

DELHI PUBLIC SCHOOL GHAZIABAD
CLASS – XI
CONSOLIDATED LESSON PLAN

CHAPTER 3 : CLASSIFICATION OF ELEMENTS AND PERIODICITY IN PROPERTIES

Unit	CLASSIFICATION OF ELEMENTS AND PERIODICITY IN PROPERTIES
Class Transaction	Total: 4 periods
Pre-requisite for the course	This lesson requires Basic knowledge of periodic table Basic knowledge of electronic configuration of atom
Assessment of qualifying knowledge	1. Written test 2. HW notebook
Objective	Students would be able to understand *modern periodic law, IUPAC name of elements with atomic number more than 100 *periodic trend in properties of elements- atomic radii, ionization enthalpy, electron gain enthalpy, electronegativity
Learning Outcomes	<u>KNOWLEDGE-</u> <i>Students will know and understand</i> 1. Describe the term vander waal radii, ionic radii. 2. Explain diagonal relationship and its causes. 3. Types of oxides and trend of valency <u>SKILLS-</u> <i>Students would be able to</i> 1. Understand the present form of periodic table 2. Reasoning questions based on ionization enthalpy and electron gain enthalpy. 3. Solve questions of justification of number of elements in period
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 <i>Collaboration:</i> <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> <i>Creativity and innovation</i>

	<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 <i>Character and citizenship:</i> Group discussion helps to develop interpersonal skills, respecting and valuing views of others 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>3UNIT TESTS</td><td>30,35,35 Marks</td></tr> <tr> <td>HALF YEARLY EXAMINATION</td><td>70 Marks</td></tr> <tr> <td>ANNUAL EXAMINATION</td><td>70 Marks</td></tr> </table>	3UNIT TESTS	30,35,35 Marks	HALF YEARLY EXAMINATION	70 Marks	ANNUAL 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.

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CLASS XI
LESSON PLAN
CHAPTER – 3
Classification of elements and periodicity in properties
(Based on DOL)

Anticipatory Set: Facilitator introduces the topic classification of elements

Objective: 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

- **Need to classify elements, genesis of periodic classification, Dobereiner's Law of Triads, Newlands Law of Octaves, Mendeleev's Periodic Law and modern Periodic Law**
- The students will be shown a PPT and will be made aware about the mendeleev's and modern periodic table ,
- The students will be told about the nomenclature of elements with atomic number > 100

GUIDED PRACTICE

The students will solve selected questions from NCERT book of 3.3 to 3.6 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.
Group discussion on the topic taught(COMMUNICATION)

INDEPENDENT PRACTICE – Students will do the questions of NCERT in assignment copy
DAY 2

- The students will be shown a PPT and will be made aware about **periodwise and groupwise electronic configuration of elements and position of s-, p-,d- and f- block elements in the periodic table and their general properties.**
 - The students will be told about the position of metals, non metals and metalloid in periodic table.

*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.
Group discussion on the topic taught(COMMUNICATION)

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

DAY 3

- **Trend in physical properties like Atomic Radius. Ionic Radius, Ionization enthalpy in periodic table**
- , The exercise would be undertaken
- The students will be told about the nomenclature of elements with atomic number>100

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.
Group discussion on the topic taught(COMMUNICATION)

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

DAY 4

- **Trend in physical properties like Electronegativity, Electron Gain Enthalpy in periodic table**
- **Periodicity of valence or oxidation state and anomalous properties of second period elements i.e. Diagonal relationship.**
- **Periodic trends and chemical reactivity.**
- 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)

SUMMARIZE AND CHECK FOR UNDERSTANDING

Some conceptual questions will be asked based on the day's teaching and doubts will be cleared. Group discussion on the topic taught(COMMUNICATION)

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