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 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 2 MATHEMATICS

The majority of the Grade 2 Alabama Course of Study: Mathematics standards are fully covered by the Grade 2 Eureka Math curriculum. There is one standard from the content area of Operations and Algebraic Thinking that 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 within 100 to solve one- and two-step word problems by using drawings and equations with a symbol for the unknown number to represent the problem.	G2 M1 Topic A: Foundations for Fluency with Sums and Differences Within 100 G2 M1 Lesson 5: Make a ten to add within 100. G2 M1 Lesson 8: Take from 10 within 100. G2 M4 Topic A: Sums and Differences within 100 G2 M4 Topic C: Strategies for Decomposing a Ten G2 M4 Topic F: Student Explanations of Written Methods
	Cluster: Add and subtract within 20.	
	2. Fluently add and subtract within 20 using mental strategies such as counting on, making ten, decomposing a number leading to ten, using the relationship between addition and subtraction, and creating equivalent but easier or known sums. a. State automatically all sums of two one-digit numbers.	G2 M1: Sums and Differences to 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

Content Area	Standards for Mathematical Content	Aligned Components of *Eureka Math*
	Cluster: Work with equal groups of objects to gain foundations for multiplication.	
	3. Use concrete objects to determine whether a group of up to 20 objects is even or odd. a. Write an equation to express an even number as a sum of two equal addends.	G2 M6 Topic D: The Meaning of Even and Odd Numbers
	4. Explain subtraction as an unknown-addend problem.	G2 M6 Topic A: Formation of Equal Groups G2 M6 Topic B: Arrays and Equal Groups G2 M6 Topic C: Rectangular Arrays as a Foundation for Multiplication and Division
	Cluster: Understand simple patterns.	
	5. Reproduce, extend, create, and describe patterns and sequences using a variety of materials.	GPK M5 Topic F: Duplicating and Extending Patterns
Operations with Numbers: Base Ten	**Cluster: Understand place value.**	
	6. Explain that the three digits of a three-digit number represent amounts of hundreds, tens, and ones. a. Explain the following three-digit numbers as special cases: 100 can be thought of as a bundle of ten tens, called a “hundred,” and the numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).	G2 M3 Topic A: Forming Base-Ten Units of Ten, a Hundred, and a Thousand G2 M3 Topic E: Modeling Numbers Within 1,000 with Place Value Disks

Content Area	Standards for Mathematical Content	Aligned Components of *Eureka Math*
	7. Count within 1000 by ones, fives, tens, and hundreds.	G2 M3 Topic B: Understanding Place Value Units of One, Ten, and a Hundred G2 M3 Topic C: Three-Digit Numbers in Unit, Numeral, Expanded, and Word Forms G2 M3 Topic D: Modeling Base-Ten Numbers Within 1,000 with Money G2 M3 Topic G: Finding 1, 10, and 100 More or Less Than a Number
	8. Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.	G2 M3 Topic C: Three-Digit Numbers in Unit, Numeral, Expanded, and Word Forms
	9. Compare two three-digit numbers based on the value of the hundreds, 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.”	G2 M3 Topic F: Comparing Two Three-Digit Numbers
	Cluster: Use place value understanding and properties of operations to add and subtract.	
	10. Fluently add and subtract within 100, using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.	G2 M1: Sums and Differences to 100 G2 M4 Topic A: Sums and Differences Within 100 G2 M7 Topic B: Problem Solving with Coins and Bills

Content Area	Standards for Mathematical Content		Aligned Components of *Eureka Math*
	11. Use a variety of strategies to add up to four two-digit numbers.		G2 M4 Topic D: Strategies for Composing Tens and Hundreds
	12. Add and subtract within 1000 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. a. Explain that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.		G2 M4 Topic B: Strategies for Composing a Ten G2 M4 Topic C: Strategies for Decomposing a Ten G2 M4 Topic D: Strategies for Composing Tens and Hundreds G2 M4 Topic E: Strategies for Decomposing Tens and Hundreds G2 M4 Topic F: Student Explanations of Written Methods G2 M5 Topic A: Strategies for Adding and Subtracting Within 1,000 G2 M5 Topic B: Strategies for Composing Tens and Hundreds within 1,000 G2 M5 Topic C: Strategies for Decomposing Tens and Hundreds Within 1,000 G2 M5 Topic D: Student Explanations for Choice of Solution Methods

Content Area	Standards for Mathematical Content		Aligned Components of *Eureka Math*
	13. Mentally add and subtract 10 or 100 to a given number between 100 and 900.		G2 M4 Topic A: Sums and Differences within 100 G2 M4 Topic D: Strategies for Composing Tens and Hundreds G2 M5 Topic A: Strategies for Adding and Subtracting within 1,000 G2 M5 Topic D: Student Explanations for Choice of Solution Methods

Content Area	Standards for Mathematical Content		Aligned Components of *Eureka Math*
	14. Explain why addition and subtraction strategies work, using place value and the properties of operations.		G2 M4 Topic A: Sums and Differences Within 100 G2 M4 Topic B: Strategies for Composing a Ten G2 M4 Topic C: Strategies for Decomposing a Ten G2 M4 Topic D: Strategies for Composing Tens and Hundreds G2 M4 Topic E: Strategies for Decomposing Tens and Hundreds G2 M4 Topic F: Student Explanations of Written Methods G2 M5 Topic A: Strategies for Adding and Subtracting Within 1,000 G2 M5 Topic B: Strategies for Composing Tens and Hundreds within 1,000 G2 M5 Topic C: Strategies for Decomposing Tens and Hundreds within 1,000 G2 M5 Topic D: Student Explanations for Choice of Solution Methods

Content Area	Standards for Mathematical Content	Aligned Components of *Eureka Math*
Data Analysis	**Cluster: Collect and analyze data and interpret results.**	
	15. Measure lengths of several objects to the nearest whole unit. a. Create a line plot where the horizontal scale is marked off in whole-number units to show the lengths of several measured objects.	G2 M2 Topic A: Understand Concepts about the Ruler G2 M2 Topic B: Measure and Estimate Length Using Different Measurement Tools G2 M2 Topic C: Measure and Compare Lengths Using Different Length Units G2 M7 Topic C: Creating an Inch Ruler G2 M7 Topic D: Measuring and Estimating Length Using Customary and Metric Units G2 M7 Topic F: Displaying Measurement Data
	16. Create a picture graph and bar graph to represent data with up to four categories. a. Using information presented in a bar graph, solve simple “put-together,” “take-apart,” and “compare” problems. b. Using Venn diagrams, pictographs, and "yes-no" charts, analyze data to predict an outcome.	G2 M7 Topic A: Problem Solving with Categorical Data

Content Area	Standards for Mathematical Content	Aligned Components of *Eureka Math*
Measurement	**Cluster: Measure and estimate lengths in standard units.**	
	17. Measure the length of an object by selecting and using standard units of measurement shown on rulers, yardsticks, meter sticks, or measuring tapes.	G2 M2 Topic A: Understand Concepts about the Ruler G2 M2 Topic B: Measure and Estimate Length Using Different Measurement Tools G2 M2 Topic C: Measure and Compare Lengths Using Different Length Units G2 M7 Topic C: Creating an Inch Ruler G2 M7 Topic D: Measuring and Estimating Length Using Customary and Metric Units
	18. Measure objects with two different units, and describe how the two measurements relate to each other and the size of the unit chosen.	G2 M2 Topic C: Measure and Compare Lengths Using Different Length Units G2 M7 Topic D: Measuring and Estimating Length Using Customary and Metric Units
	19. Estimate lengths using the following standard units of measurement: inches, feet, centimeters, and meters.	G2 M2 Topic B: Measure and Estimate Length Using Different Measurement Tools G2 M7 Topic D: Measuring and Estimating Length Using Customary and Metric Units

Content Area	Standards for Mathematical Content		Aligned Components of *Eureka Math*
	20. Measure to determine how much longer one object is than another, expressing the length difference of the two objects using standard units of length.		G2 M2 Topic C: Measure and Compare Lengths Using Different Length Units G2 M7 Topic D: Measuring and Estimating Length Using Customary and Metric Units
	Cluster: Relate addition and subtraction to length.		
	21. Use addition and subtraction within 100 to solve word problems involving same units of length, representing the problem with drawings (such as drawings of rulers) and/or equations with a symbol for the unknown number.		G2 M2 Topic D: Relate Addition and Subtraction to Length G2 M7 Topic E: Problem Solving with Customary and Metric Units
	22. Create a number line diagram using whole numbers and use it to represent whole-number sums and differences within 100.		G2 M2 Topic D: Relate Addition and Subtraction to Length G2 M7 Topic E: Problem Solving with Customary and Metric Units G2 M7 Topic F: Displaying Measurement Data
	Cluster: Work with time and money.		
	23. Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m. a. Express an understanding of common terms such as, but not limited to, quarter past, half past, and quarter to.		G2 M8 Topic D: Application of Fractions to Tell Time

Content Area	Standards for Mathematical Content	Aligned Components of *Eureka Math*
	24. Solve problems with money. a. Identify nickels and quarters by name and value. b. Find the value of a collection of quarters, dimes, nickels, and pennies. c. Solve word problems by adding and subtracting within one dollar, using the $ and ¢ symbols appropriately (not including decimal notation).	G2 M7 Topic B: Problem Solving with Coins and Bills
Geometry	**Cluster: Reason with shapes and their attributes.**	
	25. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes. a. Recognize and draw shapes having specified attributes.	G2 M8 Topic A: Attributes of Geometric Shapes
	26. Partition a rectangle into rows and columns of same-size squares, and count to find the total number of squares.	G2 M6 Topic A: Formation of Equal Groups G2 M6 Topic B: Arrays and Equal Groups G2 M6 Topic C: Rectangular Arrays as a Foundation for Multiplication and Division

Content Area	Standards for Mathematical Content		Aligned Components of *Eureka Math*
	27. Partition circles and rectangles into two, three, or four equal shares. Describe the shares using such terms as halves, thirds, half of, or a third of, and describe the whole as two halves, three thirds, or four fourths. a. Explain that equal shares of identical wholes need not have the same shape.		G2 M8 Topic B: Composite Shapes and Fraction Concepts G2 M8 Topic C: Halves, Thirds, and Fourths of Circles and Rectangles G2 M8 Topic D: Application of Fractions to Tell Time