday	4 3	**Learning Objective:** To answer the questions, in the worksheet. **Learning outcome:** Students will be able to reinforce the concepts learned by answering the questions in the worksheet.	**GC**	Instruction will be given in the Google classroom to complete the Worksheet.

Home work: Solve S1 and E1 questions (pg no.167)

YEAR 11 A/D/E – CHEMISTRY (Girls)

WEEK 41 (6th June to 10th June)
Work Sent to the students through Google classroom

Date	Topic	
06.06.21 Sunday 8th **Mode of Teaching**: GC	**Learning Objective:** Write a plan to find water of crystallization of Epsom salt, including risks, hazards, safety measures and site references.	Google reference sites
07.06.21 Monday4th **Mode of Teaching:** GC	**Learning Objective:** To reinforce the calculation of empirical and molecular formula.	Worksheet assigned on GC
09.06.21 Wednesday 8th period **Mode of Teaching:** GC	**Learning Objective:** To find the water of crystallisation from the given experimental data	Worksheet – Part 1, assigned on GC
10.06.21 Thursday5th **Mode of Teaching:** Zoom	**Learning Objective:** To watch a video and discuss the plan to find water of crystallisation.	Video
10.06.21 Thursday6th **Mode of Teaching:** Zoom	**Learning Objective:** To find the water of crystallisation from the given experimental data.	Worksheet – Part 2

YEAR 11 B/C/F – CHEMISTRY (Boys)

WEEK 41 (6th June to 10th June)

Work Sent to the students through Google classroom

Date	Topic	
06.06.21 Sunday 1st **Mode of Teaching:** GC	**Learning Objective:** Write a plan to find water of crystallization of Epsom salt, including risks, hazards, safety measures and site references.	Google reference sites
06.06.21 Sunday2nd **Mode of Teaching:** GC	**Learning Objective:** To reinforce the calculation of empirical and molecular formula.	Worksheet assigned on GC
07.06.21 Monday3rd **Mode of Teaching:** GC	**Learning Objective:** To find the water of crystallisation from the given experimental data.	Worksheet – Part 1, assigned on GC
08.06.21 Tuesday7th **Mode of Teaching:** Zoom	**Learning Objective:** To watch a video and discuss the plan to find water of crystallisation.	Video
10.06.21 Thursday4th **Mode of Teaching:** Zoom	**Learning Objective:** To find the water of crystallisation from the given experimental data.	Worksheet – Part 2, assigned on GC

YEAR 11 G/H–CHEMISTRY (IGCSE)

WEEK 41 (6th June to 10th June)
Work Sent to the students through Google classroom

Date	Topic	
06.06.21 Sunday 6th period **Mode of Teaching**: GC	**Learning Objective:** To reinforce the calculation of empirical and molecular formula.	Worksheet assigned on GC
07.06.21 Monday 5th period **Mode of Teaching**: GC	**Learning Objective:** Write plan to find water of crystallization of Epsom salt, including risks, hazards, safety measures and site references.	Google reference sites
08.06.2021 Tuesday 1st period **Mode of Teaching**: Zoom/ Google Meet	**Learning Objective:** To find the water of crystallisation from the given experimental data.	Worksheet – Part 1, assigned on GC
08.06.2021 Tuesday 2nd period **Mode of Teaching**: Zoom/ Google Meet	**Learning Objective:** To watch a video and discuss the plan to find water of crystallisation.	Video
10.06. 2021 Thursday 4th period **Mode of Teaching**: GC	**Learning Objective:** To find the water of crystallisation from the given experimental data.	Worksheet – Part 2, assigned on GC

YEAR 12 D/G– CHEMISTRY

WEEK 41 (6th June to 10th June)
Work Sent to the students through Zoom Learning Platform / Google classroom

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

Date	**Topic**	
9.06.21 Wednesday 1, 2 - **12G** 7,8- **12D** **Mode of Teaching –** ZOOM	**Learning Objective:** Core Practical 5 – OXIDATION OF ALCOHOL	Teacher uses video and worksheet to complete the core practical 4 .
7.06.21 **Monday 7,8 – 12G** **8.6.21** **Tuesday 7** **10.6.21** **Thursday 7** **12D** ZOOM	**Learning Objective:** Calculation of Kc – Solve problems related to equilibrium concept. **Success Criteria: students will be able to:** Write the expression of Kc. Determine the value of Kc. Find the unit of Kc from the substituted concentration	Teacher uses past paper and worksheet to solve question on Kc

YEAR 13 A/B – CHEMISTRY

WEEK 41 (6th June to 10th June)
Work Sent to the students through Zoom Learning Platform / Google classroom
Topic:– Buffers (Reinforcement)
Resources: Text book, Worksheet file, video, power point presentations.

Date	Topic	
06.06.21 Sunday **1-13A ,4-13B** **Mode of Teaching –**GC	**Lesson Objective:** Acid base calculations and indicators. **Success Criteria: students will be able to:** - calculate the pH of buffer given appropriate data	Video, Textbook and power point
06.06.21 Sunday **2-13 A** **08.06.2021** Tuesday **2-13B** **Mode of Teaching –** GC	**Lesson Objective:** - 'buffer solution' - action of a buffer solution - roles of carbonic acid molecules and hydrogen carbonate ions in controlling the pH of blood. **Success Criteria: students will be able to:** - apply the roles of carbonic acid molecules and hydrogen carbonate ions in controlling the pH of blood. Buffer functioning and selection of appropriate chemicals to make buffer solution.	Past paper question on calculations spectroscopy
Wednesday **4- 13A** **2-13B** **Mode of Teaching – Zoom**	**Lesson Objective:** - calculation of: the pH of a buffer solution given appropriate data concentrations of solutions required to prepare a buffer solution of a given pH **Success Criteria: students will be able to:** - show the buffer range in titration curve of weak acid and strong base. determine K_a from the pH at the point where half the acid is neutralised. - calculate the concentrations of solutions required to prepare a buffer solution of a given pH	Video , worksheet and power point

YEAR 13 A/B – CHEMISTRY

WEEK 41 (6th June to 10th June)
Work Sent to the students through Zoom Learning Platform / Google classroom
Topic:– Buffers (Reinforcement)
Resources: Text book, Worksheet file, video, power point presentations.

Date	Topic	
06.06.21 Sunday 5 ,8 **13B** 09.06.21 Wednesday 5 , 6 **13A** **Mode of Teaching –** Zoom /GC	**Lesson Objective:** **-calculations to find pH of given buffer solutions, find the concentration of the different components needed to make a buffer of a given pH**. -enthalpy changes of neutralisation values for strong and weak acids. **Success Criteria: students will be able to:** -the concentrations of solutions required to prepare a buffer solution of a given pH. -Understand how to use a weak acid–strong base titration curve to demonstrate buffer action	Video and Textbook
06.06.21 Sunday 3 1**3A** 08.06.21 Tuesday 1 **13B** **Mode of Teaching –** Zoom/GC	**Lesson Objective:** **-calculations to find pH of given buffer solutions, find the concentration of the different components needed to make a buffer of a given pH**. **Success Criteria: students will be able to:** Problem solving based on buffer calculations. Applications of buffer at industrial level and calculation of buffer pH	Past paper and worksheet