EUREKA MATH®

GREAT MINDS®

ABOUT *EUREKA MATH*

Created by the nonprofit Great Minds, *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

Eureka Math is the only curriculum found by EdReports.org to align fully with the Common Core State Standards for Mathematics for all grades, Kindergarten through Grade 8. 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 academic growth and impressive test scores after using *Eureka Math*. See their stories and data at greatminds.org/data.

FULL SUITE OF RESOURCES

As a nonprofit, 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

Alabama Course of Study: Mathematics Correlation to *Eureka Math*®

GRADE 1 MATHEMATICS

The majority of the Grade 1 Alabama Course of Study: Mathematics are fully covered by the Grade 1 *Eureka Math* curriculum. One standard from the content area of Operations and Algebraic Thinking and one from Data Analysis will require the use of *Eureka Math* content from another grade level. A detailed analysis of alignment is provided in the table below.

INDICATORS

GREEN	indicates the Alabama standard is addressed in *Eureka Math*.
YELLOW	indicates the Alabama standard may not be completely addressed in *Eureka Math*.
RED	indicates the Alabama standard is not addressed in *Eureka Math*.
BLUE	indicates there is a discrepancy between the grade level at which this standard is addressed in Alabama and in *Eureka Math*.

Content Area	Standards for Mathematical Content	Aligned Components of *Eureka Math*
Operations and Algebraic Thinking	**Cluster: Represent and solve problems involving addition and subtraction.**	
	1. Use addition and subtraction to solve word problems within 20 by using concrete objects, drawings, and equations with a symbol for the unknown number to represent the problem. a. Add to with change unknown to solve word problems within 20. b. Take from with change unknown to solve word problems within 20. c. Put together/take apart with addend unknown to solve word problems within 20. d. Compare quantities, with difference unknown, bigger unknown, and smaller unknown while solving word problems within 20.	G1 M1 Topic B: Counting On from Embedded Numbers G1 M1 Topic C: Addition Word Problems G1 M1 Topic G: Subtraction as an Unknown Addend Problem G1 M1 Topic H: Subtraction Word Problems G1 M2 Topic A: Counting On or Making Ten to Solve Result Unknown and Total Unknown Problems G1 M2 Topic B: Counting On or Taking from Ten to Solve Result Unknown or Total Unknown Problems G1 M2 Topic C: Strategies for Solving Change or Addend Unknown Problems G1 M2 Topic D: Varied Problems with Decompositions of Teen Numbers as 1 Ten and Some Ones G1 M3 Topic C: Non-Standard and Standard Length Units G1 M3 Topic D: Data Interpretation G1 M4 Topic E: Varied Problem Types Within 20

		G1 M6 Topic A: Comparison Word Problems G1 M6 Topic F: Varied Word Problems Within 20
	2. Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20 by using concrete objects, drawings, or equations with a symbol for the unknown number to represent the problem.	G1 M2 Topic A: Counting On or Making Ten to Solve Result Unknown and Total Unknown Problems
	Cluster: Understand and apply properties of operations and the relationship between addition and subtraction.	
	3. Apply properties of operations as strategies to add and subtract.	G1 M1 Topic E: The Commutative Property of Addition and the Equal Sign G1 M1 Topic F: Development of Addition Fluency Within 10 G1 M2 Topic A: Counting On or Making Ten to Solve Result Unknown and Total Unknown Problems G1 M2 Topic B: Counting On or Taking from Ten to Solve Result Unknown and Total Unknown Problems G1 M2 Topic C: Strategies for Solving Change or Addend Unknown Problems

Content Area	Standards for Mathematical Content	Aligned Components of *Eureka Math*
	4. Explain subtraction as an unknown-addend problem.	G1 M1 Topic G: Subtraction as an Unknown Addend Problem G1 M1 Topic H: Subtraction Word Problems G1 M2 Topic B: Counting On or Taking from Ten to Solve Result Unknown and Total Unknown Problems G1 M2 Topic C: Strategies for Solving Change or Addend Unknown Problems
	Cluster: Add and subtract within 20.	
	5. Relate counting to addition and subtraction.	G1 M1 Topic B: Counting On from Embedded Numbers G1 M1 Topic D: Strategies for Counting On G1 M1 Topic G: Subtraction as an Unknown Addend Problem G1 M1 Topic I: Decomposition Strategies for Subtraction
	6. Add and subtract within 20. a. Demonstrate fluency with addition and subtraction facts with sums or differences to 10 by counting on. b. Demonstrate fluency with addition and subtraction facts with sums or differences to 10 by making ten.	G1 M1 Topic A: Embedded Numbers and Decompositions G1 M1 Topic B: Counting On from Embedded Numbers G1 M1 Topic C: Addition Word Problems

Content Area	Standards for Mathematical Content	Aligned Components of *Eureka Math*
	c. Demonstrate fluency with addition and subtraction facts with sums or differences to 10 by decomposing a number leading to a ten. d. Demonstrate fluency with addition and subtraction facts with sums or differences to 10 by using the relationship between addition and subtraction. e. Demonstrate fluency with addition and subtraction facts with sums or differences to 10 by creating equivalent but easier or known sums.	G1 M1 Topic F: Development of Addition Fluency Within 10 G1 M1 Topic I: Decomposition Strategies For Subtraction G1 M1 Topic J: Development of Subtraction Fluency Within 10 G1 M2 Topic A: Counting On or Making Ten to Solve Result Unknown and Total Unknown Problems G1 M2 Topic B: Counting On or Taking from Ten to Solve Result Unknown and Total Unknown Problems G1 M2 Topic C: Strategies for Solving Change or Addend Unknown Problems
	Cluster: Work with addition and subtraction equations.	
	7. Explain that the equal sign means “the same as.” Determine whether equations involving addition and subtraction are true or false.	G1 M1 Topic E: The Commutative Property of Addition and the Equal Sign
	8. Solve for the unknown whole number in various positions in an addition or subtraction equation, relating three whole numbers that would make it true.	G1 M1 Topic D: Strategies for Counting On

Content Area	Standards for Mathematical Content	Aligned Components of *Eureka Math*
	Cluster: Understand simple patterns.	
	9. Reproduce, extend, and create patterns and sequences of numbers using a variety of materials.	GPK M5 Topic F: Duplicating and Extending Patterns
Operations with Numbers: Base Ten	**Cluster: Extend the counting sequence.**	
	10. Extend the number sequence from 0 to 120. a. Count forward and backward by ones, starting at any number less than 120. b. Read numerals from 0 to 120. c. Write numerals from 0 to 120. d. Represent a number of objects from 0 to 120 with a written numeral.	G1 M4 Topic A: Tens and Ones G1 M6 Topic B: Numbers to 120

Content Area	Standards for Mathematical Content	Aligned Components of *Eureka Math*
	Cluster: Understand place value.	
	11. Explain that the two digits of a two-digit number represent amounts of tens and ones. a. Identify a bundle of ten ones as a "ten." b. Identify the numbers from 11 to 19 as composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones. c. Identify the numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 as one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).	G1 M2 Topic D: Varied Problems with Decompositions of Teen Numbers as 1 Ten and Some Ones G1 M4 Topic A: Tens and Ones G1 M4 Topic C: Addition and Subtraction of Tens G1 M6 Topic B: Numbers to 120
	12. Compare pairs of two-digit numbers based on the values of the tens and ones digits, recording the results of comparisons with the symbols >, =, and < and orally with the words "is greater than," "is equal to," and "is less than."	G1 M4 Topic B: Comparison of Pairs of Two-Digit Numbers G1 M6 Topic B: Numbers to 120

Content Area	Standards for Mathematical Content	Aligned Components of *Eureka Math*
	Cluster: Use place value understanding and properties of operations to add and subtract.	
	13. Add within 100, using concrete models or drawings and strategies based on place value. a. Add a two-digit number and a one-digit number. b. Add a two-digit number and a multiple of 10. c. Demonstrate that in adding two-digit numbers, tens are added to tens, ones are added to ones, and sometimes it is necessary to compose a ten. d. Relate the strategy for adding a two-digit number and a one-digit number to a written method and explain the reasoning used.	G1 M4 Topic C: Addition and Subtraction of Tens G1 M4 Topic D: Addition of Tens or Ones to a Two-Digit Number G1 M4 Topic F: Addition of Tens and Ones to a Two-Digit Number G1 M6 Topic C: Addition to 100 Using Place Value Understanding G1 M6 Topic D: Varied Place Value Strategies for Addition to 100
	14. Given a two-digit number, mentally find 10 more or 10 less than the number without having to count, and explain the reasoning used.	G1 M4 Topic A: Tens and Ones G1 M6 Topic B: Numbers to 120
	15. Subtract multiples of 10 from multiples of 10 in the range 10–90 (positive or zero differences), 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 and explain the reasoning used.	G1 M4 Topic C: Addition and Subtraction of Tens G1 M6 Topic C: Addition to 100 Using Place Value Understanding

Content Area	Standards for Mathematical Content	Aligned Components of *Eureka Math*
Data Analysis	**Cluster: Collect and analyze data and interpret results.**	
	16. Organize, represent, and interpret data with up to three categories. a. Ask and answer questions about the total number of data points in organized data. b. Summarize data on Venn diagrams, pictographs, and "yes-no" charts using real objects, symbolic representations, or pictorial representations. c. Determine "how many" in each category using up to three categories of data. d. Determine "how many more" or "how many less" are in one category than in another using data organized e. into two or three categories.	G1 M3 Topic D: Data Interpretation
Measurement	**Cluster: Describe and compare measurable attributes.**	
	17. Order three objects by length; compare the lengths of two objects indirectly by using a third object.	G1 M3 Topic A: Indirect Comparison in Length Measurement G1 M3 Topic B: Standard Length Units
	18. Determine the length of an object using non-standard units with no gaps or overlaps, expressing the length of the object with a whole number.	G1 M3 Topic B: Standard Length Units G1 M3 Topic C: Non-Standard and Standard Length Units G1 M3 Topic D: Data Interpretation

	Cluster: Work with time and money.	
	19. Tell and write time to the hours and half hours using analog and digital clocks.	G1 M5 Topic D: Application of Halves to Tell Time
	20. Identify pennies and dimes by name and value.	G1 M6 Topic E: Coins and Their Values
Geometry	**Cluster: Reason with shapes and their attributes.**	
	21. Build and draw shapes which have defining attributes. a. Distinguish between defining attributes and b. non-defining attributes.	G1 M5 Topic A: Attributes of Shapes
	22. Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape.	G1 M5 Topic B: Part-Whole Relationships Within Composite Shapes
	23. Partition circles and rectangles into two and four equal shares and describe the shares using the words *halves*, *fourths*, and *quarters*, and use the phrases *half of*, *fourth of*, and *quarter of*. a. Describe “the whole” as two of or four of the shares of circles and rectangles partitioned into two or four equal shares. b. Explain that decomposing into more equal shares creates smaller shares of circles and rectangles.	G1 M5 Topic C: Halves and Quarters of Rectangles and Circles G1 M5 Topic D: Application of Halves to Tell Time