



CBSE Class 9 Science Updated Syllabus

CBSE Class 9 Science Syllabus: An Outline

Here is the updated Chapter wise list for Class 9 Science mentioned below:

| Unit No. | Unit Name | Marks |
|-------------|--|-------|
| I. | Matter - Its Nature and Behaviour ADVERTISING | 25 |
| II. | Organization in the living world | 22 |
| III. | Motion, force, and work | 27 |
| IV. | Food, Food Production | 6 |
| Total Marks | | 80 |

Theme: Materials

Unit I: Matter - Nature and Behaviour

Definition of Matter: Matter exists in three states - solid, liquid, and gas. Each state has distinct characteristics such as shape, volume, and density. Changes in the state of matter include melting (heat absorption), freezing, evaporation (cooling effect), condensation, and sublimation.

Nature of Matter: Matter is classified into elements, compounds, and mixtures. Mixtures can be heterogeneous or homogeneous, including colloids and suspensions. The syllabus covers physical and chemical changes but excludes the separation of mixture components.

Particle Nature and Basic Units: Understanding the basic units of matter - atoms and molecules. Topics include the Law of Chemical Combination, chemical formulas of common compounds, and atomic and molecular masses.



Structure of Atoms: Study of the atomic structure involving electrons, protons, and neutrons. It also covers concepts of valency, atomic number, mass number, isotopes, and isobars.

Theme: The World of the Living

Unit II: Organization in the Living World

Cell - Basic Unit of Life: Cells are the fundamental units of life, distinguishing between prokaryotic and eukaryotic cells, and multicellular organisms. Detailed study of the cell membrane, cell wall, cell organelles (chloroplast, mitochondria, vacuoles, endoplasmic reticulum, Golgi apparatus), nucleus, and chromosomes including their basic structure and number.

Tissues, Organs, Organ System, Organism: Structure and functions of animal and plant tissues, covering four types of animal tissues and Meristematic and Permanent tissues in plants.

Theme: Moving Things, People and Ideas

Unit III: Motion, Force, and Work

Motion: Concepts of distance and displacement, velocity, uniform and non-uniform motion in a straight line, acceleration, and graphical representation of distance-time and velocity-time for uniform and uniformly accelerated motion. Introduction to uniform circular motion.

Force and Newton's Laws: Study of force and motion, Newton's Laws of Motion, action and reaction forces, inertia, mass, momentum, force, and acceleration.

Gravitation: Exploration of gravitation, the Universal Law of Gravitation, the gravitational force of the earth (gravity), acceleration due to gravity, mass, weight, and the concept of free fall.

Floatation: Understanding thrust and pressure, Archimedes' Principle, and buoyancy. **Work,**

Energy, and Power: Concepts of work done by a force, energy, power, kinetic and potential energy, and the Law of Conservation of Energy (excluding commercial units of energy).



Sound: Nature and propagation of sound in various media, speed of sound, human hearing range, ultrasound, and reflection of sound including echoes.

Theme: Food

Unit IV: Food Production

Food Production: Study of plant and animal breeding, selection for quality improvement, and management. Usage of fertilizers and manures, pest and disease protection, and the principles of organic farming.

Prescribed Book:

Science Textbook published by NCERT

