



#### **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 K MATHEMATICS**

The Grade K Nebraska Mathematics Standards are fully covered by the Grade K *Eureka Math* curriculum. 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 that there is a discrepancy between the grade level at which this standard is addressed in the Nebraska standards and in *Eureka Math*.

#### **Mathematical Processes**

## 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:

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 M<sub>5</sub>: Numbers 10-20 and Counting to 100

GK M6: Analyzing, Comparing, and Composing Shapes

#### **Mathematical Processes**

### 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:

GK M1: 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

### 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:

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 M<sub>5</sub>: Numbers 10–20 and Counting to 100

GK M6: Analyzing, Comparing, and Composing Shapes

#### **Mathematical Processes**

#### 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:

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 M<sub>5</sub>: Numbers 10-20 and Counting to 100

GK M6: Analyzing, Comparing, and Composing Shapes

Number	Numeric Relationships: Students will demonstrate, represent, and show relationships among whole numbers within the base-ten number system.		
	MA 0.1.1.a	GK M1 Topic G: <i>One More</i> with Numbers 0–10	
	Perform the counting sequence by counting forward from any given number to 100, by ones. Count by tens to 100 starting at any decade number.	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	
	MA 0.1.1.b  Demonstrate cardinality (i.e., the last number name said indicates the number of objects counted), regardless of the arrangement or order in which the objects were counted.	GK M1: Numbers to 10	
	MA 0.1.1.c  Use one-to-one correspondence (pairing each object with one and only one spoken number name, and each spoken number name with one and only one object) when counting objects to show the relationship between numbers and quantities of 0 to 20.	GK M1: Numbers to 10 GK M5: Numbers 10–20 and Counting to 100	

Category	<b>Mathematics Standards</b>	Aligned Components of Eureka Math
	MA o.1.1.d  Demonstrate the relationship between whole numbers, knowing each sequential number name refers to a quantity that is one larger.	GK M1 Topic G: <i>One More</i> with Numbers 0–10  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 <i>the next number</i> 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
	MA 0.1.1.e  Count up to 20 objects arranged in a line, a rectangular array, or a circle. Count up to 10 objects in a scattered configuration. Count out the number of objects, given a number from 1 to 20.	GK M1: Numbers to 10 GK M5: Numbers 10–20 and Counting to 100
	MA 0.1.1.f  Write numbers 0 to 20 and represent a number of objects with a written numeral 0 to 20.	GK M1: Numbers to 10 GK M5: Numbers 10–20 and Counting to 100
	MA 0.1.1.g  Compose and decompose numbers from 11 to 19 into ten ones and some more ones by a drawing, model, or equation (e.g., 14 = 10 + 4) to record each composition and decomposition.	GK M5: Numbers 10–20 and Counting to 100

Category	<b>Mathematics Standards</b>		Aligned Components of Eureka Math
	MA 0.1.1.h  Compare the number of objects in two groups by identifying the comparison as greater than, less than, or equal to by using strategies of matching and counting.		GK M3: Comparison of Length, Weight, Capacity, and Numbers to 10
	MA 0.1.1.i  Compare the value of two written numerals between 1 and 10.		GK M3 Topic F: Comparison of Sets Within 10 GK M3 Topic G: Comparison of Numerals
Operations: Students will demonstrate the meaning of addition and subtrac numbers and compute accurately.		meaning of addition and subtraction with whole	
	MA 0.1.2.a Fluently (i.e., automatic recall based on understanding) add and subtract within 5.		GK M4 Topic A: Compositions and Decompositions of 2, 3, 4, and 5

#### **Mathematics Standards**

#### Aligned Components of Eureka Math

Algebra	
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Algebraic Relationships: Students will demonstrate, represent, and show relationships with expressions and equations.

#### MA 0.2.1.a

Decompose numbers less than or equal to 10 into pairs in more than one way, showing each decomposition with a model, drawing, or equation (e.g., 7 = 4 + 3 and 7 = 1 + 6).

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

#### MA 0.2.1.b

For any number from 1 to 9, find the number that makes 10 when added to the given number, showing the answer with a model, 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.

## Applications: Students will solve real-world problems involving addition and subtraction.

#### MA 0.2.3.a

Solve real-world problems that involve addition and subtraction within 10 (e.g., by using objects, drawings or equations to represent the problem).

GK M4: Number Pairs, Addition and Subtraction to 10

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 0.3.1.a  Describe real-world objects using names of shapes, regardless of their orientation or size (e.g., squares, circles, triangles, rectangles, hexagons, cubes, cones, spheres, and cylinders).		GK M2: Two-Dimensional and Three-Dimensional Shapes
	MA 0.3.1.b  Identify shapes as two-dimensional ("flat") or three-dimensional ("solid").		GK M2 Topic C: Two-Dimensional and Three-Dimensional Shapes
	MA 0.3.1.c  Compare and analyze two- and three-dimensional shapes, with different sizes and orientations to describe their similarities, differences, parts (e.g., number "corners"/vertices), and other attributes (e.g., sides of equal length).		GK M2: Two-Dimensional and Three-Dimensional Shapes GK M6: Analyzing, Comparing, and Composing Shapes
	MA 0.3.1.d  Model shapes found in the real world by building shapes from materials (e.g., clay and pipe cleaners) and drawing shapes.		GK M6: Analyzing, Comparing, and Composing Shapes
	MA 0.3.1.e  Combine simple shapes to compose larger shapes (e.g., use triangle pattern blocks to build a hexagon).		GK M6: Analyzing, Comparing, and Composing Shapes

Category	<b>Mathematics Standards</b>	Aligned Components of Eureka Math	
	Coordinate Geometry: Students will determine location, orientation, and relationships on the coordinate plane.		
	MA 0.3.2.a  Describe the relative positions of objects (e.g., above, below, beside, in front of, behind, next to, between).	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.	
	Measurement: Students will perform and compare measurements and apply formulas.		
	MA 0.3.3.a  Describe measurable attributes of real-world objects (e.g., length or weight).	GK M3: Comparison of Length, Weight, Capacity, and Numbers to 10	
	MA 0.3.3.b  Compare length and weight of two objects (e.g., longer/shorter, heavier/lighter).	GK M3: Comparison of Length, Weight, Capacity, and Numbers to 10	
Data	Analysis & Applications: Students will analyze data to address the situation.		
	MA 0.4.2.a  Identify, sort, and classify objects by size, shape, color, and other attributes. Identify objects that do not belong to a particular group and explain the reasoning used.	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	