

SALWAN PUBLIC SCHOOL, RAJENDRA NAGAR
CLASS – X
LESSON PLAN
CHAPTER-1: CHEMICAL REACTIONS AND EQUATIONS

CHAPTER-1:	Science :(CHEMICAL REACTIONS AND EQUATIONS)
Class Transaction	PART-II
(10-12 days)	Total: 5 periods (approx. 35 min each) Sub-Topic: Types of chemical reactions-Combination Reaction and different activities. Sub-Topic: Types of chemical reactions-Decomposition Reaction and different activities. Sub-Topic: Types of chemical reactions-Displacement Reaction and different activities. Sub-Topic: Type of chemical reactions –Double displacement reaction and different activities. Sub-Topic:- Oxidation and reduction reaction (Corrosion and rancidity)
Pre-requisite for the course (KNOWLEDGE)	This lesson requires: • Knowledge of the basic properties and mechanisms of chemical reactions. • The nature and the identity of the initial substance have somewhat changed. • What is actually meant by a chemical reaction? How do we come to know that a chemical reaction has taken place?
Learning Objectives	Students will be able to: • Classify a chemical reaction as a combination, decomposition, single replacement, double replacement, exothermic or endothermic reaction. • Differentiate between the types of chemical reactions. • Predict the products of a chemical reaction. • Understand the different sets of conditions required such as temperature, light etc in reactions. • Know the effects of oxidation reactions in everyday life like corrosion and rancidity.
Teachers' activity	Introduction: Teacher will introduce the topic by performing various activities: Evidence-based active-learning instructional strategies: • Problem solving (investigating and applying established principles to justify an observation) Activity:- Example-1:- Formation of calcium hydroxide Example-2: Heating of calcium carbonate Example-3: Electrolysis of water

	Example -4: Reaction of iron nails with copper sulphate solution Example-5: Reaction between Sodium Sulphate and Barium Chloride Example-6: Reaction between Cu and O₂; CuO and H₂. • Critical thinking and collaboration (Competitive evaluation of given information) Recall Activity : You are given test tube, the solutions of lead (II) nitrate and potassium iodide and are instructed to mix together in a test tube. Give answers by activity : (i)What was the colour of the precipitate formed? Can you name the compound precipitated? (ii)Write the balanced chemical equation for this reaction. (iii)Is this also a double displacement reaction? • The ability to understand the effects of oxidation reactions in everyday life? Example- Browning of cut surfaces of fruits. Formation of metal oxide on metal like iron rust-Corrosion, Burning of crackers, Rancidity: • Recapitulation (working effectively with others): Example-Discuss brain storming questions in class in group.
Learning Outcomes	Students will be able to know • displacement and double displacement reaction. • precipitation reactions which produce insoluble salts. • importance of Redox reaction in ever day life. Oxidation is the gain of oxygen or loss of hydrogen. Reduction is the loss of oxygen or gain of hydrogen. • molecular interactions and chemical reactions in the body.
Assessment	• Continuously monitor student progress by asking oral questions. • Providing active involvement of students in their own learning by giving daily Practice Problems in the class. • Peer assessment in Lab Activities • Written test
Self-Study, Assignments, Homework	• Self-Study (Independent Practice)-The teacher would ensure that each student should bring NCERT Book and tries to be independent at the work as well as be under the teacher's guidance. • Guided practice followed by Independent Practice (Question Bank): On completion of the chapter, students will be answer the following revision questions: Q.1.Give some examples of combination and decomposition reactions. Q.2. What happens when Ferrous sulphate crystal is heated? Write the equations also. Q.3.Dissolve 0.5 gram silver nitrate 10 ml of water in a test tube and place a

	Copper wire in a test tube. Explain your observation. Q.4. What is the difference between displacement and double displacement reactions? Write equations for these reactions. Q.5. Take about 2 g silver bromide in a china dish and Place this china dish in sunlight for some time. (a) Observe the colour of the silver bromide after some time (b). Name type of the reaction. Q.6. An iron knife kept dipped in a blue copper sulphate solution turns the blue solution light green. Why? Homework: The students, with the help of the teacher, will solve the questions from NCERT back exercise in their notebook.
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