GRADE 2 MATH

2

SCOPE AND SEQUENCE CHART					
Unit 1	**Unit 2**	**Unit 3**	**Unit 4**	**Unit 5**	**Unit 6**
Extending Base-Ten Understanding	**Becoming Fluent with addition and Subtraction**	**Applying Base-Ten Understanding**	**Understanding and Applying Length Measurement**	**Understanding Plane and Solid Figures**	**Developing Multiplication**
Approximately 6 Weeks	**Approximately 8 Weeks**	**Approximately 6 Weeks**	**Approximately 8 Weeks**	**Approximately 4 Weeks**	**Approximately 2 Weeks**
MGSE2.NBT.1* MGSE2.NBT.2	**MGSE2.OA.1***	**MGSE2.NBT.6***	**MGSE2.MD.1***	**MGSE2.G.1***	**MGSE2.OA.3**
MGSE2.NBT.4* MGSE2.NBT.3	**MGSE2.OA.2***	**MGSE2.NBT.7*** MGSE2.NBT.8	**MGSE2.MD.2*** MGSE2.MD.3	**MGSE2.G.3*** MGSE2.G.2	**MGSE2.OA.4**
	MGSE2.NBT.5* MGSE2.MD.8 MGSE2.MD.10	**MGSE2.NBT.9***	**MGSE2.MD.4***		
			MGSE2.MD.5*		
			MGSE2.MD.6*		

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

***Prioritized Standards: Grade level standards of highest priority have been identified. Pacing has been modified to allow sufficient time for in-depth instruction and practice.**

Supporting Standards: Key concepts and skills, from these grade level standards, will be used to support the Prioritized Standards.

Prerequisite Concepts and Skills: Prioritized concepts and skills, from the previous grade level standards, which are most important for success with the current grade-level content, will be integrated, where they best fit, to address learning loss.

Unit Name	Unit Description	Georgia Standards of Excellence	Unit Duration
Unit 1 **Extending Base-Ten Understanding**	In this unit, students will be able to: ● Understand the value placed on the digits within a three-digit number ● Recognize that a hundred is created from ten groups of ten ● Use skip counting strategies to skip count by 5s, 10s, and 100s within 1,000 ● Represent numbers to 1,000 by using numbers, number names, and expanded form ● Compare two-digit number using >, =, <	**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. **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). **Incorporated Grade-Level Concepts:** ▪ **Skip-count by 5s, 10s, and 100s within 1000. (MGSE2.NBT.2)** **(MGSE2.G.3) Prerequisite Concepts and/or Skills:** • **Group two-digit numbers into groups of tens and ones.** **MGSE2.NBT.4** Compare three-digit numbers based on meaning of hundreds, tens and ones digits, using >, =, and < symbols to record the results of comparisons. **Incorporated Grade-Level Concepts:** • **Read and write numbers to 1000 using base-ten numerals, number names, and expanded form. (MGSE2.NBT.3)**	**Approximately 6 Weeks**

		(MGSE1.NBT.3) Prerequisite Skills: • **Compare two two-digit numbers based on meanings of the tens and ones digits**	
Unit 2 **Becoming Fluent with Addition and Subtraction**	In this unit, students will be able to: ● Cultivate an understanding of how addition and subtraction affect quantities and are related to each other ● Will reinforce the multiple meanings for addition (combine, join, and count on) and subtraction (take away, remove, count back, and compare) ● Further develop their understanding of the relationships between addition and subtraction ● Recognize how the digits 0-9 are used in our place value system to create numbers and manipulate amounts ● Add and subtract within 20 using efficient composing and decomposing number strategies. ● Add and subtract within 100 using efficient strategies based in place value and properties of operation ● Continue to develop their understanding solving problems with money and through graphs	**<u>Represent and solve problems involving addition and subtraction.</u>** **MGES2.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. **(MGSE1.OA.1) Prerequisite Skills:** • **Use addition and subtraction within 20 to solve word problems** **<u>Add and subtract within 20.</u>** **MGES2.OA.2:** Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers. **<u>Use place value understanding and properties of operations to add and subtract.</u>** **MGES2.NBT.5:** Fluently add and subtract within 100 using strategies based on place value, properties of	**Approximately 8 Weeks**

		operations, and/or the relationship between addition and subtraction. **Incorporated Grade-Level Concepts:** • **Solve word problem involving money (MGSE2.MD.8)** • **Solve put-together, take-apart, and compare problems using information presented in a bar graph.** **(MGSE1.NBT.4) Prerequisite Skills:** • **Add two numbers within 100 (a two-digit number and a one-digit number; a two-digit number and a multiple of ten)**	
Unit 3 **Applying Base-Ten Understanding**	In this unit students will be able to: ● Continue to develop their understanding of addition and subtraction within 1000 ● Use a variety of models (base ten blocks- ones, tens, and hundreds only; diagrams; number lines; place value strategies; etc.) to add and subtract within one thousand. ● Become fluent with mentally adding or subtracting 10 or 100 to a given three-digit number. ● Demonstrate fluency with addition and subtraction. ● Understand the relationship between addition and subtraction (inverse operations).	**<u>Use place value understanding and properties of operations to add and subtract.</u>** **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. **Incorporated Grade-Level Concepts:** ▪ **Mentally add 10 or 100 to a given number and subtract 10 or 100 to a given number (MGSE2.NBT.8)**	**Approximately 6 Weeks**

	• Represent three digit numbers with a variety of different models (base ten blocks- ones, tens, and hundreds only; diagrams; number lines; place value strategies; etc.). • Recognize and use place value to manipulate numbers. • Use strategies based on place value and properties of operations to add up to 4 two-digit numbers.	**MGSE2.NBT.9** Explain why addition and subtraction strategies work, using place value and the properties of operations.	
Unit 4 **Understanding and Applying Length Measurement**	In this unit students will be able to: • Know the following customary units for measuring length: inch, foot, yard • Recognize the need for standard units of measure • Use rulers and other measurement tools with the understanding that linear measure involves an iteration of units. • Know the following metric units for measuring length: centimeter and meter • Compare the relationship of one unit of measurement to another, within the same system • Determine the appropriate tool for measuring length; inch ruler and yardstick, centimeter ruler, and meter stick • Check by measuring to determine if estimates are accurate for length	**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. **(MGSE1.MD.2) Prerequisite Skills:** • **Measure length of an object using an unit length** **MGSE2.MD.2** Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen. **Incorporated Grade-Level Concepts:** • **Estimate lengths using units of inches, feet, centimeters, and meters. (MGSE2.MD.3)** **MGSE.2.MD.4** Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.	**Approximately 8 Weeks**

	● Measure lengths of two different objects to determine how much longer is one object is than the other ● Understand the importance and usefulness of reasonable estimations when solving word problems involving lengths ● Connect the whole-number units on rulers, yardsticks, meter sticks and measuring tapes to number lines showing whole-number units starting at 0 ● Use these measuring tools to model different representations for whole-number sums and differences less than or equal to 100 using the numbers 0 to 100.	**<u>Relate addition and subtraction to length.</u>** **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.	
Unit 5 **Understanding Plane and Solid Figures**	In this unit students will cultivate spatial awareness by: ● Further developing understandings of basic geometric figures ● Identify plane figures and solid figures based on geometric properties ● Describe plane figures and solid figures according to geometric properties ● Partition shapes into equal shares by cutting, slicing, or dividing	**<u>Reason with shapes and their attributes.</u>** **MGSE2.G.1** Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes. **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.	**Approximately 4 Weeks**

	• Represent halves, thirds, and fourths using rectangles and circles to create fraction models • Compare fractions created through partitioning same-sized rectangular or circular wholes in different ways • Understand what an array is and how it can be used as a model for repeated addition	**Incorporated Grade-Level Concepts:** • **Partition a rectangle into rows and columns of same-size squares to find the total number of them. (MGSE2.G.2)**	
Unit 6 **Developing Multiplication**	In this unit students will: • Understand and model multiplication as repeated addition and as rectangular arrays. • Determine if a number is odd or even (within twenty).	**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.	**Approximately 2 Weeks**