



1st Quarter (p. 1 of 2)

Using Numbers to Represent Quantities; Identifying and Describing Shapes

Students begin to use numbers (including written numerals) to represent quantities. They begin to count objects in a set and pair each object with one number name. They begin to explore the concept that the number of objects is the same regardless of their arrangement or the order in which they are counted. They also begin to model simple joining and separating situations using objects, fingers, mental images, drawings, sounds, acting out situations and verbal explanations. Students also learn to identify and describe 2-dimensional and 3-dimensional shapes.

Essential Questions:

How does counting help me solve problems?

How can I show my thinking when solving story problems?

What shapes do I see in the world around me?

How can I sort objects?

Counting and Cardinality	
Know number names and the count sequence.	
K.CC.1	Count to 100 by ones and by tens. <i>Minimum Quarterly Expectations: Rote count by 1's to 20</i>
K.CC.2	Count forward beginning from a given number within the known sequence (instead of having to begin at 1).
K.CC.3	Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects). <i>Minimum Quarterly Expectations: Write numbers 0-5</i>
Count to tell the number of objects	
K.CC.4	Understand the relationship between numbers and quantities; connect counting to cardinality.
	a. 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.
	b. 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.
	c. Understand that each successive number name refers to a quantity that is one larger.
K.CC.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. <i>Minimum Quarterly Expectations: Count to answer "how many" questions about as many as 5 objects...</i>

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**1st Quarter** (p. 2 of 2)**Using Numbers to Represent Quantities; Identifying and Describing Shapes**

Operations and Algebraic Thinking	
Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from	
K.OA.1	Represent addition and subtraction with objects, fingers, mental images, drawings (details not needed), sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.
K.OA.2	Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.
K.OA.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 $5 = 4 + 1$).
<i>Minimum Quarterly Expectations: Decompose numbers up to 5 into pairs in more than one way...</i>	
K.OA.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.
<i>K.OA.4 is not formally reported until 2nd quarter - conceptual experiences must be provided.</i>	
K.OA.5	Fluently add and subtract within 5.
<i>Fluency is not formally reported until 3rd quarter - conceptual experiences must be provided throughout the year.</i>	
Geometry	
Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).	
K.G.1	Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as <i>above</i> , <i>below</i> , <i>beside</i> , <i>in front of</i> , <i>behind</i> , and <i>next to</i> .
K.G.2	Correctly name shapes regardless of their orientations or overall size.
K.G.3	Identify shapes as two-dimensional (lying in a plane, “flat”) or three three-dimensional (“solid”).
Measurement and Data	
Classify objects and count the number of objects in each category.	
K.MD.3	Classify objects into given categories; count the numbers of objects (less than or equal to 10) in each category and sort the categories by count.

Kindergarten students should see addition and subtraction equations, and student writing of equations in Kindergarten is encouraged, but it is not required. (CCSSM, p.9 - Kindergarten Overview)