



PRATAP
INTERNATIONAL SCHOOL
POCKET -2, SEC- 24, ROHINI, NEW DELHI

SYLLABUS

CLASS VII

Subjects

1. MATHS
2. ENGLISH
3. SOCIAL STUDIES
4. SCIENCE
5. COMPUTER
6. HINDI

MATHS

GENERAL OBJECTIVES:

1. To express thoughts clearly and accurately.
2. To reach the correct conclusion by logical reasoning.
3. To systematically organize and interpret the given data.
4. To promote original thinking and investigation.
5. To exercise intuitive powers and common sense.
6. To analyze a problem discovering fundamental relationships.
7. To accurately generalize special concepts.

TEXTBOOK:

Mathematics for class 7 (RS Aggarwal)

MONTHS	CHAPTERS	SUB-TOPIC	ACTIVITIES
April-May	Ch-1 Integers	a) Properties of addition and subtraction of integers b) Multiplication of integers c) Properties of multiplication of integers d) Division of integers e) Operation of integers using BODMAS and four types of Brackets	Playing an integer card game with 50 flashcards, wherein each has an integer written on it from -20 to 20.
	Ch-2 Fractions	a) Addition and subtraction of fractions b) Multiplication of fractions c) Division of Fractions	Understanding fractions as a part of the whole by paper folding.
	Ch-3 Decimals	a) Addition and subtraction of decimal numbers b) Multiplication of Decimal numbers c) Division of decimals numbers d) Division of a decimal number by an another decimal number e) Terminating and non-terminating decimals	Representing product of decimals on 10x10 grid (graph paper) by drawing horizontal, vertical lines and shading
June-July	Ch-4 Rational Numbers	a) Rational numbers on a number line b) Comparison of rational number c) Rational numbers b/w two rational numbers d) Addition and subtraction of rational numbers e) Multiplication and division of rational numbers	Smart Class: Rational numbers in between rational numbers for better and complete understanding.
	Ch-5 Exponents and powers	a) Exponents b) Laws of Exponents c) Standard form of large numbers	Playing Tic Tac Toe using laws of exponents Adding/subtracting same bases & powers.

August		Kinds of Algebraic Expression a) Addition and Subtraction of Algebraic Expression b) Multiplication of Algebraic Expression c) Value Of an Algebraic Expression d) Algebra in formulae and rules	deriving algebraic expressions.
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MONTHS	CHAPTERS	SUB-TOPIC	ACTIVITIES
	Ch-7 Simple Equations	a) Formation of an expression with one or two variables b) Solving an Equation c) Application of simple equations	Understanding the concept of balancing and solving the equations using pencil, paper and eraser
	Ch-8 Ratio and Proportion	Comparison of ratio a) Equivalent Ratios b) Proportion	<u>Smart Class</u> : Interactive learning of ratio and proportion concepts.
September	Ch-9 Unitary method	HALF YEARLY EXAMINATION	
October	Ch-9 Unitary method	a) Unitary method b) Direct and Inverse variation	Preparing flashcards for class board with examples of percentage conversion. <u>Smart class</u> : Profit/Loss percentage increase or decrease calculations. Group enacting of different situations of lending and borrowing money on Simple interest.
	Ch-10 Percentage	a) Conversion of Percentage b) Uses of the concept of percentage	
	Ch-11 Profit and Loss	a) Calculation of Profit and Profit percentage b) Calculation of Loss and Loss percentage	
	Ch-12 Simple Interest	a) Calculation of Simple Interest, Amount, Principal, Rate and Time	
November	Ch-13 Lines and Angles	a) Complementary and supplementary angles b) Angles formed by intersecting lines	Verifying equality of angles made by transversal to parallel lines by paper cutting and pasting. Verifying Pythagoras theorem using colored paper cuttings
	Ch-14 Properties of Parallel Lines	a) Properties of parallel Lines b) Angles formed by parallel lines and a transversal	
	Ch-15 Properties of Triangles	a) Classification of triangles b) Interior and Exterior angles of a triangle and its properties c) Angle sum property of a triangle d) Properties of triangle	
	Ch-16 Congruence	a) Congruence of triangles b) Conditions for congruence of triangles (SSS, SAS, ASA, RHS)	

December	Ch-17 Construction	a) Construction of parallel lines b) Construction of triangles using SSS, SAS, ASA and RHS criterion	Verifying the methods of constructing a triangle using sticks of different lengths
	Ch-18 Reflection and Rotational Symmetry	a) Line of symmetry for regular polygons b) Reflection Symmetry c) Rotational symmetry	Using mirror, rotating objects and paper folding to practice symmetry.
	Ch-19 Three-Dimensional Shapes	a) Plane figure and solid figures b) Nets for building 3D shapes c) Drawing solid shapes on a flat surface d) Visualizing solid objects.	Creating solid cube by drawing and cutting different designs of nets.
	Ch-20 Mensuration	a) Squares, Rectangles, Triangles, Parallelogram and Circles b) Area of combination of figures c) Application of Area	Playing mensuration quiz for testing the concept learning and revision.
January	Ch-21 Collection and Organization of Data	a) Collecting and interpretation of data b) Arithmetic Mean, Range, Mode and Median	Using lists of students of the class under different categories to understand the need of data compilation and interpretation. Playing coin tossing activity. Observing and recording the results.
	Ch-22 Bar Graph Ch-23 Probability	a) Drawing and Reading of Bar graphs b) Double Bar Graph c) a) Chance and Probability	
February		Revision for Final term	
February Final	– Ch 6, 8, 10, 11, 12, 17, 20, 21, 22 & 23	Revision of all mathematics concepts learned through the session.	

ENGLISH

LEARNING OBJECTIVES:

- To enable the child to build the four language skills i.e. LSRW (Listening, Speaking, Reading, Writing)
- To enable the child to acquire language competency.
- To familiarize the child with the basics of English language (i.e. the basic Grammatical and vocabulary)
- To enable the child to use the English language for social interaction confidently.
- To inculcate the love for the subject and an urge for extensive reading.

TEXT BOOKS TO BE USED:

1. OXFORD New Broadways(MainCourse book)
2. OXFORD New Broadways(Workbook)
3. OXFORD New Learner's Grammar and Composition

MONTH	LITERATURE	GRAMMAR	WRITING SKILLS	VOCABULARY	ACTIVITIES
APRIL	CHAPTER-1 Dreams of the future CHAPTER-2 The festival of Eid	Ch-1 Nouns Ch-2 Articles	----- -	• Use of genders • gender identification	Describe different genders by drawing flow chart.
MAY	CHAPTER-3 Sunita Williams POEM <i>Vocation</i>	Ch-3 Pronouns Ch-4 Adjectives	Picture composition	• Enhancement of new words, Introduction to new words.	Picture composition competition
JUNE	CHAPTER-4 Kailash Satyarthi	Ch-5 Verbs	Paragraph writing	• knowledge about current topics	Paragraph writing activity
JULY	CHAPTER-5 The gift of Ku POEM- <i>History</i>	Ch-6 Verb-present tense Ch-7 Verb-	Notice Writing	• Usage of formal words	-Grammar Fun
		tense			

AUGUST	CHAPTER-6 The tree lover POEM- <i>Think like a tree</i>	Ch-8 Verb-future tense Ch-9 Perfect tense	-letter Writing	Usage of formal words	- Recitation of the Poem
SEPTEMBER	CHAPTER-7 Three days to see	Ch-10- Verbs-non finite types Ch-11- Auxiliary verbs MODALS	E-mail writing	•Use of sp: prefixes un, dis, in, im, ir.	----- ----
OCTOBER	Chapter-8 Subira: The Three-legged cheetah	Ch-12 Active and passive Ch-13 Adverbs	Report writing	Forming phrases with <i>-self</i> • Forming noun forms with suffixes	-Grammar Fun - Recitation
NOVEMBER	Chapter-9 Young Sherlock Holmes Chapter-10 Spying high	Ch-14 Prepositions Ch-15 Conjunctions	-Letter- Formal	• interacting with near ones.	-Reading Activity - Extempore Activity

DECEMBER	CHAPTER-11 Charlie's mother	Ch-16 The sentences Ch-17 Phrases and clauses	Story writing	•learning new Expressions	-story writing competition
JANUARY	POEM-Night voices Poem-A mother's love	Ch-18 Sentence types Ch-19 Direct and indirect	-Diary Entry	-----	-recording ones experience
FEBRUARY	CHAPTER-12 About famous mothers	Ch20 Punctuations Ch-21 Phrasal verbs and idioms	Dialogue writing	• Enhancing conversation.	-Role play activity
MARCH Final Term					

SOCIAL STUDIES

Month	Chapters	Sub-Topic	Activities
April –May	<u>History</u> Ch – The Sultanate Period	Maps and five dynasties.	Map work, videos and collage work
	<u>Civics</u> Ch - Democracy	Types of Government and importance of democracy.	Videos and information from web.
	<u>Geography</u> Ch – Transportation and communication	Mode of transportation and mode of communication	Map work, collage work and videos.
June		Different regional of India.	Map work
	<u>History</u> Ch- The regional kingdoms-1 Ch – The great Mughals	Mughal emperors who ruled on India	Map work, information about mughal emperors from web and videos.

	<u>Geography</u> Ch – Our environment Ch – Inside our Earth	Atmosphere, Biosphere and Lithosphere Parts of earth	Diagrams Diagrams and videos
July	<u>History</u> Ch-The Regional Kingdom 2 <u>Geography</u> Ch- The Changing Earth Ch- Major Land forms <u>Civics</u> Ch-India and democracy	Different regional of India Atmosphere of Earth. Layers of Earth. Continents and water bodies on the Earth surface. Importance of democracy. Rights,	Map work Diagrams and information about the Earth from web. Map work, Diagrams and videos. Poster making.

Aug-Sept	<u>History</u> Ch- The Medieval World. Ch- Religious Beliefs. Ch-The flowering of regional culture. <u>Geography</u> Ch- Composition and the structure of the atmosphere. Ch- Weather and climate. Ch- water <u>Civics</u> Ch- Role of gender.	Information about other countries in the world. Different religions of the world. Birth of new religions. Layers of atmosphere. How the weather and the climate change take place. Watercycle or hydrocycle. Role of a woman in the society.	Map work, Famous personalities informations. Diagrams and videos. Slogan writing and debate.

	Ch- Advertising. Ch- Market around us.		
August UT-2			
September Half Yearly			
October	<u>History</u> Ch- Political formations in the 18 th century. <u>Geography</u> Ch- Life in the tropical and subtropical regions. Ch- Life in the temperate grasslands	The Marathas, The Sikhs and The mughals.	Map work, videos and collage work.
November	<u>History</u> Ch- Tours, traders and craftsmen. Ch- Monumental Architecture.	History hoe the trade started in the world. Famous monuments.	Map work, collage work and information from the web.
December	<u>Geography</u> Ch- Life in the	Vegetation, Habitats	Videos and

	desert. <u>Civics</u> Ch- Media and democracy.	and wildlife. RTI act , role of media in government.	collage work. Collecting information about role of media in the democracy.
January UT-3 January	Ch-17 & 27 <u>History</u> Ch-5 The vedic age <u>Geography</u> Ch-21 Indian climate vegetation & wild life	-Vedas & Vedic -Life in the early vedic & later vedic -Climate -Types & variety of vegetation & wild life	<u>Teaching Aids</u> -Smart Class -Atlas <u>Activity</u> Video session on Ramayana <u>Activity</u> Map work on climate, vegetation & wild life <u>Visit</u> Visit to zoo

February			
UT-4	Ch-5&21		
February	<u>Geography</u>		
	Ch-19 Relief features of continent	-Endogenic & Exogenic	<u>Teaching Aids</u> -Smart Class -Atlas -Map <u>Activities</u> -Seven wonders of the world (paste pictures on the physical map of the world)
	Ch-11 Political Development	-The sources- Charita kavyas & Prashastis -The gupta dynasty -Life of the people -	<u>Teaching Aids</u> -Smart Class <u>Activity</u> -Paste picture & make collage in the notebook
March	Final Exams		

SCIENCE

LEARNING OBJECTIVES:

- To enable the child to develop scientific skills.
- To enable the child to understand the real life applications of the concepts.
- To encourage the child learning by doing.
- To develop interest in the subject and an urge to explore the science behind everyday life.
- To encourage team work and group learning.

TEXT BOOKS TO BE USED:

1. Living Science – Ratna Sagar
2. Activity Plus in Science – Full Circle

MONTH	CHAPTER NO & NAME	SUB TOPICS	ACTIVITIES
April & May	1.Nutrition in Plants	Nutrition and its types , Autotrophic nutrition in plant , Heterotrophic nutrition, Saprotrophs , Replenishment Nutrients in the soil.	<u>Teaching Aid :</u> Videos, Pictures of examples , Mixture of paper bits & pencil shavings.
	3.Structure of Matter	What is matter made up of ? Elements and compounds , Mixtures , Tools for chemical communication - symbols , Formulae , Chemical Equations .	
	14.Motion and Time	Standard units, Measurement Of Time, Speed, Uniform and Non - uniform Motion, Distance and Time Graph.	

	in Animals 5. Heat and its Effect 6. Flow of Heat	and Frog, The Human Digestive System, Ruminants. Effects of Heat, Expansion in Solids , liquids and gases, Temperature and its measurement. Conduction , Convection And Radiation.	Model of alimentary canal , Different types of Thermometer. <u>Group Activity:</u> 1. To show that saliva breaks down food. 2. To find the temperature of hot water. 3. To observe the effect of impurities on the boiling point of water .
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			4. To show that heat transfer in water is due to convection.
August	18. Water : A Natural Resource 4. Animal Fibres	Our Natural Resource , Renewable and non-renewable resources ,Water- a renewable resource, Shortage of Water, States of Water, The Water Cycle , Groundwater, Water conservation. Climate and clothes , Natural fibres – Wool and silk.	<u>Teaching Aid:</u> Model of underground water pump system. <u>Individual Activity :</u> 1. Make a poster on 'Save Water'.

	20. Wastewater Management	Wastewater and sewage , Importance of drainage and sanitation, The sewage system, Sewage Treatment, Alternate Sewage Disposal methods.	2. Collect samples of different types of fabrics and paste it in the notebook.
September	9. Weather , Climate and Adaptation	Weather, Climate Effect of the Sun on Climate , Climate and Adaptation.	<u>Teaching Aid :</u> Newspaper <u>Individual Activity :</u> .Project : 1. Animals and Adaptation. 2. Weather Report.
October	10. Soil 7. Acids, Bases and Salts	Composition of Soil , Soil Formation, Soil Profile, Composition of Soil, Types of soil, Properties of Soil, Soil and Crops, Soil as a natural resource. Acids and base – their importance properties ,The preparation and uses of salts.	<u>Teaching Aid :</u> Garden Soil, Different Acids, bases and salts , Natural and synthetic indicators. <u>Group Activity :</u> 1. To exhibit presence of water of in soil. 2. To test the acidic and basic nature of different solutions using red and blue litmus paper. 3. To see the effect of a natural

			indicator . 4. To demonstrate a neutralization reaction.
November	15.Wind , Storms and Cyclones 11.Respiration 8. Physical and Chemical Changes	Natural disasters, Air Pressure , High speed wind causes reduced pressure, Air expands on heating , Wind currents , Thunderstorms , cyclones and tornadoes ,Cyclone forecasting and warning. Respiration in Plants , Respiration in Animals ,Respiratory System in Humans and Plants; Types of Respiration. Characteristics of chemical reactions, Types of chemical reactions, Separating a solid from a solution.	<u>Teaching Aid :</u> Model of respiratory system of humans & Stomata <u>Group Activity :</u> 1. To show that air expands on heating and contracts on cooling. 2. Make a model of Windvane /Wind anemometer. 3. To show that exhaled air contains CO₂. 4. To show that rusting of iron requires both oxygen and water. 5. To study the deposition of copper from its salt solution.

			6.To study the reaction between vinegar and baking soda. 7. To show that rusting of iron requires both oxygen and water.
December	17. Electric Current and its Effects 12.Transport of Substances in Plants and Animals 16.Light	Electric Current & Circuit , Effects of Electric Current, The electromagnet. Transportation of Materials in plants and Animals , Excretion in Animals and Humans . Rectilinear Propagation of Light, Reflection of Light, Real and virtual images ,Spherical Mirrors,	<u>Teaching Aid :</u> Model of electric circuit , Human Circulatory system , Heart and Excretory system, Stethoscope, Syphgmomanometer , Different types of mirrors and lenses , Prism <u>Group Activity :</u> 1. To prepare an electric circuit

		Lenses, Spectrum.	/ electromagnet / Newton's Disc 2. To observe the process of transpiration in a potted plant . 3.To study the nature of images formed by curved reflecting surfaces. 4. To demonstrate that sunlight is made of seven colours.
January	13.Reproduction in Plants	Asexual Reproduction in plants , Vegetative Reproduction , Artificial methods of vegetative reproduction,,Sexual reproduction.	<u>Teaching Aid :</u> ,Live examples of different parts of plant, Permanent slides. <u>Group Activity :</u> To dissect a hibiscus flower and observe its parts.

February	19.Our Forest	Forest Wealth , Producers , consumers and decomposers , Food Chain , Balance in Nature , Forest conservation.	<u>Teaching Aid :</u> School Garden (visit) <u>Individual Activity :</u> <u>.Project :</u> To prepare a record of trees in your neighbourhood /school campus.
March		REVISION	

COMPUTER

Content	Learning Objectives	Methodology	Activity	Resources Required
Ist TERM				
Theory: L-1 Number System L-10 Cyber Safety Practical L-2 Formulas & Functions L-3 Advanced features of excel L-4 Log on to Animate CC	- Understanding Number System & its need - Understand the use of various Cyber Ethics, Cyber crime - To use Spreadsheet software for calculations and to create, compare & manipulate data. - Getting familiar with various flash components to create animation	- Through a presentation & demonstration - Through a presentation & demonstration - Through a presentation & demonstration	- Sums on Binary arithmetic - Creating spreadsheets to enter, sort & filter data. Enter various formulas to perform calculations. - Create, modify & group different objects to make moving objects	- Presentation related to the topic - MS- Excel 2010 - Adobe Flash CS3 OR Macromedia Flash 8
IInd TERM				

Theory: L-6 Introducing Python	To understand a programming language that is used in problem solving techniques.	Through a presentation , Explanation		Presentation related to the topic
Practical: L-7 More on Python	- Understanding Control Structure - Using Text properties in HTML	Through demonstration	Creating programs in Python to increase problem solving skills.	Python platform
L-8 More on CSS 3	To create and design tables using HTML	Through a presentation & demonstration	Creating HTML document (web pages).	Notepad, web Browser
L-9 Using Lists and Tables in HTML5				

HINDI

क्रम	पाठ्यपुस्तक एवं व्याकरण	अनुमानित आवश्यक कालांश	माह	रचनात्मक गतिविधियां
1	पाठ - 1 जागरण गीत (कविता)	4	अप्रैल - मई	सस्वर वाचन, सोहन लाल द्विवेदी की कुछ कविताओं को चार्ट पेपर
	पाठ - 2 हंस और कौआ (लोक कथा)	5		पर लिखकर कक्षा में लगाना।
		4		कौए और हंस के बीच वार्तालाप लिखना, नाट्य रूपांतरण।
	पाठ - 4 मन जीते जग जीत (कहानी)	7		अनुच्छेद जब मैं दो अंको से पिछड़ गया।
	व्याकरण - भाषा, बोली, लिपि तथा व्याकरण, वर्ण- विवेक	10		कक्षा कक्ष गतिविधियाँ स्मार्ट कक्षा
	पर्यायवाची शब्द - पशु - पक्षी - कीट और प्रकृति संबंधित			
	विलोम शब्द - घटना से उत्थान			
	अनेकार्थी शब्द - आराम से			
2	पाठ - 3 तारों की दुनिया में (विज्ञान लेख)	4	जुलाई	लोक कथा सुनना-सुनाना, सौरमंडल का चार्ट बनाना
		5		
	पाठ - 5 नाम की इच्छा (व्यंग्य)	3		समाचार पत्र निर्माण और परिचर्चा
	पाठ - 6 पहले अपना अध्ययन करो (कविता)	6		कविताओं का संकलन एवं वाचन
		5		स्मार्ट कक्षा कक्षा कक्ष गतिविधियाँ
	व्याकरण -संधि -विसर्ग तथा व्यंजन			
	संज्ञा, लिंग, वचन, डायरी लेखन, कारक, पत्र (अनौपचारिक)			
3	पाठ - 7 ह्वेनसांग स्मृति संग्रहालय (यात्रा वृत्तांत)	5	अगस्त	यात्रा वृत्तांत लिखना, संग्रहालय के जानकारी
	पाठ - 8 आम और गालिब	4		चार्ट बनाना, शायरी संकलन

	(ललित निबंध) व्याकरण - शब्द विचार (उत्पत्ति के आधार पर) रचना के आधार पर, व्याकरण अथवा प्रयोग के आधार पर श्रुतिसमभिन्नार्थक (1 तो 28) अनुच्छेद लेखन, अपठित गद्यांश और पद्यांश	10		स्मार्ट कक्षा, कक्षा कक्ष गतिविधियाँ, कार्य पत्रिकाएँ
4	पाठ - 9 विश्वराज्य (कविता) पाठ - 10 रंगोली (कला संस्कृति) व्याकरण - अनेक शब्दों के लिए एक शब्द (1 से 34 तक) शब्द-युग्म, एकार्थक प्रतीत होने वाले शब्द (1 से 14 तक) संवाद लेखन	6 5 8	सितंबर	कवि सम्मेलन अथवा अंत्याक्षरी का आयोजन, कविता पठन रंगोली प्रतियोगिता, बिहार की मधुबनी पेंटिंग्स या महाराष्ट्र की वरली के पैटर्न का चार्ट बनाना स्मार्ट कक्षा, कार्य पत्रिकाएँ (विषय से संबंधित चित्र)
5	पाठ - 11 रक्त - चन्दन (एकांकी) पाठ - 12 आर्ट का पुल (कहानी) व्याकरण - सर्वनाम, उपसर्ग, प्रत्यय, विशेषण, समास पत्र (ओपचारिक)	6 6 10	अक्टूबर	नाट्य रूपांतर अनुच्छेद लेखन और फिल्म देखना समास वर्ग पहेली , स्मार्ट कक्षा

	पाठ - 13 आप भले तो जग भला (ललित निबंध) पाठ - 15 इस्तीफ़ा (कहानी) व्याकरण - काल वाच्य, क्रिया, एकार्थक प्रतीत होने वाले शब्द (16 से 30)	4 10	नवंबर	पत्र लेखन, परिचर्चा मुंशी प्रेमचंद की कहानियों का संकलन स्मार्ट कक्षा, कक्षा कक्ष गतिविधियाँ स्मार्ट कक्षा, कक्षा कक्ष गतिविधियाँ, कार्य पत्रिकाएँ
7	पाठ - 14 जीवन - सत्य (दोहे) पाठ - 16 सिनेमा का स्वप्नलोक (फ़िल्म जगत) व्याकरण - अव्यय, वाक्य, पर्यायवाची (नौकर से रोग)	4 5	दिसंबर	कबीर के जीवन और उनके दोहों का संकलन वाद विवाद, लेख (भारतीय सिनेमा - कल आज और कल) स्मार्ट कक्षा, कक्षा कक्ष गतिविधियाँ
8	पाठ 17 बापू के पत्र : मीरा बेन के नाम व्याकरण -शब्द और वाक्य रचना की अशुद्धियाँ ,विराम चिह्न ,मुहावरे एवं लोकोक्तियाँ	6 12	जनवरी	संवाद लेखन (पत्र और इ-मेल के बीच) महात्मा गाँधी संबंधी सूक्तियाँ, चित्र, भाषण, पत्र आदि का संकलन कर स्क्रैप बुक तैयार करना स्मार्ट कक्षा, कक्षा कक्ष गतिविधियाँ हाव - भाव द्वारा पहचान गतिविधि
9	पाठ - 18 तुम्हीं मिटाओ मेरी उलझन (कविता) व्याकरण - निबंध, विज्ञापन - लेखन, स्लोगन लेखन, निमंत्रण पत्र, पुनरावृत्ति एवं अभ्यास कार्य (वार्षिक परीक्षा पाठ्यक्रम)	5 10	फरवरी- मार्च	अनुच्छेद - मेरी माँ, 'माँ' विषयक कविताओं का संकलन मुख्य बिंदुओं पर चर्चा तथा लेखन

