# Mathematics

## PreK-K

### Topic: Number Sense and Operations

1. Count by ones to at least 20.
2. Match quantities up to at least 10 with numerals and words.
3. Identify positions of objects in sequences (e.g., first, second) up to fifth.
4. Compare sets of up to at least 10 concrete objects using appropriate language (e.g., none, more than, fewer than, same number of, one more than), and order numbers.
5. Understand the concepts of whole and half.
6. Identify U.S. coins by name.
7. Use objects and drawings to model and solve related addition and subtraction problems to ten.
8. Estimate the number of objects in a group and verify results.

### Topic: Patterns, Relations, and Algebra

1. Identify the attributes of objects as foundation for sorting and classifying (e.g., a red truck, a red block, and a red ball share the attribute of being red).
2. Sort and classify objects by color, shape, size, number, and other properties.
3. Identify, reproduce, describe, extend, and create color, rhythmic, shape, number, and letter repeating patterns with simple attributes (e.g., ABABAB…).
4. Count by fives and tens at least up to 50.

### Topic: Geometry

1. Name, describe, sort, and draw simple two-dimensional shapes.
2. Describe attributes of two-dimensional shapes (e.g., number of sides, number of corners).
3. Name and compare three-dimensional shapes.
4. Identify positions of objects in space, and use appropriate language (e.g., beside, inside, next to, close to, above, below, apart) to describe and compare their relative positions.

### Topic: Measurement

1. Recognize and compare the attributes of length, volume/capacity, weight, area, and time using appropriate language (e.g., longer, taller, shorter, same length; heavier, lighter, same weight; holds more, holds less, holds the same amount).
2. Make and use estimates of measurements from everyday experiences.
3. Use nonstandard units to measure length, area, weight, and capacity.

### Topic: Data Analysis, Statistics, and Probability

1. Collect, sort, organize, and draw conclusions about data using concrete objects, pictures, numbers and graphs.