HANS RAJ MODEL SCHOOL
PUNJABI BAGH,NEW DELHI
CURRICULUM
Session 2024-25
SUBJECT: CHEMISTRY
CLASS X

MONTH	Topics/Subtopics	Learning Intentions	Activities	Assignment
April	Ch-1- Chemical Reaction & Equation ●Introduction ●Definition of Chemical Reaction & Its Characteristics ●Definition & Writing of Chemical Equation ●Definition of Balanced Chemical Equation ●Balancing Chemical Equation ●Introduction to Types of Chemical Reactions ●Combination reaction definition & Examples. ●Difference between Endothermic & Exothermic Reactions ●Decomposition Reaction & ItsTypes ●Electrolysis of Water (with diagram) Photolysis ●Displacement	1.To develop the understanding & Concept of Chemical Reactions. 2.Acquirement of skills in drawing various diagrams related to the concept. 3. To develop problem solving Skills related to balancing of Chemical Equations. 4. To understand and differentiate between various types of Chemical Reactions 5. To be responsible and take care of lab apparatus while performing activities in the lab	DEMONSTRATION OF- Simple Chemical Reactions of metal with dil sulphuric acid shown in the lab. TUG OF WAR - Group activity based on balancing of Chemical Equations will be organised in school ground. DEMONSTRATION OF - Reaction of Ba(OH)2 and NH4Cl shown in the lab ART INTEGRATION ACTIVITY (Waste to wonder) - Students will be asked to prepare a working Model of	Assignment 1: Intext Questions (Page:6,10,13) . Assignment 2: NCERT Back Exercise page (14-16) Assignment 3: Competency based questions (MCQ, Reason, Case/ Situation questions)

	& Double Displacement Reaction- Definition & Examples ●Redox Reaction & Its definition ●Oxidation & Reduction Reaction- Definition & Examples with Equation		Electrolysis of Water from various materials available at home	
May	Ch-2 - Acids, bases & Salts ●Introduction ●Universal indicator, Natural & Olfactory indicators ●Chemical properties of Acids & Bases ●What do acids and bases have in common ●Dilution- Definition & method ●pH - Introduction and its importance in everyday life.	1.Ability of differentiate Between Acids & bases on the basis of physical properties 2. Ability to work productively on team projects acquired knowledge about pH 3. To be responsible and take care of lab apparatus while performing activities in lab.	MY KITCHEN LAB Students will be asked to make a video of preparing an indicator at home,followed by testing various acid/base samples from kitchen to observe the colour change. Demonstration of an activity to determine the pH of substances like lemon Juice, Vinegar, Sodium Hydrogen Carbonate etc. will be shown in the Lab ART INTEGRATION(OUR BODY) Students will be asked to draw Human digestive system on a chart and depict the changes in pH by change in colours	Assignment 1: Intext Questions (page 18,22,25,28,33) Assignment 2 : NCERT Back Exercise(34,35)
July	•Salts - Manufacturing, Reaction & Uses of common Salt bleaching	To develop understanding of various important chemical	Presentation on properties of metals and non metals will be shown using	Assignment 3: Competeny Based Questions (MCQ's, Assertion

	powder, baking soda, washing soda & plaster of Paris •Water of Crystallisation Ch-3 Metals& Non Metals ●Properties of Metals & Non Metals Chemical properties of Metals and Non Metals	compounds & their application in everyday life. 1. Ability to understand various physical chemical properties of Metal and Non Metal with balanced chemical equation.	Audiovisual aids . Demonstration of reaction of Fe nail with CuSO4 solution will be done in Lab	Reasons , Case/Situation based questions) Assignment 1: Intext Questions (page :40, 46,49,53,55)
Aug	Ch-3 Metals& Non Metals ●Reactivity Series ●Ionic compounds-definition, formation, Lewis dot structure ●Properties of ionic compounds ●Extraction of metals ●Corrosion - definition, causes, Examples with equations Prevention of Corrosion	To develop skills in performing activities related to reaction of Metals and Non Metals 2.. To understand concept of extraction of metals from its Ore 3.To be responsible and take care of lab apparatus while performing activities in lab.	ART INTEGRATION ACTIVITY(Fun with Bindis) Drawing lewis dot structure of ionic compounds using creative material like bindis will be done to develop the concept Powerpoint presentation on electrolytic refining of copper will be shown in the class	Assignment 2: NCERT Back Exercise (Page-56-57 Assignment 3: Competency Based Questions (MCQ's, Assertion Reasons , Case/Situation based questions)
Sep	Revision & Half Yearly Examination			
Oct	Ch-4 Carbon & Its Compound ●Introduction ●Unique / Versatile Property Of Carbon ●Hydrocarbons-Saturated &Unsaturated Hydrocarbons	1.To acquire knowledge about carbon compounds & understand various properties.	QUIZ TIME A Quiz will be conducted in class based on Versatile nature of Carbon RELAY RACE A Fun activity based	Assignment 1: Intext Questions. Page - (61,68,69,71,74,76)

	●Functional Groups ●Halogen ●Alcohol ●Halogens ●Aldehydes ●Ketones ●Carboxylic acid ●Alkene/alkynes ●Groups, Molecular formula, structural formula and IUPAC nomenclature	2.To understand the concept of funational groups and classify them in various types 3.To develop knowledge about structural and molecular formulas of various carbon compounds	on identifying various functional groups and their properties will be organised in form of a RELAY RACE in the School play ground	Assignment 2: NCERT Back Exercise , Page (77-78)
Nov	Ch-4 Carbon & Its Compound (Contd.) ●Some important carbon compounds- ●Ethanol and Ethanoic acid Acid Soaps and detergents	4.To develop skills in performing various activities related to the concept. 5.understand the concept of soaps and detergent and relate it to everydaylife	FUN WITH LATHER Students will be asked to demonstrate the formation of lather using soaps and detergents at home in samples of hard and soft water and to interpret the results.	Assignment 3: Competency Based Questions (MCQ's, Assertion Reasons , Case/Situation based questions)
Dec	Pre-board Examination			