


Term – wise Syllabus

Class 1 (2019 -2020)

The following syllabus for mathematics is based on the Learning Outcomes which was notified on 5 July 2017, SCERT, Delhi. It is expected that the syllabus would support teachers to reach the Learning Outcomes for all the children. Activities, textbook chapters are given which can help to plan the classroom processes.

Learning Outcomes for Mathematics - Class 1

The learner:

1. Is able to work with numbers 1 to 20 (Developing and Consolidating Number Sense up to 20- Counting one-to-one correspondence and connecting to quantity)
2. Classifies objects into groups based on some physical attributes like shape, size and other observable properties including rolling and sliding.
3. Recites number names and counts objects up to 20, concretely, pictorially and symbolically.
4. Compares numbers up to 20. (Compares quantities to find out more/ less/ equal)
5. Applies addition and subtraction of numbers 1 to 20 in daily life: (Can do counting-on; develops meaning for the symbols of addition(+) and subtraction(-))
 - Constructs addition facts up to 10 by using concrete objects. {Number combinations}
 - Subtracts numbers using 1 to 10.
 - Solves day to day problems related to addition & subtraction of numbers up to 10.
 - Recognizes numbers up to 20 and writes numerals.
6. Describes the physical features of various solids/shapes in her own language. For example- a ball rolls, a box slides etc.
7. Estimates and measures short lengths using non uniform units like a finger, hand span, length of a forearm, footsteps, etc. (Compares lengths)
8. Observes, extends and creates patterns of shapes and numbers. For example arrangement of shapes/objects/ numbers, etc. like

9. Collects, records (using pictures & numerals) and interprets simple information by looking at visuals. For example in a picture of a garden the child looks at different flowers and draws inference that flowers of a certain color are more.
10. Develops concept of zero.

Term 1 (Upto September 2019)

| Learning Outcomes | Activities | Textbook chapters & workbook |
|---|--|--|
| <p>LO 1. Is able to work with numbers 1 to 20 (Developing and consolidating number Sense up to 10)</p> <p>LO 10. Develops concept of zero</p> | <p>Aaj hamari class mei kitne bachche hain'? (with number patti)every day</p> <p>Counting activities with Dice to find out 'how many?'</p> <ul style="list-style-type: none"> • Jumping on the spot – <i>jitni bindi utni chalaang</i> • Jumping from one line to another – <i>jitni bindi utni chalaang</i> • <i>Sher ke muh mein laddoo</i> (with Story of Himmat Aur Sher)- Throwing as many laddoos to Sher as the number of dots one gets on the dice <p>Counting activities with two Dice:</p> <ul style="list-style-type: none"> • <i>Sajana Rang birangi</i> –let's come together& decorate - with as many pieces of Rangometry as the number of dots on dice(the two dice are counted together) | |
| <p>LO 3. Recites number names and counts objects up to 20, concretely, pictorially and symbolically.</p> <p>LO 5.4 Recognizes numbers up to 20 and writes numerals.</p> | <p>Counting activities with Rangometry :</p> <ul style="list-style-type: none"> • Free play with Rangometry after introduction through story • Teacher takes rounds during free play to have conversations with children – what did you make, how many pieces have you used? • Make a figure of your choice and count – with Rangometry • <i>Andar-bahar</i>(guess and tell how many pieces are hidden) • <i>Sankhya Parchi</i> (with Rangometry) : make a figure of your choice using the number of pieces given on the chit (<i>parchi</i>) • Writing with meaning – <i>Maal Gadi</i> – story and worksheet | <p>Math Magic Chapter 2 – Numbers One to Nine Math workbook unit – 2 (Page 27-44) It is important to connect Numeral recognition and Writing with sense of Quantity</p> |
| <p>LO 4: Compares numbers up to 20. (Compares quantities to find out more/ less/ equal)</p> | <ul style="list-style-type: none"> • 'Tulna' activity with fruits - Count and tell which bag has more/mango/ balls/ bananas • Discussion during aaj hamari class mein kitne bachche hain? | |
| <p>LO 2: Classifies objects into groups based on some physical attributes like shape, size and other observable properties including rolling and sliding.</p> <p>LO 6: Describes the physical features of various solids/shapes in her own language. For example- a ball rolls, a box slides etc.</p> | <p>Activities from the chapter Children find/bring objects to roll and objects to slide</p> | <p>Math Magic Chapter 1 – Shapes and Space Math workbook unit – 1 (Page no. 1 - 26)</p> |

| | | |
|--|---|--|
| LO 5.1 Constructs addition facts up to 10 by using concrete objects. {Number combinations} | Pre addition activity: <i>Madku II</i> – story of the frog and activity of jumping by counting ahead (as many jumps as given on the dice) | |
| LO 7. Estimates and measures short lengths using non uniform units like a finger, hand span, length of a forearm, footsteps, etc. (Compares lengths) | Estimating and measuring in meaningful contexts - Comparison of heights of children in class (who is the tallest?) & measuring heights using sutli | Math Magic Chapter 7 - Measurement (till page number 100) Math workbook unit – 7 (Page no. 81-90) Math Magic Chapter 6 - Time Math workbook unit – 6 (Page 79-80) |
| Term 2 (October 2019 to March 2020) | | |
| LO 3. Recites number names and counts objects up to 20, concretely, pictorially and symbolically. | Activities for unstructured counting - ‘Aaj hamari class mei kitne bachche hai’ ? (with number patti) every day - ‘Sankhya parchi’ (with Rangometry) : Make a figure of your choice using the number of pieces given on the chit | Math Magic Chapter 5 - Numbers from ten to twenty page number (page no. 79 to 83) Math workbook unit – 5 Page no. (63 - 76) |
| LO 5.1 Constructs addition facts up to 10 by using concrete objects. | Pre addition activities: – Ghar Chalo – story and activity (counting-on till 20) Activities for Number Combinations of 10 - Number combination of 5 with ‘finger folding’ activity - Number combination of 10 with ‘finger folding’ activity - Anjali- Shyamli story, (Doubling with the context of twin sisters) | |
| LO 4. Compares numbers up to 20 | - Count and tell which bag has more amrood/ balls/ biscuits/marbles - Free-Play and activity – Rangometry ‘tulna’ activity | |
| LO 1. Is able to work with numbers 1 to 20 (Consolidating number sense up to 20) | Activities for structured counting - Introduction to Ginladi with story - taking out beads with context on Ginladi 10 and then 20 - taking out beads without context until children take out beads at one go - Introduction to ‘0’ and location of number on Ginladi - Reverse counting – Children walk on ‘stones’ forward and then backward (1 to 10 and then 10 to 1, 10 to 1 is done without turning back) - Children measure using their foot-lengths to see where they would reach with 20 foot-lengths (the beginning and end are marked on the floor). First they walk forward, counting as they move. Then without turning take steps backward, counting backward | |

| | | |
|--|--|---|
| | <p>from 20 to reach 1. (beginning is marked 0)</p> <ul style="list-style-type: none"> - Backward counting on 'Ginladi' from 10 to 0 and 20 to 0 - Locating numbers on empty number line up to 10 and later 20 | |
| <p>LO 5.1 Constructs addition facts up to 10 by using concrete objects.</p> <p>LO 5.2 Subtracts numbers using 1 to 10</p> | <p>Consolidating Number combinations of 10</p> <ul style="list-style-type: none"> - Chhupana (Hiding) with Ginladi (10) - Sliding Card (showing 5 dots and more) <p>Number combinations of 6, 7, 8 and 9</p> <ul style="list-style-type: none"> - With kyari - With rangometry 2 design activity - Mutthi ka khel <p>Halving up to 10 (Anjali-Shyamli context)</p> <p>Use of context to give meaning to the symbols</p> <ul style="list-style-type: none"> - <i>Train making</i> game to introduce addition symbol '+' - 'Dibba khali' game to introduce subtraction symbol '-' <p>Word Problems for near doubles (Children solve by saying "6 और 6 बनेगा 12, और 1 और डालेंगे तो हो जायेगा 13. इसलिए मुझे मालूम है की उनको 13 बिस्कुट मिले)</p> | |
| <p>LO 5. Applies addition and subtraction of numbers 1 to 20 in daily life</p> <p>LO 5.3 Solves day to day problems related to addition & subtraction of numbers up to 10.</p> | <p>Presenting a context that children can connect to asking questions (word problems) involving finding the sum or difference</p> <ul style="list-style-type: none"> - Story problems with drawings are presented (Children solve in a natural way by using their number sense for instance number combinations) | <p>Math Magic</p> <p>Chapter3 – Addition</p> <p>Chapter4 – Subtraction</p> <p>Teacher can present these problems horizontally.</p> <p>Math workbook unit – 3 (Page no. 45-54)</p> <p>Math workbook unit – 4 (Page no. 55-62)</p> <p>Math workbook unit – 5 Page no. (77 - 78)</p> <p>Math Magic</p> <p>Chapter 12- Money</p> <p>Math workbook unit – 10</p> |
| <p>LO 7. Estimates and measures short lengths using non uniform units like a finger, hand span, length of a forearm, footsteps, etc.</p> | <p>Measuring distances using body parts</p> <ul style="list-style-type: none"> - Children measure in groups of 4 the length of their desks using their hand span and finger and discuss among themselves the result if differences are there. | <p>Math Magic</p> <p>Chapter7 – Measurement (page number 101 to 103)</p> |
| <p>LO 8. Observes, extends and creates patterns of shapes and numbers. For example arrangement of shapes/objects/ numbers, etc.</p> | <p>Patterns with Rangometry</p> <ul style="list-style-type: none"> - Making patterns with Rangometry shapes and other objects such as, leaves, seeds etc. - The above activity can also be connected with numbers | <p>Math Magic</p> <p>Chapter 10 - Pattern</p> <p>Math workbook unit – 9 (Page no. 95- 98)</p> |

| | | |
|---|---|--|
| <p>LO 9. Collects, records (using pictures numerals) and interprets simple information by looking at visuals.</p> <p>LO 2. Classifies objects into groups based on some physical attributes</p> | <p>-Data collection -Visit a park nearby and collect dry leaves, twigs etc. and record the numbers collected and interpret the result to know which item is more</p> <p>-Classify the leaves collected according to different attributes (size, texture, colour) and give the reason for the classification</p> | <p>Math Magic Chapter9 – Data handling Math workbook unit – 8 (Page no. 91-94)</p> |
| <p>REVISION</p> | | |

Note: Details of activities are shared during workshops/ given in Manual