
Grade 2 | Georgia's K–12 Mathematics Standards Correlation to *Eureka Math*[®]

About *Eureka Math*

Created by Great Minds[®], a mission-driven Public Benefit Corporation, *Eureka Math*[®] helps teachers deliver unparalleled math instruction that provides students with a deep understanding and fluency in math. Crafted by teachers and math scholars, the curriculum carefully sequences the mathematical progressions to maximize coherence from Prekindergarten through Precalculus—a principle tested and proven to be essential in students' mastery of math.

Teachers and students using *Eureka Math* find the trademark “Aha!” moments in *Eureka Math* to be a source of joy and inspiration, lesson after lesson, year after year.

Aligned

Great Minds offers detailed analyses that demonstrate how each grade of *Eureka Math* aligns with specific state standards. Access these free alignment studies at greatminds.org/state-studies.

Data

Schools and districts nationwide are experiencing student growth and impressive test scores after using *Eureka Math*. See their stories and data at greatminds.org/data.

Full Suite of Resources

Great Minds offers the *Eureka Math* curriculum as PDF downloads for free, noncommercial use. Access the free PDFs at greatminds.org/math/curriculum.

The teacher-writers who created the curriculum have also developed essential resources, available only from Great Minds, including the following:

- Printed material in English and Spanish
- Digital resources
- Professional development
- Classroom tools and manipulatives
- Teacher support materials
- Parent resources

Standards for Mathematical Practice	Aligned Components of <i>Eureka Math</i>
<p>MP.1 Make sense of problems and persevere in solving them.</p>	<p>Lessons in every module engage students in mathematical practices. These are designated in the Module Overview and labeled in lessons. For example:</p>
<p>MP.2 Reason abstractly and quantitatively.</p>	<p>A STORY OF UNITS Lesson 18 2•5</p>
<p>MP.3 Construct viable arguments and critique the reasoning of others.</p>	<p>T: (Write 2 above the arrow, then 280.) T: How many more do we need now to get to the next hundred? (Record student responses.) S: 20. → 2 tens. T: How many more do we need to get to our whole? S: 100.</p>
<p>MP.4 Model with mathematics.</p>	<p>T: We wrote 2, then 20, then 100. Put them altogether, and what do we get? S: 122. T: So, $400 - 278$ is ...? S: 122.</p>
<p>MP.5 Use appropriate tools strategically.</p>	<p>Problem 3: 605 – 498</p>
<p>MP.6 Attend to precision.</p>	<p>T: Now, let's subtract from a number with a zero in the tens place. Which strategies could we use to solve this problem? S: We could use the arrow way to solve it with addition because it's easy to make 500 and then get to 605. → We could take 6 off both numbers to make $599 - 492$, which means we don't have to do any renaming. → We could just use vertical form.</p>
<p>MP.7 Look for and make use of structure.</p>	<p>Take students through the process of solving the problem by relating the chip model to vertical form, renaming 605 as 5 hundreds, 9 tens, 15 ones in one step. When finished, engage students in a discussion about which methods they prefer.</p>
<p>MP.8 Look for and express regularity in repeated reasoning.</p>	<p>Instruct students to work in pairs through the following problems, discussing which strategy they think would work best for each problem: $500 - 257$, $702 - 195$, and $600 - 314$. As students demonstrate proficiency renaming in one step, instruct them to work on the Problem Set.</p>

NOTES ON MULTIPLE MEANS OF REPRESENTATION:

There is no right answer as to which strategy is the best or most efficient for a given problem type. Different students may find certain strategies easier than others. Allow for creativity in modeling, expressing, and critiquing different solution strategies; however, acknowledge that some students may feel most comfortable and capable using a particular method.

Mathematical Modeling Framework	Aligned Components of <i>Eureka Math</i>
MF.1 Explore and describe real-life, mathematical situations or problems.	Lessons in every module engage students in mathematical modeling.
MF.2 Gather information, make assumptions, and define variables related to the problem.	
MF.3 Create a model and arrive at a solution to explain the problem presented.	
MF.4 Analyze and revise models, as necessary.	
MF.5 Evaluate the model and interpret solutions generated from other models. Draw and validate conclusions.	

Framework for Statistical Reasoning	Aligned Components of <i>Eureka Math</i>
<p>SR</p> <p>Create statistical investigative questions that can be answered using data. Collect, analyze, and interpret categorical data presented as picture graphs and bar graphs (with single-unit scales) with up to four categories from real situations to answer questions.</p>	<p>Lessons in Module 7 engage students in statistical reasoning.</p> <p><i>Supplemental material is necessary to fully address the Framework for Statistical Reasoning.</i></p>
<p>SR.1</p> <p>Ask: Create a statistical investigative question that can be answered by gathering, representing, and interpreting data.</p>	
<p>SR.2</p> <p>Collect: Determine strategies for collecting and organizing data to answer a statistical investigative question.</p>	
<p>SR.3</p> <p>Analyze: Create a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Analyze the information by asking and answering questions about the data.</p>	
<p>SR.4</p> <p>Interpret: Interpret categorical data to answer the statistical investigative question created.</p>	

Numerical Reasoning—counting within 1,000, place value, addition and subtraction, fluency to 20, developing multiplication through arrays

2.NR.1 Using the place value structure, explore the count sequences to represent, read, write, and compare numerical values to 1,000 and describe basic place-value relationships and structures.

Georgia’s K–12 Mathematics Standards	Aligned Components of <i>Eureka Math</i>
<p>2.NR.1.1</p> <p>Explain the value of a three-digit number using hundreds, tens, and ones in a variety of ways.</p>	<p>G2 M3 Topic A: Forming Base Ten Units of Ten, a Hundred, and a Thousand</p> <p>G2 M3 Lesson 4: Count up to 1,000 on the place value chart.</p> <p>G2 M3 Lesson 5: Write base ten three-digit numbers in unit form; show the value of each digit.</p> <p>G2 M3 Lesson 7: Write, read, and relate base ten numbers in all forms.</p> <p>G2 M3 Topic D: Modeling Base Ten Numbers Within 1,000 with Money</p> <p>G2 M3 Topic E: Modeling Numbers Within 1,000 with Place Value Disks</p> <p>G2 M3 Topic G: Finding 1, 10, and 100 More or Less Than a Number</p>
<p>2.NR.1.2</p> <p>Count forward and backward by ones from any number within 1,000. Count forward by fives from multiples of 5 within 1,000. Count forward and backward by 10s and 100s from any number within 1,000. Count forward by 25s from 0.</p>	<p>G2 M3 Topic B: Understanding Place Value Units of One, Ten, and a Hundred</p> <p>G2 M3 Lesson 4: Count up to 1,000 on the place value chart.</p> <p>G2 M3 Topic D: Modeling Base Ten Numbers Within 1,000 with Money</p> <p>G2 M3 Lesson 12: Change 10 ones for 1 ten, 10 tens for 1 hundred, and 10 hundreds for 1 thousand.</p> <p>G2 M3 Lesson 15: Explore a situation with more than 9 groups of ten.</p> <p>G2 M3 Topic G: Finding 1, 10, and 100 More or Less Than a Number</p>

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<p>2.NR.1.3</p> <p>Represent, compare, and order whole numbers to 1,000 with an emphasis on place value and equality. Use $>$, $=$, and $<$ symbols to record the results of comparisons.</p>	<p>G2 M3 Lesson 5: Write base ten three-digit numbers in unit form; show the value of each digit.</p> <p>G2 M3 Lesson 6: Write base ten numbers in expanded form.</p> <p>G2 M3 Lesson 7: Write, read, and relate base ten numbers in all forms.</p> <p>G2 M3 Lesson 11: Count the total value of ones, tens, and hundreds with place value disks.</p> <p>G2 M3 Lesson 13: Read and write numbers within 1,000 after modeling with place value disks.</p> <p>G2 M3 Lesson 14: Model numbers with more than 9 ones or 9 tens; write in expanded, unit, standard, and word forms.</p> <p>G2 M3 Lesson 15: Explore a situation with more than 9 groups of ten.</p> <p>G2 M3 Topic F: Comparing Two Three-Digit Numbers</p>
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Numerical Reasoning—counting within 1,000, place value, addition and subtraction, fluency to 20, developing multiplication through arrays

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.

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<p>2.NR.2.1</p> <p>Fluently add and subtract within 20 using a variety of mental, part-whole strategies.</p>	<p>G2 M1 Topic A: Foundations for Fluency with Sums and Differences Within 100</p> <p>G2 M1 Lesson 3: Add and subtract like units.</p> <p>G2 M1 Lesson 4: Make a ten to add within 20.</p> <p>G2 M1 Lesson 5: Make a ten to add within 100.</p>
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<p>2.NR.2.2</p> <p>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.</p>	<p>G2 M3 Lesson 19: Model and use language to tell about 1 more and 1 less, 10 more and 10 less, and 100 more and 100 less.</p> <p>G2 M3 Lesson 21: Complete a pattern counting up and down.</p> <p>G2 M4 Lesson 1: Relate 1 more, 1 less, 10 more, and 10 less to addition and subtraction of 1 and 10.</p> <p>G2 M4 Lesson 2: Add and subtract multiples of 10 including counting on to subtract.</p> <p>G2 M4 Lesson 3: Add and subtract multiples of 10 and some ones within 100.</p> <p>G2 M4 Lesson 4: Add and subtract multiples of 10 and some ones within 100.</p> <p>G2 M4 Lesson 17: Use mental strategies to relate compositions of 10 tens as 1 hundred to 10 ones as 1 ten.</p> <p>G2 M5 Lesson 1: Relate 10 more, 10 less, 100 more, and 100 less to addition and subtraction of 10 and 100.</p> <p>G2 M5 Lesson 2: Add and subtract multiples of 100, including counting on to subtract.</p> <p>G2 M5 Lesson 3: Add multiples of 100 and some tens within 1,000.</p> <p>G2 M5 Lesson 4: Subtract multiples of 100 and some tens within 1,000.</p> <p>G2 M5 Lesson 5: Use the associative property to make a hundred in one addend.</p>
<p>2.NR.2.3</p> <p>Solve problems involving the addition and subtraction of two-digit numbers using part-whole strategies.</p>	<p>G2 M4 Lesson 5: Solve one- and two-step word problems within 100 using strategies based on place value.</p> <p>G2 M4 Lesson 16: Solve one- and two-step word problems within 100 using strategies based on place value.</p> <p>G2 M4 Lesson 31: Solve two-step word problems within 100.</p>
<p>2.NR.2.4</p> <p>Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.</p>	<p>G2 M1 Lesson 6: Subtract single-digit numbers from multiples of 10 within 100.</p> <p>G2 M1 Lesson 7: Take from ten within 20.</p> <p>G2 M1 Lesson 8: Take from ten within 100.</p> <p>G2 M4 Topic A: Sums and Differences Within 100</p> <p>G2 M7 Topic B: Problem Solving with Coins and Bills</p>

Numerical Reasoning—counting within 1,000, place value, addition and subtraction, fluency to 20, developing multiplication through arrays

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

Georgia’s K–12 Mathematics Standards	Aligned Components of <i>Eureka Math</i>
<p>2.NR.3.1</p> <p>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.</p>	<p>G2 M6 Topic D: The Meaning of Even and Odd Numbers</p>
<p>2.NR.3.2</p> <p>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>G2 M6 Topic A: Formation of Equal Groups</p> <p>G2 M6 Topic B: Arrays and Equal Groups</p> <p>G2 M6 Lesson 10: Use square tiles to compose a rectangle, and relate to the array model.</p> <p>G2 M6 Lesson 11: Use square tiles to compose a rectangle, and relate to the array model.</p> <p>G2 M6 Lesson 13: Use square tiles to decompose a rectangle.</p> <p>G2 M6 Lesson 15: Use math drawings to partition a rectangle with square tiles, and relate to repeated addition.</p>

Patterning & Algebraic Reasoning—patterns up to 20 and addition and subtraction within 1,000

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

Georgia’s K–12 Mathematics Standards	Aligned Components of <i>Eureka Math</i>
<p>2.PAR.4.1</p> <p>Identify, describe, and create a numerical pattern resulting from repeating an operation such as addition and subtraction.</p>	<p><i>Supplemental material is necessary to address this standard.</i></p>

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<p>2.PAR.4.2</p> <p>Identify, describe, and create growing patterns and shrinking patterns involving addition and subtraction up to 20.</p>	<p><i>Supplemental material is necessary to address this standard.</i></p>
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Measurement & Data Reasoning—length, distance, time, and money

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.

**Georgia’s K–12
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<p>2.MDR.5.1</p> <p>Construct simple measuring instruments using unit models. Compare unit models to rulers.</p>	<p>G2 M7 Lesson 15: Apply concepts to create inch rulers; measure lengths using inch rulers.</p> <p><i>Supplemental material is necessary to address this standard.</i></p>
<p>2.MDR.5.2</p> <p>Estimate and measure the length of an object or distance to the nearest whole unit using appropriate units and standard measuring tools.</p>	<p>G2 M2 Topic A: Understand Concepts About the Ruler</p> <p>G2 M2 Topic B: Measure and Estimate Length Using Different Measurement Tools</p> <p>G2 M2 Lesson 6: Measure and compare lengths using centimeters and meters.</p> <p>G2 M7 Topic C: Creating an Inch Ruler</p> <p>G2 M7 Lesson 16: Measure various objects using inch rulers and yardsticks.</p> <p>G2 M7 Lesson 17: Develop estimation strategies by applying prior knowledge of length and using mental benchmarks.</p> <p>G2 M7 Lesson 19: Measure to compare the differences in length using inches, feet, and yards.</p>

<p style="text-align: center;">Georgia’s K–12 Mathematics Standards</p>	<p style="text-align: center;">Aligned Components of <i>Eureka Math</i></p>
<p>2.MDR.5.3</p> <p>Measure to determine how much longer one object is than another and express the length difference in terms of a standard-length unit.</p>	<p>G2 M2 Lesson 6: Measure and compare lengths using centimeters and meters.</p> <p>G2 M2 Lesson 9: Measure lengths of string using measurement tools, and use tape diagrams to represent and compare the lengths.</p> <p>G2 M7 Lesson 19: Measure to compare the differences in length using inches, feet, and yards.</p>
<p>2.MDR.5.4</p> <p>Ask questions and answer them based on gathered information, observations, and appropriate graphical displays to solve problems relevant to everyday life.</p>	<p>G2 M7 Topic A: Problem Solving with Categorical Data</p> <p>G2 M7 Topic F: Displaying Measurement Data</p>
<p>2.MDR.5.5</p> <p>Represent whole-number sums and differences within a standard unit of measurement on a number line diagram.</p>	<p>G2 M2 Lesson 8: Solve addition and subtraction word problems using the ruler as a number line.</p> <p>G2 M7 Lesson 21: Identify unknown numbers on a number line diagram by using the distance between numbers and reference points.</p> <p>G2 M7 Lesson 22: Represent two-digit sums and differences involving length by using the ruler as a number line.</p> <p>G2 M7 Lesson 24: Draw a line plot to represent the measurement data; relate the measurement scale to the number line.</p>

Measurement & Data Reasoning—length, distance, time, and money

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

Georgia’s K–12 Mathematics Standards	Aligned Components of <i>Eureka Math</i>
<p>2.MDR.6.1</p> <p>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.</p>	<p>G2 M8 Topic D: Application of Fractions to Tell Time</p>
<p>2.MDR.6.2</p> <p>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.</p>	<p>G2 M7 Topic B: Problem Solving with Coins and Bills</p>

Geometric & Spatial Reasoning—sorting shapes, lines of symmetry, partitioning circles and rectangles

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.

Georgia’s K–12 Mathematics Standards	Aligned Components of <i>Eureka Math</i>
<p>2.GSR.7.1</p> <p>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.</p>	<p>G2 M8 Topic A: Attributes of Geometric Shapes</p> <p>G2 M8 Lesson 6: Combine shapes to create a composite shape; create a new shape from composite shapes.</p>
<p>2.GSR.7.2</p> <p>Identify at least one line of symmetry in everyday objects to describe each object as a whole.</p>	<p><i>Supplemental material is necessary to address this standard.</i></p>
<p>2.GSR.7.3</p> <p>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.).</p>	<p>G2 M8 Topic B: Composite Shapes and Fraction Concepts</p> <p>G2 M8 Topic C: Halves, Thirds, and Fourths of Circles and Rectangles</p> <p>G2 M8 Lesson 13: Construct a paper clock by partitioning a circle into halves and quarters, and tell time to the half hour or quarter hour.</p>
<p>2.GSR.7.4</p> <p>Recognize that equal shares of identical wholes may be different shapes within the same whole.</p>	<p>G2 M8 Topic B: Composite Shapes and Fraction Concepts</p> <p>G2 M8 Topic C: Halves, Thirds, and Fourths of Circles and Rectangles</p> <p>G2 M8 Lesson 13: Construct a paper clock by partitioning a circle into halves and quarters, and tell time to the half hour or quarter hour.</p>