## EUREKA MATH<sup>™</sup>

ABOUT EUREKA MATH	Created by the nonprofit Great Minds, <i>Eureka Math</i> 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 <i>Eureka Math</i> find the trademark "Aha!" moments in <i>Eureka Math</i> to be a source of joy and inspiration, lesson after lesson, year after year.		
ALIGNED	<i>Eureka Math</i> 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 <i>Eureka Math</i> 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 <i>Eureka Math</i> . See their stories and data at greatminds.org/data.		
FULL SUITE OF RESOURCES	As a nonprofit, Great Minds offers the <i>Eureka Math</i> 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:		
	<ul> <li>Printed material in English and Spanish</li> <li>Digital resources</li> <li>Professional development</li> <li>Classroom tools and manipulatives</li> <li>Teacher support materials</li> </ul>		

• Parent resources

# Oklahoma Academic Standards for Mathematics Correlation to *Eureka Math*™

## **GRADE 1 MATHEMATICS**

The majority of the Grade 1 Oklahoma Academic Standards for Mathematics are fully covered by the Grade 1 *Eureka Math* curriculum. The areas where the Grade 1 Oklahoma Academic Standards for Mathematics and Grade 1 *Eureka Math* do not align will require the use of *Eureka Math* content from other grade levels. A detailed analysis of alignment is provided in the table below.

### **INDICATORS**

Green indicates that the Oklahoma standard is fully 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*.

#### Aligned Components of Eureka Math

<b>Develop a Deep and Flexible Conceptual Understanding</b> 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:
	G1 M1: Sums and Differences to 10
	G1 M2: Introduction to Place Value Through Addition and Subtraction Within 20
	G1 M3: Ordering and Comparing Length Measurements as Numbers
	G1 M5: Identifying, Composing, and Partitioning Shapes
	G1 M6: Place Value, Comparison, Addition and Subtraction to 100

#### Aligned Components of Eureka Math

<b>Develop Accurate and Appropriate Procedural Fluency</b> 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:
	G1 M1: Sums and Differences to 10
	G1 M2: Introduction to Place Value Through Addition and Subtraction Within 20
	G1 M3: Ordering and Comparing Length Measurements as Numbers
	G1 M4: Place Value, Comparison, Addition and Subtraction to 40
	G1 M5: Identifying, Composing, and Partitioning Shapes

#### **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.

#### Aligned Components of Eureka Math

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:

G1 M1: Sums and Differences to 10

G1 M2: Introduction to Place Value Through Addition and Subtraction Within 20

G1 M3: Ordering and Comparing Length Measurements as Numbers

G1 M5: Identifying, Composing, and Partitioning Shapes

G1 M6: Place Value, Comparison, Addition and Subtraction to 100

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.	<ul> <li>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:</li> <li>G1 M3: Ordering and Comparing Length Measurements as Numbers</li> <li>G1 M4: Place Value, Comparison, Addition and Subtraction to 40</li> <li>G1 M6: Place Value, Comparison, Addition and Subtraction to 100</li> </ul>

Mathematical Actions and Processes	Aligned Components of Eureka Math
<b>Develop a Productive Mathematical Disposition</b> 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:
	G1 M1: Sums and Differences to 10
	G1 M2: Introduction to Place Value Through Addition and Subtraction Within 20
	G1 M3: Ordering and Comparing Length Measurements as Numbers
	G1 M4: Place Value, Comparison, Addition and Subtraction to 40
	G1 M5: Identifying, Composing, and Partitioning Shapes
	G1 M6: Place Value, Comparison, Addition and Subtraction to 100

Subtraction Within 20
G1 M3: Ordering and Comparing Length Measurements as Numbers
G1 M4: Place Value, Comparison, Addition and Subtraction to 40
G1 M5: Identifying, Composing, and Partitioning Shapes
G1 M6: Place Value, Comparison, Addition and Subtraction to 100

**Mathematical Actions and Processes** 

Develop the Ability to Make Conjectures, Model, and

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

Make predictions and conjectures and draw conclusions

Generalize

making sense of problems.

#### Aligned Components of Eureka Math

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

addressed in the following modules:

G1 M1: Sums and Differences to 10

for Mathematical Practice 4, 7, and 8, which are specifically

G1 M2: Introduction to Place Value Through Addition and

Mathematical Actions and Processes	Aligned Components of Eureka Math
<b>Develop the Ability to Communicate Mathematically</b> 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:
	G1 M1: Sums and Differences to 10
	G1 M3: Ordering and Comparing Length Measurements as Numbers
	G1 M4: Place Value, Comparison, Addition and Subtraction to 40
	G1 M5: Identifying, Composing, and Partitioning Shapes
	G1 M6: Place Value, Comparison, Addition and Subtraction to 100

Strand	<b>Objectives for Mathematical Content</b>	Aligned Components of Eureka Math
Number & Operations	Standard: Count, compare, and represent whole numbers up to 100, with an emphasis on groups of tens and ones.	
	<ul> <li>1.N.1.1 Recognize numbers to 20 without counting (subitize) the quantity of structured arrangements.</li> <li>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.</li> </ul>	GK M1: Numbers to 10 GK M5: Numbers 10–20 and Counting to 100 G1 M1: Sums and Differences to 10
	1.N.1.2 Use concrete representations to describe whole numbers between 10 and 100 in terms of tens and ones.	<ul> <li>G1 M4 Lesson 5: Identify 10 more, 10 less, 1 more, and 1 less than a two-digit number.</li> <li>G1 M4 Lesson 6: Use dimes and pennies as representations of tens and ones.</li> <li>G1 M4 Topic C: Addition and Subtraction of Tens</li> <li>G1 M6 Lesson 5: Identify 10 more, 10 less, 1 more, and 1 less than a two-digit number within 100.</li> <li>G1 M6 Lesson 10: Add and subtract multiples of 10 from multiples of 10 to 100, including dimes.</li> <li>G1 M6 Lesson 11: Add a multiple of 10 to any two-digit number within 100.</li> </ul>

Strand	<b>Objectives for Mathematical Content</b>	Aligned Components of Eureka Math
	<b>1.N.1.3</b> Read, write, discuss, and represent whole	G1 M4 Lesson 1: Compare the efficiency of counting by ones and counting by tens.
	numbers up to 100. Representations may include numerals, addition and subtraction, pictures, tally marks, number lines and	G1 M6 Lesson 7: Count and write numbers to 120. Use Hide Zero cards to relate numbers 0 to 20 to 100 to 120.
	manipulatives, such as bundles of sticks and base 10 blocks.	G1 M6 Lesson 8: Count to 120 in unit form using only tens and ones. Represent numbers to 120 as tens and ones on the place value chart.
		G1 M6 Lesson 9: Represent up to 120 objects with a written numeral.
	1.N.1.4	G1 M6 Topic B: Numbers to 120
	Count forward, with and without objects, from any given number up to 100 by 1s, 2s, 5s, and 10s.	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 twos, fives, and tens in a variety of fluency activities in Grades 1 and 2.
	<b>1.N.1.5</b> Find a number that is 10 more or 10 less than a given number up to 100.	G1 M4 Lesson 5: Identify 10 more, 10 less, 1 more, and 1 less than a two-digit number.
		G1 M4 Lesson 6: Use dimes and pennies as representations of tens and ones.
		G1 M6 Lesson 5: Identify 10 more, 10 less, 1 more, and 1 less than a two-digit number within 100.

Strand	<b>Objectives for Mathematical Content</b>	Aligned Components of Eureka Math
	1.N.1.6	G1 M4 Topic B: Comparison of Pairs of Two-Digit Numbers
	Compare and order whole numbers from 0 to 100.	G1 M6 Lesson 6: Use the symbols >, =, and < to compare quantities and numerals to 100.
	<b>1.N.1.7</b> Use knowledge of number relationships to locate the position of a given whole number on	G2 M2 Lesson 8: Solve addition and subtraction word problems using the ruler as a number line.
	an open number line up to 20.	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.
	1.N.1.8	G1 M4 Topic B: Comparison of Pairs of Two-Digit Numbers
	Use objects to represent and use words to describe the relative size of numbers, such as more than, less than, and equal to.	G1 M6 Lesson 6: Use the symbols >, =, and < to compare quantities and numerals to 100.
	Standard: Solve addition and subtraction p contexts.	problems up to 10 in real-world and mathematical
	1.N.2.1	G1 M1: Sums and Differences to 10
	Represent and solve real-world and mathematical problems using addition and subtraction up to ten.	G1 M2: Introduction to Place Value Through Addition and Subtraction Within 20
	<b>1.N.2.2</b> Determine if equations involving addition and	G1 M1 Topic E: The Commutative Property of Addition and the Equal Sign
	subtraction are true.	G1 M2 Lesson 25: Strategize and apply understanding of the equal sign to solve equivalent expressions.

Strand	<b>Objectives for Mathematical Content</b>	Aligned Components of Eureka Math
	<b>1.N.2.3</b> Demonstrate fluency with basic addition facts and related subtraction facts up to 10.	G1 M1: Sums and Differences to 10
	Standard: Develop foundational ideas for f	iractions.
	<b>1.N.3.1</b> Partition a regular polygon using physical models and recognize when those parts are equal.	G1 M5: Identifying, Composing, and Partitioning Shapes
	<b>1.N.3.2</b> Partition (fair share) sets of objects into equal groupings.	G2 M6 Topic A: Formation of Equal Groups
	Standard: Identify coins and their values.	
	<b>1.N.4.1</b> Identifying pennies, nickels, dimes, and quarters by name and value.	G1 M6 Topic E: Coins and Their Values
	<b>1.N.4.2</b> Write a number with the cent symbol to describe the value of a coin.	G1 M6 Topic E: Coins and Their Values
	<b>1.N.4.3</b> Determine the value of a collection of pennies, nickels, or dimes up to one dollar counting by ones, fives, or tens.	<ul><li>G1 M4 Lesson 1: Compare the efficiency of counting by ones and counting by tens.</li><li>G1 M6 Topic E: Coins and Their Values</li></ul>

Strand	<b>Objectives for Mathematical Content</b>	Aligned Components of Eureka Math	
Algebraic	Standard: Identify patterns found in real-world and mathematical situations.		
Reasoning & Algebra	<b>1.A.1.1</b> Identify, create, complete, and extend repeating, growing, and shrinking patterns with quantity, numbers, or shapes in a variety of real-world and mathematical contexts.	<ul> <li>G2 M3 Topic G: Finding 1, 10, and 100 More or Less than a Number</li> <li>G2 M6: Foundations of Multiplication and Division</li> <li>G2 M8 Topic D: Application of Fractions to Tell Time</li> </ul>	
Geometry &	Standard: Recognize, compose, and decompose two- and three-dimensional shapes.		
Measurement	<b>1.GM.1.1</b> Identify trapezoids and hexagons by pointing to the shape when given the name.	G1 M5 Lesson 2: Find and name two-dimensional shapes including trapezoid, rhombus, and a square as a special rectangle, based on defining attributes of sides and corners.	
	<b>1.GM.1.2</b> Compose and decompose larger shapes using smaller two-dimensional shapes.	G1 M5 Topic B: Part–Whole Relationships Within Composite Shapes	
	<b>1.GM.1.3</b> Compose structures with three-dimensional shapes.	G1 M5 Topic B: Part–Whole Relationships Within Composite Shapes	
	<b>1.GM.1.4</b> Recognize three-dimensional shapes such as cubes, cones, cylinders, and spheres.	G1 M5 Lesson 3: Find and name three-dimensional shapes including cone and rectangular prism, based on defining attributes of faces and points.	

Strand	<b>Objectives for Mathematical Content</b>		Aligned Components of Eureka Math
	Standard: Select and use nonstandard and standard units to describe length and volume/capac		
	<b>1.GM.2.1</b> Use nonstandard and standard measuring tools to measure the length of objects to reinforce the continuous nature of linear measurement.		G1 M3: Ordering and Comparing Length Measurements as Numbers
	<b>1.GM.2.2</b> Illustrate that the length of an object is the number of same-size units of length that, when laid end-to-end with no gaps or overlaps, reach from one end of the object to the other.		G1 M3: Ordering and Comparing Length Measurements as Numbers
	<b>1.GM.2.3</b> Measure the same object/distance with units of two different lengths and describe how and why the measurements differ.		G1 M3 Topic A: Indirect Comparison in Length Measurement G1 M3 Lesson 6: Order, measure, and compare the length of objects before and after measuring with centimeter cubes, solving <i>compare with difference unknown</i> word problems.
	<b>1.GM.2.4</b> Describe a length to the nearest whole unit using a number and a unit.		G1 M3: Ordering and Comparing Length Measurements as Numbers

Strand	Objectives for Mathematical Content	Aligned Components of Eureka Math		
	<b>1.GM.2.5</b> Use standard and nonstandard tools to identify volume/capacity. Compare and sort containers that hold more, less, or the same amount.	<ul> <li>GK M3 Topic D: Comparison of Volume</li> <li>G1 M3: Ordering and Comparing Length Measurements as Numbers</li> <li>G1 M4 Topic B: Comparison of Pairs of Two-Digit Numbers</li> <li>G1 M6 Lesson 6: Use the symbols &gt;, =, and &lt; to compare quantities and numerals to 100.</li> </ul>		
	Standard: Tell time to the half and full hour.			
	<b>1.GM.3.1</b> Tell time to the hour and half-hour (analog and digital).	G1 M5 Topic D: Application of Halves to Tell Time		
Data &	Standard: Collect, organize, and interpret categorical and numerical data.			
Probability	<b>1.D.1.1</b> Collect, sort, and organize data in up to three categories using representations (e.g., tally marks, tables, Venn diagrams).	G1 M3 Topic D: Data Interpretation		
	<b>1.D.1.2</b> Use data to create picture and bar-type graphs to demonstrate one-to-one correspondence.	G1 M3 Topic D: Data Interpretation G2 M7 Topic A: Problem Solving with Categorical Data		
	<b>1.D.1.3</b> Draw conclusions from picture and bar-type graphs.	G1 M3 Topic D: Data Interpretation		