Grade 6 | North Dakota Mathematics K–12 Standards 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.

Math Attributes	Aligned Components of *Eureka Math²*
6–8.MA.P Learners can analyze information and formulate a flexible, systematic plan to problem-solve authentic situations and reflect on the reasonableness of the solution, making revisions when necessary.	Lessons in every module engage students in math attributes. These are indicated in margin notes included with every lesson.
6–8.MA.C Learners can create connections within and across concepts and provide examples of how they relate to other learning and ideas using supporting evidence.	Lessons in every module engage students in math attributes. These are indicated in margin notes included with every lesson.
6–8.MA.R Learners can reason logically, citing evidence to evaluate and explain what they see, think, and conclude through exploration and justification.	Lessons in every module engage students in math attributes. These are indicated in margin notes included with every lesson.

Number and Operations: Learners will develop a foundational understanding of the number system, operations, and computational fluency to create connections and solve problems within and across concepts.

6.NO.NS Number Systems: Learners will expand their knowledge of the number system to create connections and solve problems within and across concepts.

North Dakota Mathematics K–12 Standards	Aligned Components of *Eureka Math²*
6.NO.NS.1 Explain and show the relationship between non-zero rational numbers and their opposites using horizontal and vertical number lines, including authentic problems. Use rational numbers to represent quantities in authentic contexts and explain the meaning of 0 in certain situations.	6 M3 Topic A: Integers and Rational Numbers 6 M3 Lesson 7: Absolute Value
6.NO.NS.2 Write, interpret, and explain statements of order for rational numbers on a number line and in authentic contexts.	6 M3 Lesson 5: Comparing Rational Numbers 6 M3 Lesson 6: Ordering Rational Numbers 6 M3 Lesson 8: Absolute Value and Order 6 M3 Lesson 9: Interpreting Order and Distance in Real-World Situations

Number and Operations: Learners will develop a foundational understanding of the number system, operations, and computational fluency to create connections and solve problems within and across concepts.

6.NO.O Operations: Learners will expand their computational fluency to create connections and solve problems within and across concepts.

North Dakota Mathematics K–12 Standards	Aligned Components of *Eureka Math²*
6.NO.O.1 Divide multi-digit whole numbers up to four-digit dividends and two-digit divisors using strategies or procedures.	6 M2 Topic E: Division of Multi-Digit Numbers
6.NO.O.2 Add and subtract fractions and decimals up to the hundredths place, including authentic problems.	6 M2 Lesson 12: Fraction Operations in a Real-World Situation 6 M2 Lesson 13: Decimal Addition and Subtraction 6 M2 Lesson 16: Applications of Decimal Operations
6.NO.O.3 Apply multiplication and division of fractions and decimals to solve and interpret problems using visual models, including authentic problems.	5 M3 Topic B: Multiplication of Fractions 5 M3 Topic C: Division with a Unit Fraction and a Whole Number 5 M3 Lesson 19: Create and solve one-step word problems involving fractions. 5 M3 Lesson 20: Solve multi-step word problems involving fractions and write equations with parentheses. 5 M3 Lesson 21: Solve multi-step word problems involving fractions. 6 M2 Topic B: Dividing Fractions 6 M2 Topic C: Dividing Fractions Fluently 6 M2 Lesson 14: Patterns in Multiplying Decimals 6 M2 Lesson 15: Decimal Multiplication 6 M2 Lesson 16: Applications of Decimal Operations 6 M2 Topic F: Decimal Division

North Dakota Mathematics K–12 Standards	Aligned Components of *Eureka Math²*
6.NO.O.4 Determine the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12.	6 M2 Topic A: Factors, Multiples, and Divisibility

Algebraic Reasoning: Learners will look for, generate, and make sense of patterns, relationships, and algebraic symbols to represent mathematical models while adopting approaches and solutions in novel situations.

6.AR.RP Ratios and Proportional Relationships: Learners will use ratios, rates, and proportions to model relationships and solve problems.

North Dakota Mathematics K–12 Standards	Aligned Components of *Eureka Math²*
6.AR.RP.1 Describe the concept of a ratio relationship between two quantities using ratio language and visual models.	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 Topic B: Collections of Equivalent Ratios
6.AR.RP.2 Describe and calculate a unit rate when given a ratio relationship between two quantities using rate language and visual models.	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

North Dakota Mathematics K–12 Standards	Aligned Components of *Eureka Math²*
6.AR.RP.3 Make and use tables of equivalent ratios, tape diagrams, double number line diagrams, and equations to solve problems involving ratios, rates, and unit rates, including authentic problems.	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 Topic B: Collections of Equivalent Ratios 6 M1 Topic C: Comparing Ratio Relationships 6 M1 Topic D: Rates 6 M4 Lesson 22: Relationship Between Two Variables 6 M4 Lesson 23: Graphs of Ratio Relationships
6.AR.RP.4 Calculate a percent of a quantity as a rate per 100. Solve problems using ratio reasoning involving finding the whole when given a part and the percent.	6 M1 Topic E: Percents
6.AR.RP.5 Convert measurement units within and between measurement systems using ratio reasoning given conversion factors.	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

Algebraic Reasoning: Learners will look for, generate, and make sense of patterns, relationships, and algebraic symbols to represent mathematical models while adopting approaches and solutions in novel situations.

6.AR.EE Expressions and Equations: Learners will look for, generate, and make sense of patterns, relationships, and algebraic symbols to represent mathematical models while adapting approaches in novel situations.

North Dakota Mathematics K–12 Standards	Aligned Components of *Eureka Math²*
6.AR.EE.1 Read, write, and evaluate numerical expressions including expressions with whole number exponents and grouping symbols.	6 M4 Topic A: Numerical Expressions
6.AR.EE.2 Read and evaluate algebraic expressions, including expressions with whole number exponents and grouping symbols. Write algebraic expressions to represent simple and authentic situations.	6 M4 Topic B: Expressions and Real-World Problems 6 M4 Lesson 12: Applying Properties to Multiplication and Division Expressions 6 M4 Lesson 16: Equivalent Algebraic Expressions
6.AR.EE.3 Identify when two expressions are equivalent. Apply the properties of operations to generate equivalent expressions.	6 M4 Topic C: Equivalent Expressions Using the Properties of Operations
6.AR.EE.4 Describe the concept of a solution of an equation and an inequality. Determine whether a given number is a solution to an equation or an inequality.	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

North Dakota Mathematics K–12 Standards	**Aligned Components of *Eureka Math²***
6.AR.EE.5 Write and solve equations of the form $x + p = q$ and $px = q$ for cases in which p and q are non-negative whole numbers or decimals, including authentic problems.	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.AR.EE.6 Write a statement of inequality of the form $x > c$ or the form $x < c$ to represent a constraint or condition. Recognize that inequalities of the form $x > c$ or the form $x < c$ have infinitely many solutions; represent solutions of such inequalities on number line diagrams.	6 M4 Lesson 18: Inequalities and Solutions *Supplemental material is necessary to address inequalities of the form $x \geq c$ and the form $x \leq c$.*

Geometry and Measurement: Learners will use visualization, spatial reasoning, geometric modeling, and measurement to investigate the characteristics of figures, perform transformations, and construct logical arguments.

6.GM.AV Area and Volume: Learners will use visualization and spatial reasoning to solve problems involving the area, surface area, and volume of geometric figures.

North Dakota Mathematics K–12 Standards	Aligned Components of *Eureka Math²*
6.GM.AV.1 Derive the relationship of the areas of triangles using the area of rectangles. Calculate the areas of triangles and quadrilaterals by composing and/or decomposing them into rectangles and triangles, including authentic problems.	6 M5 Topic A: Areas of Polygons 6 M5 Topic B: Problem Solving with Area
6.GM.AV.2 Describe the concept of volume of a right rectangular prism. Apply given formulas to calculate the volume of right rectangular prisms, including fractional edge lengths, including authentic problems.	5 M5 Topic D: Volume and the Operations of Multiplication and Addition 6 M5 Topic D: Volumes of Right Rectangular Prisms

Geometry and Measurement: Learners will use visualization, spatial reasoning, geometric modeling, and measurement to investigate the characteristics of figures, perform transformations, and construct logical arguments.

6.GM.GF Geometric Figures: Learners will use visualization, spatial reasoning, and geometric modeling to investigate the characteristics of figures, perform transformations, and construct logical arguments.

North Dakota Mathematics K–12 Standards	Aligned Components of *Eureka Math²*
6.GM.GF.1 Identify and position ordered pairs of rational numbers in all four quadrants of a coordinate plane.	6 M3 Topic C: The Coordinate Plane 6 M3 Topic D: Solving Problems in the Coordinate Plane
6.GM.GF.2 Draw polygons in the coordinate plane given coordinates for the vertices. Determine the length of a side joining points with the same first or second coordinate, including authentic problems.	6 M5 Lesson 5: Perimeter and Area in the Coordinate Plane 6 M5 Lesson 6: Problem Solving with Area in the Coordinate Plane
6.GM.GF.3 Represent three-dimensional figures using nets made up of rectangles and triangles (right prisms and pyramids whose bases are triangles and rectangles). Calculate the surface area of prisms with rectangular and triangular bases using nets, including authentic problems.	6 M5 Topic C: Nets and Surface Area 6 M5 Lesson 19: Volume and Surface Area in Real-World Situations

Data, Probability, and Statistics: Learners will ask and answer questions by collecting, organizing, and displaying relevant data, drawing inferences and conclusions, making predictions, and understanding and applying basic concepts of probability.

6.DPS.D Data Analysis: Learners will ask and answer questions by collecting, organizing, and displaying relevant data, drawing inferences and conclusions, and making predictions.

North Dakota Mathematics K–12 Standards	Aligned Components of *Eureka Math²*
6.DPS.D.1 Write a statistical question that can be answered using measures of center or variability of a data set.	6 M6 Lesson 1: Posing Statistical Questions 6 M6 Lesson 6: Selecting a Data Display 6 M6 Lesson 17: Developing a Statistical Project
6.DPS.D.2 Calculate measures of center (median and mean) and variability (range and mean absolute deviation) to answer a statistical question. Identify mode(s) if they exist.	6 M6 Lesson 2: Describing a Data Distribution 6 M6 Topic B: Mean and Mean Absolute Deviation 6 M6 Lesson 12: Using the Median to Describe the Center 6 M6 Lesson 18: Connecting Graphical Representations and Summary Measures 6 M6 Lesson 19: Comparing Data Distributions 6 M6 Lesson 20: Choosing a Measure of Center 6 M6 Lesson 21: Comparing Measures of Variability *Supplemental material is necessary to address mode.*
6.DPS.D.3 Identify outliers by observation and describe their effect on measures of center and variability. Justify which measures would be appropriate to answer a statistical question.	6 M6 Lesson 2: Describing a Data Distribution 6 M6 Lesson 9: Variability in a Data Distribution 6 M6 Lesson 14: Using a Box Plot to Summarize a Distribution 6 M6 Lesson 16: Interpreting Box Plots 6 M6 Topic D: Answering Statistical Questions by Analyzing Data

North Dakota Mathematics K–12 Standards	**Aligned Components of *Eureka Math²***
6.DPS.D.4 Display numerical data in plots on a number line, including dot plots and histograms. Describe any overall patterns in data, such as gaps, clusters, and skews.	6 M6 Topic A: Understanding Distributions 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 Topic D: Answering Statistical Questions by Analyzing Data