

NYS Pre-Kindergarten to Grade 2 Mathematics Learning Standards					
Kindergarten					
Counting and Cardinality					
	Standard Code	Current Standard	Revised Standard Recommendation for 2018-19	Additional Information/Notes	
Clusters	A. Know number names and the count sequence.	K.CC.A.1	1. Count to 100 by ones and by tens.	1. No Change	
		K.CC.A.2	2. Count forward beginning from a given number within the known sequence (instead of having to begin at 1).	2. Count forward by 1's beginning from any given number within 100.	Clarification of concept.
		K.CC.A.3	3. Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing account of no objects).	3. No Change	
	B. Count to tell the number of objects.	K.CC.B.4	4. Understand the relationship between numbers and quantities; connect counting to cardinality.	4. Understand the relationship between numbers and quantities up to 20; connect counting to cardinality.	Clarification of concept.
		K.CC.B.4a	4a. When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.	4a. When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object. (1:1 correspondence)	Clarification of vocabulary.

NYS Pre-Kindergarten to Grade 2 Mathematics Learning Standards					
Kindergarten					
Counting and Cardinality					
	Standard Code	Current Standard	Revised Standard Recommendation for 2018-19	Additional Information/Notes	
Clusters	B. Count to tell the number of objects.	K.CC.B.4b	4b. Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.	4b. Understand that the last number name said tells the number of objects counted, (cardinality). The number of objects is the same regardless of their arrangement or the order in which they were counted.	Clarification of vocabulary.
		K.CC.B.4c	4c. Understand that each successive number name refers to a quantity that is one larger.	4c. Explore the concept that each successive number name refers to a quantity that is one larger.	Clarification - mastery not needed. The word "explore" indicates the topic is an important concept that builds the foundation for progression toward mastery in later grades. However, mastery at the current grade is not expected for that standard. Repeated experiences with these concepts, with immersion in the concrete, are vital.
		K.CC.B.4d	4d. Develop understanding of ordinal numbers (first through tenth) to describe the relative position and magnitude of whole numbers.	4d. Explore the concept of ordinal numbers (first through tenth) to describe the relative position and magnitude of whole numbers.	Clarification - mastery not needed. See above.
		K.CC.B.5	5. Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects.	5a. Answer counting questions using as many as 20 objects arranged in a line, a rectangular array, and a circle and as many as 10 objects in a scattered configuration, (e.g., "How many _____ are there?"). 5b. Given a number from 1–20, count out that many objects.	To provide clarification language and concept; separate distinct skills.

[Submit comments on the draft NYS Kindergarten Mathematics Learning Standards](#)

	C. Compare numbers.	K.CC.C.6	6. Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, (e.g., by using matching and counting strategies. Include groups with up to ten objects).	6. Identify whether the number of objects in one group is more/greater than, fewer/less than, or equal/same to the number of objects in another group, (e.g., by using matching and counting strategies). Include groups with up to ten objects.	Clarification of vocabulary.
		K.CC.C.7	7. Compare two numbers between 1 and 10 presented as written numerals.	7. No Change	

NYS Pre-Kindergarten to Grade 2 Mathematics Learning Standards

**Kindergarten
Operations & Algebraic Thinking**

	Standard Code	Current Standard	Revised Standard Recommendation for 2018-19	Additional Information/Notes	
Clusters	A. Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.	K.OA.A.1	1. Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations. Drawings need not show details, but should show the mathematics in the problem.	1. Represent addition and subtraction using objects, fingers, pennies, mental images, drawings, sounds, acting out situations, verbal explanations, expressions, equations or other strategies. Drawings need not show details, but should show the mathematics in the problem.	Clarification
		K.OA.A.2	2. Solve addition and subtraction word problems, and add and subtract within 10, (e.g., by using objects or drawings to represent the problem).	2. No Change	
		K.OA.A.3	3. Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., $5 = 2 + 3$ and $5 = 4 + 1$).	3. Decompose numbers less than or equal to 5 into pairs in more than one way, and record each decomposition by a drawing or equation (e.g., $5 = 2 + 3$ and $5 = 4 + 1$). Explore decomposition within 10.	Students will have a deeper understanding of addition and subtraction within 10 going into Grade 1. The word "explore" indicates the topic is an important concept that builds the foundation for progression toward mastery in later grades. However, mastery at the current grade is not expected for that standard. Repeated experiences with these concepts, with immersion in the concrete, are vital.

[Submit comments on the draft NYS Kindergarten Mathematics Learning Standards](#)

Clusters	A. Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.	K.OA.A.4	4. For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.	4. Find the number that makes 10 when given a number from 1 to 9, (e.g., by using objects or drawings, and record the answer with a drawing or equation).	Clarification
		K.OA.A.5	5. Fluently add and subtract within 5.	5. Fluently add and subtract within 5. Fluency involves a mixture of just knowing some answers, knowing some answers from patterns, and knowing some answers from the use of strategies.	Clarification
B. Understand simple patterns.	K.OA.B.6	NEW ADDITION	6. Duplicate, extend, and create simple patterns using concrete objects.	6. Duplicate, extend, and create simple patterns using concrete objects.	This creates a progression from Pre-K since a K standard that addresses patterns does not currently exist. See PK.OA.B.2.

NYS Pre-Kindergarten to Grade 2 Mathematics Learning Standards

**Kindergarten
Number & Operations in Base Ten**

		Standard Code	Current Standard	Revised Standard Recommendation for 2018-19	Additional Information/Notes
Clusters	A. Work with numbers 11-19 to gain foundations for place value.	K.NBT.A.1	1. Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (such as $18 = 10 + 8$); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.	1. Explore composing and decomposing of the numbers from 11 to 19 into ten ones and some further ones, (e.g., by using objects or drawings).	<p>Ensures the concept is well-developed in the concrete before moving to the abstract.</p> <p>The word "explore" indicates the topic is an important concept that builds the foundation for progression toward mastery in later grades. However, mastery at the current grade is not expected for that standard. Repeated experiences with these concepts, with immersion in the concrete, are vital.</p>

NYS Pre-Kindergarten to Grade 2 Mathematics Learning Standards

**Kindergarten
Measurement & Data**

		Standard Code	Current Standard	Revised Standard Recommendation for 2018-19	Additional Information/Notes
Clusters	A. Describe and compare measurable attributes.	K.MD.A.1	1. Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.	1. Describe measurable attributes of an object(s), such as length or weight, using appropriate vocabulary (e.g., small, big, short, tall, empty, full, heavy, and light).	Clarification of vocabulary.
		K.MD.A.2	2. Directly compare two objects with a measurable attribute in common, to see which object has “more of”/“less of” the attribute, and describe the difference. For example, directly compare the heights of two children and describe one child as taller/shorter.	2. Directly compare two objects with a measurable attribute in common to see which object has “more of”/“less of” the attribute and describe the difference.	Removed the example (the example could limit comparisons to height and could potentially make students feel badly if they are short).
	B. Classify objects and count the number of objects in each category.	K.MD.B.3	3. Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. Limit category counts to be less than or equal to 10.	3. Classify objects into given categories; count the objects in each category and order the categories by count. Limit category counts to be less than or equal to 10.	Clarification - simplify language.
C. Work with money	K.MD.C.4	NEW ADDITION		4. Explore coins and begin identifying pennies and dimes.	Support progression from K to Grade 1. Currently students are lacking foundations to master Grade 1 standards.

NYS Pre-Kindergarten to Grade 2 Mathematics Learning Standards

**Kindergarten
Geometry**

		Standard Code	Current Standard	Revised Standard Recommendation for 2018-19	Additional Information/Notes
Clusters	A. Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).	K.G.A.1	1. Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.	1. No Change	
		K.G.A.2	2. Correctly name shapes regardless of their orientations or overall size.	2. Name shapes regardless of their orientations or overall size.	Correctly is implied.
		K.G.A.3	3. Identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”).	3. Differentiate between two-dimensional (lying in a plane, “flat”) and three-dimensional (“solid”) shapes.	Removed "identify" and replaced it with "differentiate between" to clarify.

NYS Pre-Kindergarten to Grade 2 Mathematics Learning Standards

**Kindergarten
Geometry**

		Standard Code	Current Standard	Revised Standard Recommendation for 2018-19	Additional Information/Notes
Clusters	B. Analyze, compare, and sort objects.	K.G.B.4	4. Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length).	4. No Change	
		K.G.B.5	5. Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.	5. Model objects in their environment by using and/or drawing shapes (e.g., using unit blocks to build a simple representation of the classroom).	For clarification and progression. The example from the Progressions represented the concept more clearly. "Their environment" conveys a connection to students' experiences.
		K.G.B.6	6. Compose simple shapes to form larger shapes. For example, "Can you join these two triangles with full sides touching to make a rectangle?"	6. Compose larger shapes from simple shapes (e.g., join two triangles to make a rectangle).	Clarification of language.