



# ST NICHOLAS PUBLIC SCHOOL GARHBETA

## CURRICULUM FOR SESSION-2024-25

### CLASS-VIII

### Subject: MATHEMATICS

CLASS	VIII				
Name of the Text Book	Mathematics	Author	R.S. Aggarwal	Publisher	BharatiBhawan (P & D)
No. of Units/Chapters given in the textbook	13	No. of units/chapters deleted if any	Nil		

Month & No. of Working Days	Unit	Theme/Sub theme	Key Concepts	Activities/Processes	Resources	No. of Periods for each unit
1	2	3	4	5	6	7
April – 21 days May - 4 days	Number System	➤ Rational numbers ➤ Exponents	<ul style="list-style-type: none"><li>• Square and cube of a given number.</li><li>• Square root and cube root of perfect squares and cubes using the prime factorization method.</li><li>• Square root of a non-perfect square number (upto two or three decimal places) by division</li></ul>	✓ Math lab ✓ Text book	✓ To verify through experiments. ✓ Paper cutting and recording in math practical record. ✓ Class work and home work (10) ✓ Class test (10)	25 pds

			<ul style="list-style-type: none"> <li>method.</li> <li>Problems based on square roots.</li> <li>CCE – Test papers.</li> </ul>			
		2. Rational exponents	<ul style="list-style-type: none"> <li>Meaning of rational exponents.</li> <li>Laws of exponents</li> <li>Idea of radical and radicand.</li> </ul>		<ul style="list-style-type: none"> <li>✓ Problem solving</li> <li>✓ CW/HW</li> <li>✓ CT</li> <li>✓ Verify through experiment by Paper folding method.</li> </ul>	15 pds
June & July – 37 days	Commercial mathematics	3. Applications of Percentage	<ul style="list-style-type: none"> <li>Problems on profit and loss</li> <li>Discount &amp; Marked price</li> <li>Difference between Simple Interest and Compound Interest.</li> <li>Introduction of the term 'conversion period'. Use of formula to find the unknowns is a given question.</li> </ul>	Text Book	<ul style="list-style-type: none"> <li>✓ Home activities to collect 5 bills of the articles purchased during that month and analysis it and interpret it.</li> <li>✓ To look into bank passbook and read the entries and the interest credited. To keep a record of annual interest quoted by different savings On given amount to calculate a better deal.</li> <li>✓ PA 1(10MARKS)</li> </ul>	17 pds
	Operations on Algebraic Expression	Addition Subtraction Multiplication Division 4. Introduction to Identities	<ul style="list-style-type: none"> <li>Meaning of Identity.</li> <li>Recall of the different identities learnt in the previous class.</li> <li>Proves of Identities by conducting activities &amp; algebraically.</li> </ul>	Text book	✓	8pds

August 23 days	Algebra	Identities contd	<ul style="list-style-type: none"> <li>Factorization of the algebraic expressions based on the identities.</li> </ul>	Visit to the math lab  Factorization kit	<ul style="list-style-type: none"> <li>✓ Math practical : to verify using colour paper and chart paper.</li> <li>✓ MCQ test</li> <li>✓ CW/HW</li> </ul>	10pds
		5. Polynomials 6. Linear Equation with are variable.	<ul style="list-style-type: none"> <li>Fundamental concepts of polynomials.</li> <li>Degree of a polynomial.</li> <li>Division of polynomials.</li> <li>Checking the result of the process of division.</li> <li>Concept of a factor of a polynomial.</li> </ul>	Text book	<ul style="list-style-type: none"> <li>✓ Assignment</li> <li>✓ -PPT</li> <li>✓ FA3 (10+10)</li> </ul>	14pds
September 21 days			<ul style="list-style-type: none"> <li>Revision &amp; I semester Exams</li> </ul>		✓	
October 15 days	Algebra	6. Equations in one variable	<ul style="list-style-type: none"> <li>Word problems</li> </ul>	Lab – Ramanjuam kit of linear equation	<ul style="list-style-type: none"> <li>✓ Workshop using math lab material.</li> <li>✓ Holiday HW</li> <li>✓ Short question to be made by students</li> </ul>	18 pds
November 23 day	Geometry	7. Parallel	<ul style="list-style-type: none"> <li>Parallel lines and perpendicular lines and their properties.</li> <li>Construction of division of a line segment into a number of equal segments and in a given ratio internally using a ruler and compass.</li> </ul>	Visit to the math lab PPT	<ul style="list-style-type: none"> <li>✓ Making chart on the concept using sticks and paper cutting.</li> <li>✓ Home assignment.</li> </ul>	15pds

		8. Special types of quadrilaterals	<ul style="list-style-type: none"> <li>• Quadrilaterals and properties.</li> <li>• Simple problems based on the properties.</li> </ul>		<ul style="list-style-type: none"> <li>✓ Chart paper cuttings</li> <li>✓ Math practical work CW?HW</li> </ul>	12pds
December 18 days	Geometry	9. Construction of Quadrilaterals	<ul style="list-style-type: none"> <li>• Different ways of constructing a quadrilateral with the following conditions given. <ul style="list-style-type: none"> <li>(a) Four sides and 1 diagonal</li> <li>(b) 3 sides and 2 diagonals</li> <li>(c) 3 sides and 2 included angles</li> </ul> </li> </ul>	Interactive board Teacher geometry box	<ul style="list-style-type: none"> <li>✓ CW/HM.</li> <li>✓ CT</li> <li>✓ PT 2</li> </ul>	8pds
		10. Introduction to Circles	<ul style="list-style-type: none"> <li>• Definition and properties of circle.</li> <li>• Concept of con-cyclic points and cyclic quadrilateral introduced.</li> <li>• Angle properties and chord properties of a circle and their verification.</li> <li>• Simple problems based on the properties.</li> </ul>	Visit to math lab	Exciting mathematics 8 activity no	10pds

January 22 days	Mensuration	Circles contd  11. Area	<ul style="list-style-type: none"> <li>• Definition of area.</li> <li>• Area of a parallelogram, triangle trapezium and circle using the formula.</li> <li>• Problems based on the circumference of the circle also.</li> </ul>	Ramanujam kit. PPT	<ul style="list-style-type: none"> <li>✓ Chart paper cutting Oral questions</li> <li>✓ CW/HW Formulae book. Inter class MQC.</li> </ul>	8pds  14 pds
		12. Volume and Surface Area	<ul style="list-style-type: none"> <li>• Definition of volume.</li> <li>• Concept and volume of a right circular cylinder, cone and sphere with simple problems.</li> <li>• Problems based on the surface area</li> </ul>		<ul style="list-style-type: none"> <li>✓ Models</li> <li>✓ Practical work.</li> <li>✓ CT</li> <li>✓ Home assignment</li> </ul>	14 pds
February 09 days	Statistics	13. Data and its representation	<ul style="list-style-type: none"> <li>• Idea of various terms related with types of data.</li> <li>• Reading and interpretation of histograms. Calculating the mean data of observations up to a maximum of 10 observations</li> </ul>	Interactive board	<ul style="list-style-type: none"> <li>✓ Do a survey on how much time is spent by a student on different activities in a day.</li> <li>✓ What channel is watched by your classmate at 9pm</li> </ul>	08 pds
Feb	REVISION FOR FINAL TERM					





**SUBJECT: GENERAL SCIENCE****Subject: Physics**

Class	8				
Name of the Text Book	General Science	Author	R.P. Rana	Publisher	S. Chand
No. of Units/Chapters given in the textbook	6	No. of units/chapters deleted if any	Nil		

Month & No. of Working Days	Unit	Theme/Sub Theme	Learning outcome	Resources	Key concepts	IT integration	No. of Periods for each unit
April – May	FORCE AND PRESSURE	<ul style="list-style-type: none"><li>• What is Force?</li><li>• Types of forces</li><li>• Application of force</li><li>• Pressure</li><li>• Fluid pressure</li></ul>	<ul style="list-style-type: none"><li>• To able the students to know the use and abuse of scientific facts.</li><li>• To enable the children to know that SC. Is a systematic study.</li><li>• To know the effects physics in our daily life.</li></ul>	CI – book of IX. (NCERT) Smart classes	<ul style="list-style-type: none"><li>• Activities an pressure and Thrust.</li></ul>	Smart Class.	8
June – July	FRICTION	<ul style="list-style-type: none"><li>• Force of friction</li><li>• Cause of friction</li><li>• Types of friction</li><li>• Applications</li></ul>	<ul style="list-style-type: none"><li>• To enable the children to understand the correct use of SI system of units.</li><li>• To be aware of the take systems of measurement in market.</li><li>• Some Numerical</li></ul>	CI – IX (NCERT) T. Book	<ul style="list-style-type: none"><li>• Methods of increasing and minimizing friction. activity</li></ul>	Smart class.	9

August	Sound	<ul style="list-style-type: none"> <li>• Sound - definition.</li> <li>• How to produce sound?.</li> <li>• Propagation .</li> <li>• Musical instruments</li> </ul>	<ul style="list-style-type: none"> <li>• Enabling the students to understand the effects of force in their day to day life.</li> </ul>	Cl. – X (NCERT) Book.	<ul style="list-style-type: none"> <li>• Activities on sound</li> </ul>		8
October & November	Some Natural Phenomena	<ul style="list-style-type: none"> <li>➤ Natural phenomenon</li> <li>➤ Lightening</li> <li>➤ Lightening conductor</li> <li>➤ Application</li> <li>➤ Earthquake</li> <li>➤ Cause</li> <li>➤ How to protect it?</li> </ul>	<ul style="list-style-type: none"> <li>➤ Enabling the students to identify simple levers and their use in our day to day activities.</li> </ul>	Smart board	<ul style="list-style-type: none"> <li>• Project on seismic zones in india group activity</li> </ul>	Smart board.	9
December	Light	<ul style="list-style-type: none"> <li>➤ What is light?</li> <li>➤ Reflection</li> <li>➤ Mirrors</li> <li>➤ Image formation</li> <li>➤ Lens</li> <li>➤ Dispersion of sun light.</li> </ul>	<ul style="list-style-type: none"> <li>➤ To make the students understand the relation between work and energy.</li> <li>➤ To enable children to think on the alternative resources if energy to overcome energy crisis.</li> </ul>	Smart Board	<ul style="list-style-type: none"> <li>• Ray diagram activity</li> <li>• Properties of images</li> </ul>	Smart Board.	8
January	Stars and the solar system	<ul style="list-style-type: none"> <li>➤ Our solar system</li> <li>➤ Stars</li> <li>➤ Planets</li> <li>➤ Moon</li> <li>➤ Satellites</li> </ul>	<ul style="list-style-type: none"> <li>• To allow the students to understand about solar system</li> </ul>	Cl – X (NCERT) Book.	Role play Making solar system	Smart Board.	7
Feb	Revision for final term						

Grade	8				
Name of the Text Book	Chemistry for middle classes book - III	Author	R.P. Rana	Publisher	S. Chand
No. of Units/Chapters given in the textbook	6	No. of units/chapters			Nil

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## Subject: Chemistry

Month & No. of Working Days	Unit	Theme/Sub Theme	Key Concepts	Resources	Activities
April		➤ Bridge Course	<ul style="list-style-type: none"> <li>• Symbol, Formula, Radical, Valency, completing the equations and balancing them.</li> </ul>		
April	❖ Hydrogen	➤ The Lightest element	<ul style="list-style-type: none"> <li>• Hydrogen is the lightest element having atomic weight 1.008 and molecular weight 2.016.</li> </ul>	<ul style="list-style-type: none"> <li>• Charts and worksheet</li> </ul>	<ul style="list-style-type: none"> <li>• Libr lab me in a</li> </ul>
		➤ History and occurrence	<ul style="list-style-type: none"> <li>• Hydrogen was previously known as in flammable air and found at a height of several hundred kilometers above the surface of the earth in the atmosphere.</li> </ul>		
		➤ Physical properties of hydrogen	<ul style="list-style-type: none"> <li>• It is colourless, tasteless &amp; transparent.</li> </ul>		
		➤	<ul style="list-style-type: none"> <li>• It is sparingly, soluble in water &amp; other solvents.</li> </ul>		
		➤	<ul style="list-style-type: none"> <li>• It liquefies at <math>-250.8^{\circ}\text{C}</math> and solidifies at <math>-257.3^{\circ}\text{C}</math>.</li> </ul>		
		➤ Isotopes of Hydrogen	<ul style="list-style-type: none"> <li>• Three isotopes of Hydrogen               <ul style="list-style-type: none"> <li>- Protium (At. Wt : - 1)</li> <li>- Deuterium (At. Wt : - 2)</li> <li>- Tritium (At – wt : - 3)</li> </ul> </li> </ul>		
		➤ Chemical properties of hydrogen	<ul style="list-style-type: none"> <li>• Action on litmus</li> <li>• Reducing properties</li> <li>• Action with oxygen</li> <li>• Action with carbon</li> <li>• Reaction with sulphur</li> <li>• Reaction with chlorine</li> <li>• Reaction with metals</li> <li>• Hydrogenation of oils.</li> </ul>		
		➤ Methods of preparing hydrogen.	<ul style="list-style-type: none"> <li>• Hydrogen from water</li> <li>• Hydrogen from alkalis</li> <li>• Hydrogen from acids.</li> </ul>		
		➤ Uses of hydrogen	<ul style="list-style-type: none"> <li>• As a fuel</li> <li>• For preparation of chemical</li> <li>• As reducing agent.</li> </ul>		
April-June	❖ Carbon and its Compounds.	➤ Carbon and its compounds.	<ul style="list-style-type: none"> <li>• Carbon is a unique element derived from Latin word 'carbon' meaning coal.</li> </ul>	<ul style="list-style-type: none"> <li>• Structure and diagrams</li> </ul>	<ul style="list-style-type: none"> <li>• Exp sho car use</li> </ul>

		➤ Occurrence of carbon.	<ul style="list-style-type: none"> <li>• In free state (graphite, diamond)</li> <li>• In combined state (metal carbonates and bicarbonates)</li> <li>• In atmosphere.</li> </ul>	• Flow charts	• Exp sho flan
		➤ Allotropy	<ul style="list-style-type: none"> <li>• Different forms or structure of same element having different physical properties. Examples : - sulphure, phosphorus, iron and tin etc.</li> </ul>		
		➤ Allotropic forms of carbon and their properties	<ul style="list-style-type: none"> <li>• Crystalline form:- Diamond, graphite, fullerenes (Properties and uses)</li> <li>• Amorphous form (Properties and uses)</li> <li>• Coal</li> <li>• Coke</li> <li>• Charcoal (Sugar charcoal, bone charcoal, wood charcoal)</li> <li>• Gas carbon</li> <li>• Lampblack or soot.</li> </ul>	<ul style="list-style-type: none"> <li>• Structures and flow chart.</li> <li>• Worksheet</li> </ul>	
		➤ Chemical properties of carbon	<ul style="list-style-type: none"> <li>• Combustion</li> <li>• Reducing action.</li> <li>• (Metallic oxides to metals)</li> <li>• Combination with elements</li> <li>• Formation of carbides.</li> </ul>		
		➤ Carbon – monoxide (CO)	<ul style="list-style-type: none"> <li>• Combustion of carbon in an insufficient supply of air.</li> <li>• Physical properties of CO</li> <li>• Uses of CO.</li> </ul>		
		➤ Fuels	<ul style="list-style-type: none"> <li>• Substances that burns in the presence of air</li> </ul>	• Flow charts	
		➤ Classification of fuels	<ul style="list-style-type: none"> <li>• Solid fuel <ul style="list-style-type: none"> <li>- Natural (wood, coal, peat etc)</li> <li>- Artificial (charcoal, coke, etc)</li> </ul> </li> <li>• Liquid fuel <ul style="list-style-type: none"> <li>- Natural (petroleum products, oil)</li> <li>- Artificial (Petrol, kerosene)</li> </ul> </li> <li>• Gas fuel <ul style="list-style-type: none"> <li>- Natural (natural gas)</li> <li>- Artificial (coal gas, water gas)</li> </ul> </li> </ul>		
		➤ Combustion	<ul style="list-style-type: none"> <li>• Any chemical action accompanied by the evolution of heat and light is termed combustion.</li> </ul>		
		➤ Flames	<ul style="list-style-type: none"> <li>• A flame is a region where combustion of gaseous substances takes place.</li> </ul>	• Diagrams	
		➤ Zones of a flame	<ul style="list-style-type: none"> <li>• Outer zone</li> <li>• Mid zone</li> <li>• Inner zone</li> </ul>		
		➤ Temperature of flames	<ul style="list-style-type: none"> <li>• Temperature of different flames are :</li> <li>• Oxy hydrogen flame : - 2400<sup>o</sup>C</li> <li>• Sun (outer part) – 7000<sup>o</sup> C</li> </ul>		



			<ul style="list-style-type: none"> <li>(electrons).</li> <li>➤ Goldstein led to the discovery of anode rays (protons).</li> <li>➤ Chadwick led to the discovery of neutron.</li> </ul>		
		➤ Models of the atom	<ul style="list-style-type: none"> <li>➤ Thomson model of structure of atom</li> <li>➤ Rutherford's nuclear model of the atom.</li> </ul>	•	•
		➤ Composition of the nucleus	<ul style="list-style-type: none"> <li>➤ Protons and neutrons</li> <li>➤ Atomic number</li> <li>➤ Mass number</li> <li>➤ Numerical based on atomic number and mass number.</li> </ul>		
		➤ Chemical Bonding	<ul style="list-style-type: none"> <li>➤ Concept of valency:- the no. of electron lent, borrowed or shared to determine the valency of the atom.</li> <li>- Electro valency</li> <li>- Covalency</li> </ul>	• Models	
		➤ Nuclear reaction	<ul style="list-style-type: none"> <li>➤ Reaction might produce particles which were is no way present in the original reactants.</li> <li>➤ Types of nuclear reaction <ul style="list-style-type: none"> <li>- Natural nuclear reaction (Radio activity)</li> <li>- Synthetic Nuclear Reactions (Man – made and Artificial)</li> </ul> </li> </ul>	• Work-sheet	
		➤ Radioactivity	<ul style="list-style-type: none"> <li>➤ The natural and spontaneous disintegration of a substance which results in the emission of radioactive rays containing .</li> <li>➤ <math>\alpha</math>- particles (Properties)</li> <li>➤ <math>\beta</math>- Particles (properties)</li> <li>➤ <math>\gamma</math>- rays (properties)</li> </ul>		
		➤ Nuclear energy	<ul style="list-style-type: none"> <li>➤ Energy released either by splitting of heavier nucleus or by union of smaller nuclei.</li> <li>➤ Type of nuclear energy <ul style="list-style-type: none"> <li>- Nuclear fission (with examples)</li> <li>- Nuclear fusion (with examples)</li> </ul> </li> <li>➤ Uses of nuclear energy.</li> </ul>		
		➤ Mass and Energy	<ul style="list-style-type: none"> <li>➤ Relation between mass and energy: <math>E = mc^2</math>.</li> </ul>		
Oct	❖ Transformation of substances	➤ Purification of substances	<ul style="list-style-type: none"> <li>➤ Substances are purified is processes like distillation and fractional distillation.</li> </ul>	• Flow charts	• Exp filtr
		➤ Characteristics of substance	<ul style="list-style-type: none"> <li>➤ Specific melting and boiling points of specific substances. (examples)</li> </ul>		
		➤ Change of state	<ul style="list-style-type: none"> <li>➤ Solid to liquid</li> <li>➤ Liquid to solid</li> <li>➤ Liquid to gas</li> <li>➤ Gas to liquid</li> </ul>		

		➤ Inter conversion of matter	<ul style="list-style-type: none"> <li>➤ Phenomenon of change of one state of matter into another and back to its original state involving physical processes like:- <ul style="list-style-type: none"> <li>• Melting</li> <li>• Freezing</li> <li>• Condensation</li> <li>• Vapourization</li> <li>• Sublimation</li> </ul> </li> </ul>	• Work-sheet	• Exp the pro
		➤ Physical change	➤ A change in which no new substance is formed. (with examples)		
		➤ Chemical reactions and their characteristics.	<ul style="list-style-type: none"> <li>➤ A change where new substance is formed.</li> <li>➤ Characteristics of chemical reaction</li> <li>➤ Change in colour</li> <li>➤ Evolution of gas</li> <li>➤ Formation of precipitate</li> <li>➤ Production of energy</li> <li>➤ Change of state</li> </ul>		
		➤ Types of Reactions	<ul style="list-style-type: none"> <li>• On the basis of physical state <ul style="list-style-type: none"> <li>- Homogenous reaction</li> <li>- Heterogeneous reactions</li> </ul> </li> <li>• On the basis of direction of reaction <ul style="list-style-type: none"> <li>- Reversible reaction</li> <li>- Irreversible reaction</li> </ul> </li> <li>• On the bases of absorption or evolution of heat <ul style="list-style-type: none"> <li>- Exothermic reactions</li> <li>- Endothermic reactions</li> </ul> </li> <li>• On the basis of nature of reaction. <ul style="list-style-type: none"> <li>- Direct combination reaction.</li> <li>- Substitution reaction.</li> <li>- Decomposition reaction</li> <li>- Dissociation reactions</li> <li>- Oxidation and reduction reactions.</li> <li>- Catalytic reactions</li> <li>- (with examples)</li> </ul> </li> </ul>		
Nov		➤ Electrolysis	<ul style="list-style-type: none"> <li>• Decomposition of an electrolyte by the passage of electricity or electric current.</li> <li>• Electrolysis of water</li> <li>• Electrolysis of molten NaCl</li> </ul>	Work-sheet & diagrams	
		➤ Applications of electrolysis	<ul style="list-style-type: none"> <li>• Electroplating :- Plating materials with a thin coat of a metal.</li> <li>• Metallurgy :- Extraction of pure metals from their alloys.</li> </ul>		
		➤ Chemical Equation	• The concise representation of a chemical reaction by means of symbols and formulae.		

			<ul style="list-style-type: none"> <li>Essentials of chemical equation</li> <li>Writing the selection equation &amp; balancing them.</li> <li>Numerical based on molecular weight of compounds.</li> </ul>		
	❖ Metals and Non-metals	➤ Metals	<ul style="list-style-type: none"> <li>Elements having electrons 1, 2 or 3 in their outermost shell &amp; have tendency to lose electrons.</li> <li>Physical properties of metals.</li> <li>Luster</li> <li>Ductile</li> <li>Malleable</li> <li>Sonorous</li> <li>Good conductor of heat and electricity.</li> </ul>	Work-sheets	<ul style="list-style-type: none"> <li>List</li> <li>con</li> <li>me</li> <li>non</li> </ul>
Dec		➤ Non-metals	<ul style="list-style-type: none"> <li>Elements having electrons 5, 6 or 7 in their outer most shell and have tendency to gain electrons.</li> <li>Physical properties of non-metal</li> <li>Non-lustrous</li> <li>Non-malleable</li> <li>Non-ductile</li> <li>Non – sonorous</li> <li>Poor conductor of heat and electricity.</li> </ul>		
Dec		➤ General chemical properties of metals and non-metals.	<ul style="list-style-type: none"> <li>Formation of oxides</li> <li>Nature of oxides</li> <li>Neutralization reaction.</li> </ul>		
		➤ Reactivity of metals	<ul style="list-style-type: none"> <li>Reaction with air</li> <li>Reaction with water</li> <li>Reaction with acids</li> <li>Displacement reactions.</li> </ul>		
		➤ Noble metals	<ul style="list-style-type: none"> <li>Metals maintaining their metallic lusture for a long time without reacting with others.</li> </ul>		
		➤ Metalloids	<ul style="list-style-type: none"> <li>Elements exhibiting the properties of both metals and non-metals. (examples)</li> </ul>		
		➤ Alloys	<ul style="list-style-type: none"> <li>Homogeneous mixture of two or more metals or a metal and a non-metal. (examples)</li> <li>They are loosely classified as :</li> <li>Ferrous</li> <li>Non ferrous</li> </ul>		
		➤ Occurrence of metals in nature	<ul style="list-style-type: none"> <li>In free states like Cu, Ag, Au, Mg and Pt.</li> </ul>		
		➤	<ul style="list-style-type: none"> <li>In the combined state (ores and</li> </ul>		

			minerals) like oxides, halides, carbonates, sulphates, silicates (e.t.c) with examples.		
		➤ Extraction of metals from ores	<ul style="list-style-type: none"> <li>• The science of extracting metals from an ore and refining it is called metallurgy. Separation from their ores in different stages:</li> <li>• Concentration</li> <li>• Roasting</li> <li>• Smelting</li> <li>• Refining the metal.</li> </ul>		
	❖	➤ Uses of common metals and non-metals	<ul style="list-style-type: none"> <li>• Different uses of metals like Fe, Mg, Cu, Al, Ag, Au, Ca etc. and non – metals like O, N, Cl, S, I etc.</li> </ul>		
Jan	❖ Practical chemistry	➤ Action of heat on some common materials.	<ul style="list-style-type: none"> <li>• Action of heat on hydrated salts like blue vitriol, washing soda with chemical reactions.</li> <li>• Action of heat on carbonates and bicarbonates like calcium carbonate (chalk), sodium bicarbonate (Baking soda) with chemical reactions.</li> <li>• Action of heat on oxides like calcium oxide (quicklime), mercuric oxide e.t.c with chemical reactions.</li> <li>• Action of heat on complex hydrocarbons like sugar, wood with chemical reactions</li> <li>• Action of heat on coal.</li> <li>• Action of heat on common salt.</li> <li>• Action of heat on ammonium chloride with chemical reactions.</li> </ul>		
	❖	➤ Detection of some important radicals.	<ul style="list-style-type: none"> <li>• Detection of non-metallic radicals <ul style="list-style-type: none"> <li>- Test for carbonate</li> <li>- Test for chloride</li> <li>- Test for nitrate</li> <li>- Test for sulphate</li> </ul> </li> <li>• Defection of metallic radicals <ul style="list-style-type: none"> <li>- Test of copper ions</li> <li>- Test of Ferrous ion</li> <li>- Test of Ferric ion</li> <li>- Test of calcium ion</li> <li>- Test of Zinc ion</li> <li>- Detection of Ammonium radical</li> </ul> </li> </ul>		
Feb	<b>REVISION FOR FINAL TERM</b>				

**Subject: Biology**

Grade	8				
Name of the Text Book	Biology for middle classes	Author	A.P. Mishra	Publisher	S. Chand
No. of Units/Chapters given in the textbook	06	No. of units/chapters deleted if any			Nil

Month & No. of Working Days	Unit	Theme/Sub Theme	Key Concepts	Resources	Activities/Processes	No. of Periods for each unit
April, May	6	<ul style="list-style-type: none"> <li>➤ Health &amp; Hygiene (8<sup>th</sup> text)</li> <li>➤ Hygiene (9<sup>th</sup> text)</li> </ul>	<ul style="list-style-type: none"> <li>• Good health means having a body that is fit and a mind that is healthy. Simple personal hygiene</li> <li>• Life cycle of mosquito and house fly.</li> </ul>	Charts First Aid kit	Data collection on diseases spread by mosquitoes from available resources	7 4
June – 11	1		<ul style="list-style-type: none"> <li>•</li> </ul>			
July (25 days)	1	<ul style="list-style-type: none"> <li>➤ Disease (9<sup>th</sup> text)</li> <li>➤ The cell (9<sup>th</sup> text) L-2</li> </ul>	<ul style="list-style-type: none"> <li>• Categories of diseases. Diseases caused by microbes</li> <li>• Discovery of cell. Cell theory, structure and functions.</li> </ul>	Slides, microscope, charts	Project Topic – Disease caused by microbes, Structure symptoms, treatment	4 5
August	2	<ul style="list-style-type: none"> <li>➤ Transport in animals &amp; plants.</li> </ul>	<ul style="list-style-type: none"> <li>• Blood- components &amp; functions. Blood group &amp; function of human heart.</li> <li>• Transport system in plants – xylem and phloem</li> </ul>	Chart, slides, model of heart. Plant specimens.	Demo of blood grouping. Working of human heart showing Blood circulation, Balsam plant-Xylem-water conduction.	9
September 13 days			Revision			
October 21 days	L – 9 First Semester Examination and Dussara vacation					
November 24 days	5	<ul style="list-style-type: none"> <li>➤ Pollution &amp; conservation.</li> </ul>	<ul style="list-style-type: none"> <li>• Major sources of pollution.</li> <li>• Biodiversity.</li> <li>• Conservation of wildlife.</li> </ul>		Project Types of pollutants (3 pages – 1 sided) Picture collection of Endangered species	6
	5	<ul style="list-style-type: none"> <li>➤ Food, production and management</li> </ul>	<ul style="list-style-type: none"> <li>• Energy</li> <li>• Plants are cultivated for food, fiber, timber etc.</li> <li>• Soil – classification.</li> <li>• Types of irrigation.</li> <li>• Fertilizers.</li> <li>• Weeds-unwanted plants</li> </ul>	Soil Samples from different region of the country	Data collection on fibre yielding plants  <b>Field trip</b> Picture collection of weeds	9

			<ul style="list-style-type: none"> <li>• Hybridization</li> </ul>			
December 22 days	4	➤ Reproduction Growth & Development (8 <sup>th</sup> test). The flower fertilization Pollination (9 <sup>th</sup> text)	<ul style="list-style-type: none"> <li>• Reproduction, growth &amp; development.</li> <li>• Asexual and sexual reproduction.</li> <li>• Vegetative propagation</li> <li>• Androceium&amp;Gyneocium Pollination.</li> <li>• Fertilization</li> <li>• Primary reproductive organ in male and Female Zygote individual</li> </ul>	Specimens of vegetative propagation  Charts	Germinating of bean seed. Demonstration of Grafting Dissection of a flower.	3  10 + 6
February 12 days	3	➤ Control & co-ordination	<ul style="list-style-type: none"> <li>• Nervous system &amp; its classification. CNS, ANS, PNS.</li> <li>• Sense organs &amp; their functions.</li> <li>• Endocrine system.</li> </ul>	Chart/model of human brain, eye, ear.	Model of human brain and sense organs.	9
March 22 days	Revision and second semester examination					

## SUBJECT-ENGLISH

MONTH No of working days	CHAPTERS/TOPICS	Resources	NO OF
<b>APRIL</b> 22 days	1. Who did Patrick's Homework?(HS)  2. A house, a home(poem) (HS)	ICT  YOUTUBE VIDEOS  GRAMMER BOOK	18+08
<b>MAY</b> 4 days	3. A Tale of 2 Birds( PS)  4. The Sentence  5. Subject and Predicate  6. Descriptive Essay/ Paragraph Writing (GR)		
<b>JUNE</b> 16 days	1. Taro's Reward (HS)  2. The Quarrel( poem)(HS)  3. The Noun  4. Articles  5. Letter Writing [Editorial](GR)	ICT	18
<b>JULY</b> 23 days	1. A Different Kind of School (HS)  2. The Shepherd's Treasure(PS)  3. The Adjectives  4. Degree Of Comparison  5. Story Writing (GR)	WRITING LETTER	21
<b>AUGUST</b> 23 days	1. The Old Clock Shop(PS)  2. The Verb: Kinds of Verb  3. Active and Passive(GR)	ICT  INTERNET	18
<b>SEPTEMBER</b>	<b>REVISION FOR MID TERM</b>		

## SUBJECT- SOCIAL SCIENCE

<b>Grade</b>	8	<b>Subject</b>	Geography		
<b>Name of the Text Book</b>	Getting Ahead in social Science	<b>Author</b>		<b>Publisher</b>	
<b>No. of Units/ Chapters given in the text book</b>		8+1	<b>No. of units / chapters deleted if any:</b>		

Month & number of working days	UNIT	Sub theme	Key concepts	Resources	Learning Outcomes	Activities/ Processes
April + May  (21+4 days)	Chapter 1: Resources	Natural resources	Meaning of resources Classification of resources . Conservation of resources	Various practical examples	A resource can be anything that can be used to satisfy	Refer activi form page of textbo

					human wants.. Not all resources enjoy an economic value.	.
	Chapter 2: land, soil and water resources	Land resources	Classification of land Land use Land degradation Conservation of land resources	Use of physical map of India to refer to India's soil, diagram on page 11 for soil profile.	The use of land is being determined by physical factors such as topography, soil climate, minerals etc	Refer activity form page of textbook.
	Soil Resources	Soil and soil profile Soils of India Conservation of soil	Use of physical map of India	Soil varies in colour texture, fertility and content.	Refer activity form page 14 of textbook.	
	Water resources	Distribution of water Uses of water Water resources of India Water pollution Conservation of water resources		Fresh water is a critical resource. India has abundant water resources. yet many of them suffer from water scarcity.	Refer activity form page 17 of textbook.	
June (12 days)	Chapter 3: Natural vegetation and wildlife	Natural vegetation and wildlife	Distribution of natural vegetation Deforestation Wildfires Forests in India Conservation of forests.	Use of physical map of world to refer to world vegetation and physical map of India to refer to	Natural vegetation and wild life are renewable and are closely interconnected. Plants are producers, where as	Refer activity form page of textbook.

				India's vegetation	animals are consumers	
		Wildlife	The conservation of wildlife	Physical map of India to refer to India's National park and wildlife sanctuary	National parks , wild life sanctuaries and biosphere reserves are made to protect our natural vegetation and wild lif.	Refer activi form page of textbo .
	Chapter 4 Minerals and power resources	Mineral resources	Types of minerals Extraction of minerals Distribution of minerals Distribution of minerals in India and their uses Conservation of minerals.	Use of political map of India to show distribution of metallic minerals in India.	Mineral and power resources are vital for the economic and industrial growth of a nation.	Map pointing from Page
July (25 days)		Power resources	Conventional sources of energy Non conventional sources of energy Save energy	Political map of the world to refer to the world power resources.	Industrial and domestic sectors both need power. It is essential for agriculture communication, transport and defence.	Refer activi from page in the textbo .
	Disaster management	A PART OF THE	LESSON WILL BE COVERED	IN THE FIRST		SUMMATIVE EXAM
	Natural disaster	Earthquake	Measurement of earthquake Effects of earthquake Precautions to	Political map of India to refer to India's	Natural disasters are caused by geographic	Colle inform on or various recer

			be taken Coping with the aftermath	earthquak e belt.	al factors, like earth quake and cyclones.	earth akes that shool the world
Augu st - 23		Cyclone	Effects of cyclone Cyclone warning and coping with the cyclone After the cyclone	Political map of India to refer to India's cyclone belt.		Colle inform on or Supe cyclo which wreat havo Oriss
		Flood	Causes of flood Effects of flood Ways to prevent and mitigate flood	Political map of India to refer to India's flood belt.		Refer activi from page of textbo .
Septe mber	Revision & first semester exam					

October -21	Chapter 5 Agriculture	Factors influencing agriculture	Eight factors influencing agriculture Farm system	Use of physical map of India to explain the factors	Agriculture is the primary activity. It depends on different factors. A large variety of crops grown all over the world.	Refer activity from page of textbo
		Types of farming	Nomadic farming Shifting cultivation Subsistence farming Commercial farming Dairy farming			Collect pictures on various types of cultivation and prepare a chart
		Major crops	Rice Wheat Millets Maize Cotton Jute Coffee Tea	Use of political map of the world Physical map of the world to show the cultivation of crops.		Visit a paddy field near
		Agriculture in India	Case study of a farmer in India and USA			Assignment on difference of agricultural holdings
	Chapter 6 Industries	Description of industries	Importance of industries Classification of industries Factors affecting location of industries	Political map of India showing major industrial regions.	The process of converting the raw material into a finished	Refer activity from page 64 and 66 of textbo

			Industrial system Industrial regions.		goods is called manufacturing.	
November (24 days)	Chapter 7: Distribution of major industries and comparative case studies	Various types of industries	Iron and steel industry Chemical industry Transport equipment industry Textile industry Sugar industry Cement industry Information technology Industry	Political map of the world to locate each and every industry	Iron & steel industry is a key industry as it is helped paved the way for modern civilization.	Refer activities from page 75 and 81 for the textbook.  <b>Field Trip:</b> Visit to the industrial area Baikalady.
Dec (25 days)	Chapter 8: human resource	Human resource development	Various ways by which development in human resources can be done		People are the greatest asset and resources of a nation. Healthy educated, and motivated people contribute immensely to the growth and development of a country.	Discussion on how to improve India's human resource
		Distribution of population	Meaning of distribution of population and the various parameters associated with it.			Discussion on how change in the distribution of population can change the social setup
	Density	Population	World political		Refer	

	ty of population	density meaning Areas of high population density Areas of moderate population density Areas of low population density	map to show the density of population		activity from page 85 of textbook	
	Factors affecting distribution of population	Population change- birth rate, death rate, growth rate and migration			Refer activity from page 89 of textbook	
	Population composition	Population composition Age-sex pyramid  dependency ratio Literacy rate Life expectancy	Political map of India to show sex ratio and literacy rate		Refer activity from page 91 of textbook	
Jan (25 days)	Chapter 9: disaster management					
	Natural disaster	Drought	Effects of drought Certain precautions that can be taken in drought prone areas	Political map of India to show drought prone areas of India		Collect information on any picture on drought situations in India
	Human made disaster	Nuclear, chemical and biological disaster	Weapons of mass destruction Precautions of chemical		Human made disasters are caused by human	Refer activity from page 100,

<b>SUBJECT</b>	<b>SANSKRIT CLASS – VIII</b>	
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			disaster Precautions to be taken to avoid biological disasters		activities like industrial accidents, wars and environme ntal Pollution.	101, and 1 of textbo
Febru ary	<b>Revision</b>					

### **Subject: Art & Craft**

Grade	8				
Name of the Text Book	Colours& Craft	Author	Kamal Jain	Publisher	Viva Education
No. of Units/Chapters given in the textbook		No. of units/chapters deleted if any	Nil		

### **Subject: Art & Craft**

Month & No. of Working Days	Concepts	Theme/Sub Theme/Topic	Medium/Material	Out door	No. of Periods for each unit
June – Aug	Landscape	➤ Aliments of nature	Oil Pastel, Pencil colour, Pencil (2B, 4B, 6B) water colour.		6
Sept	Scientific subject	➤ Science related Topic	Oil Pastel, Pencil colour, Pencil (2B, 4B, 6B) water colour.		7
Oct- Nov	Geography Subject	➤ Aliments of nature	Oil Pastel, Pencil colour, Pencil (2B, 4B, 6B) water colour.	ISC-DPS	8
Dec	Geometric form	➤ Form & Shape	Oil Pastel, Pencil colour, Pencil (2B, 4B, 6B) Coloursketchpen	ISC-DPS	5
Jan	Geometric form	➤ Form & Shape	Oil Pastel, Pencil colour, Pencil (2B, 4B, 6B) Coloursketchpen	ISC-DPS	7
Feb – March		➤ Topic for competition	Oil Pastel, Pencil colour, Pencil (2B, 4B, 6B) Coloursketchpen		10

PRESCRIBED TEXT BOOK	MANIKA VYAKARAN 2. RUCHIRA		
MONTHS	NAME OF THE LESSON TO BE TAUGHT		
APRIL -19	ÒeLeceHeep: , mebefvOe , efÜleer <sup>3</sup> e Heep: , JeCe&efJev <sup>3</sup> eeme , Òel <sup>3</sup> e <sup>3</sup> e (J <sup>3</sup> eekeÀjCe)Oeeleg©HeeCeeb Òe <sup>3</sup> eesieb		mebb Megv
MAY -19	le=leer <sup>3</sup> e Heep: (-eÀceMe: ) , mebefvOe , GHeHeoeveeb Òe <sup>3</sup> eesieb , DeHepeefleeY <sup>3</sup> eemeb , ,DeMegefÜMeesOeveb		Meue YeeJe ,efue
JUNE -19	le=leer <sup>3</sup> e Heep: (meceeHle) æmebK <sup>3</sup> ee <sup>3</sup> ee: Òe <sup>3</sup> eesieb , keÀejkeÀefJeYeeqkeileleLeeGHeHeoefJeYeeqkeile ,		mebc Oeele Òe <sup>3</sup> ee GHeH
JULY -19	®elegLe&: Heep:, Heb®eceHeep: mJejevleMeyoj®evee , GHemeie&Deewj Òel <sup>3</sup> e <sup>3</sup> e , meJe&veeceleLee DeJ <sup>3</sup> e <sup>3</sup> ee: , ÒekeÀeMem <sup>3</sup> e HejeJele&vebDeHeJele&veb ®e		Heefj (veei ®e)
AUGUST- 19	<eäHeep: Hegvejeuees®evee, meceeme , Je®eve , keÀejkeÀ , meJe&veece , efJeMes< <sup>3</sup> e leLeeefJeMes<eCe Fl <sup>3</sup> eeo <sup>3</sup> e:		mJeyJuees ceeO Heefj
SEPTEMBER-19	REVISION & EXAMINATION		

OCTOBER	<p>YeejlekeÀerKeespe - DejyeDeewjcebieesue , yeejeDeewjDekeÀyej, mecevJe<sup>3</sup>e Deewjefceueer-pegueer....(3)</p> <p>J<sup>3</sup>eekeÀjCe - meJe&amp;veece ,efJeMes&lt;eCe ,ef-eA<sup>3</sup>ee (3) keÀeue (3)</p>
NOVEMBER	<p>Jemeble - megoecee ©eejle (5) peneB Heefn<sup>3</sup>ee nw (5)</p> <p>YeejlekeÀerKeespe - mecevJe<sup>3</sup>e Deewjefceueer-pegueer..... , DeewjbiepesyevesGuieriebieeyeneF&amp; , OeYefJekesA</p> <p>efueS..... , YeejeceWefye'efiMeMeemeve ..... J<sup>3</sup> ee ke Àj ( ) C 3 e- (4), )</p>
DECEMBER	<p>Jemeble - DekeAyejerueesie (4) mejoemekesAHeo (3)</p> <p>YeejlekeÀerKeespemeved 1857 keÀerceneve..... , efleuekeÀDeewjjeesKeues (4)</p> <p>J<sup>3</sup> (3) ee ke षट्- Àj C ष e- (1), cegneJejs-ueeskeÀeseqkelle<sup>3</sup>eeB (1)</p>
	<p>Jemeble - HeeerveerkeÀerkeÀeerveer (ieefleefJeefOe)(1) yeepeDeewjmeebHe (4) iestHeer (4)</p>

<p><b>JANUARY</b></p>	<p>J³eekeÀjCe - j@eveekesÁDeeOeejHej Jeekel³e kesÁYeso (2) DeLe&amp;kesÁDeeOeejHej Jeekel³e kesÁYeso</p> <p>(1)efJejeceef@endve (1)</p> <p>DeuebkeÀej (3)</p> <p>He\$e (2) (</p> <p>efveyebOeuesKeve (2) ¶ (</p>
<p><b>FEBRUARY</b></p>	<p>Jemeble (</p> <p>J³eekeÀjCe -¶ 9</p>