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 K MATHEMATICS

The majority of the Grade K Arkansas Mathematics Standards are fully covered by the Grade K *Eureka Math* curriculum. The areas where the Grade K Arkansas Mathematics Standards and Grade K *Eureka Math* do not align will require the use of *Eureka Math* content from other grade levels or supplemental materials. A detailed analysis of alignment is provided in the table below. With strategic placement of supplemental materials, *Eureka Math* can ensure students are successful in achieving the proficiencies of the Arkansas Mathematics Standards while still benefiting from the coherence and rigor of *Eureka Math*.

INDICATORS

Green indicates that the Arkanas 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*
Counting and Cardinality	**Cluster: Know number names and the count sequence**	
	AR.Math.Content.K.CC.A.1 Count to 100 by ones, fives, and tens	GK M5 Topic D: Extend the Say Ten and Regular Count Sequence to 100 G2 M7 Lesson 6: Recognize the value of coins and count up to find their total value. G2 M8 Topic D: Application of Fractions to Tell Time Note: Students build fluency of skip-counting with fives and tens in a variety of fluency activities in Grades 1 and 2.
	AR.Math.Content.K.CC.A.2 Count forward, by ones, from any given number up to 100	GK M1 Topic G: *One More* with Numbers 0–10 GK M5 Lesson 13: Show, count, and write to answer *how many* questions in linear and array configurations. GK M5 Topic D: Extend the Say Ten and Regular Count Sequence to 100

Domain	Standards for Mathematical Content		Aligned Components of *Eureka Math*
	AR.Math.Content.K.CC.A.3 Read, write, and represent numerals from 0 to 20		GK M1 Topic D: The Concept of Zero and Working with Numbers 0–5 GK M1 Topic E: Working with Numbers 6–8 in Different Configurations GK M1 Topic F: Working with Numbers 9–10 in Different Configurations GK M5 Topic B: Compose Numbers 11–20 from 10 Ones and Some Ones; Represent and Write Teen Numbers GK M5 Lesson 14: Show, count, and write to answer *how many* questions with up to 20 objects in circular configurations.

Domain	Standards for Mathematical Content	Aligned Components of *Eureka Math*
	Cluster: Count to tell the number of objects	
	AR.Math.Content.K.CC.B.4 Understand the relationship between numbers and quantities; connect counting to cardinality When counting objects: ▪ Say the numbers in order, pairing each object with only one number and each number with only one object (one to one correspondence) ▪ Understand that the last number said tells the number of objects counted ▪ Understand that each successive number refers to a quantity that is one larger	GK M1: Numbers to 10 GK M3 Lesson 23: Reason to identify and make a set that has 1 more. GK M4 Lesson 37: Add or subtract 0 to get the same number and relate to word problems wherein the same quantity that joins a set, separates. GK M4 Lesson 38: Add 1 to numbers 1–9 to see the pattern of *the next number* using 5-group drawings and equations. GK M5 Topic A: Count 10 Ones and Some Ones GK M5 Topic C: Decompose Numbers 11–20, and Count to Answer "How Many?" Questions in Varied Configurations GK M6 Lesson 4: Describe the relative position of shapes using ordinal numbers.
	AR.Math.Content.K.CC.B.5 Count to answer "how many?": ▪ Count up to 20 objects in any arrangement ▪ Count up to 10 objects in a scattered configuration ▪ Given a number from 1–20, count out that many objects	GK M1: Numbers to 10 GK M5: Numbers 10–20 and Counting to 100

Domain	Standards for Mathematical Content	Aligned Components of *Eureka Math*
	Cluster: Compare numbers	
	AR.Math.Content.K.CC.C.6 Identify whether the number of objects in one group from 0–10 is greater than (more, most), less than (less, fewer, least), or equal to (same as) the number of objects in another group of 0–10	GK M3: Comparison of Length, Weight, Capacity, and Numbers to 10
	AR.Math.Content.K.CC.C.7 Compare two numbers between 0 and 20 presented as written numerals	GK M3 Topic F: Comparison of Sets Within 10 GK M3 Topic G: Comparison of Numerals
	AR.Math.Content.K.CC.C.8 Quickly identify a number of items in a set from 0–10 without counting (e.g., dominoes, dot cubes, tally marks, ten-frames)	GK M1: Numbers to 10
Operations and Algebraic Thinking	**Cluster: Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from**	
	AR.Math.Content.K.OA.A.1 Represent addition and subtraction using objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, *expressions* (e.g., 2 + 3), or *equations* (e.g., 2 + 3 =).	GK M1 Lesson 28: Act out *result unknown* story problems without equations. GK M4: Number Pairs, Addition and Subtraction to 10

Domain	Standards for Mathematical Content		Aligned Components of *Eureka Math*
	AR.Math.Content.K.OA.A.2 Solve real-world problems that involve addition and subtraction within 10 (e.g., by using objects or drawings to represent the problem)		GK M4: Number Pairs, Addition and Subtraction to 10
	AR.Math.Content.K.OA.A.3 Use objects, drawings, etc., to decompose (break apart) numbers less than or equal to 10 into pairs in more than one way, and record each decomposition (part) by a drawing or an equation (e.g., 5 = 2 + 3 and 5 = 4 + 1)		GK M1 Topic C: Numbers to 5 in Different Configurations, Math Drawings, and Expressions GK M1 Lesson 14: Write numerals 1–3. Represent decompositions with materials, drawings, and equations, 3 = 2 + 1 and 3 = 1 + 2. GK M1 Lesson 16: Write numerals 1–5 in order. Answer and make drawings of decompositions with totals of 4 and 5 without equations. GK M3 Lesson 7: Compare objects using *the same as*. GK M4: Number Pairs, Addition and Subtraction to 10
	AR.Math.Content.K.OA.A.4 Find the number that makes 10 when added to the given number (e.g., by using objects or drawings) and record the answer with a drawing or equation		GK M4 Lesson 39: Find the number that makes 10 for numbers 1–9, and record each with a 5-group drawing. GK M4 Lesson 40: Find the number that makes 10 for numbers 1–9, and record each with an addition equation. GK M5 Lesson 10: Build a Rekenrek to 20.
	AR.Math.Content.K.OA.A.5 Fluently add and subtract within 10 by using various strategies and manipulatives		GK M4 Topic A: Compositions and Decompositions of 2, 3, 4, and 5 G1 M1: Sums and Differences to 10

Domain	Standards for Mathematical Content	Aligned Components of *Eureka Math*
Number and Operations in Base Ten	**Cluster: Work with numbers 11–19 to gain foundations for place value**	
	AR.Math.Content.K.NBT.A.1 Develop initial understanding of place value and the base-ten number system by showing equivalent forms of *whole numbers* from 11 to 19 as groups of tens and ones using objects and drawings	GK M5: Numbers 10–20 and Counting to 100
Measurement and Data	**Cluster: Describe and compare measurable attributes**	
	AR.Math.Content.K.MD.A.1 Describe several measurable *attributes* of a single object, including but not limited to length, weight, height, and temperature	GK M3: Comparison of Length, Weight, Capacity, and Numbers to 10 Note: Supplemental materials are needed to cover temperature.
	AR.Math.Content.K.MD.A.2 Describe the difference when comparing two objects (side-by-side) with a measurable *attribute* in common, to see which object has more of or less of the common *attribute*	GK M3: Comparison of Length, Weight, Capacity, and Numbers to 10
	Cluster: Classify objects and count the number of objects in each category	
	AR.Math.Content.K.MD.B.3 Classify, sort, and count objects using both measurable and non-measurable attributes such as size, number, color, or shape	GK M1 Topic A: Attributes of Two Related Objects GK M1 Topic B: Classify to Make Categories and Count GK M2 Topic C: Two-Dimensional and Three-Dimensional Shapes

Domain	Standards for Mathematical Content	Aligned Components of *Eureka Math*
	Cluster: Work with time and money	
	AR.Math.Content.K.MD.C.4 ▪ Understand concepts of time including morning, afternoon, evening, today, yesterday, tomorrow, day, week, month, and year ▪ Understand that clocks, both analog and digital, and calendars are tools that measure time	*Eureka Math* does not specifically teach calendar skills except for use in word problem situations.
	AR.Math.Content.K.MD.C.5 Read time to the hour on digital and analog clocks	G1 M5 Lesson 10: Construct a paper clock by partitioning a circle and tell time to the hour.
	AR.Math.Content.K.MD.C.6 Identify pennies, nickels, and dimes, and know the *value* of each	G1 M4 Lesson 6: Use dimes and pennies as representations of tens and ones. G1 M6 Topic E: Coins and Their Values

Domain	Standards for Mathematical Content	Aligned Components of *Eureka Math*
Geometry	**Cluster: Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres)**	
	AR.Math.Content.K.G.A.1 Describe the positions of objects in the environment and geometric shapes in space using names of shapes, and describe the relative positions of these objects	GK M2 Lesson 5: Describe and communicate positions of all flat shapes using the words *above, below, beside, in front of, next to,* and *behind.* GK M2 Lesson 8: Describe and communicate positions of all solid shapes using the words *above, below, beside, in front of, next to,* and *behind.*
	AR.Math.Content.K.G.A.2 Correctly name shapes regardless of their orientations or overall size	GK M2: Two-Dimensional and Three-Dimensional Shapes
	AR.Math.Content.K.G.A.3 Identify shapes as two-dimensional (flat) or three-dimensional (solid)	GK M2 Topic C: Two-Dimensional and Three-Dimensional Shapes
	Cluster: Analyze, compare, create, and compose shapes.	
	AR.Math.Content.K.G.B.4 Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/corners), and other *attributes* (e.g., having sides of equal length)	GK M2: Two-Dimensional and Three-Dimensional Shapes GK M6: Analyzing, Comparing, and Composing Shapes

Domain	Standards for Mathematical Content		Aligned Components of *Eureka Math*
	AR.Math.Content.K.G.B.5 Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and by drawing shapes		GK M6: Analyzing, Comparing, and Composing Shapes
	AR.Math.Content.K.G.B.6 Compose two-dimensional shapes to form larger two-dimensional shapes		GK M6: Analyzing, Comparing, and Composing Shapes