New York Mathematics - Next Generation

Grade Pre-K

Adopted 2017

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. NY-PK-K.CC.A

1. Count to 20. NY-PK.CC.1
2. Represent a number of objects (0-5), with a written numeral 0–5 (with 0 representing a count of no objects). NY-PK.CC.2

B. Count to tell the number of objects. NY-PK-K.CC.B

3. Understand the relationship between numbers and quantities to 10; connect counting to cardinality. NY-PK.CC.3
   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. (1:1 correspondence NY-PK.CC.3.A
   b. Explore and develop the concept that the last number name said tells the number of objects counted, (cardinality). The number of objects is the same regardless of their arrangement or the order in which they were counted. NY-PK.CC.3.B
   a. Answer counting questions using as many as 10 objects arranged in a line, a rectangular array, and a circle. Answer counting questions using as many as 5 objects in a scattered configuration. NY-PK.CC.4.A
   b. Given a number from 1–10, count out that many objects. NY-PK.CC.4.B

C. Compare numbers. NY-PK-K.CC.C

5. Recognize whether the number of objects in one group is more than, fewer than, or equal to (the same as) the number of objects in another group. NY-PK.CC.5
6. Identify "first" and "last" related to order or position. NY-PK.CC.6

Operations and Algebraic Thinking

A. Understand addition as adding to and understand subtraction as taking from. NY-PK.OA.A

1. Explore addition and subtraction by using objects, fingers, and responding to real world situations. NY-PK.OA.1

A. Understand simple patterns. NY-PK-K.OA.A

2. Duplicate and extend simple patterns using concrete objects. NY-PK.OA.2

Measurement and Data

A. Describe and compare measurable attributes. NY-PK-K.MD.A

1. Identify measurable attributes of objects, such as length or weight, and describe them using appropriate vocabulary. NY-PK.MD.1

A. Sort objects and count the number of objects in each category. NY-PK.MD.A

2. Sort objects and shapes into categories; count the objects in each category. NY-PK.MD.2

Geometry

A. Identify and describe shapes (squares, circles, triangles, and rectangles). NY-PK.G.A

1. Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as top, bottom, up, down, above, below, in front of, behind, over, under, and next to. NY-PK.G.1
2. Name shapes regardless of size. NY-PK.G.2

B. Explore and create two-and three-dimensional objects. NY-PK.G.B

3. Explore two-and three-dimensional objects and use informal language to describe their similarities, differences, and other attributes. NY-PK.G.3
4. Create and build shapes from components. NY-PK.G.4