

SARASWATI WORLD SCHOOL
SESSION 2026-27
HOLIDAYS' HOMEWORK
CLASS 11

ENGLISH

Newspaper Activity

Read an English newspaper daily for 15 days including:

- 5 important national news reports
- 5 international news reports
- 5 advertisements

Paste the cuttings neatly and write the date and source.

Write reports on the following:

1. Independence Day Celebration
2. Science Exhibition
3. Road Safety Awareness Programme
4. Cultural Fest
5. NSS Cleanliness Drive

BIOLOGY

1) Do prepare Notes of following chapters in fair Notebook:

Ch-1 The living world, Ch-2 Biological Classification,

Ch-3 The Plant kingdom,

Ch-4 The Animal kingdom

2) Do learn the names of all bones, joints present in a human body (Ch-17 Locomotion and movement).

SARASWATI WORLD SCHOOL

Class 11 Chemistry

Foundation & Holiday Homework Refresher

Transitioning from Class 10 to Class 11 Chemistry requires a strong grasp of fundamental concepts. This guide focuses on the "Essential Pillars" from previous classes that form the basis of the Class 11 syllabus.

1. The Language of Chemistry

Before entering the lab, you must master chemical nomenclature and stoichiometry.

- **Valency Refresher:** Memorize the charges of common polyatomic ions:
 - Sulfate (SO_4^{2-}), Nitrate (NO_3^-), Carbonate (CO_3^{2-}), Phosphate (PO_4^{3-}), Ammonium (NH_4^+).
- **Formulas:** Practice the criss-cross method for complex compounds like Aluminum Sulfate or Magnesium Nitride.
- **Balancing:** Ensure you can balance redox and displacement equations rapidly.

2. The Mole Concept & Stoichiometry

This is the most critical bridge to Class 11. Most physical chemistry chapters depend on this.

Key Relationship:

$$\text{Number of Moles (n)} = \text{Given Mass (m)} / \text{Molar Mass (M)}$$

Avogadro's Number: $N_A = 6.022 \times 10^{23}$ particles/mol.

- Calculate the number of molecules in 18g of water.
- Understand the concept of **Molar Volume** (22.4 L at STP).

3. Atomic Structure & Periodic Trends

Class 11 introduces orbitals and quantum numbers, but the Bohr model is your starting point.

- **Electronic Configuration:** Review Bohr-Bury rules for elements $Z = 1$ to 20 .
- **Periodic Trends:** Recall why Atomic Radius decreases across a period and increases down a group.
- **Definitions:** Be clear on Valency vs. Valence Electrons.

4. Organic Chemistry Basics

Class 10 "Carbon and its Compounds" is the foundation for a massive portion of the 11th-grade curriculum.

- **Homologous Series:** Alkanes, Alkenes, and Alkynes.
- **Functional Groups:** Identify and name basic Alcohols, Carboxylic Acids, and Ketones.
- **IUPAC Naming:** Practice naming chains up to 6 carbon atoms with simple branching.

Self-Assessment Checklist

1. Can you define "Relative Atomic Mass"?
2. Can you balance the combustion of Butane (C_4H_{10})?
3. Do you know the difference between an Isotope and an Isobar?