

DELHI PUBLIC SCHOOL GHAZIABAD
CLASS – XII
CONSOLIDATED LESSON PLAN
CHAPTER-8: d and f-block element

Unit	d-and f-block elementsss
Class Transaction	Total: 5 periods
Pre-requisite for the course	This lesson requires 1. Basic knowledge of electronic configuration of d-and f-block element 2. Knowledge of Atomic trends and their properties
Assessment of qualifying knowledge	1. Written test 2. HW notebook
Objective	Students would be able to understand the chemistry of d-and f-block element , their important compounds and basic properties
Learning Outcomes	<u>KNOWLEDGE-</u> <i>Students will know and understand</i> 1. Relative stability of oxidation states in terms of electrode potential 2. Preparation and properties of KMnO_4 and $\text{K}_2\text{Cr}_2\text{O}_7$ 3. Properties and trends of inner transition elements 4. Structure of dichromate ion and permanganate ion <u>SKILLS-</u> <i>Students would be able to</i> 1. Understand chemical properties of transition elements and their trends 2 Reasoning questions based on properties of transition elements 2. Word problem based on chemical equation 3. Solve questions pertaining to structure and chemical properties
Transaction Methodology (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Transaction would proceed in the following manner- <i>Brain Storming</i>-The class would start with a discussion on what the students have already learnt in the previous classes and hence what is it that they would learn now. They would also be told the significance of the topic that they would be studying. <i>Communication and brainstorming:</i> <i>Students develop effective communication skills and learn to put across their views.</i> <i>Introduction of the topic-</i> ppt and Digital Content would be made by

	students. Collaboration:<i>Students learn to work in collaboration to achieve a common goal. They learn to manage time and divide and delegate work and responsibilities.</i> Creativity and innovation <i>Students use the knowledge given in class and create projects and models and perform research to give innovative solutions to the problem studied. Guided practice followed by Independent Practice- NCERT questions to be discussed in the classroom. : Helps students to think critically and solve the given problem</i> <i>Guided practice followed by Independent Practice- NCERT questions to be discussed in the classroom.</i> Techniques to be used: Daily Practice Problem MCQ Peer Assessment Character and citizenship: <i>Group discussion helps to develop interpersonal skills, respecting and valuing views of others</i> HOTS Any Other												
Resources	Text Book: NCERT text book for Mathematics Reference Book 1. CBSE Exemplar 2. DPSG Spiral 3. Previous year questions												
Self Study, Home Work, Assignments	Independent Practice: Students would do the given questions in their H.W. notebooks as mentioned in the monthly planner. It is also advised that the students come to the class with proper background knowledge of the topic under discussion. They can refer to the resources stated above.												
Assessments	<table><tr><td>3 UNIT TESTS</td><td>Marks each</td><td></td></tr><tr><td>MID TERM EXAMINATION</td><td></td><td>70 Marks</td></tr><tr><td>HALF YEARLY EXAMINATION</td><td></td><td>70 Marks</td></tr><tr><td>PRE BOARD EXAMINATION</td><td></td><td>70 Marks</td></tr></table>	3 UNIT TESTS	Marks each		MID TERM EXAMINATION		70 Marks	HALF YEARLY EXAMINATION		70 Marks	PRE BOARD EXAMINATION		70 Marks
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Addressing Classroom Diversity	Due to various social backgrounds and multiple intelligences, the classroom might be a diverse arena. The following techniques can be used for various groups: <i>For higher scoring students:</i> • Spiral Level 3 questions to be done • Encouragement for referring other resources <i>For lower scoring students:</i> • Spiral Level 1 to be completed • Peer help to be provided • Provide grade-up classes(PCC) <i>For differently abled students:</i> • Ignore spelling mistakes and formulae,if not written • Call parents at regular intervals • Provide grade-up classes • Encourage and motivate them at every level.
Marks	The weightage would be given by CBSE.

DELHI PUBLIC SCHOOL GHAZIABAD
CLASS XII
LESSON PLAN
Unit-8
d-and - f-BLOCK ELEMENTS
(Based on DOL)

Anticipatory Set: Facilitator introduces the topic **d - and f-BLOCK ELEMENTS**

Objective:

- Given questions based on the topic. learners will be able understand the atomic properties of P-block elements
- Students will be able to do reasoning questions based on atomic properties of elements
- To make students able to solve questions based on the topics to be discussed

Techniques to be used:

- Peer Assessment
- Quiz
- Case Study
- PPT

Materials required and Teaching Aids: Smart Class Modules, blackboard, chalk, duster, NCERT book

Strategy

Student – teacher interaction, collaborative learning, independent practice

DAY 1

- The students will be shown a PPT and will be made aware abundance and application
- of d-Block elements
- The students will be told about the uses of the compounds in day to day life.
- The students would be given practice on simple questions based on structure and atomic properties of d-Block elements.
- **GUIDED PRACTICE**

The students will solve selected questions from NCERT book in their notebook in the class with the help of their teacher .(CRITICAL THINKING)

Students will prepare power point presentation on the properties of d and f block elements (CREATIVITY)

SUMMARIZE AND CHECK FOR UNDERSTANDING

Some questions will be asked based on the day's teaching and doubts will be cleared.

Oral question answer session (COMMUNICATION)

INDEPENDENT PRACTICE – Students will do the leftover questions of ex. in assignment copy

DAY 2

=> learn the positions of the d- and f-block elements in the periodic table;

- know the electronic configuration some of their important compounds

=>Questions from NCERT will be discussed along with the discussion of solved examples given.

GUIDED PRACTICE

The students will solve selected questions from NCERT book of exercise in their notebook in the class with the help of their teacher.

.(CRITICAL THINKING

SUMMARIZE AND CHECK FOR UNDERSTANDING

Some questions will be asked based on the day's teaching and doubts will be cleared

. Oral question answer session (COMMUNICATION)

INDEPENDENT PRACTICE – Students will do the leftover questions of ex in their Assignment notebook

DAY 3

=>appreciate the relative stability of various oxidation states in terms of electrode potential values;

=>The exercise would be undertaken , questions from NCERT will be discussed along with the discussion of solved examples given.

GUIDED PRACTICE

The students will solve selected questions from NCERT book of exercise in their notebook in the class with the help of their teacher. .(CRITICAL THINKING)

Students will help weak students in solving brain storming questions (CHARACTER)

SUMMARIZE AND CHECK FOR UNDERSTANDING

Some questions will be asked based on the day's teaching and doubts will be cleared.

. Oral question answer session (COMMUNICATION)

INDEPENDENT PRACTICE – Students will do the left over questions of exercise in their assignment notebook.

DAY 4

=>describe the preparation ,properties, structures and uses of some important compounds such as $K_2Cr_2O_7$ and $KMnO_4$

- The exercise would be undertaken , questions from NCERT will be discussed along with the discussion of solved examples given.

GUIDED PRACTICE

The students will solve selected questions from NCERT book of exercise in their notebook in the class with the help of their teacher.

SUMMARIZE AND CHECK FOR UNDERSTANDING

Some conceptual questions will be asked based on the day's teaching and doubts will be cleared.

INDEPENDENT PRACTICE – Students will do the leftover questions of exercise in their assignment notebook.

DAY 5

=>understand the general characteristics of the d– and f–block elements and the general horizontal and group trends in periodic table.

describe the properties of the f-block elements and give a comparative account of the lanthanoids and actinoids with respect to their electronic configurations, oxidation states and chemical behaviour.

The exercise would be undertaken , questions from NCERT will be discussed along with the discussion of solved examples given.

GUIDED PRACTICE

The students will solve selected questions from NCERT book of exercise in their notebook in the class with the help of their teacher.

Students will do brainstorming questions (CRITICAL THINKING)

SUMMARIZE AND CHECK FOR UNDERSTANDING

Some conceptual questions will be asked based on the day's teaching and doubts will be cleared.

. Oral question answer session (COMMUNICATION)

INDEPENDENT PRACTICE – Students will do the leftover questions of exercise in their assignment notebook.

Practice of 1. COMPLETE THE EQUATION

2.REASONING QUESTIONS

3.DESRIPTIVE TYPE QUESTIONS BASED ON PREPARATION OF ELEMENTS