



#### **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

## Nebraska Mathematics Standards Correlation to *Eureka Math*™

## GRADE 3 MATHEMATICS

The majority of the Grade 3 Nebraska Mathematics Standards are fully covered by the Grade 3 *Eureka Math* curriculum. The primary area where the Grade 3 Nebraska Mathematics Standards and Grade 3 *Eureka Math* do not align is in the category of Number. Standards from this category 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 Nebraska standard is fully addressed in *Eureka Math*.
- Yellow indicates that the Nebraska standard may not be completely addressed in *Eureka Math*.
- Red indicates that the Nebraska 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 Nebraska standards and in *Eureka Math*.

#### Aligned Components of Eureka Math

#### 1: Solves mathematical problems.

Through the use of appropriate academic and technical tools, students will make sense of mathematical problems and persevere in solving them. Students will draw upon their prior knowledge in order to employ critical thinking skills, reasoning skills, creativity, and innovative ability. Additionally, students will compute accurately and determine the reasonableness of solutions.

Lessons in every module engage students in making sense of problems and persevering in solving them as required by this standard. This habit of mind is analogous to the CCSSM Standards for Mathematical Practices 1, 2, and 5, which are specifically addressed in the following modules:

G<sub>3</sub> M<sub>1</sub>: Properties of Multiplication and Division and Solving Problems with Units of 2–5 and 10

G3 M2: Place Value and Problem Solving with Units of Measure

G3 M3: Multiplication and Division with Units of 0, 1, 6–9, and Multiples of 10

G3 M4: Multiplication and Area

G3 M5: Fractions as Numbers on the Number Line

G<sub>3</sub> M<sub>6</sub>: Collecting and Displaying Data

G<sub>3</sub> M<sub>7</sub>: Geometry and Measurement Word Problems

## Aligned Components of Eureka Math

#### 2: Models and represents mathematical problems.

Students will analyze relationships in order to create mathematical models given a real-world situation or scenario. Conversely, students will describe situations or scenarios given a mathematical model. Lessons in every module engage students in reasoning abstractly and quantitatively as required by this standard. This habit of mind is analogous to the CCSSM Standards for Mathematical Practice 4, which is specifically addressed in the following modules:

G3 M1: Properties of Multiplication and Division and Solving Problems with Units of 2–5 and 10

G3 M2: Place Value and Problem Solving with Units of Measure

G3 M3: Multiplication and Division with Units of 0, 1, 6–9, and Multiples of 10

### Aligned Components of Eureka Math

### 3: Communicates mathematical ideas effectively.

Students will communicate mathematical ideas effectively and precisely. Students will critique the reasoning of others as well as provide mathematical justifications. Students will utilize appropriate communication approaches individually and collectively and through multiple methods, including writing, speaking, and listening.

Lessons in every module engage students in constructing viable arguments and critiquing the reasoning of others as required by this standard. This habit of mind is analogous to the CCSSM Standards for Mathematical Practices 3 and 6, which are specifically addressed in the following modules:

G<sub>3</sub> M<sub>1</sub>: Properties of Multiplication and Division and Solving Problems with Units of 2–5 and 10

G3 M2: Place Value and Problem Solving with Units of Measure

G3 M3: Multiplication and Division with Units of 0, 1, 6–9, and Multiples of 10

G3 M4: Multiplication and Area

G3 M5: Fractions as Numbers on the Number Line

G3 M6: Collecting and Displaying Data

G<sub>3</sub> M<sub>7</sub>: Geometry and Measurement Word Problems

### Aligned Components of Eureka Math

#### 4: Makes mathematical connections.

Students will connect mathematical knowledge, ideas, and skills beyond the math classroom. This includes the connection of mathematical ideas to other topics within mathematics and to other content areas. Additionally, students will be able to describe the connection of mathematical knowledge and skills to their career interest as well as within authentic/real-world contexts.

Lessons in every module engage students in modeling with mathematics as required by this standard. This habit of mind is analogous to the CCSSM Standards for Mathematical Practices 7 and 8, which are specifically addressed in the following modules:

G<sub>3</sub> M<sub>1</sub>: Properties of Multiplication and Division and Solving Problems with Units of 2–5 and 10

G3 M2: Place Value and Problem Solving with Units of Measure

G3 M3: Multiplication and Division with Units of 0, 1, 6–9, and Multiples of 10

G3 M4: Multiplication and Area

G3 M5: Fractions as Numbers on the Number Line

G<sub>3</sub> M<sub>6</sub>: Collecting and Displaying Data

Categor
Number

## **Mathematics Standards**

## Aligned Components of $\it Eureka\,Math$

Number	Numeric Relationships: Students will demonstrate, represent, and show relationships among whole numbers and simple fractions within the base-ten number system.		
	MA 3.1.1.a  Read, write and demonstrate multiple equivalent representations for numbers up to 100,000 using objects, visual representations, including standard form, word form, expanded form, and expanded notation.	G2 M3: Place Value, Counting, and Comparison of Numbers to 1,000 G4 M1 Topic A: Place Value of Multi-Digit Whole Numbers	
	MA 3.1.1.b  Compare whole numbers through the hundred thousands and represent the comparisons using the symbols >, < or =.	G4 M1 Topic B: Comparing Multi-Digit Whole Numbers	
	MA 3.1.1.c  Round a whole number to the tens or hundreds place, using place value understanding or a visual representation.	G3 M2 Topic C: Rounding to the Nearest Ten and Hundred G3 M2 Lesson 17: Estimate sums by rounding and apply to solve measurement word problems. G3 M2 Topic E: Two- and Three-Digit Measurement Subtraction Using the Standard Algorithm	
	MA 3.1.1.d  Represent and understand a fraction as a number on a number line.	G3 M5 Topic D: Fractions on the Number Line	
	MA 3.1.1.e  Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers.	G3 M5 Topic D: Fractions on the Number Line G3 M5 Topic E: Equivalent Fractions	

Category	<b>Mathematics Standards</b>	Aligned Components of Eureka Math
	MA 3.1.1.f  Show and identify equivalent fractions using visual representations including pictures, manipulatives, and number lines.	G3 M5 Topic E: Equivalent Fractions
	MA 3.1.1.g  Find parts of a whole and parts of a set using visual representations.	G3 M5 Topic B: Unit Fractions and Their Relation to the Whole  G3 M5 Lesson 12: Specify the corresponding whole when presented with one equal part.
	MA 3.1.1.h  Explain and demonstrate how fractions 1/4, 1/2, 3/4 and a whole relate to time, measurement, and money, and demonstrate using visual representation.	G3 M2 Topic A: Time Measurement and Problem Solving
	MA 3.1.1.i  Compare and order fractions having the same numerators or denominators using visual representations, comparison symbols, and verbal reasoning.	G3 M5 Topic C: Comparing Unit Fractions and Specifying the Whole  G3 M5 Lesson 18: Compare fractions and whole numbers on the number line by reasoning about their distance from 0.  G3 M5 Lesson 19: Understand distance and position on the number line as strategies for comparing fractions.  G3 M5 Topic F: Comparison, Order, and Size of Fractions

Category	<b>Mathematics Standards</b>	Aligned Components of Eureka Math
	Operations: Students will demonstrate the meaning of multiplication and division with whole numbers and compute accurately.	
	MA 3.1.2.a Add and subtract within 1,000 with or without	G2 M4: Addition and Subtraction Within 200 with Word Problems to 100
	regrouping.	G2 M5: Addition and Subtraction Within 1,000 with Word Problems to 100
	MA 3.1.2.b  Select and apply the appropriate methods of computation when solving one- and two-step addition and subtraction problems with four-digit whole numbers through the thousands (e.g., visual representations, mental computation, paper-pencil).	G4 M1: Place Value, Rounding, and Algorithms for Addition and Subtraction
	MA 3.1.2.c Use drawings, words, arrays, symbols, repeated addition, equal groups, and number lines to explain the meaning of multiplication.	G3 M1: Properties of Multiplication and Division and Solving Problems with Units of 2–5 and 10 G3 M3: Multiplication and Division with Units of 0, 1, 6–9, and Multiples of 10
	MA 3.1.2.d  Use words and symbols to explain the meaning of the Zero Property and Identity Property of multiplication.	G3 M3 Topic E: Analysis of Patterns and Problem Solving Including Units of o and 1
	MA 3.1.2.e  Multiply one digit whole numbers by multiples of 10 in the range of 10 to 90.	G3 M3 Topic F: Multiplication of Single-Digit Factors and Multiples of 10

Category	<b>Mathematics Standards</b>	Aligned Components of Eureka Math
	MA 3.1.2.f Use objects, drawings, arrays, words and symbols to explain the relationship between multiplication and division (e.g., if $3 \times 4 = 12$ then $12 \div 3 = 4$ ).	G3 M1 Topic B: Division as an Unknown Factor Problem G3 M1 Topic D: Division Using Units of 2 and 3 G3 M1 Lesson 17: Model the relationship between multiplication and division.
	MA 3.1.2.g Fluently (i.e., automatic recall based on understanding) multiply and divide within 100.	G3 M1 Topic E: Multiplication and Division Using Units of 4 G3 M3: Multiplication and Division with Units of 0, 1, 6–9, and Multiples of 10
	MA 3.1.2.h  Determine the reasonableness of whole number sums and differences in real-world problems using estimation, compatible numbers, mental computations, or other strategies.	G3 M3 Lesson 11: Interpret the unknown in multiplication and division to model and solve problems.  G3 M3 Lesson 15: Interpret the unknown in multiplication and division to model and solve problems.  G3 M3 Lesson 18: Solve two-step word problems involving all four operations and assess the reasonableness of solutions.  G3 M3 Lesson 21: Solve two-step word problems involving multiplying single-digit factors and multiples of 10.  G3 M7 Topic A: Solving Word Problems
Algebra	Algebraic Relationships: Students will demonstrate, represent, and show relationships with expressions and equations.	
	MA 3.2.1.a  Identify arithmetic patterns (including patterns in the addition or multiplication tables) using properties of operations.	G3 M3: Multiplication and Division with Units of 0, 1, 6–9, and Multiples of 10

Category	<b>Mathematics Standards</b>	Aligned Components of Eureka Math
	MA 3.2.1.b  Interpret a multiplication equation as equal groups (e.g., interpret 4 × 6 as the total number of objects in four groups of six objects each). Represent verbal statements of equal groups as multiplication equations.	G3 M1 Topic A: Multiplication and the Meaning of the Factors G3 M1 Topic C: Multiplication Using Units of 2 and 3
	Algebraic Processes: Students will apply t dividing.	he operational properties when multiplying and
	MA 3.2.2.a  Apply the commutative, associative, and distributive properties as strategies to multiply and divide.	G3 M1: Properties of Multiplication and Division and Solving Problems with Units of 2–5 and 10 G3 M3: Multiplication and Division with Units of 0, 1, 6–9, and Multiples of 10
	MA 3.2.2.b  Solve one-step whole number equations involving addition, subtraction, multiplication, or division, including the use of a letter to represent the unknown quantity.	G3 M3 Lesson 11: Interpret the unknown in multiplication and division to model and solve problems.  G3 M3 Lesson 15: Interpret the unknown in multiplication and division to model and solve problems.  G3 M3 Lesson 18: Solve two-step word problems involving all four operations and assess the reasonableness of solutions.  G3 M3 Lesson 21: Solve two-step word problems involving multiplying single-digit factors and multiples of 10.  G3 M7 Topic A: Solving Word Problems

Category	<b>Mathematics Standards</b>	Aligned Components of Eureka Math
	Applications: Students will solve real-world problems involving equations with whole numbers.	
	MA 3.2.3.a Solve real-world problems involving two-step	G3 M3 Lesson 11: Interpret the unknown in multiplication and division to model and solve problems.
	equations (involving two operations) involving whole numbers using addition and subtraction.	G3 M3 Lesson 15: Interpret the unknown in multiplication and division to model and solve problems.
		G3 M3 Lesson 18: Solve two-step word problems involving all four operations and assess the reasonableness of solutions.
		G3 M3 Lesson 21: Solve two-step word problems involving multiplying single-digit factors and multiples of 10.
		G3 M7 Topic A: Solving Word Problems
	MA 3.2.3.b Write an equation (e.g., one operation, one	G3 M3 Lesson 11: Interpret the unknown in multiplication and division to model and solve problems.
	variable) to represent real-world problems involving whole numbers.	G3 M3 Lesson 15: Interpret the unknown in multiplication and division to model and solve problems.
		G3 M3 Lesson 18: Solve two-step word problems involving all four operations and assess the reasonableness of solutions.
		G3 M3 Lesson 21: Solve two-step word problems involving multiplying single-digit factors and multiples of 10.
		G3 M7 Topic A: Solving Word Problems

Category	<b>Mathematics Standards</b>	Aligned Components of Eureka Math	
Geometry	Characteristics: Students will identify and describe geometric characteristics and create two- and three-dimensional shapes.		
	MA 3.3.1.a  Identify the number of sides, angles, and vertices of two-dimensional shapes.	G3 M7 Topic B: Attributes of Two-Dimensional Figures	
	MA 3.3.1.b  Sort quadrilaterals into categories (e.g., rhombuses, squares, and rectangles).	G3 M7 Topic B: Attributes of Two-Dimensional Figures	
	MA 3.3.1.c  Draw lines to separate two-dimensional figures into equal areas, and express the area of each part as a unit fraction of the whole.	G3 M5 Topic A: Partitioning a Whole into Equal Parts	
	Measurement: Students will perform and compare measurements and apply formulas.		
	MA 3.3.3.a  Find the perimeter of polygons given the side lengths, and find an unknown side length.	G3 M7: Geometry and Measurement Word Problems	
	MA 3.3.3.b  Tell and write time to the minute using both analog and digital clocks.	G3 M2 Topic A: Time Measurement and Problem Solving G3 M2 Lesson 12: Round two-digit measurements to the nearest ten on the vertical number line.	
	MA 3.3.3.c Solve real-world problems involving addition and subtraction of time intervals and find elapsed time.	G3 M2 Topic A: Time Measurement and Problem Solving G3 M2 Lesson 12: Round two-digit measurements to the nearest ten on the vertical number line.	

Category	<b>Mathematics Standards</b>	Aligned Components of Eureka Math
	MA 3.3.d  Identify and use the appropriate tools and units of measurement, both customary and metric, to solve real-world problems involving length, weight, mass, liquid volume, and capacity (within the same system and unit).	G3 M2 Topic B: Measuring Weight and Liquid Volume in Metric Units  G3 M2 Lesson 12: Round two-digit measurements to the nearest ten on the vertical number line.  G3 M2 Lesson 21: Estimate sums and differences of measurements by rounding, and then solve mixed word problems.
	MA 3.3.3.e  Estimate and measure length to the nearest half inch, quarter inch, and centimeter.	G3 M6: Collecting and Displaying Data G3 M7 Lesson 19: Use a line plot to record the number of rectangles constructed from a given number of unit squares. G3 M7 Lesson 22: Use a line plot to record the number of rectangles constructed in Lessons 20 and 21.
	MA 3.3.3.f Use concrete and pictorial models to measure areas in square units by counting square units.	G3 M4: Multiplication and Area
	MA 3.3.3.g  Find the area of a rectangle with wholenumber side lengths by modeling with unit squares, and show that the area is the same as would be found by multiplying the side lengths.	G3 M4: Multiplication and Area

Category	<b>Mathematics Standards</b>	Aligned Components of Eureka Math
	MA 3.3.3.h  Identify and draw rectangles with the same perimeter and different areas or with the same area and different perimeters.	G3 M7: Geometry and Measurement Word Problems
Data	Representations: Students will create displays that represent data.	
	MA 3.4.1.a  Create scaled pictographs and scaled bar graphs to represent a data set—including data collected through observations, surveys, and experiments—with several categories.	G3 M6: Collecting and Displaying Data
	MA 3.4.1.b  Represent data using line plots where the horizontal scale is marked off in appropriate units—whole numbers, halves, or quarters.	G3 M6: Collecting and Displaying Data G3 M7 Lesson 19: Use a line plot to record the number of rectangles constructed from a given number of unit squares. G3 M7 Lesson 22: Use a line plot to record the number of rectangles constructed in Lessons 20 and 21.
	Analysis & Applications: Students will analyze data to address the situation.	
	MA 3.4.2.a Solve problems and make simple statements about quantity differences (e.g., how many more and how many less) using information represented in pictographs and bar graphs.	G3 M6: Collecting and Displaying Data