New York Prekindergarten Learning Standards

Cognition and Knowledge of the World: Mathematics

COUNTING AND CARDINALITY

Know number names and the count sequence

1 Counts to 20 PK.MATH.1

2 Represents a number of objects (0-5), with a written numeral 0-5 (with 0 representing a count of no objects) PK.MATH.2

Counts to tell the number of objects

3 Understands the relationship between numbers and quantities to 10, connects counting to cardinality PK.MATH.3

- a When counting objects, says 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) PK.MATH.3A
- b Explores and develops 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. PK.MATH.3B

4 PK.MATH.4

- a Answers counting questions using as many as 10 objects arranged in a line, a rectangular array, and a circle. Answers counting questions using as many as 5 objects in a scattered configuration (e.g., how many ____ are there?") PK.MATH.4A
- b Given a number from 1-10, counts out that many objects PK.MATH.4B

Compares numbers

6 Recognizes 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 (e.g., using matching and counting strategies PK.MATH.6

7 Identifies first and last related to order or position PK.MATH.7

OPERATIONS AND ALGEBRAIC THINKING

Understands addition as adding to, and understand subtraction as taking from

8 Explores addition and subtraction by using objects, fngers, and responding to real world situations (e.g., if we have 3 apples and add 2 more, how many apples do we have all together?) PK.MATH.8

Understands simple patterns

9 Duplicates and extends simple patterns using concrete objects (e.g., what comes next?) PK.MATH.9

MEASUREMENT AND DATA

Describes and compares measurable attributes

10 Identifies measurable attributes of objects, such as length or weight, and describes them using appropriate vocabulary (e.g., small, big, short, tall, empty, full, heavy, light) PK.MATH.10

Sorts objects and counts the number of objects in each category

11 Sorts objects and shapes into categories; counts the objects in each category. PK.MATH.11

GEOMETRY

Identifies and describes shapes (squares, circles, triangles and rectangles)

12 Describes objects in the environment using names of shapes and describes the relative positions of these objects using terms such as top, bottom, up, down, above, below, in front of, behind, over, under, next to PK.MATH.12

13 Names shapes regardless of size PK.MATH.13

Explores and creates two and three-dimensional objects

14 Explores two-and three-dimensional objects and uses informal language to describe their similarities, differences, and other attributes PK.MATH.14

15 Creates and builds shapes from components (e.g., sticks, blocks, clay) PK.MATH.15