MONTHLY SYLLABUS

SESSION-2017-18

CLASS-V

SUBJECT: MATHEMATICS

| | TERM-I |
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| MONTH | CONTENT |
| April 2017 | Unit-1 : The Fish Tale – Problems based on speed-distance-time, numbers and number names, large number upto 1 crore, concept of buying, selling and loan. |
| | Activity: |
| | 1) Drawing different types of fish and sea creatures with different geometrical shapes. |
| | 2) To read the entries in your bank passbook and make the same in your notebook. |
| | 3) Role play of fish market or any market. |
| | Mental Maths |
| | Unit 2: Shapes and Angles – (1) Closed and open shapes (2) Introduction of angles (3) Angles in geometrical shapes (4) Measuring angles with divider (5) Type of angles (6) Angles in alphabets (7) Changing shapes and angles (8) Angles in clock (9) Introduction to protractor 'D' and Measuring angles with it. |
| | Activity: |
| | 1) Making different geometrical shapes with matchsticks and finding angles in them. |
| | 2) Measuring the given angles with protractor. |

| | 3) Angle sum property of triangle using paper folding activity. |
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| | 4) Making different shapes by paper cutting and measure its angles. |
| | 5) Making different angles by your arms and legs. |
| | Mental Maths |
| May 2017 | Unit 3: How many squares – (1) Perimeter and area (2) Use of square boxes (grid) to find area (3) Comparison of areas of different objects (4) Area of triangle and comparison of area of different triangles in a grid (5) Complete the shapes (6) Puzzle with five squares |
| | Activity: |
| | 1) Find the area of different objects by using graph paper |
| | 2) Find the perimeter of different objects with the use of scale and thread |
| | 3) Making of different shapes using five squares |
| | 4) Make different triangles by paper cutting, compare their area by using grid |
| | 5) Make your own tile |
| | Mental Maths |
| July 2017 | Unit 4: Parts and wholes – (1) Fractions, Equivalent Fractions (2) Dividing different shapes and things into fractions, shading a part of whole and make fractions (3) Patterns in parts (4) Ramu's vegetable field (5) Part to whole (6) Conversion of time and money into fractions. |
| | Activity: |
| | 1) Draw a rectangle, divide it into three equal parts and tricolour |

| | it. |
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| | 2) Learn equivalent fraction by dividing a shape in different equal parts. |
| | 3) Guess and check |
| | 4) Cutting the halwa |
| | 5) Parts of the strips |
| | 6) Making the fractions of time spent in different activities of the whole day |
| | 7) Role play – 'Market scene' |
| | Mental Maths |
| | Unit 5: Does it look the same – (1) Making patterns with a drop of colour and paper folding (2) Line of symmetry (3) Objects in the mirror (4) 1/2 (Half) rotation (5) 1/4 (One-fourth) rotation (6) 1/3 (One-third) and 1/6 (one sixth) rotation. |
| | Activity: |
| | 1) Dividing different shapes and things into half vertically and horizontally. |
| | 2) Making of toy windmill. |
| | 3) Finding figures which look same after 1/2, 1/4, 1/3 and 1/6 rotation. |
| | 4) Making flash cards of alphabets and numbers for rotation. |
| | Mental Maths |
| August 2017 | Unit 6: Be my multiple, I will be your factor – (1) Introduction about multiples using tables (2) Finding out the multiples of different numbers (3) Common multiples (4) Introduction of factors: Multiplication chart (5) Common factors (6) Factor tree |

(7) L.C.M. and H.C.F. related word problems.

Activity:

- 1) Who is Monto waiting for?
- 2) Dice Game
- 3) To find out common multiples and factors by Venn diagram.
- 4) Puzzle: Tamarind seeds
- 5) Making factor tree of given numbers in different way

Mental Maths

Unit 7: Can you see the pattern – (1) Patterns from our daily life (2) Turns and patterns (3) Look for a pattern (4) Magic squares (5) Magical Hexagon (6) Pattern in number series (7) Calender Magic (8) Puzzles and word problems related to number series

Activity:

- 1) Finding patterns in given series.
- 2) Making different series patterns.
- 3) Fill different numbers in the given magic squares.
- 4) Finding 3x3 box in the calendar and pattern in it.

Mental Maths

September 2017

Unit 8: Mapping your way – (1) Know about map of Delhi (2) Distance between two points on the map (3) Scale reading in maps (4) Hexagons in map and angles made in between (5) Journey of Red Fort: Understanding of directions (6) Scaling of images: big and small (7) Map of India and its states (8) Map of school and classroom.

Activity:

| | 1) Finding different places in the given map. |
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| | 2) Finding the distance between two cities according to given scale in the map. |
| | 3) Show four states in map of India in four different directions. |
| | 4) Draw map of school with scale. |
| | 5) Finding out stations on the map of Metro. |
| | TERM-II |
| October 2017 | Unit 9: Boxes and sketches – (1) Difference between 2D and 3D figures (2) Introduction to cubes and cuboids (2) Shapes that fold into a cube, shapes for an open box (4) Nets of different solid shapes (5) Map of floors and 3-D figures (6) Understanding the difference between maps and 3-D figures. (7) Method of drawing 3-D figure of a cube and cuboid (8) Views from different angles: front and side. Activity: Draw pictures of boxes made from different geometrical shapes i.e. square, rectangle, cone etc. Name some cubical shapes objects around you. Making a bridge using matchbox and find the difference between its views from front, side and top. Use real objects for different views (like glass, pencil, etc.) Mental Maths |
| November 2017 | Unit 10: Tenths and Hundredths - (1) Tenths part (2) Conversion of higher units into lower (m, cm to mm and viceversa) (3) Conversion of fraction into decimal and viceversa (4) Hundredth part in the units of length (km, m, etc.) (5) Currency |

of different countries (6) Conversion of currency (rupee into dollar etc.) (7) Addition and subtraction of decimals (8) Minimum and maximum temperature of a day

Activity:

- 1) Conversion of given units m, cm, into tenth parts i.e. cm, mm and vice-versa
- 2) Estimate the length of different given objects and then measuring them
- 3) Collect different rupee-notes, estimate their length and width and then actually measure them
- 4) Make designs in 10x10 grid by colouring tenth/hundredth parts in it.
- 5) Collect pictures of currencies of different countries and find their value in rupees
- 6) Note the minimum and maximum temperature for a week and find their difference.
- 7) Use of thermometer for temperature reading.

Mental Maths

December 2017

Unit 11: Area and its boundary- (1) Introduction of area and perimeter (2) Comparison of area of different objects (3) Simple word problems based on area and perimeter (4) Puzzles related to area and perimeter (5) Dividing grid into different area (6) Objects with different shapes and perimeter can have same area and vice-versa (7) Finding side when area / perimeter is given

Activity:

- 1) Use a thread to measure the perimeter of given figures.
- 2) Use of graph paper for finding area.

3) Measure the length and width of your maths book, pencil box, etc. and find its area and perimeter. 4) Use of postcard to form a belt by cutting/pasting strips of it. Make your belt as large as possible. 5) Draw any 2 squares (one is double of the other) and compare their area and perimeter. **Mental Maths Unit-12**: Smart charts – (1) Use of tally marks, frequency table (2) Reading of tally marks (3) Data table of helping hands (4) Reading of Chapati chart (Pie chart) and bar graph (5) Making of bar graph and chapati chart (6) Family tree (7) Growth chart of a plant **Activity:** 1) Count and note the number and type of vehicles passing from your street and make a frequency table. 2) Find out how many students of your class help their parents in household works and make a table. 3) Ask your 10 friends about what work they do after school hours and make a chapati chart 4) Note down the temperature of two different states and make a bar-graph. 5) Rabbits in Australia (Page No. 166) **Mental Maths** January 2018 Unit 13: Ways to Multiply and Divide – (1) Simple

multiplication (2) Multiplication by breaking method (3) Dailylife problems for multiplication (4) Patterns in multiplication (5) Simple division problems (6) Division by long methods (7)

| | answer of division |
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| | Activity: |
| | 1) Puzzles related to multiplication |
| | 2) Mock shopping situation created for mental calculations |
| | 3) Make the best story problem |
| | 4) Cross check for Harisharan |
| | Mental Maths |
| February 2018 | Unit 14 : How big, How heavy – (1) Understanding the concept of volume (2) Measuring of volume, unit of volume (3) Volume of cube and cuboid (4) Simple word problems related to volume (5) Concept of weight, unit of weight (6) Word problem related to Weight |
| | Activity: |
| | 1) Measure the volume of a match box |
| | 2) Find different shapes made on a note of Rs. 100 |
| | 3) Take 2 cards and make pipes by folding them length and width wise, thus compare their volume |
| | 4) Trek to Gangotri |
| | Mental Maths |
| | Unit-6: "Be my multiple, I'll be your factor" |
| | This chapter of Term-I will be repeated and evaluated in Term-II as per Department Guidelines. |