

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

Oklahoma Academic Standards for Mathematics Correlation to *Eureka Math*[™]

GRADE K MATHEMATICS

The majority of the Grade K Oklahoma Academic Standards for Mathematics are fully covered by the Grade K *Eureka Math* curriculum. The areas where the Grade K Oklahoma Academic Standards for Mathematics 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 Oklahoma Academic Standards for Mathematics while still benefiting from the coherence and rigor of *Eureka Math*.

INDICATORS

-  Green indicates that the Oklahoma standard is addressed in *Eureka Math*.
-  Yellow indicates that the Oklahoma standard may not be completely addressed in *Eureka Math*.
-  Red indicates that the Oklahoma 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 Oklahoma standards and in *Eureka Math*.

Mathematical Actions and Processes

Aligned Components of *Eureka Math*

Develop a Deep and Flexible Conceptual Understanding

Demonstrate a deep and flexible conceptual understanding of mathematical concepts, operations, and relations while making mathematical and real-world connections. Students will develop an understanding of how and when to apply and use the mathematics they know to solve problems.

Lessons in every module engage students in making sense of problems and persevering in solving them as required by this standard. This Mathematical Action and Process is analogous to the CCSSM Standards for Mathematical Practice 1 and 2, which are specifically addressed in the following modules:

GK M1: Numbers to 10

GK M2: Two-Dimensional and Three-Dimensional Shapes

GK M3: Comparison of Length, Weight, Capacity, and Numbers to 10

GK M4: Number Pairs, Addition and Subtraction to 10

GK M5: Numbers 10–20 and Counting to 100

GK M6: Analyzing, Comparing, and Composing Shapes

Mathematical Actions and Processes

Aligned Components of *Eureka Math*

Develop Accurate and Appropriate Procedural Fluency

Learn efficient procedures and algorithms for computations and repeated processes based on a strong sense of numbers. Develop fluency in addition, subtraction, multiplication, and division of numbers and expressions. Students will generate a sophisticated understanding of the development and application of algorithms and procedures.

Lessons in every module engage students in reasoning abstractly and quantitatively as required by this standard. This Mathematical Action and Process is analogous to the CCSSM Standards for Mathematical Practice 7 and 8, which are specifically addressed in the following modules:

GK M1: Numbers to 10

GK M2: Two-Dimensional and Three-Dimensional Shapes

GK M3: Comparison of Length, Weight, Capacity, and Numbers to 10

GK M4: Number Pairs, Addition and Subtraction to 10

GK M5: Numbers 10–20 and Counting to 100

GK M6: Analyzing, Comparing, and Composing Shapes

Mathematical Actions and Processes

Aligned Components of *Eureka Math*

Develop Strategies for Problem Solving

Analyze the parts of complex mathematical tasks and identify entry points to begin the search for a solution. Students will select from a variety of problem solving strategies and use corresponding multiple representations (verbal, physical, symbolic, pictorial, graphical, tabular) when appropriate. They will pursue solutions to various tasks from real-world situations and applications that are often interdisciplinary in nature. They will find methods to verify their answers in context and will always question the reasonableness of solutions.

Lessons in every module engage students in constructing viable arguments and critiquing the reasoning of others as required by this standard. This Mathematical Action and Process is analogous to the CCSSM Standards for Mathematical Practice 1, 2, and 8, which are specifically addressed in the following modules:

GK M1: Numbers to 10

GK M2: Two-Dimensional and Three-Dimensional Shapes

GK M3: Comparison of Length, Weight, Capacity, and Numbers to 10

GK M4: Number Pairs, Addition and Subtraction to 10

GK M5: Numbers 10–20 and Counting to 100

GK M6: Analyzing, Comparing, and Composing Shapes

Mathematical Actions and Processes

Aligned Components of *Eureka Math*

Develop Mathematical Reasoning

Explore and communicate a variety of reasoning strategies to think through problems. Students will apply their logic to critique the thinking and strategies of others to develop and evaluate mathematical arguments, including making arguments and counterarguments and making connections to other contexts.

Lessons in every module engage students in modeling with mathematics as required by this standard. This Mathematical Action and Process is analogous to the CCSSM Standards for Mathematical Practice 3, which is specifically addressed in the following modules:

GK M1: Numbers to 10

GK M2: Two-Dimensional and Three-Dimensional Shapes

GK M3: Comparison of Length, Weight, Capacity, and Numbers to 10

GK M5: Numbers 10–20 and Counting to 100

Mathematical Actions and Processes

Aligned Components of *Eureka Math*

Develop a Productive Mathematical Disposition

Hold the belief that mathematics is sensible, useful, and worthwhile. Students will develop the habit of looking for and making use of patterns and mathematical structures. They will persevere and become resilient, effective problem solvers.

Lessons in every module engage students in using appropriate tools strategically as required by this standard. This Mathematical Action and Process is analogous to the CCSSM Standards for Mathematical Practice 1, 7, and 8, which are specifically addressed in the following modules:

GK M1: Numbers to 10

GK M2: Two-Dimensional and Three-Dimensional Shapes

GK M3: Comparison of Length, Weight, Capacity, and Numbers to 10

GK M4: Number Pairs, Addition and Subtraction to 10

GK M5: Numbers 10–20 and Counting to 100

GK M6: Analyzing, Comparing, and Composing Shapes

Mathematical Actions and Processes

Aligned Components of *Eureka Math*

Develop the Ability to Make Conjectures, Model, and Generalize

Make predictions and conjectures and draw conclusions throughout the problem solving process based on patterns and the repeated structures in mathematics. Students will create, identify, and extend patterns as a strategy for solving and making sense of problems.

Lessons in every module engage students in attending to precision as required by this standard. This Mathematical Action and Process is analogous to the CCSSM Standards for Mathematical Practice 4, 7, and 8, which are specifically addressed in the following modules:

GK M1: Numbers to 10

GK M2: Two-Dimensional and Three-Dimensional Shapes

GK M3: Comparison of Length, Weight, Capacity, and Numbers to 10

GK M4: Number Pairs, Addition and Subtraction to 10

GK M5: Numbers 10–20 and Counting to 100

GK M6: Analyzing, Comparing, and Composing Shapes

Mathematical Actions and Processes

Aligned Components of *Eureka Math*

Develop the Ability to Communicate Mathematically

Students will discuss, write, read, interpret and translate ideas and concepts mathematically. As they progress, students' ability to communicate mathematically will include their increased use of mathematical language and terms and analysis of mathematical definitions.

Lessons in every module engage students in looking for and making use of structure as required by this standard. This Mathematical Action and Process is analogous to the CCSSM Standards for Mathematical Practice 3 and 6, which are specifically addressed in the following modules:

GK M1: Numbers to 10

GK M2: Two-Dimensional and Three-Dimensional Shapes

GK M3: Comparison of Length, Weight, Capacity, and Numbers to 10

GK M5: Numbers 10–20 and Counting to 100

GK M6: Analyzing, Comparing, and Composing Shapes

Strand	Objectives for Mathematical Content	Aligned Components of <i>Eureka Math</i>
Number & Operations	Standard: Understand the relationship between quantities and whole numbers.	
	K.N.1.1 Count aloud forward in sequence to 100 by 1's and 10's.	GK M5 Topic D: Extend the Say Ten and Regular Count Sequence to 100
	K.N.1.2 Recognize that a number can be used to represent how many objects are in a set up to 10.	GK M1: Numbers to 10
	K.N.1.3 Use ordinal numbers to represent the position of an object in a sequence up to 10.	GK M1: Numbers to 10
	K.N.1.4 Recognize without counting (subitize) the quantity of a small group of objects in organized and random arrangements up to 10. Clarification Statement: Subitizing is defined as instantly recognizing the quantity of a set without having to count. "Subitizing" is not a vocabulary word and is not meant for student discussion at this age.	GK M1: Numbers to 10
	K.N.1.5 Count forward, with and without objects, from any given number up to 10.	GK M1: Numbers to 10

Strand	Objectives for Mathematical Content	Aligned Components of <i>Eureka Math</i>
	<p>K.N.1.6 Read, write, discuss, and represent whole numbers from 0 to at least 10. Representations may include numerals, pictures, real object and picture graphs, spoken words, and manipulatives.</p>	<p>GK M1 Topic D: The Concept of Zero and Working with Numbers 0–5</p> <p>GK M1 Topic E: Working with Numbers 6–8 in Different Configurations</p> <p>GK M1 Topic F: Working with Numbers 9–10 in Different Configurations</p> <p>GK M5 Topic B: Compose Numbers 11–20 from 10 Ones and Some Ones; Represent and Write Teen Numbers</p> <p>GK M5 Lesson 14: Show, count, and write to answer how many questions with up to 20 objects in circular configurations.</p>
	<p>K.N.1.7 Find a number that is 1 more or 1 less than a given number up to 10.</p>	<p>GK M1 Topic G: <i>One More</i> with Numbers 0–10</p> <p>GK M1 Topic H: <i>One Less</i> with Numbers 0–10</p> <p>GK M3 Lesson 23: Reason to identify and make a set that has 1 more.</p> <p>GK M4 Lesson 38: Add 1 to numbers 1–9 to see the pattern of <i>the next number</i> using 5-group drawings and equations.</p>
	<p>K.N.1.8 Using the words <i>more than</i>, <i>less than</i>, or <i>equal to</i> to compare and order whole numbers, with and without objects, from 0 to 10.</p>	<p>GK M3: Comparison of Length, Weight, Capacity, and Numbers to 10</p>

Strand	Objectives for Mathematical Content	Aligned Components of <i>Eureka Math</i>
	Standard: Develop conceptual fluency with addition and subtraction (up to 10) using objects and pictures.	
	K.N.2.1 Compose and decompose numbers up to 10 with objects and pictures.	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 <i>the same as</i> . GK M4: Number Pairs, Addition and Subtraction to 10
	Standard: Understand the relationship between whole numbers and fractions through fair share.	
	K.N.3.1 Distribute equally a set of objects into at least two smaller equal sets.	G2 M6: Foundations of Multiplication and Division
	Standard: Identify coins by name.	
	K.N.4.1 Identify pennies, nickels, dimes, and quarters by name.	G1 M6 Topic E: Coins and Their Values

Strand	Objectives for Mathematical Content	Aligned Components of <i>Eureka Math</i>
Algebraic Reasoning & Algebra	Standard: Duplicate patterns in a variety of contexts.	
	K.A.1.1 Sort and group up to 10 objects into a set based upon characteristics such as color, size, and shape. Explain verbally what the objects have in common.	GK M1 Topic A: Attributes of Two Related Objects GK M1 Topic B: Classify to Make Categories and Count GK M1 Lesson 7: Sort by count in vertical columns and horizontal rows (linear configurations to 5). Match to numerals on cards. GK M2 Lesson 9: Identify and sort shapes as two-dimensional or three-dimensional, and recognize two-dimensional and three-dimensional shapes in different orientations and sizes.
	K.A.1.2 Recognize, duplicate, complete, and extend repeating, shrinking and growing patterns involving shape, color, size, objects, sounds, movement, and other contexts.	GK M1 Topic G: <i>One More</i> with Numbers 0–10 GK M1 Topic H: <i>One Less</i> with Numbers 0–10 Note: <i>Eureka Math</i> focuses on number patterns. Consider adding those listed in the standard for full alignment.
Geometry & Measurement	Standard: Recognize and sort basic two-dimensional shapes and use them to represent real-world objects.	
	K.GM.1.1 Recognize squares, circles, triangles, and rectangles.	GK M2: Two-Dimensional and Three-Dimensional Shapes
	K.GM.1.2 Sort two-dimensional objects using characteristics such as shape, size, color, and thickness.	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

Strand	Objectives for Mathematical Content	Aligned Components of <i>Eureka Math</i>
	<p>K.GM.1.3 Identify attributes of two-dimensional shapes using informal and formal geometric language interchangeably.</p>	<p>GK M1 Topic A: Attributes of Two Related Objects</p> <p>GK M1 Topic B: Classify to Make Categories and Count</p> <p>GK M2: Two-Dimensional and Three-Dimensional Shapes</p> <p>GK M6: Analyzing, Comparing, and Composing Shapes</p>
	<p>K.GM.1.4 Use smaller shapes to form a larger shape when there is an outline to follow.</p>	<p>GK M6: Analyzing, Comparing, and Composing Shapes</p>
	<p>K.GM.1.5 Compose free-form shapes with blocks.</p>	<p>GK M6: Analyzing, Comparing, and Composing Shapes</p>
	<p>K.GM.1.6 Use basic shapes and spatial reasoning to represent objects in the real world.</p>	<p>GK M2 Lesson 5: Describe and communicate positions of all flat shapes using the words <i>above</i>, <i>below</i>, <i>beside</i>, <i>in front of</i>, <i>next to</i>, and <i>behind</i>.</p> <p>GK M2 Lesson 8: Describe and communicate positions of all solid shapes using the words <i>above</i>, <i>below</i>, <i>beside</i>, <i>in front of</i>, <i>next to</i>, and <i>behind</i>.</p>
Standard: Compare and order objects according to location and measurable attributes.		
	<p>K.GM.2.1 Use words to compare objects according to length, size, weight, position, and location.</p>	<p>GK M3: Comparison of Length, Weight, Capacity, and Numbers to 10</p>
	<p>K.GM.2.2 Order up to 6 objects using measurable attributes, such as length and weight.</p>	<p>GK M3: Comparison of Length, Weight, Capacity, and Numbers to 10</p>

Strand	Objectives for Mathematical Content	Aligned Components of <i>Eureka Math</i>
	<p>K.GM.2.3 Sort objects into sets by more than one attribute.</p>	<p>GK M1 Topic A: Attributes of Two Related Objects GK M1 Topic B: Classify to Make Categories and Count</p>
	<p>K.GM.2.4 Compare the number of objects needed to fill two different containers.</p>	<p>GK M3 Lesson 15: Compare using <i>the same as</i> with units. GK M3 Topic D: Comparison of Volume</p>
	<p>Standard: Tell time as it relates to daily life.</p>	
	<p>K.GM.3.1 Develop an awareness of simple time concepts using words such as <i>yesterday, today, tomorrow, morning, afternoon, and night</i> within his/her daily life.</p>	<p><i>Eureka Math</i> does not specifically teach calendar skills except for use in word problem situations.</p>
Data & Probability	<p>Standard: Collect, organize, and interpret categorical data.</p>	
	<p>K.D.1.1 Collect and sort information about objects and events in the environment.</p>	<p>G1 M3 Topic D: Data Interpretation</p>
	<p>K.D.1.2 Use categorical data to create real-object and picture graphs.</p>	<p>G1 M3 Topic D: Data Interpretation</p>
	<p>K.D.1.3 Draw conclusions from real-object and picture graphs.</p>	<p>G1 M3 Topic D: Data Interpretation</p>