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CLASS 2
YEARLY LEARNING OUTCOMES FOR MATHS
YEAR 20 2022-23

By the end of the year, students should be able to-

Number System:

M1. Understand place value.

M1.1 Learn nine hundred and ninety nine and one more is thousand

M1.2 Demonstrate and state the place value of a digit in a 2-digit and 3-digit number (from100-999) by 1) expanding and 2) by converting expanded form to a 2 digit/3 digit number

M1.3 Distinguish between the place value and face value of a digit

M1.4 Express hundreds in tens or as ones. Eg 1 hundred = 10 tens or 100 ones.

M2. Use place value understanding and properties of operations to add and subtract.

M2.1Represent problems involving addition and subtraction using +,-,= appropriately

M2.2 Add or subtract two or three, 2 digit and 3 digit numbers, with OR without regrouping and sum not exceeding 999 (move from concrete objects to paper and pencil)

M2.3 Interpret mathematical statements and write signs +, - ,=, <,> appropriately

M3. Work with equal groups of objects to gain foundations for multiplication.

M3.1 Understand multiplication as repeated addition (Introduce the sign "x"). Use repeated addition to build and learn multiplication facts with 1,2,3,4,5,6,7,8,9,10 as multipliers and the numbers 1-10 as multiplicands using the pattern 1x2=2,2x2=4,3x2=6 etc

<u>Algebra</u> :

<u>M4. Understand the basic concept of a pattern and recognize regularities in a variety of contexts (e.g., events, designs, shapes, sets of numbers).</u>

M 4.1 Identify and describe a rule for a repeating pattern or number sequence
M 4.2 Find missing element(s) in a pattern of numbers or shapes
M 4.3 Create and describe own repeating pattern

<u>Geometry:</u>

<u>M5. Reason with shapes and their attributes.</u>

M5.1 Identify different type of lines (straight and curved lines)
M5.2 Draw a straight line of given length using a ruler
M5.3 Recognize open and closed curves in the environment
M5.4 Recognize and identify 2 D shaped objects (rectangle, square, triangle, circle, oval) and understand their properties
M5.5 Recognize and identify 3D shaped objects (cuboid, cube, sphere, cylinder, cone) and identify corners, edges and faces of the same
M5.6 Identify symmetry in nature through recognizing shapes in the environment
M5.7 Create different shapes by dividing basic shapes eg. From one square two rectangles, two triangles, four squares, etc OR understand that every shape can be a compound of 2 or more shapes

<u>Measurement:</u>

<u>M6. Make quantitative estimates of familiar linear dimensions, weights, capacity, and time intervals and check them against measurements.</u>

<u>Length</u>
M6.1 Understand and use the terms cubit, foot, span, palm, finger (digit) width
M6.2 Use the centimeter ruler to measure small lengths and small distances
M6.3 Understand that 1 meter (m) = 100 (cm) and measure objects in metres and centimeters

<u>Weight (Mass)</u>
M6.4 Compare masses different objects (like a stone, bean bag, sand bag or the stretching of a rubber strip.)
M6.5 Recognize and work with mass units like 5kg, 2kg, 1kg, 500g, 200g,   100g, 50g
M6.6 Understand 1kg is equal to 1000g

M6.7 Solve word problems related to weight using addition or subtraction skills learnt (using only kg as unit)

Capacity
M6.8 Use non standard measuring equipment like cups, glasses, buckets to measure capacity
M6.9 Understand and use the standard units litre and millilitre and note that 1 litre = 1000 ml
M6.10 Recognise 1L, 500mL, 200mL, 100 mL and 50mL as units of capacity
M6.11 Solve word problems related to capacity using addition or subtraction skills   learnt (using only litre as unit)

M7. Work with time and money.

Time
M7.1 Understand the terms morning, noon, evening, night, bed-time, today, yesterday and tomorrow
M7.2 Read time to the hour, half hour
M7.3 Understand that 1 hour is equal to 60 minutes (introduce hour and minute hand of the clock)
M7.4 Understand that 1 day has 24 hours

Calendar
M7.5 Know the relationship of days to week, weeks to month, months to year
M7.6 Know the number of days in a month (30,31,28,29)
M7.7 Find days and date in calendar (introduce 1 year is equal to 365 days or 12 months and a leap year is 366 days where February has 29 days)
M7.8 Know the names of the four worldwide seasons (Winter, Spring, Summer, Autumn); Know the names and characteristics of the six seasons or ritus in India and match those with the respective months (Shishir, Vasanta, Grishma, Varsha, Sharad, Hemanta)

Money
M7.9 Recognise coins and currency notes of different denominations and become aware of what each denomination can buy (10, 20, 50,100, 500 and 2000)
M7.10 Compute amounts by adding/ subtracting coins or currency notes of 2 or 3 denominations

Data Handling:

M8. Represent and interpret data.
M8.1 Read OR create pictographs and also answer questions related to it
M8.2 Read Venn diagram & Tally chart (through practical experiences)

Mathematical Reasoning:

M 9. Make decisions about how to set up a problem

M 9.1 Determine the approach, materials, and strategies to be used
M 9.2 Use tools, such as manipulatives or sketches, to model problems.

M 10.Solve problems and justify their reasoning

M10.1 Explain reasoning used and justify procedures selected
M10.2 Compute precisely and check results from context of the problem.

M11. Note connections between one problem and another.

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