

CBSE CLASS 9 SCIENCE SYLLABUS 2024-25

No	Unit	Marks
I	Matter - Its Nature and Behaviour	25
II	Organization in the Living World	22
III	Motion, Force, and Work	27
IV	Food Food Production	06

Unit I: Matter-Nature and Behaviour

Chapter 1 - Matter in Our Surroundings

- Definition of matter solid, liquid, and gas characteristics
- Shape, volume, and density change of state
- Melting (absorption of heat)
- Freezing
- Evaporation (cooling by evaporation)
- Condensation
- Sublimation.

Chapter 2 - Is Matter Around Us Pure?

- Nature of matter
- Elements, compounds, and mixtures
- Heterogeneous and homogenous mixtures, colloids, and suspensions
- Physical and chemical changes

(excluding separating the components of a mixture).

Chapter 3 - Atoms and Molecules

- Particle nature and its basic units
- Atoms and molecules, Law of Chemical Combination
- Chemical formula of common compounds
- Atomic and molecular masses.

Chapter 4 - Structure of The Atom

- Structure of atoms
- Electrons, protons and neutrons
- Valency, Atomic Number, and Mass Number,
- Isotopes and Isobars.

Unit II: Organization in the Living World

Chapter 5 - The Fundamental Unit of Life

- Cell - Basic Unit of life
- Cell as a basic unit of life prokaryotic and eukaryotic cells
- Multicellular organisms cell membrane and cell wall
- Cell organelles and cell inclusions chloroplast, mitochondria, vacuoles, endoplasmic reticulum, Golgi apparatus and nucleus
- Chromosomes - basic structure, number

Chapter 6 - Tissues

- Tissues, Organs, Organ System, Organism

Chapter 7 - Diversity in Living Organisms

- Structure and functions of animal and plant tissues (only four types of tissues in animals Meristematic and Permanent tissues in plants).

Unit III: Motion, Force, and Work

Chapter 8 - Motion

- Motion
- Distance and displacement
- Velocity uniform and non-uniform motion along a straight line acceleration
- Distance-time & velocity-time graphs for uniform motion & uniformly accelerated motion
- The elementary idea of uniform circular motion.

Chapter 9 - Force and Laws of Motion

- Force and Newton's laws

- Force and Motion
- Newton's Laws of Motion
- Action and Reaction forces,
- Inertia of the body
- Inertia, and mass
- Momentum, Force, and Acceleration.

Chapter 10 - Gravitation

- Gravitation
- Gravitation Universal Law of Gravitation
- Force of Gravitation of the earth (gravity)
- Acceleration due to Gravity Mass and Weight, Free fall
- Floatation
- Thrust and Pressure.
- Archimedes' Principle
- Buoyancy

Chapter 11 - Work and Energy

- Work, Energy, and Power
- Work done by a Force, Energy, power Kinetic, and Potential energy
- Law of conservation of energy (*excluding commercial units of Energy*).

Chapter 12 - Sound

- Sound
- Nature of sound and its propagation in various media
- Speed of sound
- Range of hearing in humans ultrasound reflection of sound echo.

Unit IV: Food Production

Chapter 15 - Improvement in Food Resources

- Plant and animal breeding and selection for quality improvement and management
- Use of fertilizers and manures
- Protection from pests and diseases
- Organic farming.