

# Gwinnett County Public Schools Mathematics: Kindergarten – At A Glance 2015-2016

## Standards for Mathematical Practice

- 1 Make sense of problems and persevere in solving them.
- 2 Reason abstractly and quantitatively.
- 3 Construct viable arguments and critique the reasoning of others.

- 4 Model with mathematics.
- 5 Use appropriate tools strategically.
- 6 Attend to precision.

- 7 Look for and make use of structure.
- 8 Look for and express regularity in repeated reasoning.

### 1<sup>st</sup> 9 Weeks: Unit 1

#### Unit 1: Counting with Friends

##### Know number names and the count sequence

- **1.CC.1** count to 100 by ones and by tens
- **2.CC.2** count forward by ones, beginning from a given number within the known sequence (instead of having to begin at 1)
- **3.CC.3** write numerals from 0 to 20 and represent a number of objects with a written numeral 0 – 20, with 0 representing a count of no objects

##### Count to tell the number of objects.

- **4.CC.4** demonstrate the relationship between numbers and quantities to 20; connect counting to cardinality
- **6.CC.4\_b.** demonstrate 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
- **7.CC.4\_c.** demonstrate that each successive number name refers to a quantity that is one larger

##### Identify coins and bills

- **11.CC.** identify coins by name and value: pennies, nickels, dimes, quarters, and dollar bills

##### Classify objects and count the numbers of objects in each category.

- **21.MD.3** classify objects into given categories; count the numbers of objects in each category and sort the categories by count (limit category counts to be less than or equal to 10)

### 2<sup>nd</sup> 9 Weeks: Unit 2

#### Unit 2: Building Numbers

##### Gain foundations for place value

- **18.NBT.1** compose and decompose numbers from 11 to 19 into ten ones and some further ones (e.g., by using objects or drawings), and record each composition or decomposition by a drawing or equation (e.g.,  $18 = 10 + 8$ ); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones

##### Count to tell the number of objects

- **5.CC.4\_a.** count objects by stating 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 (one to one correspondence)
- **8.CC.5** count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1-20, count out that many objects; identify and be able to count pennies within 20 (use pennies as manipulatives in multiple mathematical contexts)

##### Compare Numbers

- **9.CC.6** compare two sets of objects and identify which set is equal to, more than, or less than the other using matching and counting strategies
- **10.CC.7** compare two numbers between 1 and 10 presented as written numerals

##### Classify objects and count the numbers of objects in each category.

- **21.MD.3** classify objects into given categories; count the numbers of objects in each category and sort the categories by count (limit category counts to be less than or equal to 10)

### 3<sup>rd</sup> 9 weeks: Units 3-4

#### **Unit 3: Sophisticated Shapes**

##### **Identify and Describe Shapes.**

- **22.G.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, to the left of, to the right of, behind, and next to
- **23.G.2** name shapes correctly regardless of their orientations or overall size
- **24.G.3** classify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”)

##### **Analyze, Compare, Create, and Compose Shapes.**

- **25.G.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)
- **26.G.5** model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.
- **27.G.6** compose simple shapes to form larger shapes (e.g., "Can you join these two triangles with full sides touching to make a rectangle?")

##### **Patterns**

- **17.OA.** identify, create, extend, and transfer patterns from one representation to another using actions, objects, and geometric shapes

##### **Classify objects and count the numbers of objects in each category.**

- **21.MD.3** classify objects into given categories; count the numbers of objects in each category and sort the categories by count (limit category counts to be less than or equal to 10)

#### **Unit 4: Measuring and Data Analysis**

##### **Describe and compare attributes.**

- **19.MD.1** describe several measurable attributes of an object, such as length or weight; for example, an object may be described as heavy or light or long or short
- **20.MD.2** directly compare two objects on the basis of length (longer/shorter), capacity (more/less), height (taller/shorter), and weight (heavier/lighter) and describe the difference (e.g., directly compare the heights of two children and describe one child as taller/shorter)

##### **Classify objects and count the numbers of objects in each category.**

- **21.MD.3** classify objects into given categories; count the numbers of objects in each category and sort the categories by count (limit category counts to be less than or equal to 10)

### 4<sup>th</sup> 9 weeks: Units 5

#### **Unit 5: Investigating Addition and Subtraction**

##### **Understand addition and subtraction.**

- **12.OA.1** represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps) acting out situations, verbal explanations, expressions, or equations
- **13.OA.2** solve addition and subtraction word problems, and add and subtract within 10 (e.g., by using objects or drawings to represent the problem)
- **14.OA.3** decompose numbers less than or equal to 10 into pairs in more than one way (e.g., by using objects or drawing), and record each decomposition by a drawing or equations (e.g.,  $5 = 2 + 3$  and  $5 = 4 + 1$ )
- **15.OA.4** find the number that makes 10 when added to the given number, for any number from 1 to 9 (e.g., by using objects or drawings, and record the answer with a drawing or equation)
- **16.OA.5** add and subtract within 5 fluently

##### **Classify objects and count the numbers of objects in each category.**

- **21.MD.3** classify objects into given categories; count the numbers of objects in each category and sort the categories by count (limit category counts to be less than or equal to 10)

