YEAR 12 G /D – CHEMISTRY

WEEK 7 (11th October to 15th October)

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

Topic:– Periodic Table and Periodicity
Resources: Text book, Worksheet file, video, power point presentations.

Date	Topic	Mode of Teaching	
12.10.2020 Monday 3 **12D** 13.10.2020 Tuesday 1 **12G**	**Lesson Objective:** Understand reasons for the trends in the following properties of the elements from periods 2 and 3 of the Periodic Table: i the melting and boiling temperatures of the elements, based on given data, in terms of structure and bonding ii ionisation energy based on given data or recall of the plots of ionisation energy versus atomic number **Learning Outcome:** Analyse the trends in the melting and boiling points for elements in period 2, period 3 based on the structure and bonding. Analyse the trends in ionization energy for period 2,3.	Zoom	Teacher uses PowerPoint presentation that contains interactive questions.
13.10.2020 Tuesday 2 **12G** 7 **12D**	**Learning Objective: (Assessment)** To be able to apply the knowledge and understanding of the concepts of atomic structure, isotopes, mass spectrometry, relative masses, atomic orbitals and electronic configuration, to answer the questions in the assessment. **Learning Outcome:** Students will be able to recall the concepts learned in the previous lessons 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.
14.10.2020 Wednesday 2 **12G**	**Learning Objective:** To answer the questions, on ionization energies, periodic table and periodicity, in the worksheet. **Learning outcome:** Students will be able to reinforce the concepts learned in the previous lesson by	GC	Worksheet assigned through GC.

15.10.2020 Thursday **7 12D**	answering the questions in the worksheet.		Instruction will be given in the GC to complete the worksheet.

HOMEWORK: Complete the textbook questions on page 25 and 29

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Topic 2 – Inter molecular force of attraction .
Resources: Text book, Worksheet, Video , Board works , power point

Date	**Topic**	
13.10.20 Tuesday 8 **12D** 12.10.20 Monday 6 **12G** **Mode of Teaching –** Zoom	**Learning Objective:** . understand the nature of intermolecular forces resulting from the following interactions: i London forces (instantaneous dipole – induced dipole) ii permanent dipoles iii hydrogen bonds **Learning Outcome:** • Compare the difference between inter and intra molecular forces. • Reviews that covalent bonds are between atoms in molecules, but how do molecules stay together. • Introduce Van der Waal's forces, due to movement of electrons, partially positive and negative parts in attract molecules. • Identify the nature of dispersion forces due to the oscillation of electrons causing temporary dipole in the molecule. • **Relates** that dispersion forces increase with increasing molecular mass. • Compare the solubility of non hydrogen bonding substances.	Teacher uses power point and interactive animation to demonstrate the polarity in molecules. https://www.youtube.com/watch?v=9YwdeEDrfPI Instructions will be given to complete chapter questions.
12.10.20 Monday	**Learning Objective:** • Understand the interactions in molecules, such as H_2O, liquid NH_3 and liquid HF, which give rise to hydrogen bonding	Teacher uses power point presentation and videos to explain the three types of

7- **12G** 14.10.20 Wednesday 7- **12D** **Mode of Teaching –** ZOOM	• hydrogen bonding and its impact on properties of the compounds. **Learning Outcome:** • Recall the conditions for the formation of hydrogen bonds. • Draw the hydrogen bonding between water molecules. • Explain the effect of hydrogen bonding on boiling point and solubility of compounds. • Predict why ammonia is soluble in water by drawing the hydrogen bonding between ammonia and water molecules.	forces. Teacher uses worksheet that contains interactive questions, to explain the properties based on intermolecular forces of attraction.
14.10.20 Wednesday **8- 12D** **1-12G** **Mode of Teaching –** Zoom	**Learning Objective:** Understand the following anomalous properties of water resulting from hydrogen bonding: i) its relatively high melting temperature and boiling temperature. ii) the density of ice compared to that of water. **Learning Outcome:** Predict the anomalous properties of molecules because of hydrogen bonding. Draw the structure of ice and compares its structure with water. Reason out why the density of ice is less than density of water.	Teacher uses textbook and worksheet questions to explain the concept of intermolecular forces.

HOMEWORK: Solve the given text book page 60