

Grade K: Access Points

Algebraic Reasoning

1 Represent and solve addition problems with sums between 0 and 10 and subtraction problems using related facts.

- 1 For any number from 1 to 9, use objects to find the number that makes 10 when added to the given number. [MA.K.AR.1.AP.1](#)
- 2 Given a number from 0 to 5, find the different ways it can be represented as the sum of two numbers. [MA.K.AR.1.AP.2](#)
- 3 Solve addition and subtraction real-world problems within 5 using objects, drawings or equations to represent the problem. [MA.K.AR.1.AP.3](#)

2 Develop an understanding of the equal sign.

- 1 Show that an addition or subtraction equation within 5 is true using objects or drawings. [MA.K.AR.2.AP.1](#)

Data Analysis and Probability

Develop an understanding for collecting, representing and comparing data.

- 1 Sort objects by characteristic (e.g., size, shape or color). Count the objects in each category and report the results. [MA.K.DP.1.AP.1](#)
-

Geometric Reasoning

Identify, compare and compose two- and three-dimensional figures.

- 1 Identify two- and three-dimensional figures regardless of their size. Figures are limited to circles, triangles, rectangles, squares, spheres, cubes, cones and cylinders. [MA.K.GR.1.AP.1](#)
 - 2a Sort two-dimensional figures based on their similarities. Figures are limited to circles, triangles, rectangles and squares. [MA.K.GR.1.AP.2A](#)
 - 2b Use informal spatial language to describe the relative positions of two-dimensional figures (e.g., above, below, beside, next to, under). [MA.K.GR.1.AP.2B](#)
 - 3a Sort three-dimensional figures based on their similarities. Figures are limited to spheres, cubes, cones and cylinders. [MA.K.GR.1.AP.3A](#)
 - 3b Use informal spatial language to describe the relative positions of three-dimensional figures (e.g., above, below, beside, next to, under). [MA.K.GR.1.AP.3B](#)
 - 4 Explore real-world objects that can be modeled by a given two- or three-dimensional figure. Figures are limited to circles, triangles, rectangles, squares, spheres, cubes, cones and cylinders. [MA.K.GR.1.AP.4](#)
 - 5 Recognize that a different figure can be formed by combining two smaller two-dimensional figures. Figures used to form a composite shape are limited to triangles, rectangles and squares. [MA.K.GR.1.AP.5](#)
-

Measurement

1 Identify and compare measurable attributes of objects.

- 1 1a. Explore the attributes of a single object that can be measured such as length or weight. [MA.K.M.1.AP.1](#)
 - 2 1b. Directly compare two objects to determine which is longer/shorter or heavier/lighter. [MA.K.M.1.AP.2](#)
 - 3 1c. Express the length of an object, up to 10 units long, as a whole number of lengths using non-standard objects laid end to end with no gaps or overlaps. [MA.K.M.1.AP.3](#)
-

Number Sense and Operations

1 Develop an understanding for counting using objects in a set.

- 1 Given a group of up to 10 objects, count the number of objects in that group and represent the number by identifying the written numeral. Express the number of objects in a rearrangement of that group without recounting. [MA.K.NSO.1.AP.1](#)
- 2 Given a number from 0 to 10, count out that many objects. [MA.K.NSO.1.AP.2](#)
- 3 Identify the first, second or third object within a sequence. [MA.K.NSO.1.AP.3](#)
- 4 Compare the number of objects from 0 to 10 in two groups to determine which group is greater or less, or if the number of objects in the two groups are equal. [MA.K.NSO.1.AP.4](#)

2 Recite number names sequentially within 100 and develop an understanding for place value.

- 1 Express number names from 1 to 100 by ones and from 10 to 100 by tens. Starting at a given number, count forward to 20 and backwards within 10. [MA.K.NSO.2.AP.1](#)
- 2 Represent whole numbers from 10 to 19, using one group of 10 ones and some further ones, with objects, drawings or verbalization. [MA.K.NSO.2.AP.2](#)
- 3 Locate and compare two numbers from 0 to 10 to determine which number is less than, equal to or greater than the other number. [MA.K.NSO.2.AP.3](#)

3 Develop an understanding of addition and subtraction operations with one-digit whole numbers.

- 1 Explore addition and subtraction of two whole numbers within 5 using objects. [MA.K.NSO.3.AP.1](#)
- 2 Apply a strategy for adding and subtracting two one-digit whole numbers to solve within 5. [MA.K.NSO.3.AP.2](#)