

Fulton County Schools 2021-2022

GSE Second Grade Curriculum Map					
Unit 1		Unit 2		Unit 3	
<u>Extending Base Ten Understanding</u>		<u>Becoming Fluent with Addition and Subtraction</u>		<u>Understanding Measurement, Length, and Time</u>	
5-6 weeks		6 - 7 weeks		5-6 weeks	
Grade Level Standard	Direct Prerequisite Standard	Grade Level Standard	Direct Prerequisite Standard	Grade Level Standard	Direct Prerequisite Standard
MGSE2.NBT.1	MGSE1.NBT.2	<u>MGSE2.OA.1</u>	MGSE1.NBT.4 MGSE1.NBT.5 MGSE1.NBT.6 MGSE1.OA.1	MGSE2.MD.1	MGSE1.MD.2
MGSE2.NBT.2		<u>MGSE2.OA.2</u>	MGSE1.OA.6	MGSE2.MD.2	
MGSE2.NBT.3		<u>MGSE2.NBT.5</u>	MGSE1.NBT.4* MGSE1.NBT.5* MGSE1.NBT.6*	MGSE2.MD.3	
MGSE2.NBT.4		<u>MGSE2.MD.8</u>		MGSE2.MD.4	
MGSE2.MD.10	MGSE1.MD.4	MGSE2.MD.10		MGSE2.MD.5	
				MGSE2.MD.6	
				<u>MGSE2.MD.7</u>	MGSE1.MD.3
				MGSE2.MD.9	
				MGSE2.MD.10	
<p>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 include the Mathematical Practices and indicate skills to maintain. Prioritized standards in RED Prerequisite standards in BLUE Prerequisite prioritized standards in BOLD BLUE Prerequisite standards already addressed are denoted with * Underlined standards link to STATE IMPLEMENTATION VIDEOS</p>					

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.

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GSE Second Grade Curriculum Map						
Semester 2						
Unit 4		Unit 5		Unit 6		Unit 7
<u>Applying Base Ten Understanding</u>		<u>Understanding Plane and Solid Figures</u>		<u>Developing Multiplication</u>		Show What We Know
5-6 weeks		5-6 weeks		5-6 weeks		
Grade Level Standard	Direct Prerequisite Standard	Grade Level Standard	Direct Prerequisite Standard	Grade Level Standard	Direct Prerequisite Standard	ALL
<u>MGSE2.NBT.6</u>		<u>MGSE2.G.1</u>	<u>MGSE1.G.1</u>	<u>MGSE2.OA.3</u>	<u>MGSE1.OA.7</u>	
<u>MGSE2.NBT.7</u>		<u>MGSE2.G.2</u>		<u>MGSE2.OA.4</u>	<u>MGSE1.OA.7*</u>	
<u>MGSE2.NBT.8</u>		<u>MGSE2.G.3</u>	<u>MGSE1.G.3</u>	<u>MGSE2.MD.10</u>		
<u>MGSE2.NBT.9</u>	<u>MGSE1.OA.3</u> <u>MGSE1.OA.4</u>	<u>MGSE2.MD.10</u>				
<u>MGSE2.MD.8</u>						
<u>MGSE2.MD.10</u>						
<p>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 include the Mathematical Practices and indicate skills to maintain.</p> <p style="text-align: center;"> Prioritized standards in RED Prerequisite standards in BLUE Prerequisite prioritized standards in BOLD BLUE Prerequisite standards already addressed are denoted with * Underlined standards link to STATE IMPLEMENTATION VIDEOS </p>						

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GSE Second Grade

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.

Unit 1	Unit 2	Unit 3
Extending Base Ten Understanding	Becoming Fluent with Addition and Subtraction	Understanding Measurement, Length, and Time
<p>MGSE1.NBT.2. Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases: a. 10 can be thought of as a bundle of ten ones — called a “ten.” b. The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones. c. The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).</p> <p>Understand place value.</p> <p>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:</p> <ol style="list-style-type: none"> a. 100 can be thought of as a bundle of ten tens — called a “hundred.” b. 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). <p>MGSE2.NBT.2 Count within 1000; skip-count by 5s, 10s, and 100s.</p> <p>MGSE2.NBT.3 Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.</p> <p>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.</p> <p>MGSE1.MD.4 Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in</p>	<p>Represent and solve problems involving addition and subtraction.</p> <p>MGSE1.NBT.4 Add within 100, including adding a two-digit number and a one-digit number and adding a two-digit number and a multiple of ten (e.g., $24 + 9$, $13 + 10$, $27 + 40$), using concrete models or drawings and strategies based on place value, properties of operations, and/or relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.</p> <p>MGSE1.NBT.5 Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.</p> <p>MGSE1.NBT.6 Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range of 10-90 (positive or zero differences), 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 and explain the reasoning used. (e.g., $70 - 30$, $30 - 10$, $60 - 60$)</p> <p>MGSE1.OA.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.</p> <p>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</p>	<p>Measure and estimate lengths in standard units.</p> <p>MGSE1.MD.2 Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. (Iteration)</p> <p>MGSE2.MD.1 Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.</p> <p>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. <i>For example, an inch is longer than a centimeter.</i> (Students are not expected to convert between systems of measurement.)</p> <p>MGSE2.MD.3 Estimate lengths using units of inches, feet, centimeters, and meters.</p> <p>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.</p> <p>Relate addition and subtraction to length.</p> <p>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.</p> <p>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.</p>

² See Glossary, Table 1..

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each category, and how many more or less are in one category than in another.

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 problems¹ using information presented in a bar graph.

Add and subtract within 20.

MGSE1.OA.6 Add and subtract within 20.

a. Use strategies such as counting on; making ten (e.g., $8 + 6 = 8 + 2 + 4 = 10 + 4 = 14$); decomposing a number leading to a ten (e.g., $13 - 4 = 13 - 3 - 1 = 10 - 1 = 9$); using the relationship between addition and subtraction (e.g., knowing that $8 + 4 = 12$, one knows $12 - 8 = 4$); and creating equivalent but easier or known sums (e.g., adding $6 + 7$ by creating the known equivalent $6 + 6 + 1 = 12 + 1 = 13$).

b. Fluently add and subtract within 10.

MGSE2.OA.2 Fluently add and subtract within 20 using mental strategies.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 problems⁴ using information presented in a bar graph.

MGSE1.MD.3 Tell and write time in hours and half-hours using analog and digital clocks.

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 problems⁵ using information presented in a bar graph.

¹ See Glossary, Table 1.

³ See standard 1.OA.6 for a list of mental strategies.

⁴ See Glossary, Table 1.

⁵ See Glossary, Table 1.

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Unit 4	Unit 5	Unit 6
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Applying Base Ten Understanding	Understanding Plane and Solid Figures	Developing Multiplication
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<p><u>Use place value understanding and properties of operations to add and subtract.</u></p> <p>MGSE2.NBT.6 Add up to four two-digit numbers using strategies based on place value and properties of operations.</p> <p>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.</p> <p>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.</p> <p>MGSE1.OA.3 Apply properties of operations as strategies to add and subtract.2Examples: If $8 + 3 = 11$ is known, then $3 + 8 = 11$ is also known. (Commutative property of addition.) To add $2 + 6 + 4$, the second two numbers can be added to make a ten, so $2 + 6 + 4 = 2 + 10 = 12$. (Associative property of addition.)</p> <p>MGSE1.OA.4 Understand subtraction as an unknown-addend problem. For example, subtract $10 - 8$ by finding the number that makes 10 when added to 8.</p> <p>MGSE2.NBT.9 Explain why addition and subtraction strategies work, using place value and the properties of operations.⁶</p> <p>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?</p> <p><u>Represent and interpret data.</u></p> <p>MGSE2.MD.10 Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four</p>	<p><u>Reason with shapes and their attributes.</u></p> <p>MGSE1.G.1 Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes.</p> <p>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 Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.</p> <p>MGSE2.G.2 Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.</p> <p>MGSE1.G.3 Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.</p> <p>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.</p> <p><u>Represent and interpret data.</u></p> <p>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 problems⁹ using information presented in a bar graph.</p>	<p><u>Work with equal groups of objects to gain foundations for multiplication.</u></p> <p>MGSE1.OA.7 Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? $6 = 6$, $7 = 8 - 1$, $5 + 2 = 2 + 5$, $4 + 1 = 5 + 2$.</p> <p>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.</p> <p>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.</p> <p><u>Represent and interpret data.</u></p> <p>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 problems¹⁰ using information presented in a bar graph.</p>
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⁶ Explanations may be supported by drawings or objects.

⁸ Sizes are compared directly or visually, not compared with measuring.

⁹ See Glossary, Table 1.

¹⁰ See Glossary, Table 1.

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categories. Solve simple put-together, take-apart, and compare problems ⁷ using information presented in a bar graph.		
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⁷ See Glossary, Table 1.