



Mathematics Standards

GRADE: K

Domain: COUNTING AND CARDINALITY

Cluster 1: Know number names and the count sequence.

STANDARD CODE	STANDARD
MAFS.K.CC.1.1	Count to 100 by ones and by tens. <i>Cognitive Complexity:</i> Level 1: Recall
MAFS.K.CC.1.2	Count forward beginning from a given number within the known sequence (instead of having to begin at 1). <i>Cognitive Complexity:</i> Level 1: Recall
MAFS.K.CC.1.3	Read and write numerals from 0 to 20. Represent a number of objects with a written numeral 0–20 (with 0 representing a count of no objects). <i>Cognitive Complexity:</i> Level 1: Recall

Cluster 2: Count to tell the number of objects.

STANDARD CODE	STANDARD
MAFS.K.CC.2.4	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. <i>Cognitive Complexity:</i> Level 1: Recall
MAFS.K.CC.2.5	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>Cognitive Complexity:</i> Level 1: Recall

Cluster 3: Compare numbers.

STANDARD CODE	STANDARD
MAFS.K.CC.3.6	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. <i>Cognitive Complexity:</i> Level 2: Basic Application of Skills & Concepts
MAFS.K.CC.3.7	Compare two numbers between 1 and 10 presented as written numerals. <i>Cognitive Complexity:</i> Level 2: Basic Application of Skills & Concepts

Domain: OPERATIONS AND ALGEBRAIC THINKING

Cluster 1: Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.

STANDARD CODE	STANDARD
MAFS.K.OA.1.1	Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations. <i>Cognitive Complexity:</i> Level 2: Basic Application of Skills & Concepts
MAFS.K.OA.1.2	Solve addition and subtraction word problems ¹ , and add and subtract within 10, e.g., by using objects or drawings to represent the problem (¹ Students are not required to independently read the word problems.) <i>Cognitive Complexity:</i> Level 2: Basic Application of Skills & Concepts
MAFS.K.OA.1.4	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>Cognitive Complexity:</i> Level 2: Basic Application of Skills & Concepts
MAFS.K.OA.1.5	Fluently add and subtract within 5. <i>Cognitive Complexity:</i> Level 1: Recall
MAFS.K.OA.1.a	Use addition and subtraction within 10 to solve word problems involving both addends unknown, e.g., by using objects, drawings, and equations with symbols for the unknown numbers to represent the problem. (Students are not required to independently read the word problems.)

Domain: NUMBER AND OPERATIONS IN BASE TEN

Cluster 1: Work with numbers 11–19 to gain foundations for place value.

STANDARD CODE	STANDARD
MAFS.K.NBT.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 (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>Cognitive Complexity:</i> Level 2: Basic Application of Skills & Concepts

Domain: MEASUREMENT AND DATA

Cluster 1: Describe and compare measurable attributes.

STANDARD CODE	STANDARD
MAFS.K.MD.1.1	Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. <i>Cognitive Complexity:</i> Level 2: Basic Application of Skills & Concepts
MAFS.K.MD.1.2	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> <i>Cognitive Complexity:</i> Level 2: Basic Application of Skills & Concepts
MAFS.K.MD.1.a	Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. <i>Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.</i>

Cluster 2: Classify objects and count the number of objects in each category.

STANDARD CODE	STANDARD
MAFS.K.MD.2.3	Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. <i>Cognitive Complexity:</i> Level 2: Basic Application of Skills & Concepts

Domain: GEOMETRY

Cluster 1: Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).

STANDARD CODE	STANDARD
MAFS.K.G.1.1	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> . <i>Cognitive Complexity:</i> Level 2: Basic Application of Skills & Concepts
MAFS.K.G.1.2	Correctly name shapes regardless of their orientations or overall size. <i>Cognitive Complexity:</i> Level 1: Recall
MAFS.K.G.1.3	Identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”). <i>Cognitive Complexity:</i> Level 1: Recall

Cluster 2: Analyze, compare, create, and compose shapes.

STANDARD CODE	STANDARD
MAFS.K.G.2.4	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). <i>Cognitive Complexity:</i> Level 3: Strategic Thinking & Complex Reasoning
MAFS.K.G.2.5	Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes. <i>Cognitive Complexity:</i> Level 2: Basic Application of Skills & Concepts
MAFS.K.G.2.6	Compose simple shapes to form larger shapes. <i>For example, “Can you join these two triangles with full sides touching to make a rectangle?”</i> <i>Cognitive Complexity:</i> Level 2: Basic Application of Skills & Concepts