YEAR 12 G /D – CHEMISTRY

WEEK 10 (1st November to 5th November)
Work Sent to the students through Zoom Learning Platform / Google classroom
Topic:– Standard enthalpy change of formation and Hess's law
Resources: Text book, Worksheet file, video, power point presentations.

Date	**Topic**	**Mode of Teaching**	
2.11.2020 Monday 3 **12D** 3.11.2020 Tuesday 1 **12G**	**Lesson Objective:** 1.Be able to define standard enthalpy change of formation 2. Be able to construct enthalpy cycles using Hess's Law **Learning Outcome:** • What is meant by the term standard enthalpy change of formation. • State Hess's Law and use it to calculate enthalpy changes indirectly. • Solves **some** problems using Hess's law as well as by using formula and graph..	Zoom	Teacher uses PowerPoint presentation to explain standard enthalpy change of formation and Hess' law.
3.11.2020 Tuesday 2 **12G** 7 **12D**	**Learning Objective:** (ASSESSMENT) Apply the knowledge and understanding of the concepts of ionization energy, periodic table, periodicity, enthalpy, enthalpy change, enthalpy level diagrams, and standard enthalpy of combustion to answer the questions in the assessment. **Learning Outcome:** Students will be able to recall the concepts learned and apply their knowledge and understanding to answer the questions, in the assessment.	Zoom	Teacher will conduct the assessment through Google forms and monitor the students on Zoom.
4.11.2020 Wednesday 2 **12G**	**Learning Objective:** Be able to calculate enthalpy changes from data using Hess's Law **Learning outcome:** •How Hess's law can be used to determine enthalpy changes of reactions that cannot be determined directly	Zoom	Teacher uses powerpoint presentation that contains interactive questions .

	•Predict ΔHf from ΔHc •Calculates ΔHr from ΔHf		

HOMEWORK: Complete the textbook questions on page 241

YEAR 12 D/G – CHEMISTRY

WEEK 10 (1st November to 5th November)

Work Sent to the students through Zoom Learning Platform / Google classroom
Topic 2 – Redox reactions : oxidation and reduction in terms of loss /gain of electrons .
Resources: Text book, Worksheet, Video , Board works , power point

Date	**Topic**	
3.11.20 Tuesday 8 **12D** 2.11.20 Monday 6 **12G** **Mode of Teaching –** Zoom	**Learning Objective:** - indicate the oxidation number of an element in a compound or ion, using a Roman numeral -Write the formulae of the compound by writing the oxidation number. **Learning Outcome: students will be able to:** - indicate the oxidation number of an element in a compound or ion, using a Roman numeral Use the idea of oxidation numbers for Example– iron (III) chloride etc. -**Predict** the oxidation number of an element in a compound. -Write the formulae of the compound by writing the oxidation number as and when required. -Understand that metals, in general, form positive ions by loss of electrons with an increase in oxidation number -Understand that non-metals, in general, form negative ions by gain of electrons with a decrease in oxidation number	Teacher uses power point to show rules to calculate oxidation number. Instructions will be given to complete chapter questions.
2.11.20 Monday	**Learning Objective:** - writing balanced ionic half equations.	Teacher uses ppt and videos to explain the

7- **12G** 4 .11.20 Wednesday 7- **12D** **Mode of Teaching –** ZOOM	- recall all steps in balancing ionic half equation. -identification of oxidant and reductant. **Learning Outcome: students will be able to:** -recall reducing agents lose electrons - Be able to write ionic half-equations and use them to construct full ionic equations.	concept of oxidation and reduction. Teacher uses worksheet that contains interactive questions, to explain redox concept based on OIL RIG
4. 11.20 Wednesday **8- 12D** **1-12G** **Mode of Teaching –** GC	**Learning Objective:** Know that oxidation number is a useful concept in terms of the classification of reactions as redox and as disproportionation Be able to write ionic half-equations and use them to construct full ionic equations. **Predict** redox reactions in terms of oxidation numbers. **Learning Outcome:** Combine ionic equations to give balanced redox equations for the reactions of $KMnO_4$, $K_2Cr_2O_7$ in acidified medium. Justify the given equation as an example of redox reaction. Solve **some** examples to construct half ionic equations with state symbols.eg-iron (II) sulphate with iodine	Worksheet assigned through GC. Instruction will be given in the GC to complete the worksheet.

HOMEWORK: Solve exam style questions from text book.