Grade 6 | North Dakota Mathematics K–12 Standards (2018) Correlation to *Eureka Math²® (2027)*

Eureka Math² is a research-proven math curriculum that empowers teachers to center instructional techniques on student success. Teachers can foster more "aha!" learning moments by providing the support needed for all learners to build a more confident math mindset.

This *Eureka Math²* edition builds on a strong foundation of effective instruction. It provides teachers with guidance on delivering rigorous instruction that honors student choice and encourages confident problem-solving.

Eureka Math² carefully sequences mathematical content to maximize vertical alignment from kindergarten through high school. This kind of sequencing has proven to be essential in students' mastery of math.

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 into the teacher materials.

Accessibility

Eureka Math² incorporates Universal Design for Learning (UDL) principles so all learners can access the mathematics and take on challenging math concepts. UDL, Differentiation, and Multilingual Learner supports are built into the instructional design and are clearly identified in the *Teach* book.

The curriculum also carries a focus on readability. By eliminating unnecessary words and using 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.

Math Confidence

Eureka Math² fosters a classroom culture of learning by encouraging student-led discourse and cognitive engagement that results in confident learners. By leveraging consistent models, routines, and progressions, teachers can remove barriers and allow all students an avenue to success. Within the digital platform, each grade includes wordless videos and digital interactives that spark students' curiosity and help them make conceptual connections. Using the *Learn* books, students wonder, explore, and make sense of mathematics, which helps them develop 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 Lesson 1: Positive and Negative Numbers 6 M3 Lesson 2: Integers 6 M3 Lesson 3: Rational Numbers 6 M3 Lesson 4: Rational Numbers in Real-World Situations 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 Lesson 17: Partial Quotients 6 M2 Lesson 18: The Standard Division Algorithm 6 M2 Lesson 19: Expressing Quotients as Decimals 6 M2 Lesson 20: Real-World Division Problems
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 Lesson 7: Multiply fractions less than 1 by unit fractions pictorially. 5 M3 Lesson 8: Multiply fractions less than 1 pictorially. 5 M3 Lesson 9: Multiply fractions by unit fractions by making simpler problems. 5 M3 Lesson 10: Multiply fractions greater than 1 by fractions. 5 M3 Lesson 11: Multiply fractions. 5 M3 Lesson 12: Divide a nonzero whole number by a unit fraction to find the number of groups. 5 M3 Lesson 13: Divide a nonzero whole number by a unit fraction to find the size of the group. 5 M3 Lesson 14: Divide a unit fraction by a nonzero whole number. 5 M3 Lesson 15: Divide by whole numbers and unit fractions. 5 M3 Lesson 16: Reason about the size of quotients of whole numbers and unit fractions and quotients of unit fractions and whole numbers. 5 M3 Lesson 17: Solve word problems involving fractions with multiplication and division.

North Dakota Mathematics K–12 Standards	Aligned Components of *Eureka Math²*
6.NO.O.3 ***continued***	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 Lesson 6: Dividing a Whole Number by a Fraction 6 M2 Lesson 7: Dividing a Fraction by a Whole Number 6 M2 Lesson 8: Dividing Fractions by Making Common Denominators 6 M2 Lesson 9: Dividing Fractions by Using Tape Diagrams 6 M2 Lesson 10: Dividing Fractions by Using the Invert and Multiply Strategy 6 M2 Lesson 11: Applications of Fraction Division 6 M2 Lesson 12: Fraction Operations in a Real-World Situation 6 M2 Lesson 14: Patterns in Multiplying Decimals 6 M2 Lesson 15: Decimal Multiplication 6 M2 Lesson 16: Applications of Decimal Operations 6 M2 Lesson 21: Dividing a Decimal by a Whole Number 6 M2 Lesson 22: Dividing a Decimal by a Decimal Greater Than 1 6 M2 Lesson 23: Dividing a Decimal by a Decimal Less Than 1 6 M2 Lesson 24: Living on Mars
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.	5 M1 Lesson 21: Express a composite number to 50 as a product of its prime factors. 6 M2 Lesson 1: Factors and Multiples 6 M2 Lesson 2: Divisibility 6 M2 Lesson 3: The Greatest Common Factor 6 M2 Lesson 4: The Least Common Multiple 6 M2 Lesson 5: The Euclidean Algorithm

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 Lesson 6: Ratio Tables and Double Number Lines 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.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 Lesson 6: Ratio Tables and Double Number Lines 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 Lesson 12: Multiple Ratio Relationships 6 M1 Lesson 13: Comparing Ratio Relationships, Part 1 6 M1 Lesson 14: Comparing Ratio Relationships, Part 2 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 M1 Lesson 21: Solving Multi-Step Rate Problems 6 M4 Lesson 22: Relationship Between Two Variables 6 M4 Lesson 23: Graphs of Ratio Relationships

North Dakota Mathematics K–12 Standards	Aligned Components of *Eureka Math²*
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 Lesson 22: Introduction to Percents 6 M1 Lesson 23: Finding the Percent 6 M1 Lesson 24: Finding a Part 6 M1 Lesson 25: Finding the Whole 6 M1 Lesson 26: Solving Percent Problems
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 Lesson 1: Expressions with Addition and Subtraction 6 M4 Lesson 2: Expressions with Multiplication and Division 6 M4 Lesson 3: Exploring Exponents 6 M4 Lesson 4: Evaluating Expressions with Exponents 6 M4 Lesson 5: Exploring Order of Operations 6 M4 Lesson 6: Order of Operations
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 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 M4 Lesson 10: Multiplication and Division Expressions from Real-World Situations 6 M4 Lesson 11: Modeling Real-World Situations with Expressions 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 Lesson 12: Applying Properties to Multiplication and Division Expressions 6 M4 Lesson 13: The Distributive Property 6 M4 Lesson 14: Using the Distributive Property to Factor Expressions 6 M4 Lesson 15: Combining Like Terms by Using the Distributive Property 6 M4 Lesson 16: Equivalent Algebraic Expressions

North Dakota Mathematics K–12 Standards	Aligned Components of *Eureka Math²*
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
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 Lesson 1: The Area of a Parallelogram 6 M5 Lesson 2: The Area of a Right Triangle 6 M5 Lesson 3: The Area of a Triangle 6 M5 Lesson 4: Areas of Triangles in Real-World Situations 6 M5 Lesson 5: Perimeter and Area in the Coordinate Plane 6 M5 Lesson 6: Problem Solving with Area in the Coordinate Plane 6 M5 Lesson 7: Areas of Trapezoids and Other Polygons 6 M5 Lesson 8: Areas of Composite Figures in Real-World Situations

North Dakota Mathematics K–12 Standards	Aligned Components of *Eureka Math²*
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 Lesson 22: Find the volumes of right rectangular prisms by using the area of the base. 5 M5 Lesson 23: Find the volumes of right rectangular prisms by multiplying the edge lengths. 5 M5 Lesson 24: Solve word problems involving volumes of right rectangular prisms. 5 M5 Lesson 25: Find the volumes of solid figures composed of right rectangular prisms. 5 M5 Lesson 26: Solve word problems involving perimeter, area, and volume. 5 M5 Lesson 27: Apply concepts and formulas of volume to design a sculpture by using right rectangular prisms, part 1. 5 M5 Lesson 28: Apply concepts and formulas of volume to design a sculpture by using right rectangular prisms, part 2. 6 M5 Lesson 15: Exploring Volume 6 M5 Lesson 16: Applying Volume Formulas 6 M5 Lesson 17: Problem Solving with Volume 6 M5 Lesson 18: Volumes of Composite Solids 6 M5 Lesson 19: Volume and Surface Area in Real-World Situations

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 Lesson 10: The Four Quadrants of the Coordinate Plane 6 M3 Lesson 11: Plotting Points in the Coordinate Plane 6 M3 Lesson 12: Reflections in the Coordinate Plane 6 M3 Lesson 13: Constructing the Coordinate Plane 6 M3 Lesson 14: Modeling with the Coordinate Plane 6 M3 Lesson 15: Distance in the Coordinate Plane 6 M3 Lesson 16: Figures in the Coordinate Plane 6 M3 Lesson 17: Problem Solving with 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

North Dakota Mathematics K–12 Standards	Aligned Components of *Eureka Math²*
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 Lesson 9: Properties of Solids 6 M5 Lesson 10: Discovering Nets of Solids 6 M5 Lesson 11: Constructing Nets of Solids 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 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 Lesson 7: Using the Mean to Describe the Center 6 M6 Lesson 8: The Mean as a Balance Point 6 M6 Lesson 9: Variability in a Data Distribution 6 M6 Lesson 10: The Mean Absolute Deviation 6 M6 Lesson 11: Using the 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.*

North Dakota Mathematics K–12 Standards	Aligned Components of *Eureka Math²*
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 Lesson 17: Developing a Statistical Project 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 6 M6 Lesson 22: Presenting Statistical Projects

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 Lesson 1: Posing Statistical Questions 6 M6 Lesson 2: Describing a Data Distribution 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 17: Developing a Statistical Project 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 6 M6 Lesson 22: Presenting Statistical Projects