

NAVODAYA VIDYALAYA SAMITI

CLASS :IX

SUBJECT : SCIENCE (086)

Unit No.	Unit	Marks	Periods
I	Matter-ItsNatureand behavior Chapters(1-4)	25	78
II	Organizationinthelivingworld Chapters(5-6)	22	59
III	Motion,ForceandWorkChapte rs(8-12)	27	78
IV	Food:FoodProductionChapters(15)	06	19
	Total	80	
	Internalassessment 1. PeriodicWrittenTest(5M) 2. Multipleassessment(5M) 3. Portfolio(5M) 4. Subjectenrichmentactivit y(5M)	20	
	GrandTotal	100	

MONTH	NO. OF DAYS	NO. OF PERIODS	MAIN TOPICS AND SUB-TOPICS TO BE COVERED	PRACTICALS/ ACTIVITIES PRACTICAL EXPERIMENTS TO HELD/ SPECIFIC ASSESMENT TOOLS (SUGGESTED)
APRIL-2024	22DAYS	09	Organization in Living World Cell - Basic Unit of life : Cell as a basic unit of life; prokaryotic and eukaryotic cells, Multicellular organisms; cell membrane and cell wall, Nucleus, chromosome- basic structure, number. cell organelles and inclusions	1.To prepare stained temporary mounts of (a) onion peel and (b)Human cheek cells and to record observations and draw their labeleddiagrams.
		09	Matter its Nature and Behavior: Definition of matter- solid, liquid and gas. Characteristics-shape, volume, density.	To determine the Melting point of ice and the boiling point of water

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		09	Motion Force & Work :-Idea of motion, types with examples ,Distance and displacement, velocity; uniform and non-uniform motion along a straight line	
PWT – 1 :- 26 -29 April- 2024				
JULY-2024	26 DAYS	12	Organization in Living World Cell - Basic Unit of life : endoplasmic reticulum, Golgi apparatus, chloroplast, mitochondria, vacuoles	
		12	1.Matter its Nature and Behavior: Matter in Our Surroundings Change of state- melting, freezing, evaporation, Condensation, sublimation, Evaporation (cooling by evaporation).	To prepare a)mixture b)compound using iron filings and sulphur powder and Distinguish these on the basis of i)appearance i.e. homogeneity/heterogeneity ii)Behavior towards a magnet iii)behavior towards carbon dioxide sulphide Effect of heat.
		12	Motion Force & Work: Acceleration ,distance-time and velocity-time graphs for uniform motion and uniformly accelerated motion, elementary idea of uniform circular motion Force and Newton’s laws: Force and motion Newton’s laws of motion	
AUGUST-2024	22 DAYS	09	Tissues, Organs, Organ System, Organism Structure and functions of Animals and plant tissues (Only four types of tissues in animal’s meristematic and permanent tissues in plants).	2. To identify parenchyma and Collenchyma, sclerenchyma tissues in plants striated, smooth and cardiac muscle fibers and nerve cells in animals from prepared slides and to draw their labeled diagrams.
		09	Nature of Matter: Is Matter Around Us Pure Elements, compounds and mixtures. homogeneous/ heterogeneous Mixtures	Practical. :To carry out the following reactions and classify them as physical and chemical changes a)reaction between iron and copper

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			:	sulphate solution. b)burning of magnesium ribbon in air. c)zincwithdil.H ₂ SO ₄ d)Heating of CuSO ₄ . Na ₂ SO ₄ (aq)and BaCl ₂ (aq)
		09	Motion Force & Work: Action and reaction forces, inertia of a body inertia and mass ,momentum, force and acceleration Momentum, force and acceleration.	
		PeriodWrittenTest-2: 08 TO 10 August 2024		
SEPTEMBER-2024	17 DAYS	08	Tissues, Organs, Organ System, Organism	-----
		08	Matter Its Nature AndBehavior: True, Colloids and suspension	Preparation of true, suspension and colloidal solution and distinguishing them on the basis of I. Transparency2.filteration3.Stability II. Performing following reactions 1. Iron with copper sulphate solution in water2.Burning of magnesium ribbon in air 3. Zinc with dilute sulphuric acid
		08	Motion, Force and Work: Gravitation: Gravitation; universal law of gravitation, force of gravitation of the earth(gravity),	Determination of density of solid using spring balance and measuring cylinder.
		TERM-I :- 23 September To 4 OCT 2024		
OCTOBER 2024	18 Days	07	Matter Its Nature AndBehavior: , Physical and Chemical changes(Excluding separating the components of a mixture)	1. Heating of copper sulphate crystals Sodium sulphate with barium chloride in the form of their solutions in water
		07	Gravitation: Acceleration due to gravity; mass and weight; free fall.
		07	Structure and functions of Animal tissues(four types of tissues in animals)
Nove mber 2024	20 Days	09	Food Production: Plant and Animal breeding
		9	Matter its Nature and Behavior	Verification of the law of conservation

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			Atoms and Molecules, Chemical Formula of common compounds, Law of Chemical combination, Atomic and molecular masses,	of mass in a chemical reaction.
		09	Motion Force & Work Floatation: Thrust And pressure. Archimedes's principle, buoyancy,	To establish the relation between the loss in weight of a solid when fully immersed 1) Tap water 2) Strongly salted water
DECEMBER-2024	17 DAYS	08	Improvement in Food Resources: Selection for Quality Improvement and Management	
		08	Atoms and Molecules: Valence, Chemical formulae of common compounds. Structure of Atoms: Electrons, protons and neutrons, valency	
		08	Work, energy and Power: Work done by force, energy power, kinetic energy, potential energy, law of conservation of energy (excluding commercial unit of energy)	
			Periodic Written Test-3 12 To 14 December 2024	
January-2025	15 days	07	Sound : Nature of sound and its propagation in various media speed of sound.	Verification of law of Reflection of sound,
		07	Structure of Atoms: Atomic number, mass number, Valency	
		07	Improvement in Food Resources: Use of Fertilizers and manures	
			Periodic Written Test- 4 06 To 08 February 2025	
Feb2025	21 days	07	Sound : Range of hearing in humans; ultrasound, Reflection of sound ,echo +	Determination of speed of pulse propagated through a stretched string
		07	Structure of Atoms: Isotopes and isobars +	
		07	Revision Improvement in Food Resources: Protection from pests, and Diseases, Organic	

Perspective Academic Planning (PAP) Spilt-Up of Syllabus Session 2024-25

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			farming + Revision	
March-2025			TERM-II EXAMS :- 17 To 28 MARCH 2025	