# **Preschool Math Curriculum revised June 2018**

	Nursery	KGI	KGII
Data Handling	D.1 demonstrate an ability to organize objects into categories by sorting and classifying objects using one attribute (color, shape, size) D.2 understand that information about themselves and their surroundings can be obtained in different ways. D.3 discuss chance in daily events (impossible, maybe, certain). D.4 sort and discuss real objects by one attribute. D.5 create living graphs using real objects and people. D.6 describe real objects and events by attributes.	D.1 demonstrate an ability to organize objects into categories by sorting and classifying (shape, color, size, materials, action) D.2 understand that information about themselves and their surroundings can be obtained in different ways. D.3 discuss chance in daily events (impossible, maybe, certain). D.4 manipulate and represent information through pictographs and tally marks. D.5 sort and label real objects by attributes. D.6 create pictographs and tally marks. D.7 create living graphs using real objects and people. D.8 describe real objects and events by attributes. D.9 read and describe primary data presented in concrete graphs and pictographs. D10. recognize and create a criteria for sorting.	D.1 demonstrate an ability to organize objects into categories by sorting and classifying by one or more attributes (shape, color, size, pattern, texture, materials, usage, characteristics, action, usage) D.2 understand that information about themselves and their surroundings can be collected and recorded in different ways. D.3 understand and express the concept of chance in daily events (impossible, less likely, maybe, most likely, certain). D.4 sort and label real objects by attributes. D.5 create a pictograph and sample bar graph of real objects. D.6 collect and represent data in different types of graphs, for example, tally marks, bar graphs. D.7 collect, display and interpret data for the purpose of answering questions/ inquiries. D.8 interpret data by comparing quantities (for example, more, fewer, less than, greater than). D.9 use tree, Venn and Carroll diagrams to explore relationships between data.
Measurement	M.1 understand that attributes of real objects can be compared and described, for example, longer, shorter, heavier, empty, full. M.2 identify, describe and sequence up to three events in their daily routine, for example, before, after, bedtime, story time M.3 Manipulate non-standard measuring units.	M.1 estimate, compare and order objects by length/ height M2.manipulate and compare capacities. M.3 identify, compare and describe attributes of real objects using appropriate mathematical terminology. M.4 measure and record data to compare the length, height, capacity of objects using non-standard units. M.4 use non-standard units of measurement to solve problems in reallife situations involving length, height. M.5 identify, describe and sequence up to five events in their daily routine.	M.1 estimate, compare and order objects by length/ height / weight/capacity M.2 identify, compare and describe attributes of real objects using appropriate mathematical terminology. M.3 estimate, measure and record data to compare the length, height, weight and capacity of objects using non-standard units M.4 use non-standard units of measurement to solve problems in reallife situations involving length and weight. M.5 identify, describe and sequence up to seven events (or more) in their daily routine. M.6 understand the function of the clock by exploration of time (morning, noon, afternoon, night).

Shape and Space	SS.1 describe the relative locations of objects using positional language for example: inside, outside, above, below, next to, behind, in front of, up, down. SS.2 move in a certain place, or	SS.1 describe the relative locations of objects using positional language; for example: inside, outside, above, below, next to, behind, in front of, up, down. SS.2 move in a certain place, or move something following specific	SS.1 describe the relative locations of objects using positional language; for example: inside, outside, above, below, next to, behind, in front of, up, down. SS.2 move in a certain place, or move something following specific
	move something following specific instructions. SS.3 Identify and describe few 2D shapes. SS. 4 construct some models using geometric shapes.	instructions. SS.3 Identify and describe 2D shapes. SS. 4 construct and represent (with guidance) models using geometric shapes. SS.5 understand, describe and compare some characteristics of 2D shapes.	instructions.  SS.3 decode a plan (Moving in a maze, a grid connecting points Inquiring about a place - Following signs on a path Following a path without arrows Encoding and decoding paths).  SS.4 understand, describe and compare some characteristics of 2D and 3D shapes.  SS.5 build models from certain geometric shapes and usual solids.
Pattern and Function	PF1. understand that patterns can be found in everyday situations (sounds and colors). PF2. identify patterns (sounds and colors). PF3.reproduce patterns (sounds and colors). PF4. extend a pattern ( sounds and colors).	PF1. understand that patterns can be found in everyday situations, for example, sounds, actions, objects, nature. PF2. identify patterns using one attribute PF3.reproduce pattern using one attribute. PF4. extend patterns using one attribute. PF5. create patterns using one attribute.	PF1. identify and describe repeating patterns involving one attribute (e.g., color, size, shape, thickness, orientation). PF2. represent a given repeating pattern in a variety of ways. PF3. extend, through investigation, geometric patterns involving one attribute. PF4. create a repeating pattern involving one attribute. PF5. identify a rule for a repeating pattern. PF6. Compare two patterns.

## Numbers

## **Quantity Relationships**

N1.identify and order whole numbers to 5.

N2.represent and compare whole numbers to 5.

N3.demonstrate, using concrete materials, the concept of conservation of number (e.g., 5 counters represent the number 5, regardless whether they are close together or far apart).

N4. estimate the number of objects in a set, and check by counting (till 5)

N5.recognize groups from 1 to 5 objects without counting.

N6.understand that, for a set of objects, the number name of the last object counted, describes the

### Counting

N7.demonstrate, using concrete materials, the concept of one-to-one correspondence between number and objects when counting.

quantity of the whole set.

N8. count to determine the number of objects in a set till 5 N9.connet numerals to sets (to 5) N10. Use the language of mathematics to compare quantities (more, less, the same).

## **Operational Sense**

N11. use the concept of numbers to solve daily problems involving addition and subtraction till 5.

## **Quantity Relationships**

N1.identify and order whole numbers to 10.

N2. represent, compare, and order whole numbers to 10.

N3.demonstrate, using concrete materials, the concept of conservation of number (e.g.,

10 counters represent the number 10, regardless whether they are close together or far apart).

N4. estimate the number of objects in a set, and check by counting (till 10) N5.recognize groups from 1 to 10 objects without counting.

N6.understand that, for a set of objects, the number name of the last object counted, describes the quantity of the whole set.

#### Counting

N7.demonstrate, using concrete materials, the concept of one-to-one correspondence between number and objects when

counting.

N8. count to determine the number of objects in a set till 10 N9.connet numerals to sets (to 10) N10. use the language of mathematics to compare quantities (more, less, the same as 10).

N11. read and print numerals till 5. N.12 use ordinal numbers till 5

## **Operational Sense**

N13. use the concept of numbers to solve daily problems involving addition and subtraction till 10.

## **Quantity Relationships**

N1.identify and order whole numbers to 10.

N2. represent, compare, and order whole numbers to 10.

N3.demonstrate, using concrete materials, the concept of conservation of number (e.g.,

10 counters represent the number 10, regardless whether they are close together or far apart).

N4. estimate the number of objects in a set, and check by counting (till 10)
N5.recognize groups from 1 to 10 objects without counting.
N6.understand that, for a set of objects.

N6.understand that, for a set of objects, the number name of the last object counted, describes the quantity of the whole set.

N7. read numerals till 30

## Counting

N8.demonstrate, using concrete materials, the concept of one-to-one correspondence between number and objects when

counting.

N9. count to determine the number of objects in a set till 10

N10.connet numerals to sets (to 10) N11. use the language of mathematics to compare quantities (more, less, the same as 10).

N.12 use ordinal numbers till 10.

N13. read and print numerals till 10.

N14. count by 1s, 2s, 5s and 10s.

N15. Count backward from 10 to 0.

### **Operational Sense**

N16. use the concept of numbers to solve daily problems involving addition and subtraction till 10.