



CLASS 1
YEARLY LEARNING OUTCOMES FOR MATHS
YEAR 2022-23

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

Number System:

M1. Extend the sequence counting.

- M 1.1 Count using concrete objects and with one to one correspondence (0 to 100)
- M 1.2 Identify the numbers before, after or between (1 to 100)
- M 1.3 Understand the concept of odd and even number

M2. Understand place value.

- M 2.1 Arrange the numerals 0-99 in ones (0-9), tens (10-19) twenties (20-29) etc., till nineties (90-99)
- M 2.2 Learn ninety and nine and one more is hundred
- M 2.3 Understand that eleven is one ten and one i.e 1 ten and 1 one OR 11
- M 2.4 Demonstrate the place value of a digit in a 2 digit number (from 10-99) by expanding and/ or converting expanded form to a 2 digit numeral
- M 2.5 Compare numerals from 1 to 100 using words more than, less than, same as, greatest and least and using the signs $<$, $>$, $=$
- M 2.6 Arrange numbers from 0 -100 in ascending and descending order (Using manipulatives)

M3. Use place value understanding and properties of operations to add and subtract numbers till 99.

- M 3.1 Represent problems involving addition and subtraction as mathematical statements
- M 3.2 Add two or more 2 - digit numerals vertically or horizontally, with and without regrouping
- M 3.3 Learn that subtracting zero does not change the value of a number
- M3.4 Use strategies to compute addition and subtraction of numbers till 99 mentally
- M3.5 Understand that addition and subtraction are inverse operations. Eg $3+5 = 8$, $8-3 = 5$ OR $8-5 = 3$

Algebra:

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

M 4.1 Interpret and solve for missing numbers OR write signs +, - and = appropriately and in context while working with addition and subtraction equations.

M 4.2 Identify and repeat a pattern using shapes, size, colour and numbers

Geometry:

M5. Reason with shapes and their attributes

M 5.1 Recognize 2d shapes (square, rectangle, triangle, circle, oval) & 3d shapes (cube, cuboid, cylinder, cone, sphere) from the environment and speak about its properties using terms like sides/edge, corners, faces etc.

M 5.2 Identify same size figures and create them

M5.3 Draw and/or build geometric shapes using concrete material e.g. paper folding

M5.4 Sort and arrange objects according to size, length, thickness, shape – compare position using word near and far

Measurement:

M6. Make quantitative estimates of familiar linear dimensions, weights, and time intervals and check them against measurements

Length

M6.1 Understand and use the terms taller-shorter, longer-shorter

M6.2 Use parts of the human body as length measures, namely span, foot, cubit (arm length)

M6.3 Demonstrate understanding of meter scale and centimeter scale by using these tools for measuring objects in their immediate environment

M6.4 Compare and estimate the length between two objects.

Weight

M6.5 Use the terms “heavy-light”

M6.6 Have measuring experiences with stones, beans and sand

M6.7 Recognize the mass units-1 kg, 500g and work with these units practically

M6.8 Compare and estimate weight of two objects

Capacity

M6.9 Use non standard objects like cups, glasses, buckets to measure capacity

Money

M6.10 Can recognize coins and currency notes of different denominations up to Rs.100 (Rupee Notes of Rs.5,10,20,50,100; Coins of Rs. 1,2,5,10 and 50 Paise)

M6.11 Understand value of these denominations through the items that can be bought by them

M7.Tell and write time.

M7.1 Understand the terms day, night, noon, morning, evening, afternoon

M7.2 Can tell time to the hour and use the term O'clock (of the clock)

M7.3 Know names of the days of the week and months in sequence

M7.4 Know that total number of days in a month can be 30, 31, 28 or 29

M7.5 Match the months with four seasons of spring, summer, monsoon and winter

Data Handling:

M8. Represent and interpret data.

M8.1 Read and create pictographs and also answer questions related to it

M8.2 Get a basic understanding of how to represent data using a Venn diagram and Tally Chart (through practical experiences)

Mathematical Reasoning:

M9. Make decisions about how to set up a problem

M9.1 Determine the approach, materials, and strategies to be used

M9.2 Use tools, such as manipulatives or sketches, to model problems.

M10. 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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