

Pre-kindergarten Ages 3 and 4

Mathematics			
Strand A: Early learning experiences will support children to understand counting and cardinality.			
Learning Progression	24-36 months	3 to 4 years	4 to 5 years
Number names	M.36.1 Say or sign number sequence up to at least five. Use other number names but not necessarily in the correct order.	M.48.1 Say or sign the number sequence up to at least 10.	M.60.1 Say or sign the number sequence up to at least 20.
Cardinality	M.36.2 Count two to three objects using one-to-one correspondence	M.48.2 Count up to at least five objects using one-to-one correspondence, using the number name of the last object counted to represent the total number of objects in a set. M.48.3 Count out a series of objects up to four.	M.60.2 Count up to ten objects using one-to-one correspondence, regardless of configuration, using the number name of the last object counted to represent the total number of objects in a set. M.60.3 count out a set of objects up to five.
Written numerals		M.48.4 Recognize written numerals up to at least five.	M.60.4 Recognize written numerals up to at least 10.
Recognition of quantity.	M.36.3 Name and match a small collection of up to three objects.	M.48.5 Recognize and name, without counting, the number of objects in small groups of at least 3 or 4 objects.	M.60.5 Quickly recognize and name, without counting, the number of objects in collections of up to at least five items.
Comparison	M.36.4 Compare collections of 1 to 4 similar items verbally or nonverbally.	M.48.6 Compare sets of 1 to 5 objects using a visual matching or counting strategy and describing the comparison as more, less than or the same.	M.60.6 Compare sets of up to 10 objects using a visual matching or counting strategy and describing the comparison as more, less than or the same.
Strand B: Early learning experiences will support children to understand and describe relationships to solve problems (operations and algebraic thinking.)			
Number operations	M.36.5 Use some vocabulary related to relative quantity (e.g., “more,” “less”)	M.48.7 Understand that adding to (or taking away) one or more objects from a group will increase or decrease the objects in the group.	M.60.7 Use real-world situations and concrete objects to model and solve addition (e.g., putting together) and subtraction (e.g., taking away) problems up through five. M.60.8 Recognize and describe parts contained in larger numbers by composing number

			combinations up to at least five (e.g., recognize how many have been secretly taken away from a group of five objects).
Strand C: Early learning experiences will support children to understand the attributes and relative properties of objects (measurement and data).			
Measurement	M.36.6 Have an increasing vocabulary related to number, size, and quantity (e.g., use words such as “tall,” “long”).	M.48.8 Recognize measureable attributes of an object such as length, weight, or capacity.	M.60.9 Compare the measureable attributes of two or more objects (e.g., length, weight, and capacity) and describe the comparison using appropriate vocabulary (e.g., longer, shorter, same length, heavier, lighter, same weight, holds more, holds less, holds the same amount). M.60.10 Begin to use strategies to determine measureable attributes (e.g., length or capacity of objects). May use comparison, standard or non-standard measurement tools
Data		M.48.9 Sort objects into two groups, count, and compare the quantity of the groups formed (e.g., indicate which is greater).	M.60.11 Represent data using a concrete object or picture graph according to one attribute.
Sorting and Classifying	M.36.7 Sort on the basis of one attribute with adult support.	M.48.10 Sort and classify objects by one attribute into two or more groups (e.g., color, size, shape).	M.60.12 Sort and classify a set of objects on the basis of one attribute independently and describe the sorting rule. Can re-sort and classify the same set of objects based on a different attribute.
Strand D: Learning experiences will support children to understand shapes and spatial relationships (geometry and spatial sense.)			
Spatial Relationships	M.36.8 Find objects or locations based upon landmarks and position words (e.g., “Your blanket is on the couch.”)	M.48.11 Use positional vocabulary (e.g., up/down, in/out, on/off, under) to identify and describe the location of an object.	M.60.13 Use relational vocabulary of proximity (e.g., beside, next to, between, above, below, over and under) to identify and describe the location of an object.

<p>Identification of shapes</p>	<p>M.36.9 Match familiar shapes with different size and orientation.</p>	<p>M.48.12 Identify 2-dimensional shapes (starting with familiar shapes such as circle and triangle) in different orientations and sizes.</p>	<p>M.60.14 Identify and describe a variety of 2-dimensional and 3-dimensional shapes with mathematical names (e.g., ball/sphere, box/rectangular prism, can/cylinder) regardless of orientation and size.</p>
<p>Composition of shapes</p>		<p>M.48.13 Combine two or more shapes to create a new shape or to represent an object in the environment.</p>	<p>M.60.15 Complete a shape puzzle or a new figure by putting multiple shapes together with purpose.</p>