About Eureka Math

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

Mathematical Process Standards	Aligned Components of Eur	reka Math
MPS.PS.1 Make sense of problems and persevere in solving them strategically.	Lessons in every module engage students in m These are designated in the Module Overview For example:	nathematical processes. and labeled in lessons.
MPS.RC.1 Explain ideas using precise and contextually appropriate mathematical language, tools, and models.	 A STORY OF UNITS T: (Write 2 above the arrow, then 280.) T: How many more do we need now to get to the next hundred? S: 20. → 2 tens. T: How many more do we need to get to our whole? 	Lesson 18 2•5 ? (Record student responses.)
MPS.C.1 Demonstrate a deep and flexible conceptual understanding of mathematical ideas, operations, and relationships while making real-world connections.	 How many more do we need to get to our whole? S: 100. 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. Problem 3: 605 – 498 T: Now, let's subtract from a number with a zero in the tens place. Which strategies could we 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. A 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 just use vertical form. 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. 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.	at do we get? e. Which strategies could we use to
MPS.AJ.1 Use critical thinking skills to reason both abstractly and quantitatively. MPS.SP.1 Identify and apply regularity in repeated reasoning to make generalizations.		NOTES ON MULTIPLE MEANS DREPRESENTATION: There is no right answer as to which strategy is the best or most efficient for a given problem type. Different 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.

Data, Probability, and Statistical Reasoning

2.DPSR.1 Create and answer survey questions, collect and analyze data, and communicate through multiple representations.

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of Eureka Math	
2.DPSR.1.1	G2 M7 Topic A: Problem Solving with Categorical Data	
Create a survey question and collect data with up to four categories. Create tally charts, picture graphs, dot plots, and bar graphs with a single-unit scale to read the graph, answer questions, and draw conclusions. Limit to one-step add-to, take-from, part-part-whole, and comparison questions.	G2 M7 Topic F: Displaying Measurement Data	

Measurement, Geometry, and Spatial Reasoning

2.MGSR.1 Describe, estimate, measure, and compare objects in real-world situations using units of length, weight, currency, and time.

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of Eureka Math
2.MGSR.1.1	G2 M7 Topic C: Creating an Inch Ruler
Select and use appropriate tools to estimate and measure length of an object or distance to the nearest customary unit. Limit to inches, feet, and yards.	 G2 M7 Lesson 16: Measure various objects using inch rulers and yardsticks. G2 M7 Lesson 17: Develop estimation strategies by applying prior knowledge of length and using mental benchmarks. G2 M7 Lesson 19: Measure to compare the differences in lengths using inches, feet, and yards.

South Carolina College- and Career-Ready Mathematics Standards

Aligned Components of Eureka Math

2.MGSR.1.2 Use analog and digital clocks to tell	G2 M8 Topic D: Application of Fractions to Tell Time
identifying AM and PM.	
2.MGSR.1.3	G2 M7 Topic B: Problem Solving with Coins and Bills
Determine the value of mixed sets of coins or bills in mathematical and real-world situations and record the value using a ¢ or \$ symbol. Limit to pennies, nickels, dimes, and quarters up to a dollar; one-dollar bills, five-dollar bills, ten-dollar bills, and twenty-dollar bills up to \$100, and add-to or take-from problem types.	

Measurement, Geometry, and Spatial Reasoning

South Carolina

2.MGSR.2 Analyze, describe, and manipulate shapes to make sense of their relationships in mathematical and real-world situations.

College- and Career-Ready Mathematics Standards	Aligned Components of Eureka Math
2.MGSR.2.1	G1 M5 Topic B: Part-Whole Relationships Within Composite Shapes
Identify and describe a given shape in everyday situations to include two-dimensional shapes and three-dimensional shapes. Limit to triangle, quadrilateral, pentagon, hexagon, octagon, circle, cone, cube, cylinder, rectangular prism, square pyramid, and sphere.	G2 M8 Topic A: Attributes of Geometric Shapes
	G2 M8 Lesson 6: Combine shapes to create a composite shape; create a new shape from composite shapes.
	Supplemental material is necessary to address octagon and square pyramid.
2.MGSR.2.2	G2 M8 Lesson 2: Build, identify, and analyze two-dimensional shapes with specified attributes.
Classify shapes as polygons or non-polygons and defend that determination based on their attributes.	Supplemental material is necessary to fully address this standard.
2.MGSR.2.3	G2 M8 Lesson 2: Build, identify, and analyze two-dimensional shapes with specified attributes.
Classify two-dimensional shapes as triangles or quadrilaterals and justify each classification.	G2 M8 Lesson 3: Use attributes to draw different polygons including triangles, quadrilaterals, pentagons, and hexagons.

Numerical Reasoning

2.NR.1 Represent multi-digit numbers in a variety of ways to build place value understanding.

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of Eureka Math
2.NR.1.1	G2 M3 Lesson 5: Write base ten three-digit numbers in unit form; show the value of each digit.
Read, write, and represent numbers up to 999 using concrete models, drawings, standard form, base ten language, and equations in expanded form.	G2 M3 Lesson 6: Write base ten numbers in expanded form.
	G2 M3 Lesson 7: Write, read, and relate base ten numbers in all forms.
	G2 M3 Lesson 11: Count the total value of ones, tens, and hundreds with place value disks.
	G2 M3 Lesson 13: Read and write numbers within 1,000 after modeling with place value disks.
	G2 M3 Lesson 14: Model numbers with more than 9 ones or 9 tens; write in expanded, unit, standard, and word forms.
	G2 M3 Lesson 15: Explore a situation with more than 9 groups of ten.
	G2 M3 Topic F: Comparing Two Three-Digit Numbers
2.NR.1.2	G2 M3 Topic A: Forming Base Ten Units of Ten, a Hundred, and a Thousand
Represent and explain that whole	G2 M3 Lesson 4: Count up to 1,000 on the place value chart.
numbers 1 through 999 are organized into groups of hundreds, tens, and ones, and a digit has a different value depending on its placement.	G2 M3 Lesson 5: Write base ten three-digit numbers in unit form; show the value of each digit.
	G2 M3 Lesson 7: Write, read, and relate base ten numbers in all forms.
	G2 M3 Topic D: Modeling Base Ten Numbers Within 1,000 with Money
	G2 M3 Topic E: Modeling Numbers Within 1,000 with Place Value Disks
	G2 M3 Topic G: Finding 1, 10, and 100 More or Less Than a Number

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of Eureka Math
2.NR.1.3	G2 M3 Lesson 10: Explore $\$1,000$. How many $\$10$ bills can we change for a thousand dollar bill?
Compose and decompose whole numbers from 1 through 999 in more than one way using hundreds, tens, and ones. Explain and demonstrate each composition or decomposition with the	G2 M3 Lesson 14: Model numbers with more than 9 ones or 9 tens; write in expanded, unit, standard, and word forms. Supplemental material is necessary to fully address this standard.
use of concrete models, drawings, and equations.	
2.NR.1.4	G2 M3 Topic G: Finding 1, 10, and 100 More or Less Than a Number
Apply place value reasoning to identify the number that is 10 more, 10 less, 100 more, and 100 less than a given three-digit number through 999.	G2 M4 Lesson 1: Relate 1 more, 1 less, 10 more, and 10 less to addition and subtraction of 1 and 10.
	G2 M5 Lesson 1: Relate 10 more, 10 less, 100 more, and 100 less to addition and subtraction of 10 and 100.

Numerical Reasoning

2.NR.2 Explain the relationship between numbers and quantities.

South Carolina College- and Career-Ready Mathematics Standards

Aligned	Components	of	Eureka	Math
---------	------------	----	--------	------

2.NR.2.1	G2 M3 Topic B: Understanding Place Value Units of One, Ten, and a Hundred
Count forward and backward by ones,	G2 M3 Lesson 4: Count up to $1,000$ on the place value chart.
tens, and hundreds from any number	G2 M3 Topic D: Modeling Base Ten Numbers Within 1,000 with Money
within 999 and identify patterns in the sequence.	G2 M3 Topic G: Finding $1, 10,$ and 100 More or Less Than a Number
	G2 M4 Lesson 1: Relate 1 more, 1 less, 10 more, and 10 less to addition and subtraction of 1 and 10 .
	G2 M5 Lesson 1: Relate 10 more, 10 less, 100 more, and 100 less to addition and subtraction of 10 and 100.

Numerical Reasoning

2.NR.3 Demonstrate the ability to compare quantities of objects and numerals representing quantities of objects.

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of Eureka Math
2.NR.3.1	G2 M3 Topic F: Comparing Two Three-Digit Numbers
Compare representations of whole numbers up to 999 and write a comparison statement using words and symbols. Limit to is equal to (=), is less than (<), and/or is greater than (>).	
2.NR.3.2	G2 M1 Lesson 2: Practice making the next ten and adding to a multiple of ten.
When given a two-digit number, identify which multiple of 10 the number is closest to.	G2 M1 Lesson 4: Make a ten to add within 20.
	G2 M1 Lesson 5: Make a ten to add with 100.
	G2 M4 Lesson 3: Add and subtract multiples of 10 and some ones within 100.
	G2 M4 Lesson 4: Add and subtract multiples of 10 and some ones within 100.

Numerical Reasoning

2.NR.4 Represent and compare partitioned shapes in multiple ways using part-whole relationships.

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of Eureka Math
2.NR.4.1	G2 M8 Topic B: Composite Shapes and Fraction Concepts
Partition in multiple ways squares, rectangles, and circles into two or four equal sized parts, and describe the parts using the words <i>halves</i> , <i>fourths</i> , <i>a half of</i> , and <i>a fourth of</i> (not quarters).	G2 M8 Topic C: Halves, Thirds, and Fourths of Circles and Rectangles

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of Eureka Math
2.NR.4.2 Explain that when partitioning a square, rectangle, or circle into two or four equal parts, the parts become smaller as the number of parts increases.	G2 M8 Lesson 10: Partition circles and rectangles into equal parts, and describe those parts as halves, thirds, or fourths. G2 M8 Lesson 11: Describe a whole by the number of equal parts including 2 halves, 3 thirds, and 4 fourths.

Patterns, Algebra, and Functional Reasoning

2.PAFR.1 Understand and apply properties of operations and the relationship between addition and subtraction to solve problems.

South Carolina	
College- and Career-Ready	
Mathematics Standards	

Aligned Components of Eureka Math

2.PAFR.1.1 Use a strategy to accurately find sums and differences of two-digit numbers within 100 and justify the sum or difference.	 G2 M1 Lesson 6: Subtract single-digit numbers from multiples of 10 within 100. G2 M1 Lesson 7: Take from ten within 20. G2 M1 Lesson 8: Take from ten within 100. G2 M4 Topic A: Sums and Differences Within 100 G2 M7 Topic B: Problem Solving with Coins and Bills
2.PAFR.1.2 Determine and explain if an equation (within 20) is true using a variety of equation formats.	 G1 M1 Lesson 17: Understand the meaning of the equal sign by pairing equivalent expressions and constructing true number sentences. G1 M1 Lesson 18: Understand the meaning of the equal sign by pairing equivalent expressions and constructing true number sentences. G1 M2 Lesson 25: Strategize and apply understanding of the equal sign to solve equivalent expressions.

College- and Career-Ready Mathematics Standards	Aligned Components of Eureka Math
2.PAFR.1.3	G2 M1 Lesson 2: Practice making the next ten and adding to a multiple of ten.
Solve one-step add-to, take-from, part-part-whole, and additive comparison real-world situations through 99 with the unknown in any position.	G2 M1 Lesson 5: Make a ten to add within 100.
	G2 M1 Lesson 8: Take from ten within 100.
	G2 M4 Lesson 5: Solve one- and two-step word problems within 100 using strategies based on place value.
	G2 M4 Lesson 16: Solve one- and two-step word problems within 100 using strategies based on place value.
	G2 M6 Lesson 9: Solve word problems involving addition of equal groups in rows and columns.
2.PAFR.1.4	Supplemental material is necessary to address this standard.
For any number from 0 to 99, find the number that makes 100 when added to the given number.	
2.PAFR.1.5	G2 M1 Topic A: Foundations for Fluency with Sums and Differences Within 100
Add and subtract number combinations flexibly and accurately within 20.	G2 M1 Lesson 3: Add and subtract like units.
	G2 M1 Lesson 4: Make a ten to add within 20.
	G2 M1 Lesson 5: Make a ten to add within 100.
2.PAFR.1.6	G1 M2 Lesson 1: Solve word problems with three addends, two of which make ten.
Apply the <i>Associative Property</i> of <i>Addition</i> to find the sum (through 20) of three addends and explain that the value can be found using various grouping strategies.	G1 M2 Lesson 2: Use the associative and commutative properties to make ten with three addends.

South Carolina

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of Eureka Math
2.PAFR.1.7 Determine the unknown number in addition and subtraction equations within 20, with the unknown in any position.	G1 M1 Lesson 11: Solve add to with change unknown math stories as a context for counting on by drawing, writing equations, and making statements of the solution.
	G1 M1 Lesson 12: Solve add to with change unknown math stories using 5-group cards.
	G1 M1 Lesson 13: Tell put together with result unknown, add to with result unknown, and add to with change unknown stories from equations.
	G1 M1 Lesson 16: Count on to find the unknown part in missing addend equations such as 6 + = 9. Answer, "How many more to make 6, 7, 8, 9, and 10?"
	G1 M1 Lesson 30: Solve add to with change unknown math stories with drawings, relating addition and subtraction.
	G1 M1 Lesson 31: Solve take from with change unknown math stories with drawings.
	G1 M1 Lesson 32: Solve put together/take apart with addend unknown math stories.
	G1 M4 Topic E: Varied Problem Types Within 20
2.PAFR.1.8	G2 M6 Topic D: The Meaning of Even and Odd Numbers
Sort a collection of 20 or fewer objects into two groups to determine if the number of objects is even or odd.	
2.PAFR.1.9	G2 M6 Topic A: Formation of Equal Groups
Find the total number of objects arranged in equal groups or in a rectangular array and write an addition equation to express the total as a sum (up to 25) of equal addends.	G2 M6 Topic B: Arrays and Equal Groups
	G2 M6 Lesson 10: Use square tiles to compose a rectangle, and relate to the array model.
	G2 M6 Lesson 11: Use square tiles to compose a rectangle, and relate to the array model.
	G2 M6 Lesson 13: Use square tiles to decompose a rectangle.
	G2 M6 Lesson 15: Use math drawings to partition a rectangle with square tiles, and relate to repeated addition.

Patterns, Algebra, and Functional Reasoning

2.PAFR.2 Recognize, describe, extend, and create patterns.

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of Eureka Math
2.PAFR.2.1	Supplemental material is necessary to address this standard.
Describe, extend, and create a growing shape pattern with up to three terms within a sequence.	
2.PAFR.2.2 Create, describe, and extend an appropriate one-step rule for number patterns using addition and subtraction within 100.	 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. G2 M3 Lesson 21: Complete a pattern counting up and down. G2 M4 Lesson 1: Relate 1 more, 1 less, 10 more, and 10 less to addition and subtraction of 1 and 10. G2 M5 Lesson 1: Relate 10 more, 10 less, 100 more, and 100 less to addition and subtraction of 1 and 10. Supplemental material is necessary to fully address this standard.