



Marietta City Schools
District Unit Planner

Second Grade

Unit Name	Extending Place Value Understanding to 1,000	Unit duration (Days)	6 weeks
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[GA K-12 Standards](#)

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.

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.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: 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. **Teacher Note: 2nd grade should only be adding and subtracting tens and hundreds to 3 digit numbers and not any 3 digit with any 3 digit****

- **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: Identify, describe, extend, and create repeating patterns, growing patterns, and shrinking patterns.

- **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: 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.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.

2.MP. 1-8 Display perseverance and patience in problem-solving. Demonstrate skills and strategies needed to succeed in mathematics, including critical thinking, reasoning, and effective collaboration and expression. Seek help and apply feedback. Set and monitor goals.

- **2.MP.1** Make sense of problems and persevere in solving them.
- **2.MP.2** Reason abstractly and quantitatively.
- **2.MP.3** Construct viable arguments and critique the reasoning of others.
- **2.MP.4** Model with mathematics.
- **2.MP.5** Use appropriate tools strategically.
- **2.MP.6** Attend to precision.
- **2.MP.7** Look for and make use of structure.
- **2.MP.8** Look for and express regularity in repeated reasoning.

The [Framework for Statistical Reasoning](#) and the [Mathematical Modeling Framework](#) should be taught throughout the units. The [K-12 Mathematical Practices](#) 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.

Essential Questions/I Can Statements

- I can read, write, and identify the place value of whole numbers up to 1,000.
- I can compare 3-digit numbers with the symbols, >, =, and <.
- I can compose 3-digit numbers in different ways.
- I can skip count forwards and backwards by 10's and 100's within 1,000.
- I can use patterns to locate numbers on a 1,000 chart

Tier II Vocabulary Words- High Frequency Multiple Meaning	Tier III Vocabulary Words- Subject/ Content Related Words
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Addition, subtraction, hundreds, ones, tens,	Compose, decompose, decomposing, comparing, greater than, less than K-12 Mathematics Glossary
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Assessments

Formative Assessment(s):

- [MCS K-5 Activity & Assessment Collection](#)
- [Unit 4 Assessment](#)

It is the responsibility of each schools' grade level PLC to identify appropriate instructional lessons and resources, based on data and student needs, using the suggested pacing duration. The following learning tasks have been vetted to align to the standards included in this unit. The GA Dept. of Education strongly recommends that any

additional tasks, resources, and/or assessments used for instruction should be vetted using the [Quality Assurance Rubric](#), to ensure alignment to the state standards.

Objective or Content	Learning Experiences		Differentiation Considerations
<p>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.</p>	<p style="text-align: center;"><u>GA DOE Learning Plans</u></p> <p><u>Counting Collections Revisited (2-3 Days)</u> <i>In this learning plan, students will engage in counting collections which is a structured opportunity for children to count a collection of objects. After students count the objects in their collection, they record how they counted</i></p> <ul style="list-style-type: none"> ● Teacher Guidance ● Student Materials <p><u>Straws! Straws! Straws! (2-3 Days)</u> <i>In this learning plan, students will use base-10 knowledge to develop strategies to count large quantities more efficiently.</i></p> <ul style="list-style-type: none"> ● Teacher Guidance ● Student Materials <p><u>Base 10 Pictures (3-4 Days)</u> <i>In this learning plan, students will work together to build a deeper understanding of our base ten system and composing numbers in different ways.</i></p> <ul style="list-style-type: none"> ● Teacher Guidance ● Student Materials <p><u>What’s My Number (1-2 Days)</u> <i>In this learning plan, the students will use place value understanding to compose and decompose numbers within 1,000 in different ways.</i></p> <ul style="list-style-type: none"> ● Teacher Guidance ● Student Materials <p><u>Numbers in Different Forms (2-3 Days)</u> <i>In this learning plan, students will build and represent numbers using base-ten models, expanded form, word form, and number lines.</i></p> <ul style="list-style-type: none"> ● Teacher Guidance 	<p style="text-align: center;"><u>MCS Curriculum Resources</u></p> <p><u>MIP Module 4: Understanding Place Value</u> <i>Key ideas focused on in this unit include understanding how to read and write 3-digit numbers, decomposing numbers in different ways based on place value, mentally adding and subtracting 10 and 100 to and from 3-digit numbers.</i></p> <ul style="list-style-type: none"> ● The Flower Shop Problem p. 90-91 ● Counting to 1,000 Using Tens and Hundreds p. 92-93 ● Pencils in Boxes p. 94-95 ● Adding and Subtracting 10 and 100 p. 95 ● Counting up by Hundreds, Tens and Ones p. 95-97 ● Representing Numbers in Different Ways p. 103-105 ● Decomposing in Different Ways p. 105-108 ● Introducing Expanded Form p.108-111 <p><u>SAVVAS enVision Topic 9: Numbers to 1,000</u></p> <ul style="list-style-type: none"> ● Lesson 9-8: Compare Numbers Using Place Value ● Lesson 9-9: Compare Numbers on the Number Line <p><u>MIP Module 5: Comparing Two 3-Digit Numbers</u> <i>The key ideas focused on in this module includes comparing 3-digit numbers using a variety of strategies like number lines, base-ten models, or benchmarks, discovering a rule to compare 3-digit numbers based on the value of the digits and comparing more than two numbers (ordering numbers).</i></p> <ul style="list-style-type: none"> ● Comparing 3-Digit Numbers Using a Number Line p.117-120 	<p>Outdoor Counting 0-100-Fowards and Backwards Count forwards and backwards number word sequence in the range 0 –100, starting and ending with any number</p>

	<ul style="list-style-type: none"> • Student Materials 		
<p>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.</p>	<p><u>Shake, Rattle, and Roll (2-3 Days)</u> <i>In this learning plan, students will build and represent numbers using base-ten models, expanded form, word form, and number lines.</i></p> <ul style="list-style-type: none"> • Teacher Guidance • Student Materials <p><u>Capturing the Caterpillar (2-3 Days)</u> <i>In this learning plan, students will use place value understanding to compose and decompose numbers in different ways.</i></p> <ul style="list-style-type: none"> • Teacher Guidance • Student Materials 		<p>Number Line Flips-Before and After Number order: What comes before and after a given number in the range 0 – 100</p> <p>Visualizing/Imaging Many Hands Solving subtraction problems from 20 by counting all the objects in their head</p>
<p>2.PAR.4 Identify, describe, extend, and create repeating patterns, growing patterns, and shrinking patterns.</p>	<p><u>Comparing Numbers (2-3 Days)</u> <i>In this learning plan, students will reinforce place value understanding as well as strategies for comparing 3-digit numbers with arrow cards and number lines.</i></p> <ul style="list-style-type: none"> • Teacher Guidance • Student Materials 	<p><u>SAVVAS enVision Topic 9: Numbers to 1,000</u></p> <ul style="list-style-type: none"> • Lesson 9-6: Place-Value Patterns with Numbers • Lesson 9-7: Skip Count by 5s, 10s and 100s to 1,000 • Lesson 9-10: Looking For and Use Structure 	

Content Resources

MCS Links:

- [MCS 2nd Grade Math Curriculum Map](#)
- [MCS Math Instructional Framework](#)

GA DOE Links:

Access all GADOE Curriculum Resources at the following site: [GaDOE Inspire](#).

Additional Resources:

- Base Ten Blocks
- Place Value Mats
- Number Lines

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