|  | 2017-18 Second Grade Math Pacing Guide |  |  |  |  |
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| Operations and Algebraic Thinking- Represent and solve problems involving addition and subtraction |  | Q1 | Q2 | Q3 | Q4 |
|  |  | 25 | 50 | 75 | 100 |
| 2.OA.A. 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. • Represent a strategy with a related equation including a symbol for the unknown number | S | S | S | S |
| Operations and Algebraic Thinking-Add and subtract within 20 |  |  |  |  |  |
| 2.OA.B. 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. NOTE: Fact fluency means that students should have automaticity when recalling these facts. |  | S |  | S |
| Operations and Algebraic Thinking- Work with equal groups of objects to gain foundations for multiplication |  |  |  |  |  |
| 2.OA.C. 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 2 s ) $\cdot$ Write an equation to express an even number (up to 20 ) as a sum of two equal addends | S |  |  |  |
| 2.OA.C. 4 | - Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns Write an equation to express the total as a sum of equal addends |  |  | S | S |
| Number and Operations in Base Ten-Understand place value |  |  |  |  |  |
| 2.NBT.A. 1 | - Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 726 equals 7 hundreds, 2 tens, and 6 ones |  |  |  |  |
|  | - Understand that 100 can be thought of as a group of ten tens - called a "hundred" |  |  |  |  |
|  | - Understand that the numbers $100,200,300,400,500,600,700,800,900$ refer to one, two, three, four, five, six, seven, eight, or nine groups of 100 |  | S | S |  |
| 2.NBT.A. 2 | - Count within $1000 \cdot$ Skip-count by 5 s , 10s, and 100s beginning at zero |  | S | S | S |
| 2.NBT.A. 3 | - Read and write numbers to 1000 using base-ten numerals, number names, and a variety of expanded forms • Model and describe numbers within 1000 as groups of 10 in a variety of ways |  | S | S | S |
| 2.NBT.A. 4 | Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$, $=$, and $<$ symbols and correct terminology for the symbols to record the results of comparisons |  |  | S | S |
| Number and Operations in Base Ten- Use place value understanding and properties of operations to add and subtract |  |  |  |  |  |
| 2.NBT.B. 5 | Add and subtract within 100 with computational fluency using strategies based on place value, properties of operations, and the relationship between addition and subtraction | S | S | S | S |
| 2.NBT.B. 6 | Add up to four two-digit numbers using strategies based on place value and properties of operations |  |  | S |  |
| 2.NBT.B. 7 | Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and the relationship between addition and subtraction; relate the strategy to a written expression or equation |  |  | S | S |
| 2.NBT.B. 8 | Mentally add 10 or 100 to a given number 100-900, and mentally subtract 10 or 100 from a given number 100-900 |  | S | S |  |
| 2.NBT.B. 9 | Explain why addition and subtraction strategies work, using place value and the properties of operations. Note: Explanations could be supported by drawings or objects | S | S | S | S |
| Measurement and Data Measure and estimate lengths in standard units |  |  |  |  |  |
| 2.MD.A. 1 | Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes |  |  | S |  |
| 2.MD.A. 2 | - Measure the length of an object twice with two different length units • Describe how the two measurements relate to the size of the unit chosen. For example: A desktop is measured in both centimeters and inches. Student compares the size of the unit of measure and the number of those units |  |  | S |  |
| 2.MD.A. 3 | Estimate lengths using units of inches, feet, centimeters, and meters |  |  | S |  |


| 2.MD.A. 4 | Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit |  |  |  | S |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Measurement and Data-Relate addition and subtraction to length |  |  |  |  |  |  |
| 2.MD.B. 5 | Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, and write equations with a symbol for the unknown number to represent the problem |  |  |  | S |  |
| 2.MD.B. 6 | Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers $0,1,2, \ldots$, and solve addition and subtraction problems within 100 on the number line diagram |  | S | S |  |  |
| Measurement and Data-Work with time and money |  |  |  |  |  |  |
| 2.MD.C. 7 | Tell and write time from analog and digital clocks to the nearest five minutes, using am and pm. Note: This standard is a continuation of previous instruction at lower grades with the expectation of mastery by the end of third grade. |  |  |  |  | S |
| 2.MD.C. 8 | Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using $\$$ and $\phi$ symbols appropriately For example: A student has 2 dimes and 3 pennies; how many cents does he have? |  |  | S |  | S |
| Measurement and Data Represent and interpret data |  |  |  |  |  |  |
| 2.MD.D. 9 | - Generate data by measuring the same attribute of similar objects to the nearest whole unit • Display the measurement data by making a line plot, where the horizontal scale is marked off in whole- number units - Make a line plot, where the horizontal scale is marked off in whole-number units, to compare precision of measurements • Generate data from multiple measurements of the same object. Note: After several experiences with generating data to use, the students can be given data already generated to create the line plot. |  |  | S |  | S |
| 2.MD.D. 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 |  |  | S |  | S |
| Geometry- Reason with shapes and their attributes |  |  |  |  |  |  |
| 2.G.A. 1 | - Recognize and draw shapes having specified attributes (e.g., number of angles, number of sides, or a given number of equal faces) • Identify triangles, quadrilaterals, pentagons, hexagons, and cubes Note: Sizes are compared directly or visually, not compared by measuring. |  | S |  | S |  |
| 2.G.A. 2 | Partition a rectangle into rows and columns of same-size squares and count to find the total number of squares |  |  |  |  | S |
| 2.G.A. 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 |  |  |  | S | S |
| 2.G.A. 4 | Recognize that equal shares of identical wholes need not have the same shape |  |  |  |  | S |
|  | The standards in yellow indicate essential standards | The quarter highlighted indicates when the standard will be instructed. The S indicates when it will be scored. |  |  |  |  |

