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| GSE Second Grade Curriculum Map | | | | | | |
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| Unit 1 | Unit 2 | Unit 3 | Unit 4 | Unit 5 | Unit 6 | Unit 7 |
| **Extending Base Ten Understanding** | **Becoming Fluent with Addition and Subtraction** | **Understanding Measurement, Length, and Time** | **Applying Base Ten Understanding** | **Understanding Plane and Solid Figures** | **Developing Multiplication** | **Show What We Know** |
| **5-6 weeks** | **5-6 weeks** | **5-6 weeks** | **5-6 weeks** | **5-6 weeks** | **5-6 weeks** | **Up to 4 weeks** |
| **MGES2.NBT.1**  **MGES2.NBT.2**  **MGES2.NBT.3**  **MGES2.NBT.4**  **MGES2.MD.10**   |  | | --- | | **MGSE2.MD.10MGSE2.NBT.2MGSE2.NBT.3**  **MGSE2.NMGSE2.MD.10** | |  | | **MGES2.OA.1**  **MGES2.OA.2**  **MGES2.NBT.5**  **MGES2.MD.8**  **MGES2.MD.10** | **MGES2.MD.1**  **MGES2.MD.2**  **MGES2.MD.3**  **MGES2.MD.4**  **MGES2.MD.5**  **MGES2.MD.6**  **MGES2.MD.7**  **MGES2.MD.9**  **MGES2.MD.10** | **MGES2.NBT.6**  **MGES2.NBT.7**  **MGES2.NBT.8**  **MGES2.NBT.9**  **MGES2.MD.8**  **MGES2.MD.10** | **MGES2.G.1**  **MGES2.G.2**  **MGES2.G.3**  **MGES2.MD.10** | **MGES2.OA.3**  **MGES2.OA.4**  **MGES2.MD.10** | **ALL** |
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| These units were written to build upon concepts from prior units, so later units contain tasks that depend upon the concepts addressed in earlier units.  All units will include the Mathematical Practices and indicate skills to maintain. However, the progression of the units is at the discretion of districts. | | | | | | |

**NOTE:** Mathematical standards are interwoven and should be addressed throughout the year in as many different units and tasks as possible in order to stress the natural connections that exist among mathematical topics.

**Grades K-2 Key:** CC = Counting and Cardinality, G= Geometry, MD=Measurement and Data, NBT= Number and Operations in Base Ten, OA = Operations and Algebraic Thinking.

**GSE Second Grade**

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| GSE Second Grade Expanded Curriculum Map | | | |
| **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. | |
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| Unit 1 | Unit 2 | Unit 3 | Unit 4 |
| **Extending Base Ten Understanding** | **Becoming Fluent with Addition and Subtraction** | **Understanding Measurement, Length, and Time** | **Applying Base Ten Understanding** |
| **Understand place value.**  **MGSE2.NBT.1** Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:   1. 100 can be thought of as a bundle of ten tens — called a “hundred.” 2. The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).   **MGSE2.NBT.2** Count within 1000; skip-count by 5s, 10s, and 100s.  **MGSE2.NBT.3** Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.  **MGSE2.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.**  **MGSE2.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[[1]](#footnote-1) using information presented in a bar graph. | **Represent and solve problems involving addition and subtraction.**  **MGSE2.OA.1** Use addition and subtraction within 100 to solve one and two step word problems by using drawings and equations with a symbol for the unknown number to represent the problem. Problems include contexts that involve adding to, taking from,  putting together/taking apart (part/part/whole) and comparing with unknowns in all positions.[[2]](#footnote-2)  **Add and subtract within 20.**  **MGSE2.OA.2** Fluently add and subtract within 20 using mental strategies.[[3]](#footnote-3)  By 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.**  **MGSE2.NBT.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.  **Measure and estimate lengths in standard units.**  **MGSE2.MD.8** Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using $ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have?  **Represent and interpret data.**  **MGSE2.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[[4]](#footnote-4) using information presented in a bar graph. | **Measure and estimate lengths in standard units.**  **MGSE2.MD.1** Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.  **MGSE2.MD.2** Measure the length of an object twice, using length units of different measurements; describe how the two measurements relate to the size of the unit chosen. Understand the relative size of units in different systems of measurement. *For example, an inch is longer than a centimeter.* (Students are not expected to convert between systems of measurement.)  **MGSE2.MD.3** Estimate lengths using units of inches, feet, centimeters, and meters.  **MGSE2.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.**  **MGSE2.MD.5** Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.  **MGSE2.MD.6** Represent whole numbers as lengths from 0 on a number line diagram 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.  **MGSE2.MD.7** Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.  **Represent and interpret data.**  **MGSE2.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.  **MGSE2.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[[5]](#footnote-5) using information presented in a bar graph. | **Use place value understanding and properties of operations to add and subtract.**  **MGSE2.NBT.6** Add up to four two-digit numbers using strategies based on place value and properties of operations.  **MGSE2.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.  **MGSE2.NBT.8** Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.  **MGSE2.NBT.9** Explain why addition and subtraction strategies work, using place value and the properties of operations.[[6]](#footnote-6)  **MGSE2.MD.8** Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using $ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have?  **Represent and interpret data.**  **MGSE2.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[[7]](#footnote-7) using information presented in a bar graph. |
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**GSE Second Grade**

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| GSE Second Grade Expanded Curriculum Map | | | |
| **Standards for Mathematical Practice** | | | |
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| Unit 5 | Unit 6 | | Unit 7 |
| **Understanding Plane and Solid Figures** | **Developing Multiplication** | | **Show What We Know** |
| **Reason with shapes and their attributes.**  **MGSE2.G.1** Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces.[[8]](#footnote-8) Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.  **MGSE2.G.2** Partition a rectangle into rows and columns of same-size squares and count to find the total number of them**.**  **MGSE2.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.**  **MGSE2.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[[9]](#footnote-9) using information presented in a bar graph. | **Work with equal groups of objects to gain foundations for multiplication.**  **MGSE2.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.  **MGSE2.OA.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.  **Represent and interpret data.**  **MGSE2.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[[10]](#footnote-10) using information presented in a bar graph. | | ALL |
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1. See Glossary, Table 1. [↑](#footnote-ref-1)
2. See Glossary, Table 1. [↑](#footnote-ref-2)
3. See standard 1.OA.6 for a list of mental strategies. [↑](#footnote-ref-3)
4. See Glossary, Table 1. [↑](#footnote-ref-4)
5. See Glossary, Table 1. [↑](#footnote-ref-5)
6. Explanations may be supported by drawings or objects. [↑](#footnote-ref-6)
7. See Glossary, Table 1. [↑](#footnote-ref-7)
8. Sizes are compared directly or visually, not compared with measuring. [↑](#footnote-ref-8)
9. See Glossary, Table 1. [↑](#footnote-ref-9)
10. See Glossary, Table 1. [↑](#footnote-ref-10)