Louisiana Mathematics

Grade K

Adopted 2016

Standards for Mathematical Practice

1. **Make sense of problems and persevere in solving them.** MP.1
2. **Reason abstractly and quantitatively.** MP.2
3. **Construct viable arguments and critique the reasoning of others.** MP.3
4. **Model with mathematics.** MP.4
5. **Use appropriate tools strategically.** MP.5
6. **Attend to precision.** MP.6
7. **Look for and make use of structure.** MP.7
8. **Look for and express regularity in repeated reasoning.** MP.8

Counting and Cardinality

A. **Know number names and the count sequence.** K.CC.A

1. Count to 100 by ones and by tens. K.CC.A.1
2. Count forward beginning from a given number within the known sequence (instead of having to begin at 1). K.CC.A.2
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). K.CC.A.3

B. Count to tell the number of objects. K.CC.B

4. Understand the relationship between numbers and quantities; connect counting to cardinality. K.CC.B.4
   a. When counting objects in standard order, say the number names as they relate to each object in the group, demonstrating one-to-one correspondence. K.CC.B.4.A
   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. K.CC.B.4.B
   c. Understand that each successive number name refers to a quantity that is one larger. K.CC.B.4.C
5. Count to answer "How many?" questions. K.CC.B.5
   a. Count objects up to 20, arranged in a line, a rectangular array, or a circle. K.CC.B.5.A
   b. Count objects up to 10 in a scattered configuration. K.CC.B.5.B
   c. When given a number from 1-20, count out that many objects. K.CC.B.5.C

C. Compare numbers. K.CC.C

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.1 K.CC.C.6
7. Compare two numbers between 1 and 10 presented as written numerals. K.CC.C.7

Operations and Algebraic Thinking

A. Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from. K.OA.A

1. Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations. K.OA.A.1
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.A.2
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.A.3
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.A.4
5. Fluently add and subtract within 5. K.OA.A.5

Number and Operations in Base Ten

A. Work with numbers 11–19 to gain foundations for place value. K.NBT.A

1. Gain understanding of place value. K.NBT.A.1
   a. Understand that the numbers 11–19 are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones. K.NBT.A.1.A
   b. Compose and decompose numbers 11 to 19 using place value (e.g., by using objects or drawings). K.NBT.A.1.B
   c. Record each composition or decomposition using a drawing or equation (e.g., 18 is one ten and eight ones, 18 = 1 ten + 8 ones, 18 = 10 + 8). K.NBT.A.1.C

Measurement and Data

A. Describe and compare measurable attributes. K.MD.A

1. Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. K.MD.A.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. For example, directly compare the heights of two children and describe one child as taller/shorter. K.MD.A.2

B. Classify objects and count the number of objects in each category. K.MD.B

3. Classify objects into given categories based on their attributes; count the numbers of objects in each category and sort the categories by count.3 K.MD.B.3

C. Work with money. K.MD.C

4. Recognize pennies, nickels, dimes, and quarters by name and value (e.g., This is a nickel and it is worth 5 cents.) K.MD.C.4

Geometry

A. Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres). K.G.A

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. K.G.A.1
2. Correctly name shapes regardless of their orientations or overall size. K.G.A.2
3. Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid"). K.G.A.3

B. Analyze, compare, create, and compose shapes. K.G.B

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). K.G.B.4
5. Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes. K.G.B.5
6. Compose simple shapes to form larger shapes. K.G.B.6