

ST.ALBANS SCHOOL
SESSION 2018-19
MATHEMATICS CURRICULUM

CLASS:I

GENERAL OBJECTIVES:

1. To enable the students to understand the use of numbers in their day to day life.
2. To develop their interest in Mathematics.
3. To develop their mental process like thinking, analyzing, reasoning, logical etc.
4. To mathophobia and to make the learning of Mathematics an enjoyable experience.
5. To enable the students to visualize the small mathematical operations.
- To bring all round development of personality of a child and give practical knowledge of Mathematics.
7. To familiarise the child with the latest mathematical knowledge to fulfil the existing needs of the society.
8. To make the child more confident in dodging tables, mental maths and reasoning sums.
9. To explain the new terms for easy understanding of the concepts.
10. To develop the habit of concentration, self reliance and discovery.
11. To develop the learning leading to Higher Order Thinking Skills (HOTS).

6.

S.N	CONCEPT	SPECIFIC OBJECTIVES	SKILLS	LEARNING STYLE	ACTIVITIES	SUBJECT INTEGRATION	OUTCOME	ASSESSMENT
1	Numbers 1-100 and Ordinal numbers 1-10	Enable students to : 1. identify, sequence and compare numbers 2. know spellings of number names. 3. Identify odd and even nos. 4. differentiate between cardinal and ordinal numbers. 5. understand that ordinal nos. tell us about the position.	1. Interaction 2. Observation 3. Creative 4. Co-relating to real life 5. Expression 6. Organising details	1.Kinesthetic/ Bodily 2. Visual 3. Logical 4.Auditory	1. Flash card Activity for ascending and descending order. 2.Students to identify their roll no. as odd no. or even no. 3. Bindi activity on ones tens concept. 4. Drawing and moving on number line in the classroom. 5. Using Ganit Mala in Maths Lab . 6. Caterpillar Activity to arrange the nos. in increasing and decreasing order. 7. Showing no. with fraction kit.	1.English - Vocabulary (Spellings of No. Names, biggest, smallest, odd, even, ordinal no., cardinal no.) 2. Hindi - Counting 3. EVS - My Nation (No. of States, No. of colours in our National Flag) 4. G.K. - Solar System (No. of Planets, biggest and smallest Planet).	Understand more about nos. 1 -100 alongwith ordinal nos. 2. determine smallest and biggest no. 3. learn the difference about ordinal and cardinal no. 4. to quickly recall the concept. 5. To develop their mental process like thinking, analyzing, reasoning, logical etc.	Subject Enrichment Activity Concept Test Term - I

2	Addition (1-100) with carry over	Enable students to : 1. understand that addition means to keep together. 2. know the sign of addition (+). 3. know the placing of nos. on ones and tens position. 4. learn the concept of carry over. 5. understand that when 0 is added to a number, we get the same number and when 1 is added to a number, we get the next number.	1. Ordering details - arranging numbers under ones and tens place. 2. Content Organisation - Story telling. 3. Self study - solving sums on their own.	1. Visual 2. Kinesthetic/Bodily 3. Social 4. Verbal 5. Logical 6. Auditory	1. Number line Activity (Draw Number line on the floor) 2. Addition using Ganit Mala in Maths Lab. 3. Story telling 4. Comparing numbers of pencils, erasers and sharpeners with their friends. 5. Listening and imagining through audio.	1. English - Vocabulary Enhancement (Addition, Sum, Total, Carry Over, Place, Arrange etc.) 2. EVS - Seasons (Adding of leaves in Spring Season.) 3. Hindi Song - Ek chidiya, anek chidiya.....	1. understand the concept of addition through carry over 2. arrange the nos. on their correct place and add them. 3. arrange the numbers vertically and horizontally while solving the sums.	Mental Ability Term - I (without carry over) Term - II (with carry over)
3	Subtraction (1 - 100) without borrowing	Enable students to : 1. understand that subtraction means taking away. 2. know the sign of subtraction (-). 3. know the placing of nos. on ones and tens position. 4. subtract numbers horizontally as well as vertically. 5. understand that when 0 is subtracted from a number, we get the same number and when 1 is subtracted from a number, we get the previous number.	1. Ordering details - arranging numbers under ones and tens place. 2. Content Organisation - Story telling. 3. Self study - solving sums on their own.	1. Visual 2. Kinesthetic/Bodily 3. Social 4. Verbal 5. Logical 6. Auditory	1. Number line Activity (Draw Number line on the floor and move backward to show the subtraction.) 2. Enjoy subtracting numbers by playing games (ball and dice). 3. Bindi Activity - Subtract using colourful bindis. 4. Maths Lab Activity using Ganit Mala. 5. Subtract and colour the balloons as directed. (eg- colour the balloons red for difference greater than 5 and blue for difference less than 5)	1. English - Vocabulary (subtract, difference, minus, backward, forward , place, arrange etc.) 2. Games (ball and dice.) 3. EVS - Seasons (falling of leaves in Autumn Season is Subtraction.)	1. understand the concept of subtraction 2. arrange the nos. on their correct place and Subtract them. 3. learn the value of sharing and caring. 4. apply the concept of subtraction in their day to day life. This will form the base for <u>DIVISION</u> which is repeated subtraction . 5. use properties of subtraction in solving different sums.	Mental Ability Term - I

4	Positions	<p>Enable students to :</p> <ol style="list-style-type: none"> 1. know the value of keeping everything on its place. 2. observe position in daily life. 3. learn the use of - on /under /above /below /inside /outside etc. 4. relate Ordinal nos. with Positions. 5. compare qualities like big/small, long/short, thick/thin, more/less, heavy/light etc. 	<ol style="list-style-type: none"> 1. Interaction 2. Observation 3. Creative 4. Imagination 5. Co-relating to real life 	<ol style="list-style-type: none"> 1. Visual 2. Kinesthetic/ Bodily 3. Social 4. Logical 5. Auditory 	<ol style="list-style-type: none"> 1. Spot the difference in two pictures using Positions. 2. observing big and small shapes lying in the Maths Lab. 3. Draw a circle on the floor and students to move inside/outside the circle. 4. Given instructions to keep their stationary on their correct places. 	<ol style="list-style-type: none"> 1. English - Vocabulary (compare, position, inside/outside, bottom/top, below/above etc. 2. English Grammar - Opposites 3. Hindi Grammar - Opposites 	<ol style="list-style-type: none"> 1. understand comparing qualities like big/small, long/short, thick/thin/ more/less etc. 2. Spatial Concept like near/far, above/below, top/bottom etc. 	Oral assessment Term - I
5	Shapes	<p>Enable students to :</p> <ol style="list-style-type: none"> 1. identify and name plain (2D) shapes. 2. identify and name few solid (3D) shapes. 3. know the difference between 2D and 3D shapes. 4. list the things that slide or roll. 5. observe the pattern of shapes . 	<ol style="list-style-type: none"> 1. Ordering details - drawing and colouring shapes. 2. self study - completing the pattern given in the book. 3. Content organisation - matching objects with the correct shapes. 	<ol style="list-style-type: none"> 1. Visual 2. Kinesthetic/Bodily 3. Social 4. Logical 5. Auditory 	<ol style="list-style-type: none"> 1. Draw and colour a house using different shapes. 2. Paper folding Activity- Make different shapes with origami sheets. 3. Symmetry - Draw and colour the other half of given shapes. 4. Trace, draw and colour each shape with the colours as directed. Also, count the number of each shape. 4. Roll/Slide Activity by using ball, ruler, eraser, pencil, marble and orange. 	<ol style="list-style-type: none"> 1. English - Vocabulary (slide, roll, corners, sides, opposite, spellings of all the shapes etc.) 2. Drawing (Sun, Moon, Stars, Hut etc.) 3. EVS - The Earth and The Sky (Shape of Sun, Stars , Moon and its faces.) 	<ol style="list-style-type: none"> 1. recognise basic geometrical 2D and 3D shapes and name them. 2. use visual memory to find the difference between the shapes. 3. understand that objects with round surface can roll and the objects with flat surface can slide. 	Mental Ability Subject Enrichment Activity Term - I

6	Time	<p>Enable students to :</p> <ol style="list-style-type: none"> 1. read time on a clock in hours and minutes. 2. recognise the minute hand and hour hand on a clock. 3. differentiate between wall clock and wrist watch. 4. observe the clock in their day to day time. 5. know that there are 7 days in a week and 12 months in a year. 	<ol style="list-style-type: none"> 1. Content organisation - describe their daily routine activity. 2. Self study - observe the time shown by a clock 3. Drawing - draw a clock and its hands. 4. Musical - Poem on time. 	<ol style="list-style-type: none"> 1. Visual 2. Kinesthetic/Bodily 3. Social 4. Logical 5. Auditory 	<ol style="list-style-type: none"> 1. Picture pasting of wall clock and wrist watch to understand the difference between them 2. Drawing hands of a clock to show the time. 3. Make a time table on their daily routine by mentioning the time. 4. Clock Making Activity - Make a clock by using A4 size sheet and give it a thick base. 	<ol style="list-style-type: none"> 1. English - Vocabulary (minutes, hour, year, week, time, wrist, clock, months etc.) 2. Drawing (making of a clock) 3. EVS - Food we Eat (3 meals of a day i.e. breakfast, lunch and dinner.) 	<ol style="list-style-type: none"> 1. to know about hour and minute hand. 2. able to relate time to their day to day activities 3. understand that the hour hand is further divided into halves. With this understanding they will be able to relate the time to their day to day activity.) 	Mental Ability Term - II
7	Money	<p>Enable students to :</p> <ol style="list-style-type: none"> 1. identify different denominations of currency and coins. 2. use money in real life situations. 3. count and add the money. 	<ol style="list-style-type: none"> 1. Ordering details - Matching money with the price tags. 2. Content organisation - Money exchange 3. Expression - Shopping activity 4. Self study - find the total amount of money. 	<ol style="list-style-type: none"> 1. Visual 2. Kinesthetic/Bodily 3. Social 4. Logical 5. Auditory 	<ol style="list-style-type: none"> 1. Artificial notes pasting activity. 2. Shopping Activity - Creating market scene in the classroom by using duplicate coin and currency notes. 3. Matching money to the price tags (picture of objects will be given.) 4. adding currency notes and coins to find the total amount. 	<ol style="list-style-type: none"> 1. English - Vocabulary (denomination, currency, coins, rupee, paisa etc) 2. G.K - My Country (Symbol of rupee) 3. EVS - Places Around Us (Bank, Market etc. where we use money) 	<ol style="list-style-type: none"> 1. value money and learn to use it wisely. 2. know that Rs. 10 , Rs.5, Rs.2, Re.1 are available both as currency notes and coins. 	Concept Test Term - II

8	Patterns	<p>Enable students to :</p> <ol style="list-style-type: none"> observe and complete the given patterns. identify the rule in number pattern. know that we can complete the number pattern by adding a fixed number. recapitulate different geometrical shapes. draw their own unique patterns. 	<ol style="list-style-type: none"> Interaction Communication Team building Imagination Expression 	<ol style="list-style-type: none"> Visual Kinesthetic/Bodily Social Logical Auditory 	<ol style="list-style-type: none"> Pattern with shapes (Observe and Complete the given pattern on shapes.) Draw patterns using matchsticks. Number grid (Observe the pattern and write the missing numbers.) Vegetable printing (Make a pattern with ladyfinger using different colours.) While making a line, the students stand in a manner that forms a pattern. Draw and colour any 3 things where you see a pattern. 	<ol style="list-style-type: none"> English - Vocabulary (pattern, sequence, grid, geometry etc.) Drawing (Making patterns) 	<ol style="list-style-type: none"> observe the given pattern and complete it. identify the patterns in their surroundings observe the pattern in the nature, geometrical shapes, numbers etc. 	<p>Subject Enrichment Activity Term - II</p>
9	Multiplication	<p>Enable students to :</p> <ol style="list-style-type: none"> Understand that multiplication is repeated addition. To multiply numbers using skip counting Able to multiply single digit numbers. learn different ways of extending the knowledge of tables. 	<ol style="list-style-type: none"> Expression - listening audio clips. Content organisation - multiplication on number line. Ordering details - by arranging beads, buttons etc. into groups 	<ol style="list-style-type: none"> Kinesthetic/Bodily Visual Logical 	<ol style="list-style-type: none"> Grid Activity acting using skip counting/ tables. Audio clip on multiplication. jumping on number line to show multiplication tables. 	<ol style="list-style-type: none"> EVS - Multiplication of germs and insects in stagnant water. Hindi song - Ek chidiya, anek chidiya English - One Many 	<ol style="list-style-type: none"> Understand the concept of multiplication (i.e. repeated addition) Able to build higher tables. Able to answer quickly for multiplication. use knowledge of tables in their day to day activities. 	<p>Dodging Tables (oral/written) Mental Ability Term - II</p>

10	Measurement	<p>Enable students to :</p> <ol style="list-style-type: none"> 1. understand the standard and non standard units of measurement. 2. choose right unit for measuring various objects. 3. understand the need of using standard units for measuring length, weight and capacity. 	<ol style="list-style-type: none"> 1. Ordering details - measuring length and breath of classroom using footspan/ handspan. 2. Maths Lab Activity - measure their water bottles in increasing order of their capacities. 	<ol style="list-style-type: none"> 1. Visual 2. Kinesthetic/ Bodily 3. Social 4. Verbal 5. Logical 	<ol style="list-style-type: none"> 1. By measuring different objects and lengths using palm, stride, footspan, digit, cubit pace etc. 2. Observing the bottle of pepsi and the unit written on it. 3. Discussing different examples for different units. 4. Make a beam balance to understand that heavier side of a weighing scale moves down. 	<ol style="list-style-type: none"> 1. EVS - Different clothes of different lengths. 2. EVS - Comparing the heights of their family members. 3. Games - Measurement of height of students of a class. 4. Drawing lines of different lengths with scale. 	<ol style="list-style-type: none"> 1. Able to use the appropriate units with the objects they use in real life. 2. Able to learn about length, weight and capacity. 3. appreciate and value one uniform system of measurement. 	Mental Ability Term - II
11	Data Handling	<p>Enable students to :</p> <ol style="list-style-type: none"> 1. learn to gather information. 2. sort out things that are put in a group. 3. count and write the number of things in a group. 4. observe data to reinforce the understanding of handling data. 	<ol style="list-style-type: none"> 1. Content organisation - sorting out things that are put in a group (Maths Lab Activity). 2. Ordering details - count and write the number of things in a group 3. self study will be developed. 	<ol style="list-style-type: none"> 1. Visual 2. Kinesthetic/ Bodily 3. Social 4. Verbal 5. Logical 	<ol style="list-style-type: none"> 1. Maths Lab Activity - Sorting and counting the number of objects they have. 2. Count the pictures and find out maximum and minimum objects from it. 	<ol style="list-style-type: none"> 1. English - Vocabulary (data, maximum, minimum, taller, shorter, collect etc.) 2. Games (find and count the numbers of students, pencils, tallest classmate, etc.) 3. Ask the birthday month of all the friends in the class. 	<ol style="list-style-type: none"> 1. to know the concept of data handling. 2. to interpret the information and answer question appropriately. 	Mental Ability Subject Enrichment Activity Term - II