

# MATH KINDERGARTEN | CANS

## Counting and Cardinality

### Know number names and the count sequence

K.CC.1 I can count to 100 by ones and by tens.

K.CC.2 I can count forward beginning from a given number within the known sequence (instead of having to begin at 1).

K.CC.3 I can write numbers from 0 to 20. I can represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).

### Count to tell the number of objects

K.CC.4 I can understand the relationship between numbers and quantities; connect counting to cardinality.

K.CC.4a When counting objects, I can 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

K.CC.4b I can 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.

K.CC.4c I can understand that each successive number name refers to a quantity that is one larger.

K.CC.5 I can 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.

### Compare numbers

K.CC.6 I can 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.<sup>1</sup>

K.CC.7 I can compare two numbers between 1 and 10 presented as written numerals.

## Operations and Algebraic Thinking

### Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from

K.OA.1 I can represent addition and subtraction with objects, fingers, mental images, drawings<sup>1</sup>, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.

K.OA.2 I can 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 I can 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, I can 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 I can fluently add and subtract within 5.

## Numbers and Operations in Base Ten

### Work with numbers 11-19 to gain foundations for place value

K.NBT.1 I can 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.

## Measurement and Data

### Describe and compare measurable attributes

K.MD.1 I can describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.

K.MD.2 I can 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.*

### **Classify objects and count the number of objects in each category**

K.MD.3 I can classify objects into given categories; count the numbers of objects in each category and sort the categories by count.<sup>1</sup>

K.G.5 I can model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.

K.G.6 I can compose simple shapes to form larger shapes. *For example, “Can you join these two triangles with full sides touching to make a rectangle?”*

## **Geometry**

### **Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres)**

K.G.1 I can 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*.

K.G.2 I can correctly name shapes regardless of their orientations or overall size.

K.G.3 I can identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”).

### **Analyze, compare, create, and compose shapes**

K.G.4 I can 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).