

YEAR PLAN 2018-2019
Grade V 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: (i) Learn to enjoy the subject by developing confidence

(ii) To learn when and how a mathematical technique is to be used

(iii) Prepare for further learning in mathematics and the related fields.

(iv) Develop desirable habits and attitudes like habit of hard work, independent thinking, communication, self-reliance, concentration and discovery.

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

Objectives: Through mathematics, a pupil acquires the knowledge of the following:

1. Learns mathematical language, for example, mathematical symbols, formulae, figures, diagrams, definitions etc.
2. To learn and to use mathematical ideas, processes, rules and relationships.
3. Learn the fundamental mathematical ideas, processes, rules and relationships.
4. To learn the historical background of various topics and contribution of mathematicians.
5. To learn the significance and use of the units of measurements.

Projects: (i) Data Handling--- Pictograph.

(ii) Money—Bill.

Session One: June 2018 to October 2018

Duration	Topics	Specific learning objectives	Life Skills	Activities
June	Large Numbers Roman Numerals Operations with Large Numbers	Recall the number system and read numbers in Indian and International System. Read the same number in both the system, grouping them differently each time. To learn how to use zero as a place holder, where necessary. Roman Numerals. Use big numbers in real-life situations. To learn the reasons of using an operation. Select appropriate methods for solving problems. To learn connections between different operations.	Sequencing Comparing and contrasting Analysing relationship	Newspapers and magazine cuttings having references of large numbers. Identifying a number from the given clues (Team wise) Showing a chart on comparison between the two systems of numeration. Oral/written work. Mental Math.
July	Operations with Large Numbers (carry forward) Factors and Multiples	Review Highest Common Factor and Least common Multiple. Learn to decide whether a number is divisible by another number or not. Use the knowledge of multiplication to find common multiples. Solve problems involving H.C.F and L.C.M.	Analysing relationships Drawing inferences comparing and contrasting	Multiplying with Napier's Bone. Practicing more problems. Mental Math. Reinforcing with more examples. Divisibility game (team wise using dice). Finding perfect numbers less than 50.
August	Fractions	Recognize fractional parts of things in their immediate environment. Recall different types of fractions, addition, subtraction multiplication and division of fractions.	Analysing relationships Drawing inferences comparing and contrasting	Discussions of simple arithmetic questions based on fractions. Number cards. Multimedia.
September	Data Handling	Gather information and interpret the same using a graph. Infer a large amount of information quickly and easily.	Analysis and interpretation.	Newspaper and magazine cuttings having bar graphs, pie charts and line graphs.
October	Decimals	To learn decimals as a part of a whole. Identify the relationship between fractions and decimals. Learn to compare decimals.	Sequencing Analysing relationships.	Measuring tape and scale. Magic Square. Mental Math.

				Practicing more problems from the reference books. Solving puzzles.
November	Operations with decimals Rounding Off- Estimation	Perform the four operations of arithmetic by using number with the decimal place. To learn that fractions can be multiplied and divided. Rules for estimation of the result of four operations applied on numbers in daily life.	Processing the information. Drawing inferences Comparing and contrasting Logical thinking, Reasoning Extending ideas to life related problems.	Measuring tape and scale. Magic Square. Mental Math. Practicing more problems from the reference books. Solving puzzles.
December	Percentage Negative Numbers	To learn how to find percentage of a given number. Convert fractions and decimals into percent and vice versa. Find the percentage of a given item. Find the number when percentage is given. To use number lines for representation of negative numbers.	Posing and defining problems. Predicting outcomes Comparing and contrasting Analysing relationships Drawing inferences	Brain Tuner [Making a design by shading a figure according to the percentage given] Multimedia. Number line. Counters of two colours where the colours represent opposite numbers.
January	Lines, Angles and Shapes. Perimeter and Area Volume	Learn about pairs of angles those are related in a special way. Learn more about lines, angles etc. Measure and construct angles. To learn and to use the concept of area. Use the formulae to find area. To learn and to use the concept of volume. Demonstrate the relationship between area and volume. Use the formulae to find volume.	Posing and defining problems. Predicting outcomes Comparing and contrasting Analysing relationships Drawing inferences Classifying Applying imagination	Representing right angle, acute angle and obtuse angle using a model of a clock. Identifying parallel and perpendicular lines in the surroundings. Discussion on the historical back ground of the concept of 360° for a complete rotation. Drawing a floor plan of a house and finding the area of each room in the house. Eliciting the concept and formula for volume (using Rubik's cube). Empty cardboard boxes, coloured papers etc.
February	Patterns	To learn to identify patterns and generalize a rule to extend a progressive pattern.	Comparing and contrasting Logical thinking, Reasoning Extending ideas to life related problems.	Group activity by comparing the heights/weights. Mental Math Use of charts showing patterns with numbers and different shapes. Multimedia.

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

Resources

- Text Book : Mathway---Inspiration.
- 'I Did It' Mathematics-Cambridge
- Primary Mathematics -Frank BROS & Co.
- Ganit-Madhuban
- Class Edge
- Question papers of International Assessment for Indian Schools
- Galaxy-Aashalata Badami
- Maths Matters 5- Collins

Websites:

- www.primaryresources.uk
- www.teachingideas.com
- www.creativitymathematics.com
- www.easycalculation.com
- www.mathsisfun.com
- www.coolmaths4kids.com
- www.fun4thebrain.com

Multimedia

Iken Edu Math
Tata Class Edge
Learnoid Math