

YEAR 13 A /B –CHEMISTRY

WEEK 13 (22nd Nov to 26th Nov)

Topic: further organic chemistry -Carboxylic acids and their chemical properties.

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

Resources: Text book, Worksheets, video, power point presentations.

Date	Topic	
22.11.20 Sunday 1-13A 4-13B Mode of Teaching – Zoom	Lesson Objective: General formula and naming for simple carboxylic acids, $C_nH_{2n}O_2$, molecular and structural formula of simple carboxylic acids with up to six carbons in the main chain Success Criteria: students will be able to: Predict the general formula for simple carboxylic acids, $C_nH_{2n}O_2$, molecular and structural formula of simple carboxylic acids with up to six carbons in the main chain Use IUPAC rules to name simple carboxylic acids with up to three /six carbon atoms in the main chain. Show functional group isomers of $C_nH_{2n}O_2$.	Teacher uses power point presentation that contains interactive questions. Students solve the worksheet file questions.
Sunday 22.11.20 2-13 A 24.11.20 Tuesday 2-13B Mode of Teaching – Zoom	Lesson Objective: hydrogen bonding and physical properties of carboxylic acids, in relation to their boiling temperatures and solubility Success Criteria: students will be able to: Predict the physical properties of simple carboxylic acids by making reference to intermolecular attractions: boiling points and solubility in water due to Hydrogen bonding.	Teacher uses power point presentation that contains interactive questions. Students solve the worksheet file questions.
Wednesday 25.11.20 4- 13A 2-13B Mode of Teaching – Zoom	Lesson Objective: Methods of preparation of carboxylic acids. Success Criteria: students will be able to: understand that carboxylic acids can be prepared by the oxidation of alcohols or aldehydes, and the hydrolysis of nitriles. Relate the oxidation of primary alcohols and aldehydes to carboxylic acids using acid potassium dichromate. Show that carboxylic acids (or their salts) can also be formed by acid or base-catalysed hydrolysis of esters and nitriles.	Teacher uses power point presentation that contains interactive questions that helps to predict the products of different reactions. Students solve the worksheet file questions .

Homework : Solve worksheet file questions and text book questions page 177.

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WEEK 13 (22nd November to 26th November)

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Topic:– Further Kinetics

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

Date	Topic	
22.11.20 Sunday 4 13A	Learning Objective: Use graphical methods to find the activation energy for a reaction from experimental data <i>The Arrhenius equation will be given if needed.</i>	Teacher uses worksheet that contains data and students can solve the questions on activation energy.
5 13B Mode of Teaching – Zoom	Learning Outcome: Explain the variables in Arrhenius equation. Choose correct scale for the drawing of graph. Calculate the activation energy for the given reaction using given data from graph.	
22.11.20 Sunday 8 13B	Learning Objective: Deduce a reaction mechanism, using knowledge from a rate equation and the stoichiometric equation for a reaction.	Teacher uses textbook questions and power point to introduce the concept of reaction mechanisms.
25.11.2020 Wednesday 5 13A Mode of Teaching – Zoom	Learning Outcome: Write the steps in the mechanism given rate equation and overall equation for the reaction.	Students write rate equations for different reactions and discuss for the whole class.
24.11.20 Tuesday 1 13B	Learning Objective: Understand that knowledge of the rate equations for the hydrolysis of halogenoalkanes can be used to provide evidence for SN1 or SN2 mechanisms for tertiary and primary halogenoalkane hydrolysis.	Teacher uses PowerPoint presentation and video or animation to demonstrate the reaction mechanism to explain the progress for any reaction.
25.11.2020 Wednesday 6 13A Mode of Teaching – Zoom	Learning Outcome: Explain that SN1 has one reactant and SN2 has two reactants in the rate determining step.	Question from textbook and worksheet are given to solve. Discuss the answers for the whole class.

HOMEWORK: Solve textbook question page 148