YEAR PLAN 2018- 2019
Grade IV MATHEMATICS

The academic year is divided into **two** sessions
Session One: June 2018 to October 2018
Session Two: November 2018 to March 2019
Continuous assessments: July, August, December, January, February
Summative Assessment I: October 2018
Summative Assessment II: March 2019
Aim: To
- Learn to enjoy the subject by developing confidence.
- Prepare a sound foundation needed for various vocations.
- Develop problem solving skills and to apply the same in daily life.
- Develop logical reasoning power.
- Prepare for further learning in mathematics and related fields.

Enduring understanding:
> To realize the relevance of mathematical concepts and their applications for the smooth functioning of life.

Objectives: A pupil learns
- Learns mathematical language, for example, mathematical symbols, formulae, figures, diagrams, definitions etc.
- To improve and appreciate accuracy in computation concept, enjoy the subject, practice and develop skills to apply mathematical knowledge to solve real life situations.
- To comprehend the concept of factors, multiples, fractions, decimals, angles, area and volume.

Project: 1. Finding area of an irregular shape using graph paper.
2. To draw bar graph based on the given data.

Session One: June 2018 to October 2018

Duration	Topic	Specific learning objectives	Activity	Skill
June	Number System Roman Numerals	Thorough with the place value of six digit numbers. Learn to co-relate the expanded form, compact form, word form, comparing and ordering numerals . Recognize, read, group-numbers in Indian and International system. Roman numerals. Learn the meaning of the symbols I,V,X and also to write the Roman numerals for the numbers 1 to 50.	Explaining the system of numeration with the help of abacus. Number cards. Group activity to teach Indian and International system. Two types of clocks showing Indian and Roman Numerals .	Planning what to do Comparing Sorting Looking for alternative solutions Generating and extending ideas sequencing
	Addition Subtraction	Learn to perform calculations. Apply the concept of addition. Reinforcing concept of subtraction. Develop speed and accuracy in solving problems.	Story time A game using number cards. Math Puzzle. Mental Math.	Solving daily life problems Analysing relationship Generating and extending ideas Looking for alternative outcomes
July	Multiplication Division	Learn the fundamental operations of multiplication. Develops speed and accuracy relating to division with two and three digit divisors. Solve daily life problems involving multiplication and division skills.	Napier's Bones Practising more problems from reference books. Worksheet given in the text. Solving extra questions. (Reverse order)	Solving daily life problems Asking relevant questions Classifying Comparing and contrasting Generating and extending ideas Testing conclusions
August	Geometry	Develop the skill to draw accurate geometrical figures. Identify and draw different types of angles. Learn to use mathematical instruments.	Creating different shapes using ice-cream sticks/drinking straws. Correlating clock and geometry. Mental math.	Solving daily life problems Processing the information Analysing relationship Extending ideas to life related problems Logical thinking Drawing inference
September	Area and	Learn to find perimeter and area of plane figures.	Distinguishing the concepts of area and	Logical thinking

	Perimeter	Use formulae to find the area of a rectangular or square region.	perimeter using a floor plan of a building. Drill exercise. Multimedia.	Asking relevant questions Analysing relationship Drawing inference
October	Data Interpretation	Learn to interpret the data in different graphical forms.	Collect data from the newspaper /magazine and represent graphically(group activity)	Interpretation and Analysing
Session two: November 2018 - March 2019				
November	Time	Revision of different ways of finding out the passage of time. Conversion of time. a) 24hr and 12hr clock. b) To different units of time. Addition and subtraction of time.	Using clock representing time. Discussing about rail way time table. Mental Math.	Asking relevant questions Solving daily life problems Analysing relationship Comparing units Drawing inference
	Patterns	To learn to identify patterns and generalize a rule to extend a progressive pattern.	Use of charts showing patterns with numbers and different shapes.	
December	Properties of Whole numbers.	Learn divisibility test. Learn prime and composite numbers. Find factors of a number - By Factor tree and Prime Factorization Method.	Building factor tree. Finding perfect numbers. Group activity- to analyze word problem. Practice more exercises from reference books. Mental math. Multimedia.	Logical thinking. Asking relevant questions. Generating and extending ideas. Comparing and contrasting. Extending ideas to life related problems.
	Factors and Multiples.	Learn about multiples of a given number. Find H.C.F:- • By listing method • By Common Division Method Find L.C.M:- • By listing method • By Common Division		
January	Fractions	Learn different types of fractions, conversion of improper fraction to mixed numbers and vice versa. Learn about multiples of a given number. Find L.C.M. Compare and order fractions, addition and subtraction of fractions.	Using various objects from real life situations. Worksheet. Mental Math. Multimedia.	Logical thinking. Asking relevant questions. Generating and extending ideas. Comparing and contrasting. Extending ideas to life related problems.
February	Measurement (Conversion of common units)	Learn to measure length weight and capacity using the appropriate tools for measurement. Solve problems by using correct units and tools. Learn to convert from one unit to the other within a metric system.	Measuring flasks with different marking for measurement. Creating real life context for solving problems involving various units of measurement. Practising more problems.	Solving daily life problems Analysing relationship Sorting Comparing units Drawing inference Comparing and contrasting

Facilitators: Mrs. Biji, Mrs. Mini Madhu, Mrs. Shiny.

Resources:

1. Mastering mathematics- Arya
2. Galaxy- AashalathaBadami
3. Cambridge Mathematics-Sudha Mahesh
4. Ganit- Madhuban- C. Sailaja
5. Pubhlishing Company R G Gupta & M L Aggarwal

Websites:
- www.Creative Mathematics.com
- www.Easy calculation.com
- www.Maths is fun.com
- www.Fun 4 the brain.com

Multimedia
- Iken Edu Math
- Tata Class Edge
- Learnoid Math