



2nd Quarter (p. 1 of 2)

Exploring and Representing Numbers thru 19; Describing and Comparing Measurable Attributes

Students continue to build their understanding of numbers and how they are used to represent quantities and solve problems. They will continue to model simple joining and separating situations using objects, fingers, mental images, drawings, sounds, acting out situations and verbal explanations. Students will begin to explore the numbers 11-19, representing these numbers with objects or drawings. Students will explore measurable attributes of an object and classify objects based on similarities and differences. They will explore direct comparisons of two objects. Comparison begins with developing the meaning of the word "than" in the context of "taller than," "shorter than," "heavier than," "longer than," etc. This understanding will lead into the more abstract idea of comparing numbers with the terms "more than" and "less than".

Essential Questions:

How can I compare sets of objects?

How can I show my thinking when solving story problems?

How can I build numbers?

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 50; Rote count by 10's to 50</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 0-10</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 10 objects...</i>
Compare numbers	
K.CC.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)
K.CC.7	Compare two numbers between 1 and 10 presented as written numerals.

**2nd Quarter** (p. 2 of 2)**Exploring and Representing Numbers thru 19; Describing and Comparing Measurable Attributes**

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 $5 = 4 + 1$).
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.
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>	
Numbers and Operations in Base Ten	
Work with numbers 11-19 to gain foundations for place value	
K.NBT.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 (e.g., $18 = 10 + 8$); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.
<i>Minimum Quarterly Expectations: Represent numbers 11-19 by using objects or drawings (Experiences with composing and decomposing numbers 11-19 are encouraged, but are not formally scored.)</i>	
Measurement and Data	
Describe and compare measurable attributes.	
K.MD.1	Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.
K.MD.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. <i>For example, directly compare the heights of two children and describe one child as taller/shorter.</i>
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)