

Class IX
Subject Science
Code (086)
Term Wise Syllabus
Academic Session 2010-2011

First Semester

Chapter 1: Matter in Our Surroundings
Chapter 2: Is Matter around Us Pure
Chapter 5: The Fundamental Unit of Life
Chapter 6: Tissues
Chapter 8: Motion
Chapter 9: Force and Laws of Motion
Chapter 10: Gravitation
Chapter 15: Improvement in Food Resources

Second Semester

Chapter 3: Atoms and Molecules
Chapter 4: Structure of Atom
Chapter 7: Diversity in Living Organisms
Chapter 11: Work and Energy
Chapter 13: Why Do We Fall ill
Chapter 14: Natural Resources
Chapter 12: Sound

MONTH	DATES	NO. OF DAYS	CHAPTER / TOPICS	Practical
APRIL	1-3	2 (1 G.H.)	Chapter -1:- Matter in our surroundings – Characteristics and states of matter.	<p>Practical 1. To prepare temporary. Mounts of onion peel and human cheek cells.</p> <p>Practical 2. To measure the temperature of hot water as it cools and lot a temp. Time graph.</p> <p>Practical 3:- To determine the melting point of ice and the boiling point of water</p> <p>Practical 4. 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.</p> <p>Practical 5. 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, appearance, behavior towards a magnet, carbon disulphide a solvent and effect of heat.</p>
	5-9	5	Change of State and Evaporation	
	12-17	6	Latent heat of vaporization and fusion (Related activities)	
	19-24	6	Chapter 5:- The fundamental unit of Life – Structure of a cell, cell organelles	
	26-1 MAY	6	Related Activities and Practical Chapter 8:- Motion – Uniform and Non-Uniform motion	
MAY	3-7	5	distance-displacement, velocity and acceleration	
	10-25		SUMMER VACATION	
JUNE- JULY	26,28-3	7	Distance-Time graph, Velocity-Time graph (Plotting and interpretation), Derivation of equation of motion by graphical method, Uniform circular motion (qualitative only) Practical	
JULY	5-9	5	Chapter 2 Is matter around us pure – Mixtures, types of mixtures, solution, colloids, Suspension	
	12-17	6	Methods of separation of mixtures, compounds, elements, Physical and Chemical change (Related activities and Practical)	

	19-24	6	Chapter 6:- Tissues – Types of plant tissues.	<p>Practical 6. To separate the components of a mixture of sand, common salt and ammonium chloride by sublimation.</p> <p>Practical 7:- To identify parenchyma tissues in plants striped muscle fibers and nerve cells in animals from prepared slides and draw their labeled diagrams</p> <p>Practical 8 :- To test(a) the presence of starch in the given food sample(b) the presence of the Adulterant metanil yellow in dal.</p>
	26-31	6	Animal tissues. Related Activities and Practical	
AUGUST	2-7	6	Chapter 9:- Force and Laws of Motion – Force, definition and its effects.	
	9-13	5	Three laws of motion Mass, Inertia and Conservation of Momentum (Related Activities)	
	16-21	6	Chapter 15:- Improvement in food resources, Improvement in crop yield	
	23-28	6	Fertilizers, cropping patterns, animal husbandry, poultry and fish farming bee-keeping.	
AUGUST & SEPTEMBER	30-4	5	Chapter 10:- Gravitation – Universal law of gravitation, free - fall,	
SEPTEMBER	6-10	4	Mass and weight Thrust and pressure, Archimedes principle, relative density	
	13-19		Revision for Ist Semester	
	20-30		Ist Semester Exam	
OCTOBER	1-17		CLOSURE OF SCHOOLS DUE TO COMMAN WEALTH GAMES (08/10/2010 TO 16/10/2010 AUTUMN BREAK)	
	18-23	5		
	25-30	6	Chapter 7:- Diversity In Living Organisms.	
NOVEMBER	1-6	5	Infectious and Non-infectious diseases,	Practical 9:- . To study the characteristic of spirogyra / Agaricus, Moss/ Ferne, Pinus(Either with male or female conre) and an angiospermic plant.

			Principles of treatment and prevention	
	8-12	5	Chapter 3:- Atoms and Molecules – Laws of Chemical combination, Kinetic energy and potential energy, laws of conservation of energy (Related Activities)	Practical 10:- . To observe and draw the given specimens – earthworm, cockroach, bonefish, and bird record (i) one specific feature and (ii) one adaptive feature with reference to its habitat
	15-20	6	Chapter 4:- Definition of atoms and molecules, Structure of Atom – Atomic number, Mass number, valency, Electronic Distribution – Rutherford’s Model and Bohr Model.	Practical 11:- . To determine the density of solid (denser than water by using spring balance and a measuring cylinder Practical 12:- . 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.
	22-27	6	Isotopes and Isobars Chemical Formulae Molecular Mass and Mole-concept	
NOV.-DEC.	29-4	5	Chapter 13:- Why do we fall ill – Diseases and its causes	
	6-10	5	REVISION	Practical .13:- To carry out the following chemical Reactions and record observations. Also identify the type of reaction involved in each case.
	13-18	6	Chapter 11:-Work and Energy –Work done by a force, power and energy	
	20-24	4	Kinetic Energy and Potential energy, Laws of conservation of energy	<ol style="list-style-type: none"> 1. iron with copper sulphate solution in water. 2. burning of magnesium in air. 3. zinc with dilute sulphuric acid. 4. heating of lead nitrate. 5. sodium sulphate with barium chloride in the form of three solutions in water.
DEC.-JAN.	27-7	WINTER BREAK		
	10-15	6	Chapter 12:- Sound- Nature of sound and its Propagation, longitudinal and transverse waves	14. To verify laws of reflection of sound.

	17-22	6	Characteristics of sound waves, speed of sound, Reflection, uses of reflection	15. To Determine the velocity of a pulse propagated through a stretched string/ slinky.
	17-22	6	Echo, range of hearing, Application of Ultra Sound	
	24-29	5	Sonar, Structure of human ear, Related Activity & Practical	
JAN.-FEB.	31-5	6	Chapter 14 :- Natural Resources – Air, Air Green house effect, Ozone layer and activities.	
	7-11	5	Water and Soil, Water Pollution, Minerals riches in the Soil. Nitrogen cycle, Carbon Cycle, Water cycle, Oxygen cycle.	
	14-19	6	REVISION OF Theory & Practical	
	21-28		REVISION & Final Term Exam	
	1-31	Exam Home & Board (31-03-2011 Announcement of the Result)		

Practical

Practical 1. To prepare temporary. Mounts of onion peel and human cheek cells.

Practical 2. To measure the temperature of hot water as it cools and plot a temp. Time graph.

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Practical 4. To prepare

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Practical 5. To prepare a mixture and a compound using iron filings and sulphur powder

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Practical 6. To separate the components of a mixture of sand, common salt and ammonium chloride by sublimation.

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Practical 8. To study the characteristic of spirogyra / Agaricus, Moss/ Ferns, Pinus (Either with male or female cones) and an angiospermic plant.

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- (i) one specific feature and
- (ii) one adaptive feature with reference to its habitat

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14. To verify laws of reflection of sound.

15. To determine the velocity of a pulse propagated through a stretched string/slinky.