

YEAR PLAN 2018 – 2019
Grade VIII 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 notebook 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 gather information regarding various useful elements and compounds in nature.
- To acquire the ability to observe, experiment, hypothesize, infer, handle equipment and make correct recordings.

Project: Presentation on crystalline forms of carbon (diamond and graphite).

Presentation on the extraction of metals from their ores.

Session One: June – October 2018

Duration	TOPICS	Specific Learning Objectives	Activities	Resources
June	Atomic Structure Discovery of sub -atomic particles. Rutherford and Bohr models of atom. Isotopes, Radioactivity, chemical bonding	Knowledge on the sub- atomic particles and electronic configuration. Knowledge on atomic number, mass number, nucleus, extra nuclear parts and valency.	Draw the structure of atoms. Electron dot structure of compounds.	Text book. Charts/Models showing the structure of atom
July	Hydrogen (VIII &IX) Preparation, properties and uses of hydrogen	Knowledge on the different methods of preparation of hydrogen. Learns to describe the chemical properties and uses of hydrogen Knowledge on the concepts like oxidation and reduction of hydrogen on the basis of addition or removal of hydrogen.	Prepare charts on preparation of hydrogen.	Text book
August	Chemical reactions(VIII &IX) Characteristic of chemical reactions, types of chemical reactions	Recalls the different types of chemical reactions. Identifies the type of chemical reaction. Learns to identify the different types of oxides. Learns to explain the effect of heat on the oxides of some metals.	Experimental demonstrations. Class room discussions.	Text book
September	Carbon and its compounds. Crystalline and amorphous forms of carbon. The structure and uses of diamond and graphite. Physical and chemical properties of carbon dioxide and carbon monoxide.	Identifies the position of carbon in the periodic table, allotropes of carbon, properties and uses of wood charcoal. Learn the applications of Buckminster fullerene in superconductors and electronic goods. Learns different forms of carbon.	Class room discussions, written work. Draws diagram of graphite and diamond.	
		Revision Summative Assessment 1		

Session Two: November 2018 to March 2019

November	Language of Chemistry(VIII &IX) Symbols of elements. Formula of compounds. Balancing of simple equations. Limitations of a chemical equations	Recalls symbols of different elements Learns to derive formulae of compounds on the basis of valencies of elements and radicals. Learns to write chemical equation for a reaction and balance the same.	Prepare charts showing simple equations in which states of reactants and products are shown	Text book
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	Language of chemistry(Grade- 9) Chemical symbols, formulas, valancy, 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
December	Study of Gas Laws(Grade- 9) •Behaviour of gases under change of temperature and pressure. •Boyle's Law, Charles' Law Relationship between Kelvin scale and Celsius Scale of Temperatures.	Predicts the change in volume of gases under variable temperatures and pressures	Solve numerical based on gas laws.	Text book
January	Water(Grade- 9) 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
February	Atmospheric pollution (Grade- 9) Acid rain Global warming Greenhouse effect Ozone depletion	Recalls the effect of acid rain on soil and water bodies. Identifies the greenhouse gases.	Conducting experiment in the lab; students observe and take down points and arriving at the conclusions. Power point presentation; quiz	Text book

Textbooks: Concise Chemistry Grade VIII

Facilitators: Jiny, Vidya