

**YEAR PLAN 2018- 2019**  
**Grade IX CHEMISTRY**

The academic year is divided into **two** sessions

**Session One:** June 2018 to October 2018

**Session Two:** November 2018 to March 2019

**Continuous assessments:** July, August, September, December, January, February

**Summative Assessment I:** October 2018

**Summative Assessment II:** March 2019

Please check the **index page** in the notebooks for Continuous Assessment marks.

**ENDURING UNDERSTANDING:** To develop the ability to appreciate achievements in the field of chemistry and its role in nature and society

**General Objectives:**

- ❖ To impart the knowledge of terms, concepts, processes and principles related to the subject.
- ❖ Develop the skills in proper handling of apparatus and chemicals.

**Project:** Assignment on identification of gases.

Past year board question papers.

**Session One - JUNE TO OCTOBER 2018**

<b>Duration</b>	<b>Topics</b>	<b>Specific Learning Objectives</b>	<b>Activities</b>	<b>Resources</b>
June	<b>1.Study of Gas Laws</b> <ul style="list-style-type: none"> <li>• Behaviour of gases under change of temperature and pressure.</li> <li>• Boyle’s Law, Charles’ Law</li> </ul>	Predicts the change in volume of gases under variable temperatures and pressures.	Solve numerical, based on gas laws.	Text book
July	Relationship between Kelvin scale and Celsius Scale of Temperatures.  <b>2.Language of chemistry</b> Chemical symbols, formulas, valency, chemical equations. Relative atomic mass and relative molecular mass	Recalls the chemical formulas, chemical equations	Work out chemical formulas and balances chemical equations	Text book
August	<b>3.Water</b> Physical properties of water Water is a universal solvent Solutions, solubility, crystallisation, hydrated and anhydrous substance.	Recalls the significance of water and its properties.	Test for water of crystallisation- .Action of heat on hydrated copper sulphate and cobalt chloride.	Text book
September	<b>4. Hydrogen –</b> Position of the non- metal in the periodic table. Preparation, properties and uses	Recalls the properties of hydrogen. Identifies the chemical reactions of hydrogen.	Demonstration: preparation of hydrogen. Writing chemical properties and chemical equations of hydrogen.	
November	<b>6. Atomic Structure and Chemical Bonding (Grades IX and X).</b> Structure of atom; mass number, atomic number, and octet rule. Isotopes and Application of isotopes. Types of chemical bonding.	Recalls the types of changes Identifies their characteristics  Recollects the subatomic particles; the structure of atoms and types of bonding in molecules	Class room discussions. Lists out various examples of physical and chemical changes. Writing and balancing the equations. . Diagrams and models on atomic structures. Electron dot structure of ionic and covalent compounds	Text book
December	<b>6.The Periodic Table (Grades IX and X)</b> <ul style="list-style-type: none"> <li>• Periodic table based on atomic number and mass number.</li> <li>• Contributions of Mendeleev, Newland and Dobereiner.</li> <li>• Modern Periodic Table</li> </ul>	Classifies the elements according to their groups and properties.	Power point presentation. Quiz, mind-map and class activities.	Text book, periodic table.

**Session Two November-March 2019**

January	<b>Periodic properties</b> Periodic properties and their variations in groups and periods. Periodicity on the basis of atomic number for elements.  <b>7. Atmospheric pollution</b> <ul style="list-style-type: none"><li>• Acid rain</li><li>• Global warming</li><li>• Greenhouse effect</li><li>• Ozone depletion</li></ul>	Predicts the properties of elements in groups and periods.  Recalls the effect of acid rain on soil and water bodies. Identifies the green house gases.	Mind mapping, Flow chart, Comparative group wise study of elements in the aid of periodic table.  Solving past board papers.  Seminar on acid rain and global warming. Power point presentation; quiz	Periodic table Class Edge, Text book by Viraf Dalal.
February	<b>8. Chemical changes and Reactions</b>	Identifies the characteristics of chemical reactions.	Working out various examples of types of chemical reaction, Lab work.	Text book

*Textbook: Selina publishers part 1 and 2*

*Facilitators: Mrs. Ashwani , Mrs Jiny Wilfred*