Grade 6 | 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.

6.N.1 Numeric Relationships: Students will demonstrate, represent, and show relationships among fractions, decimals, percents, and integers within the base-ten number system.

Nebraska's College and Career Ready Standards for Mathematics	Aligned Components of *Eureka Math²*
6.N.1.a Determine common factors and common multiples.	6 M2 Topic A: Factors, Multiples, and Divisibility 6 M4 Lesson 13: The Distributive Property 6 M4 Lesson 14: Using the Distributive Property to Factor Expressions
6.N.1.b Determine prime factorization of numbers with and without exponents.	6 M2 Lesson 3: The Greatest Common Factor 6 M2 Lesson 4: The Least Common Multiple 6 M4 Lesson 3: Exploring Exponents
6.N.1.c Model integers using drawings, words, number lines, models, and symbols.	6 M3 Topic A: Integers and Rational Numbers
6.N.1.d Determine absolute value of rational numbers.	6 M3 Topic B: Ordering and Magnitude
6.N.1.e Compare and order numbers including non-negative fractions and decimals, integers, and absolute values and locate them on the number line.	5 M4 Lesson 6: Compare decimal numbers to the thousandths place. 6 M3 Lesson 5: Comparing Rational Numbers 6 M3 Lesson 6: Ordering Rational Numbers 6 M3 Lesson 8: Absolute Value and Order *Supplemental material is necessary to address comparing and ordering non-negative fractions.*

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

6.N.2 Operations: Students will compute with fractions and decimals accurately.

Nebraska's College and Career Ready Standards for Mathematics	Aligned Components of *Eureka Math²*
6.N.2.a Divide multi-digit whole numbers and decimals using an algorithm.	6 M2 Topic E: Division of Multi-Digit Numbers 6 M2 Topic F: Decimal Division
6.N.2.b Divide non-negative fractions and mixed numbers.	6 M2 Topic B: Dividing Fractions 6 M2 Topic C: Dividing Fractions Fluently
6.N.2.c Evaluate numerical expressions including absolute value and/or positive exponents with respect to order of operations.	6 M4 Topic A: Numerical Expressions

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

6.R.1 Ratios and Rates: Students will understand the concept of ratios and unit rates, use language to describe the relationship between two quantities, and use ratios and unit rates to solve authentic situations.

Nebraska's College and Career Ready Standards for Mathematics	Aligned Components of *Eureka Math²*
6.R.1.a Determine ratios from concrete models, drawings, and/or words.	6 M1 Lesson 2: Introduction to Ratios 6 M1 Lesson 3: Ratios and Tape Diagrams 6 M1 Lesson 4: Exploring Ratios by Making Batches 6 M1 Lesson 5: Equivalent Ratios 6 M1 Lesson 8: Addition Patterns in Ratio Relationships 6 M1 Lesson 10: Multiplicative Reasoning in Ratio Relationships 6 M1 Lesson 11: Applications of Ratio Reasoning
6.R.1.b Explain and determine unit rates.	6 M1 Lesson 15: The Value of the Ratio 6 M1 Lesson 16: Speed 6 M1 Lesson 17: Rates 6 M1 Lesson 18: Comparing Rates 6 M1 Lesson 19: Using Rates to Convert Units 6 M1 Lesson 20: Solving Rate Problems
6.R.1.c Find a percent of a quantity as a rate per 100 and solve problems involving finding the whole, given a part and the percent.	6 M1 Lesson 22: Introduction to Percents 6 M1 Lesson 25: Finding the Whole
6.R.1.d Convert among fractions, decimals, and percents using multiple representations.	6 M1 Topic E: Percents

Nebraska's College and Career Ready Standards for Mathematics	Aligned Components of *Eureka Math²*
6.R.1.e Solve authentic problems using ratios, unit rates, and percents.	6 M1 Lesson 1: Jars of Jelly Beans 6 M1 Lesson 3: Ratios and Tape Diagrams 6 M1 Lesson 4: Exploring Ratios by Making Batches 6 M1 Lesson 5: Equivalent Ratios 6 M1 Lesson 6: Ratio Tables and Double Number Lines 6 M1 Lesson 8: Addition Patterns in Ratio Relationships 6 M1 Lesson 9: Multiplication Patterns in Ratio Relationships 6 M1 Lesson 10: Multiplicative Reasoning in Ratio Relationships 6 M1 Lesson 11: Applications of Ratio Reasoning 6 M1 Topic D: Rates 6 M4 Lesson 22: Relationship Between Two Variables 6 M4 Lesson 23: Graphs of Ratio Relationships 6 M5 Lesson 8: Areas of Composite Figures in Real-World Situations 6 M5 Lesson 13: Surface Area in Real-World Situations
6.R.1.f Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities.	6 M1 Lesson 19: Using Rates to Convert Units 6 M1 Lesson 20: Solving Rate Problems 6 M1 Lesson 21: Solving Multi-Step Rate Problems

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

6.R.2 Represent: Students will represent ratios and rates on the coordinate plane.

Nebraska's College and Career Ready Standards for Mathematics	Aligned Components of *Eureka Math²*
6.R.2.a Identify the ordered pair of a given point in the coordinate plane.	6 M3 Lesson 10: The Four Quadrants of the Coordinate Plane
6.R.2.b Plot the location of an ordered pair in the coordinate plane.	6 M3 Lesson 11: Plotting Points in the Coordinate Plane 6 M3 Lesson 13: Constructing the Coordinate Plane
6.R.2.c Identify the location of a given point in the coordinate plane (e.g., axis, origin, quadrant).	6 M3 Lesson 10: The Four Quadrants of the Coordinate Plane
6.R.2.d Make tables of equivalent ratios relating quantities with whole number measurements.	6 M1 Topic B: Collections of Equivalent Ratios 6 M1 Topic C: Comparing Ratio Relationships 6 M1 Lesson 16: Speed 6 M1 Lesson 18: Comparing Rates
6.R.2.e Use the constant of proportionality to find the missing value in ratio tables.	6 M1 Topic D: Rates 6 M5 Lesson 8: Areas of Composite Figures in Real-World Situations 6 M5 Lesson 13: Surface Area in Real-World Situations *Supplemental material is necessary to address the term* constant of proportionality.

Nebraska's College and Career Ready Standards for Mathematics	Aligned Components of *Eureka Math²*
6.R.2.f Plot the pair of values from a ratio table on the coordinate plane.	6 M1 Lesson 7: Graphs of Ratio Relationships 6 M1 Lesson 8: Addition Patterns in Ratio Relationships 6 M1 Lesson 9: Multiplication Patterns in Ratio Relationships 6 M1 Lesson 10: Multiplicative Reasoning in Ratio Relationships 6 M1 Lesson 11: Applications of Ratio Reasoning 6 M1 Topic C: Comparing Ratio Relationships
6.R.2.g Explain what a point (x, y) on the graph of a proportional relationship means in terms of the situation.	6 M1 Lesson 7: Graphs of Ratio Relationships 6 M1 Lesson 8: Addition Patterns in Ratio Relationships 6 M1 Lesson 9: Multiplication Patterns in Ratio Relationships 6 M1 Lesson 10: Multiplicative Reasoning in Ratio Relationships 6 M1 Lesson 11: Applications of Ratio Reasoning 6 M1 Topic C: Comparing Ratio Relationships

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

6.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*
6.A.1.a Recognize and generate equivalent algebraic expressions involving the distributive property and combining like terms.	6 M4 Topic C: Equivalent Expressions Using the Properties of Operations 6 M5 Lesson 4: Areas of Triangles in Real-World Situations 6 M5 Lesson 6: Problem Solving with Area in the Coordinate Plane 6 M5 Lesson 7: Area of Trapezoids and Other Polygons 6 M5 Lesson 12: From Nets to Surface Area 6 M5 Lesson 17: Problem Solving with Volume
6.A.1.b Given the value of the variable, evaluate algebraic expressions with non-negative rational numbers with respect to order of operations, 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

Nebraska's College and Career Ready Standards for Mathematics	Aligned Components of *Eureka Math²*
6.A.1.c Use substitution to determine if a given value for a variable makes an equation or inequality true.	6 M4 Lesson 17: Equations and Solutions 6 M4 Lesson 18: Inequalities and Solutions 6 M4 Lesson 19: Solving Equations with Addition and Subtraction 6 M4 Lesson 20: Solving Equations with Multiplication and Division
6.A.1.d Solve one-step equations with non-negative rational numbers using addition, subtraction, multiplication, and division.	6 M4 Lesson 17: Equations and Solutions 6 M4 Lesson 19: Solving Equations with Addition and Subtraction 6 M4 Lesson 20: Solving Equations with Multiplication and Division 6 M4 Lesson 21: Solving Problems with Equations 6 M5 Lesson 2: The Area of a Right Triangle
6.A.1.e Solve one-step inequalities with whole numbers using addition, subtraction, multiplication, and division and represent solutions on a number line (e.g., graph $3x > 3$).	6 M4 Lesson 18: Inequalities and Solutions

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

6.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*
6.A.2 .a Create algebraic expressions (e.g., one operation, one variable as well as multiple operations, one variable) from word phrases.	6 M4 Lesson 7: Algebraic Expressions with Addition and Subtraction 6 M4 Lesson 8: Algebraic Expressions with Addition, Subtraction, Multiplication, and Division 6 M4 Lesson 9: Addition and Subtraction Expressions from Real-World Situations
6.A.2.b Write equations (e.g., one operation, one variable) to represent authentic situations involving non-negative rational numbers.	6 M4 Lesson 17: Equations and Solutions 6 M4 Lesson 19: Solving Equations with Addition and Subtraction 6 M4 Lesson 20: Solving Equations with Multiplication and Division 6 M4 Lesson 21: Solving Problems with Equations 6 M5 Lesson 2: The Area of a Right Triangle
6.A.2.c Write inequalities (e.g., one operation, one variable) to represent authentic situations involving whole numbers.	6 M4 Lesson 18: Inequalities and Solutions

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

6.G.1 Attributes: Students will identify and describe geometric attributes of two-dimensional shapes.

Nebraska's College and Career Ready Standards for Mathematics	Aligned Components of *Eureka Math²*
6.G.1.a Identify and create nets to represent two-dimensional drawings of prisms and pyramids.	6 M5 Lesson 9: Properties of Solids 6 M5 Lesson 10: Discovering Nets of Solids 6 M5 Lesson 11: Constructing Nets of Solids

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

6.G.3 Measurement: Students 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*
6.G.3.a Determine the area of quadrilaterals and triangles by composition and decomposition of these shapes, as well as applications of properties and formulas. Quadrilaterals include parallelograms and trapezoids.	6 M5 Topic A: Areas of Polygons 6 M5 Topic B: Problem Solving with Area
6.G.3.b Determine the surface area of rectangular prisms and triangular prisms using nets as well as application of formulas.	6 M5 Topic C: Nets and Surface Area 6 M5 Lesson 19: Volume and Surface Area in Real-World Situations

Nebraska's College and Career Ready Standards for Mathematics	Aligned Components of *Eureka Math²*
6.G.3.c Apply volume formulas for triangular prisms.	*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.

6.D.2 Analyze Data and Interpret Results: Students will represent and analyze the data and interpret the results.

Nebraska's College and Career Ready Standards for Mathematics	Aligned Components of *Eureka Math²*
6.D.2.a Represent data using dot plots, box-and-whisker plots, and histograms.	6 M6 Lesson 3: Creating a Dot Plot 6 M6 Lesson 4: Creating a Histogram 6 M6 Lesson 5: Comparing Data Displays 6 M6 Lesson 6: Selecting a Data Display 6 M6 Lesson 14: Using a Box Plot to Summarize a Distribution 6 M6 Lesson 15: More Practice with Box Plots 6 M6 Lesson 16: Interpreting Box Plots 6 M6 Lesson 19: Comparing Data Distributions 6 M6 Lesson 22: Presenting Statistical Projects

Nebraska's College and Career Ready Standards for Mathematics	Aligned Components of *Eureka Math²*
6.D.2.b Solve problems using information presented in dot plots, box-and-whisker plots, histograms, and circle graphs.	6 M6 Lesson 3: Creating a Dot Plot 6 M6 Lesson 4: Creating a Histogram 6 M6 Lesson 5: Comparing Data Displays 6 M6 Lesson 6: Selecting a Data Display 6 M6 Lesson 14: Using a Box Plot to Summarize a Distribution 6 M6 Lesson 15: More Practice with Box Plots 6 M6 Lesson 16: Interpreting Box Plots 6 M6 Lesson 19: Comparing Data Distributions 6 M6 Lesson 22: Presenting Statistical Projects *Supplemental material is necessary to address solving problems by using information presented in circle graphs.*
6.D.2.c Find and interpret the mean, median, mode, and range for a set of data.	6 M6 Lesson 7: Using the Mean to Describe the Center 6 M6 Lesson 8: The Mean as a Balance Point 6 M6 Lesson 12: Using the Median to Describe the Center 6 M6 Lesson 18: Connecting Graphical Representations and Summary Measures 6 M6 Lesson 21: Comparing Measures of Variability *Supplemental material is necessary to address the mode of a data set.*
6.D.2.d Compare the mean, median, mode, and range from two sets of data.	6 M6 Lesson 19: Comparing Data Distributions *Supplemental material is necessary to address comparing the mode of two data sets.*

Nebraska's College and Career Ready Standards for Mathematics	Aligned Components of *Eureka Math²*
6.D.2.e Compare and interpret data sets based upon their measures of central tendency and graphical representations (e.g., center, spread, shape).	6 M6 Lesson 7: Using the Mean to Describe the Center 6 M6 Lesson 8: The Mean as a Balance Point 6 M6 Lesson 12: Using the Median to Describe the Center 6 M6 Lesson 15: More Practice with Box Plots 6 M6 Lesson 16: Interpreting Box Plots 6 M6 Lesson 19: Comparing Data Distributions 6 M6 Lesson 22: Presenting Statistical Projects

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

6.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*
6.D.3.a Identify a list of possible outcomes for a simple event.	7 M6 Lesson 2: Empirical Probability 7 M6 Lesson 3: Outcomes of Chance Experiments 7 M6 Lesson 6: Outcomes That Are Not Equally Likely 7 M6 Lesson 8: Picking Blue
6.D.3.b Describe the theoretical and experimental probability of an event using a fraction, percentage, and decimal.	7 M6 Lesson 1: What is Probability? 7 M6 Lesson 2: Empirical Probability 7 M6 Lesson 3: Outcomes of Chance Experiments 7 M6 Lesson 6: Outcomes That Are Not Equally Likely 7 M6 Lesson 8: Picking Blue

Nebraska's College and Career Ready Standards for Mathematics	Aligned Components of *Eureka Math²*
6.D.3.c Express the degree of likelihood (possible, impossible, certain, more likely, equally likely, or less likely) of simple events.	7 M6 Lesson 1: What is Probability?
6.D.3.d Compare and contrast theoretical and experimental probabilities.	7 M6 Lesson 4: Theoretical Probability 7 M6 Lesson 7: The Law of Large Numbers 7 M6 Lesson 8: Picking Blue