Grade 7 | Nebraska's College and Career Ready Standards for Mathematics Correlation to *Eureka Math²*®

When the original *Eureka Math*® curriculum was released, it quickly became the most widely used K–5 mathematics curriculum in the country. Now, the Great Minds® teacher–writers have created *Eureka Math²*®, a groundbreaking new curriculum that helps teachers deliver exponentially better math instruction while still providing students with the same deep understanding of and fluency in math. *Eureka Math²* carefully sequences mathematical content to maximize vertical alignment—a principle tested and proven to be essential in students' mastery of math—from kindergarten through high school.

While this innovative new curriculum includes all the trademark *Eureka Math* aha moments that have been delighting students and teachers for years, it also boasts these exciting new features:

Teachability

Eureka Math² employs streamlined materials that allow teachers to plan more efficiently and focus their energy on delivering high-quality instruction that meets the individual needs of their students. Differentiation suggestions, slide decks, digital interactives, and multiple forms of assessment are just a few of the resources built right into the teacher materials.

Accessibility

Eureka Math² incorporates Universal Design for Learning principles so all learners can access the mathematics and take on challenging math concepts. Student supports are built into the instructional design and are clearly identified in the *Teach* book. Further, the curriculum carries a focus on readability. By eliminating unnecessary words and using simple, clear sentences, the *Eureka Math²* teacher–writers have created one of the most readable mathematics curricula on the market. The curriculum's readability and accessibility help all students see themselves as mathematical thinkers and doers who are fully capable of owning their mathematics learning.

Digital Engagement

The digital elements of *Eureka Math²* add to students' engagement with the math. The curriculum provides teachers with digital slides for each lesson. In addition, each grade level includes wordless videos that spark students' interest and curiosity. Students at all levels work through mathematical explorations that help lead to their own mathematical discoveries. Digital lessons and videos provide opportunities for students to wonder, explore, and make sense of mathematics, which contributes to the development of a strong, positive mathematical identity.

Nebraska Mathematical Processes	Aligned Components of *Eureka Math²*
MP.1 Make sense of problems and persevere in solving them.	Lessons in every module engage students in mathematical processes. These are indicated in margin notes included with every lesson.
MP.2 Reason quantitatively and abstractly and consider the reasoning of others.	Lessons in every module engage students in mathematical processes. These are indicated in margin notes included with every lesson.
MP.3 Create and use representations to organize, record, and communicate mathematical ideas.	Lessons in every module engage students in mathematical processes. These are indicated in margin notes included with every lesson.
MP.4 Analyze mathematical relationships to connect mathematical ideas.	Lessons in every module engage students in mathematical processes. These are indicated in margin notes included with every lesson.
MP.5 Explain and justify mathematical ideas using precise mathematical language in written or oral communication.	Lessons in every module engage students in mathematical processes. These are indicated in margin notes included with every lesson.

Number: Students will solve problems and reason with number concepts using multiple representations, make connections within math and across disciplines, and communicate their ideas.

7.N.2 Operations: Students will compute with rational numbers accurately.

Nebraska's College and Career Ready Standards for Mathematics	Aligned Components of *Eureka Math²*
7.N.2.a Add, subtract, multiply, and divide rational numbers (e.g., positive and negative fractions, decimals, and integers).	7 M2 Lesson 1: Combining Opposites 7 M2 Lesson 2: Adding Integers 7 M2 Lesson 3: Adding Integers Efficiently 7 M2 Lesson 5: Decomposing Rational Numbers to Make Addition More Efficient 7 M2 Lesson 6: Adding Rational Numbers 7 M2 Topic B: Subtracting Rational Numbers 7 M2 Topic C: Multiplying Rational Numbers 7 M2 Lesson 18: Understanding Negative Divisors 7 M2 Lesson 21: Comparing and Ordering Rational Numbers 7 M2 Lesson 25: Writing and Evaluating Expressions with Rational Numbers, Part 1 7 M2 Lesson 26: Writing and Evaluating Expressions with Rational Numbers, Part 2
7.N.2.b Apply properties of operations (commutative, associative, distributive, identity, inverse, zero) as strategies for problem solving with rational numbers.	7 M2 Lesson 4: KAKOOMA® 7 M2 Lesson 5: Decomposing Rational Numbers to Make Addition More Efficient 7 M2 Lesson 6: Adding Rational Numbers 7 M2 Lesson 9: Subtracting Integers, Part 2 7 M2 Lesson 10: Subtracting Rational Numbers, Part 1 7 M2 Lesson 11: Subtracting Rational Numbers, Part 2 7 M2 Lesson 12: The Integer Game 7 M2 Topic C: Multiplying Rational Numbers 7 M2 Lesson 17: Understanding Negative Dividends 7 M2 Lesson 18: Understanding Negative Divisors

Nebraska's College and Career Ready Standards for Mathematics	Aligned Components of *Eureka Math²*
7.N.2.b *continued*	7 M2 Lesson 22: Multiplication and Division Expressions
	7 M2 Lesson 23: Properties of Operations with Rational Numbers
	7 M2 Lesson 24: Order of Operations with Rational Numbers

Ratios and Proportions: Students will understand ratio concepts and use ratio reasoning to solve problems.

7.R.1 Proportional Relationships: Students will understand the concept of proportions, use language to describe the relationship between two quantities, and use proportions to solve authentic situations.

Nebraska's College and Career Ready Standards for Mathematics	Aligned Components of *Eureka Math²*
7.R.1.a Decide whether two quantities are in a proportional relationship (e.g., by testing for equivalent ratios in a table).	7 M1 Topic A: Understanding Proportional Relationships 7 M1 Lesson 14: Extreme Bicycles
7.R.1.b Represent and solve authentic problems with proportions.	7 M1 Lesson 2: Exploring Tables of Proportional Relationships 7 M1 Lesson 3: Identifying Proportional Relationships in Tables 7 M1 Lesson 8: Relating Representations of Proportional Relationships 7 M1 Lesson 10: Applying Proportional Reasoning 7 M1 Lesson 11: Constant Rates 7 M1 Lesson 12: Multi-Step Ratio Problems, Part 1 7 M1 Lesson 13: Multi-Step Ratio Problems, Part 2 7 M3 Lesson 17: Using Equations to Solve Problems 7 M5 Lesson 4: Proportion and Percent 7 M5 Lesson 5: Common Denominators or Common Numerators

Nebraska's College and Career Ready Standards for Mathematics	Aligned Components of *Eureka Math²*
7.R.1.c Use proportional relationships to solve authentic percent problems (e.g., percent change, sales tax, mark-up, discount, tip).	7 M1 Lesson 7: Handstand Sprint 7 M1 Lesson 10: Applying Proportional Reasoning 7 M1 Lesson 11: Constant Rates 7 M1 Lesson 12: Multi-Step Ratio Problems, Part 1 7 M1 Lesson 13: Multi-Step Ratio Problems, Part 2 7 M5 Lesson 2: Racing for Percents 7 M5 Lesson 3: Percent as a Rate per 100 7 M5 Lesson 4: Proportion and Percent 7 M5 Lesson 5: Common Denominators or Common Numerators 7 M5 Topic B: Part of 100 7 M5 Lesson 10: Percent Increase 7 M5 Lesson 11: Percent Decrease 7 M5 Lesson 12: More Discounts 7 M5 Lesson 13: What Is the Best Deal? 7 M5 Topic D: Applications of Percent 7 M5 Lesson 20: Making Money, Day 1 7 M5 Lesson 21: Making Money, Day 2 7 M5 Lesson 22: Making Mixtures 7 M5 Lesson 23: Percents of Percents

Nebraska's College and Career Ready Standards for Mathematics	Aligned Components of *Eureka Math²*
7.R.1.d Solve authentic problems involving scale drawings.	7 M1 Lesson 15: Scale Drawings 7 M1 Lesson 16: Using a Scale Factor 7 M1 Lesson 17: Finding Actual Distances from a Scale Drawing 7 M1 Lesson 18: Relating Areas of Scale Drawings 7 M1 Lesson 19: Scale and Scale Factor 7 M1 Lesson 20: Creating Multiple Scale Drawings 7 M5 Lesson 1: Proportionality and Scale Factor 7 M5 Lesson 14: Scale Factor—Percent Increase and Decrease

Algebra: Students will solve problems and reason with algebra using multiple representations, make connections within math and across disciplines, and communicate their ideas.

7.A.1 Algebraic Processes: Students will apply the operational properties when evaluating expressions, and solving equations and inequalities.

Nebraska's College and Career Ready Standards for Mathematics	Aligned Components of *Eureka Math²*
7.A.1.a Use factoring and properties of operations to create equivalent algebraic expressions (e.g., $2x + 6 = 2(x + 3)$).	7 M3 Topic A: Equivalent Expressions 7 M3 Lesson 9: Solving Equations to Determine Unknown Angle Measures 7 M5 Lesson 10: Percent Increase 7 M5 Lesson 11: Percent Decrease 7 M5 Lesson 12: More Discounts 7 M5 Lesson 14: Scale Factor—Percent Increase and Decrease 7 M5 Lesson 15: Tips and Taxes 7 M5 Lesson 16: Markups and Discounts 7 M5 Lesson 23: Percents of Percents

Nebraska's College and Career Ready Standards for Mathematics	Aligned Components of *Eureka Math²*
7.A.1.b Given the value of the variable(s), evaluate algebraic expressions, which may include absolute value.	6 M4 Lesson 8: Algebraic Expressions with Addition, Subtraction, Multiplication, and Division 6 M4 Lesson 11: Modeling Real-World Situations with Expressions 6 M4 Lesson 12: Applying Properties to Multiplication and Division Expressions 6 M4 Lesson 17: Equations and Solutions 6 M5 Lesson 1: The Area of a Parallelogram 6 M5 Lesson 3: The Area of a Triangle 6 M5 Lesson 12: From Nets to Surface Area 6 M5 Lesson 13: Surface Area in Real-World Situations 6 M5 Lesson 14: Designing a Box 6 M5 Lesson 16: Applying Volume Formulas
7.A.1.c Solve one- and two-step equations involving rational numbers.	7 M3 Lesson 7: Angle Relationships and Unknown Angle Measures 7 M3 Lesson 8: Strategies to Determine Unknown Angle Measures 7 M3 Lesson 12: Solving Equations Algebraically and Arithmetically 7 M3 Lesson 13: Solving Equations—Puzzles 7 M3 Lesson 14: Solving Equations—Scavenger Hunt 7 M3 Lesson 15: Solving Equations Fluently 7 M3 Lesson 16: Using Equations to Solve Rate Problems

Nebraska's College and Career Ready Standards for Mathematics	Aligned Components of *Eureka Math²*
7.A.1.d Solve equations using the distributive property and combining like terms.	7 M3 Lesson 7: Angle Relationships and Unknown Angle Measures 7 M3 Lesson 8: Strategies to Determine Unknown Angle Measures 7 M3 Lesson 12: Solving Equations Algebraically and Arithmetically 7 M3 Lesson 13: Solving Equations—Puzzles 7 M3 Lesson 14: Solving Equations—Scavenger Hunt 7 M3 Lesson 15: Solving Equations Fluently 7 M3 Lesson 16: Using Equations to Solve Rate Problems
7.A.1.e Solve one- and two-step inequalities involving integers and represent solutions on a number line.	7 M3 Topic D: Inequalities

Algebra: Students will solve problems and reason with algebra using multiple representations, make connections within math and across disciplines, and communicate their ideas.

7.A.2 Applications: Students will solve authentic problems with algebraic expressions, equations, and inequalities.

Nebraska's College and Career Ready Standards for Mathematics	Aligned Components of *Eureka Math²*
7.A.2.a Write one- and two-step equations involving rational numbers from words, tables, and authentic situations.	7 M3 Lesson 7: Angle Relationships and Unknown Angle Measures 7 M3 Lesson 8: Strategies to Determine Unknown Angle Measures 7 M3 Topic C: Solving Equations
7.A.2.b Write one- and two-step inequalities to represent authentic situations involving integers.	7 M3 Topic D: Inequalities

Geometry: Students will solve problems and reason with geometry using multiple representations, make connections within math and across disciplines, and communicate their ideas.

7.G.1 Attributes: Students will identify angle relationships and apply properties to determine angle measures.

Nebraska's College and Career Ready Standards for Mathematics	Aligned Components of *Eureka Math²*
7.G.1.a Apply properties of adjacent, complementary, supplementary, linear pair, and vertical angles to find missing angle measures.	7 M3 Lesson 7: Angle Relationships and Unknown Angle Measures 7 M3 Lesson 8: Strategies to Determine Unknown Angle Measures 7 M3 Lesson 10: Problem Solving with Unknown Angle Measures

Geometry: Students will solve problems and reason with geometry using multiple representations, make connections within math and across disciplines, and communicate their ideas.

7.G.2 Coordinate Geometry: Students will determine location, orientation, and relationships on the coordinate plane.

Nebraska's College and Career Ready Standards for Mathematics	Aligned Components of *Eureka Math²*
7.G.2.a Draw polygons in the coordinate plane given coordinates for the vertices.	6 M5 Lesson 5: Perimeter and Area in the Coordinate Plane 6 M5 Lesson 6: Problem Solving with Area in the Coordinate Plane
7.G.2.b Calculate vertical and horizontal distances in the coordinate plane to find perimeter and area of rectangles.	6 M5 Lesson 5: Perimeter and Area in the Coordinate Plane 6 M5 Lesson 6: Problem Solving with Area in the Coordinate Plane

Geometry: Students will solve problems and reason with geometry using multiple representations, make connections within math and across disciplines, and communicate their ideas.

7.G.3 Measurement: Students will identify geometric attributes that create two- and three-dimensional shapes in order to perform measurements and apply formulas to find area and volume.

Nebraska's College and Career Ready Standards for Mathematics	Aligned Components of *Eureka Math²*
7.G.3.a Solve authentic problems involving perimeter and area of composite shapes made from triangles and quadrilaterals.	7 M4 Lesson 14: Composite Figures with Circular Regions 7 M4 Lesson 16: Solving Area Problems by Composition and Decomposition
7.G.3.b Determine surface area and volume of composite rectangular and triangular prisms.	7 M4 Lesson 17: Surface Area of Right Rectangular and Right Triangular Prisms 7 M4 Lesson 18: Surface Area of Right Prisms 7 M4 Lesson 20: Surface Area of Right Pyramids 7 M4 Lesson 21: Surface Area of Other Solids 7 M4 Lesson 24: Volume of Prisms 7 M4 Lesson 25: Volume of Composite Solids 7 M4 Lesson 26: Designing a Fish Tank
7.G.3.c Determine the area and circumference of circles both on and off the coordinate plane using 3.14 for the value of Pi.	7 M4 Lesson 10: The Outside of a Circle 7 M4 Lesson 11: The Inside of a Circle 7 M4 Lesson 12: Exploring the Area and Circumference of a Circle 7 M4 Lesson 13: Finding Areas of Circular Regions 7 M4 Lesson 14: Composite Figures with Circular Regions 7 M4 Lesson 15: Watering a Lawn *Supplemental material is necessary to address circles on the coordinate plane.*

Data: Students will solve problems and reason with data/probability using multiple representations, make connections within math and across disciplines, and communicate their ideas.

7.D.1 Data Collection and Statistical Methods: Students will formulate statistical investigative questions, collect data, and organize data.

Nebraska's College and Career Ready Standards for Mathematics	Aligned Components of *Eureka Math²*
7.D.1.a Create an investigative question and collect data.	6 M6 Lesson 17: Developing a Statistical Project 6 M6 Lesson 22: Presenting Statistical Projects
7.D.1.b Generate conclusions about a population based on a random sample.	7 M6 Topic C: Random Sampling
7.D.1.c Identify and critique biases in various data representations.	*Supplemental material is necessary to address this standard.*

Data: Students will solve problems and reason with data/probability using multiple representations, make connections within math and across disciplines, and communicate their ideas.

7.D.3 Probability: Students will interpret and apply concepts of probability.

Nebraska's College and Career Ready Standards for Mathematics	Aligned Components of *Eureka Math²*
7.D.3.a Find theoretical and experimental probabilities for compound independent and dependent events.	7 M6 Lesson 5: Multistage Experiments 7 M6 Lesson 9: Probability Simulations 7 M6 Lesson 10: Simulations with Random Number Tables *Supplemental material is necessary to address independent and dependent events.*
7.D.3.b Identify complementary events and calculate their probabilities.	7 M6 Lesson 5: Multistage Experiments *Supplemental material is necessary to address the term* complementary events.