



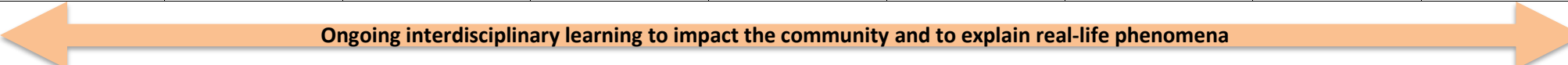
# Georgia's K-12 Mathematics Standards Curriculum Map

***Implementation beginning Fall 2023***

**GRADE 2**

# GRADE 2 MATHEMATICS CURRICULUM MAP

## Georgia's K-12 Mathematics Standards GRADE 2

Semester 1				Semester 2				
Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Unit 9
Using Tables, Graphs and Charts	Building Fluency with Addition and Subtraction	Measuring Lengths and Distances	Extending Place Value Understanding to 1000	Representing Sums and Differences within 1,000	Exploring Geometry and Patterns	Measuring Time and Money	Reasoning with Equal Groups	Culminating Capstone Unit
<a href="#">Interdisciplinary Connection</a>	<a href="#">Interdisciplinary Connection</a>	<a href="#">Interdisciplinary Connection</a>	<a href="#">Interdisciplinary Connection</a>	<a href="#">Interdisciplinary Connection</a>	<a href="#">Interdisciplinary Connection</a>	<a href="#">Interdisciplinary Connection</a>	<a href="#">Interdisciplinary Connection</a>	
<b>2 - 3 weeks</b>	<b>4 - 5 weeks</b>	<b>3 - 4 weeks</b>	<b>4 - 5 weeks</b>	<b>4 - 5 weeks</b>	<b>3 - 4 weeks</b>	<b>2 - 3 weeks</b>	<b>3 - 4 weeks</b>	<b>1 - 2 weeks</b>
2.MDR.5 2.NR.1 2.NR.2 2.PAR.4 2.MP.1-8	2.NR.2 2.NR.1 2.PAR.4 2.MDR.5 2.MP.1-8	2.MDR.5 2.NR.1 2.NR.2 2.PAR.4 2.MDR.5 2.MP.1-8	2.NR.1 2.NR.2 2.PAR.4 2.MDR.5 2.MP.1-8	2.NR.2 2.NR.1 2.PAR.4 2.MDR.5 2.MP.1-8	2.GSR.7 2.PAR.4 2.NR.2 2.MDR.5 2.MP.1-8	2.MDR.6 2.NR.2 2.PAR.4 2.MDR.5 2.MP.1-8	2.NR.3 2.PAR.4 2.NR.2 2.MP.1-8	ALL STANDARDS  2.MP.1-8
 <p><b>Ongoing interdisciplinary learning to impact the community and to explain real-life phenomena</b></p>								
<p>The concepts in each unit are presented based on a logical, mathematical progression. Each unique unit in sequence builds upon the previous unit.</p>								
<p>The <a href="#">Framework for Statistical Reasoning</a>, <a href="#">Mathematical Modeling Framework</a>, and the <a href="#">K-12 Mathematical Practices</a> should be taught throughout the units.</p>								

**Mathematical Practices (2.MP.1- 8) should be evidenced at some point throughout each unit depending on the tasks that are explored. It is important to note that MPs 1, 3 and 6 should support the learning in every lesson.**

**Key for Course Standards:** MP: Mathematical Practices, NR: Numerical Reasoning, PAR: Patterning & Algebraic Reasoning, GSR: Geometric & Spatial Reasoning, MDR: Measurement & Data Reasoning

# GRADE 2

## Year-At-A-Glance

### Semester 1

Pacing Suggestion	Unit	Content Standards	Learning Objectives	
2 - 3 weeks	<b>Unit 1: Using Tables, Graphs and Charts</b> <i>In this unit students will use statistical investigative questions to learn more about their class. Students will have the opportunity to collect, analyze and display data through picture and bar graphs. Throughout this unit, students will extend their understanding of the value of numbers to 1,000 by representing, ordering, and comparing. Students will demonstrate an understanding of counting sequences. Students will solve problems involving addition and subtraction within 1,000 (100) using strategies based on place value, including decomposing a ten, the properties of operations, relationship between addition and subtraction, and part-whole strategies. Students will begin to develop fluency using mental math and strategies.</i>	2.MDR.5 2.NR.1 2.NR.2 2.PAR.4 2.MP.1-8	2.MDR.5.4 2.NR.1.1 2.NR.1.2 2.NR.1.3 2.NR.2.1 2.NR.2.2	2.NR.2.3 2.NR.2.4 2.MDR.5.5 2.PAR.4.1 2.PAR.4.2
4 - 5 weeks	<b>Unit 2: Building Fluency with Addition and Subtraction</b> <i>In this unit, students will solve addition and subtraction problems within 100 using strategies based on place value, including decomposing a ten, the properties of operations, relationship between addition and subtraction, and part-whole strategies. Students will solve real-life addition and subtraction problems including problems involving charts and graphs. Students will continue to develop their understanding of the value of numbers to 1,000 by representing, ordering, and comparing. Students will demonstrate an understanding of counting sequences. Students will continue to develop fluency using mental math and strategies.</i>	2.NR.2 2.NR.1 2.PAR.4 2.MDR.5 2.MP.1-8	2.NR.2.1 2.NR.2.2 2.NR.2.3 2.NR.2.4	2.NR.1.1 2.NR.1.2 2.NR.1.3 2.PAR.4.1 2.MDR.5.4
3 - 4 weeks	<b>Unit 3: Measuring Lengths and Distances</b> <i>In this unit, students will construct measurement instruments. Students will learn about standard units to estimate, measure, and compare length and distances (inches, feet, and yards). Students will use addition and subtraction to solve problems involving measurement. Students will continue to develop their understanding of the value of numbers to 1,000 by representing, ordering, and comparing. Students will demonstrate an understanding of counting sequences. Students will solve problems involving addition and subtraction within 1,000. Students will continue to develop fluency using mental math and strategies.</i>	2.NR.1 2.NR.2 2.PAR.4 2.MDR.5 2.MP.1-8	2.MDR.5.1 2.MDR.5.2 2.MDR.5.3 2.NR.1.1 2.NR.1.2 2.NR.1.3 2.NR.2.1	2.NR.2.2 2.NR.2.3 2.NR.2.4 2.MDR.5.5 2.PAR.4.1 2.PAR.4.2 2.MDR.5.4
4 - 5 weeks	<b>Unit 4: Extending Place Value Understanding to 1,000</b> <i>In this unit, students will extend their understanding of the value of numbers to 1,000 by representing, ordering, and comparing. Students will demonstrate an understanding of counting sequences. Students will solve problems involving addition and subtraction within 1,000 using strategies based on place value, including decomposing a ten, the properties of operations, relationship between addition and subtraction, and part-whole strategies. Students will continue to develop fluency using mental math and strategies.</i>	2.NR.1 2.NR.2 2.PAR.4 2.MDR.5 2.MP.1-8	2.NR.1.1 2.NR.1.2 2.NR.1.3 2.NR.2.1 2.NR.2.2 2.NR.2.3	2.NR.2.4 2.MDR.5.5 2.PAR.4.1 2.PAR.4.2 2.MDR.5.4

Mathematical Practices (2.MP.1- 8) should be evidenced at some point throughout each unit depending on the tasks that are explored. It is important to note that MPs 1, 3 and 6 should support the learning in every lesson.

# GRADE 2

## Year-At-A-Glance

### Semester 2

Pacing Suggestion	Unit Description	Content Standards	Learning Objectives
4 - 5 weeks	<p><b>Unit 5: Representing Sums and Differences within 1,000</b>  <i>In this unit, students will create, locate numbers, and represent whole number sums and differences within a standard unit of measurement on a number line diagram. Students will use these diagrams to illustrate part-whole strategies. Students will continue to develop their understanding of the value of numbers to 1,000 by representing, ordering, and comparing. Students will demonstrate an understanding of counting sequences. Students will apply the understanding of addition to 100 to solve real world problems involving addition and subtraction within 1,000.</i></p>	2.NR.2 2.NR.1 2.PAR.4 2.MDR.5 2.MP.1-8	2.NR.2.1 2.NR.1.2 2.NR.2.2 2.NR.1.3 2.NR.2.3 2.PAR.4.1 2.NR.2.4 2.PAR.4.2 2.MDR.5.5 2.MDR.5.4 2.NR.1.1
3 - 4 weeks	<p><b>Unit 6: Exploring Geometry and Patterns</b>  <i>In this unit, students will reason about attributes (features) of shapes as they describe, compare, and draw them. Students identify lines of symmetry in everyday objects. Students partition circles and rectangles and recognize that equal shares may be different shapes. Students will use shapes to create growing and shrinking patterns and identify and describe these patterns using addition and subtraction. *Students will continue to review and develop their understanding of the value of numbers to 1,000, the counting sequence, and solve real world problems involving addition and subtraction within 1,000.</i></p>	2.GSR.7 2.PAR.4 2.NR.2 2.MDR.5 2.MP.1-8	2.GSR.7.1 2.NR.2.1 2.GSR.7.2 2.PAR.4.1 2.GSR.7.3 2.PAR.4.2 2.GSR.7.4 2.MDR.5.5
2 - 3 weeks	<p><b>Unit 7: Measuring Time and Money</b>  <i>In this unit, students will learn to read analog and digital clocks to the nearest 5 minutes, estimate and measure elapsed time to the hour and half hour. Students will use coins learned in previous grades to determine the value of a combination of coins or bills. Students will use addition and subtraction to solve problems involving time and money. *Students will continue to investigate the value of numbers to 1,000, the counting sequence, and solve real world problems involving addition and subtraction within 1,000.</i></p>	2.MDR.6 2.NR.2 2.PAR.4 2.MDR.5 2.MP.1-8	2.MDR.6.1 2.PAR.4.1 2.MDR.6.2 2.PAR.4.2 2.NR.2.1 2.MDR.5.4 2.NR.2.2 2.MDR.5.5 2.NR.2.3 2.NR.2.4
3 - 4 weeks	<p><b>Unit 8: Reasoning with Equal Groups</b>  <i>In this unit, students will work with equal groups. They will create arrays to solve problems. Students will extend their knowledge of equal groups to determine odd and even. Students will write and solve equations to represent equal groups and arrays with up to 5 rows and 5 columns. Students will also identify, describe, create, and extend numerical patterns in addition and subtraction as related to equal groups and arrays. *Students will continue to review and develop their understanding of the value of numbers to 1,000, the counting sequence, and solve real world problems involving addition and subtraction within 1,000.</i></p>	2.NR.3 2.PAR.4 2.NR.2 2.MP.1-8	2.NR.3.1 2.PAR.4.2 2.NR.3.2 2.NR.2.1 2.PAR.4.1
1 - 2 weeks	<p><b>Unit 9: Culminating Capstone Unit</b>  <b>(applying concepts in real-life contexts in a culminating interdisciplinary unit)</b>  <i>The capstone unit applies content that has already been learned in previous interdisciplinary PBLs and units throughout the school year. The capstone unit is an interdisciplinary unit that allows students to create a presentation, report, or demonstration that could include their models used to answer an overarching driving question. (e.g., Students can present their solution(s), findings, project, or answer to the driving question to a larger audience during the culminating capstone unit.)</i></p>	ALL STANDARDS 2.MP.1-8	ALL ASSOCIATED LEARNING OBJECTIVES

Mathematical Practices (2.MP.1- 8) should be evidenced at some point throughout each unit depending on the tasks that are explored. It is important to note that MPs 1, 3 and 6 should support the learning in every lesson.

# GRADE 2



## Semester 1

### Unit 1: Using Tables, Graphs, and Charts (2 – 3 weeks)

#### Big Ideas: Measurement & Data Reasoning, Numerical Reasoning, and Patterning & Algebraic Reasoning

#### ***Standards Addressed in this Unit:***

***2.MDR.5: Estimate and measure the lengths of objects and distance to solve problems found in real-life using standard units of measurement, including inches, feet, and yards***

***2.NR.1: Using the place value structure, explore the count sequences to represent, read, write, and compare numerical values to 1000 and describe basic place-value relationships and structures.***

***2.NR.2: Apply multiple part-whole strategies, properties of operations and place value understanding to solve real-life, mathematical problems involving addition and subtraction within 1,000. (within 100 for this unit).***

***2.PAR.4: Identify, describe, extend, and create repeating patterns, growing patterns, and shrinking patterns.***

#### ***Suggested Clusters of Concepts (Learning Objectives)***

2.MDR.5.4 Ask questions and answer them based on gathered information, observations, and appropriate graphical displays to solve problems relevant to everyday life.

2.NR.1.1 Explain the value of a three-digit number using hundreds, tens, and ones in a variety of ways.

2.NR.1.2 Count forward and backward by ones from any number within 1000. Count forward by fives from multiples of 5 within 1000. Count forward and backward by 10s and 100s from any number within 1000. Count forward by 25s from 0

2.NR.1.3 Represent, compare, and order whole numbers to 1000 with an emphasis on place value and equality. Use  $>$ ,  $=$ , and  $<$  symbols to record the results of comparisons.

2.NR.2.1 Fluently add and subtract within 20 using a variety of mental, part-whole strategies.

2.NR.2.2 Find 10 more or 10 less than a given three-digit number and find 100 more or 100 less than a given three-digit number.

2.NR.2.3 Solve problems involving the addition and subtraction of two-digit numbers using part-whole strategies

2.NR.2.4 Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.

2.MDR.5.5 Represent whole-number sums and differences within a standard unit of measurement on a number line diagram.

2.PAR.4.1 Identify, describe, and create a numerical pattern resulting from repeating an operation such as addition and subtraction.

2.PAR.4.2 Identify, describe, and create growing patterns and shrinking patterns involving addition and subtraction up to 20.

**Mathematical Practices (2.MP.1- 8) should be evidenced at some point throughout each unit depending on the tasks that are explored. It is important to note that MPs 1, 3 and 6 should support the learning in every lesson.**

# GRADE 2

## Unit 2: Building Fluency with Addition and Subtraction (4 - 5 weeks)

### Big Ideas: Numerical Reasoning, Patterning & Algebraic Reasoning, Measurement & Data Reasoning

#### ***Standards Addressed in this Unit:***

***2.NR.2: Apply multiple part-whole strategies, properties of operations and place value understanding to solve real-life, mathematical problems involving addition and subtraction within 1,000. (within 100 for this unit).***

***2.NR.1: Using the place value structure, explore the count sequences to represent, read, write, and compare numerical values to 1000 and describe basic place-value relationships and structures.***

***2.PAR.4: Identify, describe, extend, and create repeating patterns, growing patterns, and shrinking patterns.***

***2.MDR.5: Estimate and measure the lengths of objects and distance to solve problems found in real-life using standard units of measurement, including inches, feet, and yards.***

#### ***Suggested Clusters of Concepts (Learning Objectives)***

2.NR.2.1 Fluently add and subtract within 20 using a variety of mental, part-whole strategies.

2.NR.2.2 Find 10 more or 10 less than a given three-digit number and find 100 more or 100 less than a given three-digit number.

2.NR.2.3 Solve problems involving the addition and subtraction of two-digit numbers using part-whole strategies

2.NR.2.4 Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.

2.MDR.5.4 Ask questions and answer them based on gathered information, observations, and appropriate graphical displays to solve problems relevant to everyday life.

2.NR.1.1 Explain the value of a three-digit number using hundreds, tens, and ones in a variety of ways.

2.NR.1.2 Count forward and backward by ones from any number within 1000. Count forward by fives from multiples of 5 within 1000. Count forward and backward by 10s and 100s from any number within 1000. Count forward by 25s from 0

2.NR.1.3 Represent, compare, and order whole numbers to 1000 with an emphasis on place value and equality. Use  $>$ ,  $=$ , and  $<$  symbols to record the results of comparisons.

2.PAR.4.1 Identify, describe, and create a numerical pattern resulting from repeating an operation such as addition and subtraction.

**Mathematical Practices (2.MP.1- 8) should be evidenced at some point throughout each unit depending on the tasks that are explored. It is important to note that MPs 1, 3 and 6 should support the learning in every lesson.**

# GRADE 2

## Unit 3: Measuring Lengths and Distances (3 - 4 weeks)

### Big Ideas: Measurement & Data Reasoning and Numerical Reasoning

#### ***Standards Addressed in this Unit:***

***2.MDR.5: Estimate and measure the lengths of objects and distance to solve problems found in real-life using standard units of measurement, including inches, feet, and yards.***

***2.NR.1: Using the place value structure, explore the count sequences to represent, read, write, and compare numerical values to 1000 and describe basic place-value relationships and structures.***

***2.NR.2: Apply multiple part-whole strategies, properties of operations and place value understanding to solve real-life, mathematical problems involving addition and subtraction within 1,000. (within 100 for this unit).***

***2.PAR.4: Identify, describe, extend, and create repeating patterns, growing patterns, and shrinking patterns.***

#### ***Suggested Clusters of Concepts (Learning Objectives)***

2.MDR.5.1 Construct simple measuring instruments using unit models. Compare unit models to rulers.

2.MDR.5.2 Estimate and measure the length of an object or distance to the nearest whole unit using appropriate units and standard measuring tools.

2.MDR.5.3 Measure to determine how much longer one object is than another and express the length difference in terms of a standard-length unit.

2.MDR.5.5 Represent whole-number sums and differences within a standard unit of measurement on a number line diagram.

2.NR.1.1 Explain the value of a three-digit number using hundreds, tens, and ones in a variety of ways.

2.NR.1.2 Count forward and backward by ones from any number within 1000. Count forward by fives from multiples of 5 within 1000. Count forward and backward by 10s and 100s from any number within 1000. Count forward by 25s from 0

2.NR.1.3 Represent, compare, and order whole numbers to 1000 with an emphasis on place value and equality. Use  $>$ ,  $=$ , and  $<$  symbols to record the results of comparisons.

2.NR.2.3 Solve problems involving the addition and subtraction of two-digit and three-digit numbers, and up to four two-digit numbers using part-whole strategies.

2.NR.2.4 Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.

2.PAR.4.1 Identify, describe, and create a numerical pattern resulting from repeating an operation such as addition and subtraction.

2.PAR.4.2 Identify, describe, and create growing patterns and shrinking patterns involving addition and subtraction up to 20.

**Mathematical Practices (2.MP.1- 8) should be evidenced at some point throughout each unit depending on the tasks that are explored. It is important to note that MPs 1, 3 and 6 should support the learning in every lesson.**

# GRADE 2



## Unit 4: Extending Place Value Understanding to 1,000 (4 - 5 Weeks)

### Big Ideas: Numerical Reasoning and Measurement & Data Reasoning

#### ***Standards Addressed in this Unit:***

***2.NR.1: Using the place value structure, explore the count sequences to represent, read, write, and compare numerical values to 1000 and describe basic place-value relationships and structures.***

***2.NR.2: Apply multiple part-whole strategies, properties of operations and place value understanding to solve real-life, mathematical problems involving addition and subtraction within 1,000.***

***2.PAR.4: Identify, describe, extend, and create repeating patterns, growing patterns, and shrinking patterns.***

***2.MDR.5: Estimate and measure the lengths of objects and distance to solve problems found in real-life using standard units of measurement, including inches, feet, and yards.***

#### ***Suggested Clusters of Concepts (Learning Objectives)***

2.NR.1.1 Explain the value of a three-digit number using hundreds, tens, and ones in a variety of ways.

2.NR.1.2 Count forward and backward by ones from any number within 1000. Count forward by fives from multiples of 5 within 1000. Count forward and backward by 10s and 100s from any number within 1000. Count forward by 25s from 0.

2.NR.1.3 Represent, compare, and order whole numbers to 1000 with an emphasis on place value and equality. Use  $>$ ,  $=$ , and  $<$  symbols to record the results of comparisons.

2.NR.2.2 Find 10 more or 10 less than a given three-digit number and find 100 more or 100 less than a given three-digit number.

2.NR.2.3 Solve problems involving the addition and subtraction of two-digit numbers using part-whole strategies.

2.NR.2.4 Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.

2.PAR.4.1 Identify, describe, and create a numerical pattern resulting from repeating an operation such as addition and subtraction.

2.PAR.4.2 Identify, describe, and create growing patterns and shrinking patterns involving addition and subtraction up to 20.

2.MDR.5.5 Represent whole-number sums and differences within a standard unit of measurement on a number line diagram.

**Mathematical Practices (2.MP.1- 8) should be evidenced at some point throughout each unit depending on the tasks that are explored. It is important to note that MPs 1, 3 and 6 should support the learning in every lesson.**



# GRADE 2

## Semester 2

### Unit 5: Representing Sums and Differences within 1,000 (4 - 5 weeks)

#### Big Ideas: Numerical Reasoning and Measurement & Data Reasoning

##### ***Standards Addressed in this Unit:***

***2.NR.1: Using the place value structure, explore the count sequences to represent, read, write, and compare numerical values to 1000 and describe basic place-value relationships and structures.***

***2.NR.2: Apply multiple part-whole strategies, properties of operations and place value understanding to solve real-life, mathematical problems involving addition and subtraction within 1,000.***

***2.PAR.4: Identify, describe, extend, and create repeating patterns, growing patterns, and shrinking patterns.***

***2.MDR.5: Estimate and measure the lengths of objects and distance to solve problems found in real-life using standard units of measurement, including inches, feet, and yards.***

##### ***Suggested Clusters of Concepts (Learning Objectives)***

2.NR.1.1 Explain the value of a three-digit number using hundreds, tens, and ones in a variety of ways.

2.NR.1.2 Count forward and backward by ones from any number within 1000. Count forward by fives from multiples of 5 within 1000. Count forward and backward by 10s and 100s from any number within 1000. Count forward by 25s from 0.

2.NR.1.3 Represent, compare, and order whole numbers to 1000 with an emphasis on place value and equality. Use  $>$ ,  $=$ , and  $<$  symbols to record the results of comparisons.

2.NR.2.1 Fluently add and subtract within 20 using a variety of mental, part-whole strategies.

2.NR.2.2 Find 10 more or 10 less than a given three-digit number and find 100 more or 100 less than a given three-digit number.

2.NR.2.3 Solve problems involving the addition and subtraction of two-digit numbers using part-whole strategies.

2.NR.2.4 Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.

2.PAR.4.1 Identify, describe, and create a numerical pattern resulting from repeating an operation such as addition and subtraction.

2.PAR.4.2 Identify, describe, and create growing patterns and shrinking patterns involving addition and subtraction up to 20.

2.MDR.5.4 Ask questions and answer them based on gathered information, observations, and appropriate graphical displays to solve problems relevant to everyday life.

2.MDR.5.5 Represent whole-number sums and differences within a standard unit of measurement on a number line diagram.

**Mathematical Practices (2.MP.1- 8) should be evidenced at some point throughout each unit depending on the tasks that are explored. It is important to note that MPs 1, 3 and 6 should support the learning in every lesson.**

# GRADE 2



## Unit 6: Exploring Geometry and Patterns (3 - 4 weeks)

### Big Ideas: Geometric & Spatial Reasoning and Patterning & Algebraic Reasoning

#### **Standards Addressed in this Unit:**

**2.GSR.7: Draw and partition shapes and other objects with specific attributes and conduct observations of everyday items and structures to identify how shapes exist in the world.**

**2.NR.2: Apply multiple part-whole strategies, properties of operations and place value understanding to solve real-life, mathematical problems involving addition and subtraction within 1,000.**

**2.PAR.4: Identify, describe, extend, and create repeating patterns, growing patterns, and shrinking patterns.**

**2.MDR.5: Estimate and measure the lengths of objects and distance to solve problems found in real-life using standard units of measurement, including inches, feet, and yards.**

#### **Suggested Clusters of Concepts (Learning Objectives)**

2.GSR.7.1 Describe, compare and sort 2-D shapes including polygons, triangles, quadrilaterals, pentagons, hexagons, and 3-D shapes including rectangular prisms and cones, given a set of attributes.

2.GSR.7.2 Identify at least one line of symmetry in everyday objects to describe each object as a whole.

2.GSR.7.3 Partition circles and rectangles into two, three, or four equal shares. Identify and describe equal-sized parts of the whole using fractional names ("halves," "thirds," "fourths", "half of," "third of," "quarter of," etc.).

2.GSR.7.4 Recognize that equal shares of identical wholes may be different shapes within the same whole.

2.NR.2.1 Fluently add and subtract within 20 using a variety of mental, part-whole strategies.

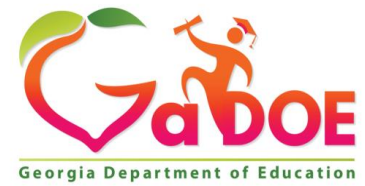
2.PAR.4.1 Identify, describe, and create a numerical pattern resulting from repeating an operation such as addition and subtraction.

2.PAR.4.2 Identify, describe, and create growing patterns and shrinking patterns involving addition and subtraction up to 20.

2.MDR.5.5 Represent whole-number sums and differences within a standard unit of measurement on a number line diagram.

**Mathematical Practices (2.MP.1- 8) should be evidenced at some point throughout each unit depending on the tasks that are explored. It is important to note that MPs 1, 3 and 6 should support the learning in every lesson.**

# GRADE 2



## Unit 7: Measuring Time and Money (2 - 3 weeks)

### Big Idea: Measurement & Data Reasoning

#### ***Standard Addressed in this Unit:***

***2.MDR.6: Solve real-life problems involving time and money.***

***2.NR.2: Apply multiple part-whole strategies, properties of operations and place value understanding to solve real-life, mathematical problems involving addition and subtraction within 1,000.***

***2.PAR.4: Identify, describe, extend, and create repeating patterns, growing patterns, and shrinking patterns.***

***2.MDR.5: Estimate and measure the lengths of objects and distance to solve problems found in real-life using standard units of measurement, including inches, feet, and yards.***

#### ***Suggested Clusters of Concepts (Learning Objectives)***

2.MDR.6.1 Tell and write time from analog and digital clocks to the nearest five minutes, and estimate and measure elapsed time using a timeline, to the hour or half hour on the hour or half hour.

2.MDR.6.2 Find the value of a group of coins and determine combinations of coins that equal a given amount that is less than one hundred cents, and solve problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately.

2.NR.2.1 Fluently add and subtract within 20 using a variety of mental, part-whole strategies.

2.NR.2.2 Find 10 more or 10 less than a given three-digit number and find 100 more or 100 less than a given three-digit number.

2.NR.2.3 Solve problems involving the addition and subtraction of two-digit numbers using part-whole strategies

2.NR.2.4 Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.

2.PAR.4.1 Identify, describe, and create a numerical pattern resulting from repeating an operation such as addition and subtraction.

2.PAR.4.2 Identify, describe, and create growing patterns and shrinking patterns involving addition and subtraction up to 20.

**Mathematical Practices (2.MP.1- 8) should be evidenced at some point throughout each unit depending on the tasks that are explored. It is important to note that MPs 1, 3 and 6 should support the learning in every lesson.**

# GRADE 2



## Unit 8: Reasoning with Equal Groups (3 - 4 weeks)

### Big Ideas: Numerical Reasoning and Patterning & Algebraic Reasoning

#### ***Standards Addressed in this Unit:***

***2.NR.3: Work with equal groups to gain foundations for multiplication through real-life, mathematical problems.***

***2.NR.2: Apply multiple part-whole strategies, properties of operations and place value understanding to solve real-life, mathematical problems involving addition and subtraction within 1,000.***

***2.PAR.4: Identify, describe, extend, and create repeating patterns, growing patterns, and shrinking patterns.***

#### ***Suggested Clusters of Concepts (Learning Objectives)***

2.NR.3.1 Determine whether a group (up to 20) has an odd or even number of objects. Write an equation to express an even number as a sum of two equal addends.

2.NR.3.2 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.

2.NR.2.1 Fluently add and subtract within 20 using a variety of mental, part-whole strategies.

2.PAR.4.1 Identify, describe, and create a numerical pattern resulting from repeating an operation such as addition and subtraction.

2.PAR.4.2 Identify, describe, and create growing patterns and shrinking patterns involving addition and subtraction up to 20.

**Mathematical Practices (2.MP.1- 8) should be evidenced at some point throughout each unit depending on the tasks that are explored. It is important to note that MPs 1, 3 and 6 should support the learning in every lesson.**

# GRADE 2

## Unit 9: Culminating Capstone Unit (1 - 2 weeks) (applying concepts in real-life contexts in a culminating interdisciplinary unit)

### ***ALL Standards Addressed in this Unit***

***The capstone unit applies content that has already been learned in previous interdisciplinary PBLs and units throughout the school year. The capstone unit is an interdisciplinary unit that allows students to create a presentation, report, or demonstration that could include their models used to answer an overarching driving question. (e.g., Students can present their solution(s), findings, project, or answer to the driving question to a larger audience during the culminating capstone unit.)***

Mathematical Practices (2.MP.1- 8) should be evidenced at some point throughout each unit depending on the tasks that are explored. It is important to note that MPs 1, 3 and 6 should support the learning in every lesson.