

**KIDS WORLD SCHOOL**  
**SESSION - 2024 -25**  
**ANNUAL CURRICULUM PLANNER**  
**SUBJECT - CHEMISTRY**  
**CLASS - X**

MONTH	NAME OF THE LESSON	METHODOLOGY	LEARNING OBJECTIVES		LEARNING OUTCOMES	MODE OF ASSESSMENT+ACTIVITY
			KNOWLEDGE / CONTENTBASED	APPLICATION BASED		
<b>APRIL</b>  <b>01/04/2024-26/04/2024</b>	Chapter - 1  Chemical reactions and equations	1. Lecture-based learning  2. Technology-based learning  3. Differentiated Instruction  4. Experimental learning  5. Demonstration  6. Videos	1. Balanced chemical equations  2. Types of chemical reactions  3. Exothermic and endothermic Reactions  4. Precipitation reaction  5. Oxidation and reduction Reaction  6. Redox reaction	1. To understand and predict the product of the reactions.  2. To understand the importance of decomposition reactions in metal industries.  3. To be able to tell some oxidation and reduction reactions, exothermic and endothermic reaction, that are observe in day to day life.	1. To be able to balance the chemical equations.  2. To be able to identify types of chemical reactions.  3. Able to classify oxidation and reduction reactions.  4. To be able to tell about redox reactions.  5. To be able to identify and categorize exothermic and endothermic reactions.	<b>Assessment of learning:</b> 1. Long/ short question answers 2. Fill in the blanks 3. One word/MCQ 4. Match the following 5. Case study-based questions. <b>Assessment as Learning:</b>  Performing experiments 1. Burning of Magnesium ribbon. 2. Identify the following reactions i) Action of water on quicklime ii) Iron nail is kept in copper sulphate solution and classify as combination, decomposition, displacement and double displacement reaction.

<p><b>APRIL JUNE AND JULY</b></p> <p><b>27/07/2024- 31/07/2024</b></p>	<p>Chapter – 2</p> <p>Acids, Bases and Salts</p>	<p>1. Lecture-based learning</p> <p>2. Technology-based learning</p> <p>3. Differentiated instruction</p> <p>4. Experimental learning</p> <p>5. Demonstration</p> <p>6. Videos</p>	<p>Definitions</p> <p>1.General properties</p> <p>2. Examples and uses</p> <p>3. Concept of pH scale</p> <p>4. Preparation and uses of Sodium Hydroxide, Bleaching Powder, Baking soda, Washing soda and Plaster of Paris</p>	<p>1.To understand the use of pH in real life. To be able to observe the action of indicators.</p> <p>2.To be able to tell about neutralization reaction.</p> <p>3.Sustainable utility of by- products obtained in industries/ factories.</p>	<p>1.To be able to identify natural and man-made indicators, strong and weak acids and bases, acidic, basic and neutral salts.</p> <p>2.To be able to identify acidic and basic reactions and suggest the application accordingly, like stomach acidity, insect bite etc.</p> <p>3.Relate the processes and phenomena with causes and effects such as tooth decay with pH of saliva.</p> <p>4. Appreciate the importance of pH in day-to-day life.</p> <p>5. Identify the positive and negative radicals present in salt, and use this information predict a salt family. Identify and chemically name salts correctly.</p>	<p><b>Assessment of learning:</b></p> <p>1. Long/ short question answers.</p> <p>2. Fill in the blanks</p> <p>3. One word/ MCQ</p> <p>4. Match the following</p> <p>5. Assertion Reasoning Questions</p> <p>6. Case study based questions.</p> <p><b>Assessment as learning :</b></p> <p>Performing Experiments</p> <p>1. Finding the pH of the following samples by using pH paper/universal indicator such as turmeric, vinegar. Testing the pH values of solutions like saliva, lemon juice, tap water.</p> <p>2. Studying the properties of acids and bases ( HCl and NaOH) On the basis of the reactions with:</p> <p>a) Litmus solution (blue/red)</p> <p>b) Natural indicator like turmeric acid.</p>
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					6. Know the importance of salts in our daily life Able to identify the chemical formula, chemical name, preparation and properties of baking soda, washing soda, and plaster of Paris	
<b>AUGUST AND SEPTEMBER</b>  01/08/2024 – 10/09/2024	Chapter – 3  Metals and Non-Metals	1. Lecture-based learning  2. Technology-based learning  3. Differentiated Instruction  4. Experimental Learning  5. Demonstration  6. Videos	1. Properties of metals and non-metals  2. Reactivity series  3. Formation and properties of ionic compounds.  4. Basic metallurgical processes, corrosion and its prevention.	1. Observe various substances and their physical properties in order to classify them as metals and non-metals.  2. Summarize the properties of ionic compounds (salts).	1. Able to differentiate between metals and non-metals on the basis of physical and chemical properties. 2. Able to predict the product when metals and non-metals react with oxygen, steam, water, and acid. 3. Draw inference about the reactivity of metals. 4. Able to identify major ores of some common metals. 5. To identify ways to prevent corrosion, alloy, painting, coating. 6. To be able to find ways to extract metals from their oxides. 7. To be able to analyze the properties of ionic	<b>Assessment of learning:</b> 1. Long/short question answers. 2. Fill in the blanks 3. One word/ MCQ 4. Match the following 5. Diagram based questions.  <b>Assessment as learning:</b> Performing experiments Observe the action of Zn, Fe, Cu and Al metals on the following salt solutions: Unit - 1 a) ZnSO <sub>4</sub> (aq) b) CuSO <sub>4</sub> (aq) Arranging Zn, Fe, Cu and Al (metals) in the decreasing order of reactivity based on the above result.

					compounds and able to compare it with covalent compound.	
					Revision of previous topics.	<b>(Multidisciplinary Activity)</b>
<b>OCTOBER</b>	REVISION OF TERM I EXAMINATION AND ACTIVITY	Discussion	Able to remember the previous topic.	To learn and recall keywords.		<p><b>Integrated with Marathi</b></p> <p><b>Assessment of learning:</b></p> <p><b>Activity</b> – Students will make the jewellery and with the help of activity they will understand the uses and properties of metals and non metals.</p>
<b>NOVEMBER AND DECEMBER</b>	Chapter – 4 Carbon and its compounds	1. Lecture-based learning 2. Technology-based Learning	1. Covalent bonding in carbon compounds. 2. Versatile nature of carbon.	1. Classification of hydrocarbons and homologous series. 2. To be able to predict formulate carbon and its versatile nature. 3. Homologous series. 4. Nomenclature of carbon compounds containing functional groups (hydrogen alcohol	1.To relate different shapes of molecules with day to day objects. 2.To able to identify saturated and unsaturated compounds. 3.To able to draw the structure of different isomers of hydrocarbons. 4.To able to tell the reason behind the blackening of utensils. 5.To understand and	<b>(ART INTEGRATION)</b>  <b>ACTIVITY-</b> Students will make a model or collage with the help of clay, ball and matchstick.  <b>Assessment of learning:</b> 1. Long/short question answers. 2. Fill in the blanks 3. One word/ MCQ 4. Match the following
11/11/2024 – 15/12/2024		3. Differentiated Instruction 4. Experimental Learning 5. Videos	3. Nomenclature of carbon compounds. 4. Outline the different functional group by replacing the hydrogen atom with heteroatoms.			

		6. Demonstration		<p>ketones aldehydes alkanes and alkynes)</p> <p>5. Comparison between saturated and unsaturated hydrocarbons.</p> <p>6. Chemical properties of carbon compounds (combustion, oxidation, addition and substitution reaction). Ethanol and ethanoic acid (properties and uses), soaps and detergents.</p>	<p>explain the reaction of carbon compounds with various materials, like nickel catalyst, hydrogen etc.</p> <p>6.To be able to identify proper usage of carbon compounds on their property.</p> <p>7. Discussion on health hazards on consumption of alcohol and health benefits of using saturated hydrocarbon (oil).</p> <p>8.Correlate day-to-day life phenomenon on working of soap and detergents.</p> <p>9. Able to correlate the examples of acetic acid with day-to-day life.</p>	<p>5. Assertion Reasoning Questions</p> <p><b>Assessment as learning:</b></p> <p>Performing experiments</p> <p>1. Study of the following properties of acetic acid (ethanoic acid):</p> <p>Unit -1</p> <p>a) odour</p> <p>b) Solubility in water</p> <p>2. Study of the comparative capacity of a sample of soap and detergent in soft and hard water.</p>
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