



Delhi Public School Srinagar

LESSON PLAN

Session 2015-2016

Class	: I X
Subject	: Chemistry
For the Month(s) of	: August and September
Theme	: <i>Atoms and molecules</i>
Periods	: <i>Theory (12) and Practical (3)</i>

OBJECTIVES (CONCEPTS & SKILLS): :

- *Basic concept of Carbon and its compounds.*
- *Concept of existence of carbon, its allotropes and hydrocarbons.*
- *Concept of physical and chemical properties of compounds.*
- *Textbook problems related to the topic.*

The teacher will keep the following skills in view:

- *Scientific Aptitude*
- *Thinking skills*
- *Reasoning Skills*
- *Attentiveness*
- *Listening Skills)*

LEARNING OUTCOMES :

- *Make it sure that the student learn the concepts given.*
- *The brief idea about atoms and molecules.*
- *Different types of atoms of a given element.*
- *Number of atoms of an element present in a given compound.*

INSTRUCTIONAL TOOLS & REFERENCES : In addition to general teaching tools like white board, marker, etc, the teacher will use demonstration method showing structure of different atoms and how they are bonded.

The References used will be:

- i. chemistry Book by S Chand publications for class IX
- ii. Text Book for class IX

PEDAGOGY :

- i. Activating Prior Knowledge by Random Questioning
- ii. Introducing the topic to be taught after getting the expected response from the students.
- iii. Developing hypothesis by (a) Brainstorming, (b) Lecture , (c) Discussion and (d) In Text Questions

ACTIVITY/ASSIGNMENT/PROJECTS : The teacher will give Home Assignments and the areas of assessment will be:

Content of Knowledge, Presentation, Correctness, Time Management and Thinking skills

ASSESSMENT:

- i. Divide the students in the class in four groups and ask them to calculate molecular mass , formula mass and
- ii. Remind the students about the various types of molecules and ask them to write formula of various compounds using crossover valency method of each of them other than the discussed in the class.
- iii. Group Discussion
- iv. In Text Questions

FA₃ & SA₂ SYLLABUS :

FA Syllabus:

- Basic concept of atoms and molecules.
- Laws of chemical combination (Law of conservation of mass and Law of constant proportion)
- Atomic mass, molecular mass , formula unit mass and molar mass of different compound.
- Molecule of a element and molecule of a compound.
- Writing chemical formula by using crossover valency method.
- Mole concept
- Textbook related to the topic.

SA Syllabus: Same as FA



Delhi Public School Srinagar

LESSON PLAN

Session 2015-2016

Class : IX
Subject : Chemistry.
For the Month(s) of : September
Theme : *Structure of atom*
Periods : *Theory (12) and Practical (3)*

OBJECTIVES (CONCEPTS & SKILLS):

- Basic concept of structure of atoms.
- To enable the students to understand discovery of two sub atomic particles like protons and electrons.
- They will understand about thomsons model and its consequences
- They will about Rutherford's model of atom and their drawbacks.
- They will understand about the concept of valency.

Enable the students to understand atomic number atomic masses massess of a various elements.

- To Enable the students to understand isotopes and isobars

The teacher will keep the following skills in view.

- Scientific Aptitude
- Thinking skills
- Reasoning Skills
- Attentiveness
- Listening Skills
- Drawing Skills

LEARNING OUTCOMES :

- Make it sure that the student learns the concepts given.
- To know basic concept of Thomson of Thomson's model.
- To know basic difference between Thomson's and Rutherford's model.
- How to calculate the valency of different elements.
- To know / learn the atomic numbers and atomic mass of a given element.
- To enable the students to understand the isotope and isobar.
- To understand the various isotopes occur in nature and their applications.

INSTRUCTIONAL TOOLS & REFERENCES : In addition to general teaching tools like white board, marker, etc, the teacher will use periodic table..

The References used will be : Chemistry by Dines and Text Book for class IX.

PEDAGOGY :

- i. Activating Prior Knowledge by Random Questioning
- ii. Introducing the topic to be taught after getting the expected response from the students.
- iii. Developing hypothesis by (a) Brainstorming, (b) Lecture , (c) Discussion and (d) In Text Questions

ACTIVITY/ASSIGNMENT/PROJECTS : The teacher will give Home Assignments and the areas of assessment will be:

Content of Knowledge, Presentation, Correctness, Time Management, Drawing Skills and Thinking skills

ASSESSMENT:

- i. Ask the students to give example of various elements whose atomic mass is variable
- ii. In Text Questions
- iii. Group Discussion

FA Syllabus:

- *Thomson's model and Rutherford model and demerits.*
- *Concept of valancy.*
- *Atomic number and atomic masses.*
- *Isotopes and isobars*
- *Numerical problems related to the topic.*

SA Syllabus: Same as FA