

# Gwinnett County Public Schools Mathematics: Grade 2 CCGPS – At A Glance 2014-2015

## 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: Base Ten

#### Understand place value.

- **7.NBT.1** explain that the three digits of a three-digit number represent amounts of hundreds, tens, and ones
- **8.NBT.1\_a.** explain that 100 can be thought of as a bundle of ten tens, called a "hundred"
- **9.NBT.1\_b.** explain the numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds
- **10.NBT.2** count within 1000; skip-count by 5s, 10s, and 100s
- **11.NBT.3** read, write, and represent numbers to 1000 using a variety of models, diagrams and base ten numerals including standard and expanded form
- **12.NBT.4** compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using  $>$ ,  $=$ , and  $<$  symbols to record the results of comparisons

#### Represent and interpret data.

- **27.MD.10** draw a picture graph and a bar graph to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph

### 2<sup>nd</sup> 9 Weeks: Unit 2: Addition and Subtraction

#### Represent and solve problems involving addition and subtraction.

- **1.OA.1** use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing with unknowns in all positions.

#### Add and subtract within 20.

- **2.OA.2** fluently add and subtract within 20 using mental strategies. By the end of Grade 2, know from memory all sums of two one-digit numbers

#### Use place value understanding and properties of operations to add and subtract.

- **13.NBT.5** add and subtract fluently within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction

#### Represent and interpret data.

- **27.MD.10** draw a picture graph and a bar graph to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph

### 3<sup>rd</sup> 9 Weeks: Unit 3: Measurement

#### Measure and estimate lengths in standard units

- **18.MD.1** measure length by determining, selecting and using an appropriate tool (rulers, yardsticks, meter sticks, measuring tapes) and unit (in., ft., yd., cm, m)
- **19.MD.2** compare and explain the relationship of inches, feet, yards, centimeters and meters by measuring an object twice using different units
- **20.MD.3** estimate lengths using units of inches, feet, yards, centimeters and meters, then measure to determine if estimations were reasonable
- **21.MD.4** measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit (relate addition and subtraction to length)

#### Relate addition and subtraction to length.

- **22.MD.5** use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units
- **23.MD.6** represent whole numbers as lengths from 0 on a number line with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram

#### Work with time and money.

- **24.MD.7** use analog and digital clocks to tell and write time to the nearest five minutes using AM and PM

#### Represent and interpret data.

- **26.MD.9** generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units
- **27.MD.10** draw a picture graph and a bar graph to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph

### Unit 4: Applying Base Ten

**Use place value understanding and properties of operations to add and subtract.**

- **14.NBT.6** add up to four two-digit numbers using strategies based on place value and properties of operations
- **15.NBT.7** add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds
- **6.NBT.8** use mental math strategies to add and subtract 10 or 100 to a given number between 100-900
- **17.NBT.9** explain why addition and subtraction strategies work using place value and the properties of operations

**Work with time and money.**

- **25.MD.8** solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately (e.g., if you have 2 dimes and 3 pennies, how many cents do you have?)

**Represent and interpret data.**

- **27.MD.10** draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph

### Unit 5: Geometry

**Reason with shapes and their attributes.**

- **29.G.1** recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces and identify triangles, quadrilaterals, pentagons, hexagons, and cubes. *Sizes are compared directly or visually, not compared by measuring.*
- **30.G.2** partition a rectangle into rows and columns of same-size squares and count to find the total number of them
- **31.G.3** partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape

**Represent and interpret data.**

- **27.MD.10** draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph

### Unit 6: Multiplication

**Work with equal groups of objects to gain foundations for multiplication.**

- **4.OA.3** determine whether a group of objects (up to 20) has an odd or even number of members. e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends
- **6.OA.4** apply the use of repeated addition (skip counting), model arrays up to 5 rows and 5 columns to determine a total number of objects, and write an equation to express the total as a sum of equal addends

**Represent and interpret data.**

- **27.MD.10** draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph