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 which 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

GRADE 2 MATHEMATICS

The Grade 2 Arkansas Mathematics Standards are fully covered by the Grade 2 *Eureka Math* curriculum. A detailed analysis of alignment is provided in the table below.

INDICATORS

- Green indicates that the Arkansas standard is fully addressed in *Eureka Math*.
- Yellow indicates that the Arkansas standard may not be completely addressed in *Eureka Math*.
- Red indicates that the Arkansas standard is not addressed in *Eureka Math*.
- Blue indicates there is a discrepancy between the grade level at which this standard is addressed in the Arkansas standards and in *Eureka Math*.

Domain	Standards for Mathematical Content	Aligned Components of *Eureka Math*
Operations and Algebraic Thinking	**Cluster: Represent and solve problems involving addition and subtraction**	
	AR.Math.Content.2.OA.A.1 ▪ Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions ▪ Represent a strategy with a related equation including a symbol for the unknown number	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 Lesson 31: Solve two-step word problems within 100. G2 M6 Lesson 9: Solve word problems involving addition of equal groups in rows and columns.
	Cluster: Add and subtract within 20	
	AR.Math.Content.2.OA.B.2 ▪ Fluently add and subtract within 20 using mental strategies ▪ By the end of Grade 2, know from memory 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.

Domain	Standards for Mathematical Content		Aligned Components of *Eureka Math*
	Cluster: Work with equal groups of objects to gain foundations for multiplication		
	AR.Math.Content.2.OA.C.3 ▪ Determine whether a group of objects (up to 20) has an odd or even number of members (e.g., by pairing objects or counting them by 2s) ▪ Write an equation to express an even number (up to 20) as a *sum* of two equal addends		G2 M6 Topic D: The Meaning of Even and Odd Numbers
	AR.Math.Content.2.OA.C.4 ▪ 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		G2 M6: Foundations of Multiplication and Division

Domain	Standards for Mathematical Content	Aligned Components of *Eureka Math*
Number and Operations in Base Ten	**Cluster: Understand place value**	
	AR.Math.Content.2.NBT.A.1 ▪ Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 726 equals 7 hundreds, 2 tens, and 6 ones ▪ Understand that 100 can be thought of as a group of ten tens—called a "hundred" ▪ Understand that the numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine groups of 100	G2 M3: Place Value, Counting, and Comparison of Numbers to 1,000
	AR.Math.Content.2.NBT.A.2 ▪ Count within 1,000 ▪ Skip-count by 5s, 10s, and 100s beginning at zero	G2 M3: Place Value, Counting, and Comparison of Numbers to 1,000
	AR.Math.Content.2.NBT.A.3 ▪ Read and write numbers to 1,000 using base-ten numerals, number names, and a variety of *expanded forms* ▪ Model and describe numbers within 1,000 as groups of 10 in a variety of ways	G2 M3 Topic C: Three-Digit Numbers in Unit, Standard, Expanded, and Word Forms G2 M3 Topic E: Modeling Numbers Within 1,000 with Place Value Disks G2 M3 Topic F: Comparing Two Three-Digit Numbers

Domain	Standards for Mathematical Content	Aligned Components of *Eureka Math*
	AR.Math.Content.2.NBT.A.4 Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols and correct terminology for the symbols to record the results of comparisons	G2 M3 Topic F: Comparing Two Three-Digit Numbers
	Cluster: Use place value understanding and properties of operations to add and subtract	
	AR.Math.Content.2.NBT.B.5 Add and subtract within 100 with *computational fluency* 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
	AR.Math.Content.2.NBT.B.6 Add up to four two-digit numbers using strategies based on *place value* and properties of operations	G2 M4 Lesson 22: Solve additions with up to four addends with totals within 200 with and without two compositions of larger units.
	AR.Math.Content.2.NBT.B.7 Add and subtract within 1,000, 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 expression or equation	G2 M4: Addition and Subtraction Within 200 with Word Problems to 100 G2 M5: Addition and Subtraction Within 1,000 with Word Problems to 100

Domain	Standards for Mathematical Content		Aligned Components of *Eureka Math*
	AR.Math.Content.2.NBT.B.8 Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900		G2 M3 Topic G: Finding 1, 10, and 100 More or Less than a Number G2 M4 Topic A: Sums and Differences Within 100 G2 M4 Lesson 17: Use mental strategies to relate compositions of 10 tens as 1 hundred to 10 ones as 1 ten. G2 M5 Topic A: Strategies for Adding and Subtracting Within 1,000
	AR.Math.Content.2.NBT.B.9 Explain why addition and subtraction strategies work, using *place value* and the properties of operations		G2 M4: Addition and Subtraction Within 200 with Word Problems to 100 G2 M5: Addition and Subtraction Within 1,000 with Word Problems to 100

Domain	Standards for Mathematical Content	Aligned Components of *Eureka Math*
Measurement and Data	**Cluster: Measure and estimate lengths in standard units**	
	AR.Math.Content.2.MD.A.1 Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes	G2 M2: Addition and Subtraction of Length Units G2 M7 Topic C: Creating an Inch Ruler G2 M7 Topic D: Measuring and Estimating Length Using Customary and Metric Units
	AR.Math.Content.2.MD.A.2 ▪ Measure the length of an object twice with two different length units ▪ Describe how the two measurements relate to 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
	AR.Math.Content.2.MD.A.3 Estimate lengths using units of 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
	AR.Math.Content.2.MD.A.4 Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard-length unit	G2 M2 Topic C: Measure and Compare Lengths Using Different Length Units G2 M2 Lesson 9: Measure lengths of string using measurement tools, and use tape diagrams to represent and compare the lengths. G2 M7 Lesson 19: Measure to compare the differences in lengths using inches, feet, and yards.

Domain	Standards for Mathematical Content	Aligned Components of *Eureka Math*
	Cluster: Relate addition and subtraction to length	
	AR.Math.Content.2.MD.B.5 Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, and write *equations* with a symbol for the unknown number to represent the problem	G2 M2 Topic D: Relate Addition and Subtraction to Length G2 M7 Lesson 20: Solve two-digit addition and subtraction word problems involving length by using tape diagrams and writing equations to represent the problem.
	AR.Math.Content.2.MD.B.6 Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and solve addition and subtraction problems within 100 on the *number line diagram*	G2 M2 Lesson 8: Solve addition and subtraction word problems using the ruler as a number line. G2 M7 Topic E: Problem Solving with Customary and Metric Units G2 M7 Lesson 24: Draw a line plot to represent the measurement data; relate the measurement scale to the number line.
	Cluster: Work with time and money	
	AR.Math.Content.2.MD.C.7 Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.	G2 M8 Topic D: Application of Fractions to Tell Time
	AR.Math.Content.2.MD.C.8 Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using $ and ¢ symbols appropriately	G2 M7 Topic B: Problem Solving with Coins and Bills

Domain	Standards for Mathematical Content	Aligned Components of *Eureka Math*
	Cluster: Represent and interpret data	
	AR.Math.Content.2.MD.D.9 ▪ Generate data by measuring the same *attribute* of similar objects to the nearest whole unit ▪ Display the measurement data by making a *line plot*, where the horizontal scale is marked off in whole-number units ▪ Generate data from multiple measurements of the same object ▪ Make a *line plot*, where the horizontal scale is marked off in whole-number units, to compare precision of measurements	G2 M7 Topic F: Displaying Measurement Data
	AR.Math.Content.2.MD.D.10 ▪ Draw a picture graph and a bar graph, with single-unit scale, to represent a data set with up to four categories ▪ Solve simple put-together, take-apart, and compare problems using information presented in a bar graph	G2 M7 Topic A: Problem Solving with Categorical Data

Domain	Standards for Mathematical Content	Aligned Components of *Eureka Math*
Geometry	**Cluster: Reason with shapes and their attributes**	
	AR.Math.Content.2.G.A.1 ▪ Recognize and draw shapes having specified *attributes* (e.g., number of angles, number of sides, or a given number of equal faces) ▪ Identify triangles, quadrilaterals, pentagons, hexagons, and cubes	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.
	AR.Math.Content.2.G.A.2 Partition a rectangle into rows and columns of same-size squares and count to find the total number of squares	G2 M6 Topic C: Rectangular Arrays as a Foundation for Multiplication and Division
	AR.Math.Content.2.G.A.3 Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths	G2 M8: Time, Shapes, and Fractions as Equal Parts of Shapes
	AR.Math.Content.2.G.A.4 Recognize that equal shares of identical wholes need not have the same shape	G2 M8 Lesson 8: Interpret equal shares in composite shapes as halves, thirds, and fourths.