

Pre-Content/content Post-Content	Learning Outcome/Objectives	
	General	Specific
Pre-Content Motivating questions related to the types of reactions Content Rate of a Chemical Reaction , Factors Influencing Rate of a Reaction , Integrated Rate Equations, Pseudo First Order Reaction Temperature Dependence of the Rate of a Reaction Collision Theory of Chemical Reactions Post-content Kinetic studies not only help us to determine the speed or rate of a chemical reaction but also describe the conditions by which the reaction rates can be altered	Students will be able to ✓ Recall the types of reactions ✓ Recollect the parameters That determine how rapidly food gets spoiled. ✓ Define the rate of a reaction in terms of change in concentration of either of the reactants or products with time ✓ Describe the types of reactions ✓ Differentiate between the molecularity and order of a reaction ✓ Understand the factors affecting rate of the reaction ✓ Determine the rate constants for zeroth and first order reactions. ✓ To promote understanding about the things around us	Students will be able to ✓ Give example of slow and fast reaction. ✓ Write the parameters that determine how rapidly food gets spoiled ✓ List the factors that controls the rate at which fuel burns in an auto engine. ✓ Define the average and instantaneous rate of a reaction ✓ Express the rate of a reaction in terms of change in concentration of either of the reactants or products with time; ✓ Distinguish between elementary and complex reactions ✓ Differentiate between the molecularity and order of a reaction ✓ Discuss the dependence of rate of reactions on concentration, temperature and catalyst ✓ Derive integrated rate equations for the zero and first order reactions ✓ Determine the rate constants for zeroth and first order reactions ✓ Describe collision theory. ✓ Show their concern for environment.

Home Work /Assignments

NCERT back exercise is given as homework.

Assignment sheet is also given

Questions taken in the class were also asked to solve.

Teacher's Activity	Student's Activity	Teacher's Observation And Remedial
Students will be asked to recall their previous knowledge in the form of questions in interactive session. Students will be asked to recall their previous knowledge on fast, slow and moderate reactions in the interactive session. Based on which the new concept of rate of the reaction will be introduced Few examples will be given related to rate of the reaction. Difference between average and Instantaneous reaction rate will be explained in the class Order and molecularity of the reaction will be explained to the students. Factors affecting rate of the reaction will be explained with examples. An experiment to calculate the rate of the reaction will be arranged in the lab Arrhenius theory and Collision theory will be explained and numerical will be explained to students. .	They will answer the questions with examples. Graphical difference between average and Instantaneous reaction rate will be drawn. They will give examples of the reactions with zero and first order reaction. They will write the factors affecting rate of the reaction along with the various examples. They will perform the experiment related to concentration with related to time. They will write the temperature controlled reactions They will solve the numerical related Arrhenius theory . They will write the formulas at the back of the register. Students will solve the NCERT intext questions and back exercise.	

Teaching Aids : Active inspire,

Methodology/Innovative Methods: Discussion, Recall, Explanation, Question-Answer method, problem solving

Interdisciplinary Links: Maths Physics

Coordinator

Vice-Principal

Principal