

Class IX  
Subject Science  
Code (086/090)  
Term Wise Syllabus  
Academic Session 2009-2010

**First Term**

Chapter 1: Matter in Our Surroundings  
Chapter 2: Is Matter around Us Pure  
Chapter 3: Atoms and Molecules  
Chapter 5: The Fundamental Unit of Life  
Chapter 6: Tissues  
Chapter 8: Motion  
Chapter 9: Force and Laws of Motion  
Chapter 7: Diversity in Living Organisms

**Second Term**

Chapter 4: Structure of Atom  
Chapter 10: Gravitation  
Chapter 11: Work and Energy  
Chapter 13: Why Do We Fall ill

**Third Term**

Chapter 12: Sound  
Chapter 14: Natural Resources  
Chapter 15: Improvement in Food Resources

Class IX  
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Weekly Bifurcation of Syllabi  
Academic Session 2009-10

MONTH	DATES	NO. OF DAYS	CHAPTER / TOPICS	Practical
APRIL	1-4	3	<u>Chapter -1</u> :- Matter in our surroundings – Characteristics and states of matter.	<u>Practical 1.</u> To study the extent of cooling caused by evaporation on the following liquids using a thermometer and arrange them in the increasing order of the extent of cooling produced a) Water (b) Alcohol (c) Ether <u>Practical 2.</u> To prepare temporary. Mounts of onion peel and human cheek cells <u>Practical 3.</u> To measure the temperature of hot water as it cools and lot a temp. Time graph. <u>Practical 4.</u> To prepare i) A solution of common salt , sugar and alum ii) A Suspension of soil, chalk powder and fine sand in water iii) a colloidal of starch and egg albumin in water <u>Practical 5.</u> To prepare a mixture and a compound using iron filings and sulphur powder And distinguished these on the basis of appearance, behavior towards a magnet
	6-11	3	Change of State and Evaporation	
	13-18	6	Latent heat of vaporization and fusion (Related activities)	
	20-25	6	<u>Chapter 5</u> :- The fundamental unit of Life – Structure of a cell, cell organelles	
	27-30	3	Related Activities and Practical	
MAY & JUNE		60	SUMMER VACATION	
JULY	1-4	3	<u>Chapter 8</u> :- Motion – Uniform and Non-Uniform motion,	
	6-11	5	distance-displacement, velocity and acceleration	
	13-18	6	Distance-Time graph, Velocity-Time graph (Plotting and interpretation), Derivation of equation of motion by graphical method, Uniform circular motion (qualitative only)	

	20-25	6	<u>Chapter 2</u> Is matter around us pure – Mixtures, types of mixtures, solution, colloids, Suspension	appearance, behavior towards a magnet, carbon disulphide a solvent and effect of heat.
JULY- AUGUST	27-01	5	Methods of separation of mixtures, compounds, elements, Physical and Chemical change (Related activities and Practical)	<u>Practical 6.</u> To separate the components of a mixture of sand, common salt and ammonium chloride by sublimation.
AUGUST	3-8	5	Chapter 6:- Tissues – Types of plant tissues and animal tissues. Related Activities and Practical.	<u>Practical 7.</u> To identify parenchyma tissues in plants striped muscle fibers and nerve cells in animals from prepared slides and draw their labeled diagrams
	10-15	4	Chapter 9:- Force and Laws of Motion – Force, definition and its effects.	
	17-22	6	Three laws of motion .Mass, Inertia and Conservation of Momentum (Related Activities) Chapter 3:- Atoms and Molecules – Laws of Chemical combination,	<u>Practical 8.</u> To observe the onion peel cells placed in hypertonic solution under the microscope and draw labeled diagram of the same.
	24-29	6	Definition of atoms and molecules, Chemical Formulae	<u>Practical 9:-</u> To determine the melting point of ice and the boiling point of water
September	1-5	4	<u>1<sup>st</sup> CCEP Exam on 04.09.2009</u> Molecular Mass and Mole-concept and Revision for 1 <sup>st</sup> Term	
	7-9	3	Revision	
	10-18	1 <sup>st</sup> Terminal Exam		
	19-28	Autumn Break		
September & October	29 - 3	2	Chapter 7:- Diversity In Living Organisms. Classification of Plants	Practical 10. To study the characteristic of spirogyra / Agaricus, Moss/ Ferne, Pinus(Either with male or female conre) and an angiospermic plant.
	5-10	5	Classification of animals and nomenclature different phylums.	Practical 11. To observe and draw the given specimens – earthworm, cockroach, bonefish, and bird record

	12-17	5	Gravitation – Universal law of gravitation, free - fall, mass and weight.	(i) one specific feature and (ii) one adaptive feature with reference to its habitat <u>Practical 12.</u> To determine the density of solid (denser than water by using spring balance and a measuring cylinder <u>Practical 13.</u> To establish the relation between the loss in weight a solid when fully immersed in (i) Tap water (ii) Strongly salty water with the weight of water displaced by it taking at least two different solids.
	19-24	6	Thrust and pressure, Archimedes principle, relative density.	
	26-31	5	Related Activities and Practical	
NOVEMBER	2-7	5	<u>Chapter 4</u> :- Structure of Atom – Atomic number, Mass number, valency, Isotopes and Isobars	
	9-14	5	Electronic Distribution – Rutherford’s Model and Bohr Model. <u>Chapter 13</u> :- Why do we fall ill – Diseases and its causes	
	16-21	6	Infectious and Non-infectious diseases, Principles of treatment and prevention	
	23-30	5	<u>Chapter 11</u> :-Work and Energy – Work done by a force, power and energy	
DECEMBER	1-5	5	Kinetic energy and potential energy, laws of conservation of energy (Related Activities)	
	7-12,14	5	2 <sup>ND</sup> CCEP 11.12.2009 REVISION	
	15-22		<b>SECOND TERMINAL EXAM.</b>	
	23 <sup>RD</sup> December		<b>Paper Discussion</b>	

	25-31		<b>WINTER BREAK</b>	
January 2010	1-2	2	<u>Chapter 14</u> :- Natural Resources – Air, Air pollution	14. To verify laws of reflection of sound. 15. To Determine the velocity of a pulse propagated through a stretched string/slinky.
	4-9	7	Water and Soil, Water Pollution, Minerals riches in the Soil. Nitrogen cycle, Carbon Cycle, Water cycle, Oxygen cycle.	
	11-16	6	Green house effect, Ozone layer and activities. <u>Chapter 12</u> :- Sound-Nature of sound and its Propagation, longitudinal and transverse waves.	
	18-23	6	Characteristics of sound waves, speed of sound, Reflection, uses of reflection, echo, range of hearing, Application of Ultra Sound	
	25-30	4	Sonar, Structure of human ear, Related Activity & Practical	
FEBRUARY	1-6	6	<u>Chapter 15</u> :- Improvement in food resources, Improvement in crop yield	
	8-13	5	Manure and fertilizers, cropping patterns, animal husbandry, poultry and fish farming, bee-keeping	
	15-20	6	REVISION	
	22-27	5	REVISION	
MARCH	1-16		ANNUAL EXAM.	
	31		Result	

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