Grade 6 | Oklahoma Academic 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.

Mathematical Actions and Processes	Aligned Components of *Eureka Math²*
Develop a Deep and Flexible Conceptual Understanding	Lessons in every module engage students in mathematical actions and processes.
Develop Accurate and Appropriate Procedural Fluency	Lessons in every module engage students in mathematical actions and processes.
Develop Strategies for Problem Solving	Lessons in every module engage students in mathematical actions and processes.
Develop Mathematical Reasoning	Lessons in every module engage students in mathematical actions and processes.
Develop a Productive Mathematical Disposition	Lessons in every module engage students in mathematical actions and processes.
Develop the Ability to Make Conjectures, Model, and Generalize	Lessons in every module engage students in mathematical actions and processes.
Develop the Ability to Communicate Mathematically	Lessons in every module engage students in mathematical actions and processes.

Numbers & Operations

6.N.1 Read, write, and represent rational numbers expressed as integers, fractions, decimals, percents, and ratios; use these representations in real-world and mathematical situations.

Oklahoma Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
6.N.1.1 Use manipulatives and models (e.g., number lines) to determine positive and negative numbers and their contexts, identify opposites, and explain the meaning of 0 (zero) in a variety of situations.	6 M3 Topic A: Integers and Rational Numbers
6.N.1.2 Compare and order positive rational numbers, represented in various forms, or integers using the symbols <, >, and =.	5 M4 Lesson 6: Compare decimal numbers to the thousandths place. *Supplemental material is necessary to address this objective.*
6.N.1.3 Explain that a percent represents parts "out of 100" and ratios "to 100."	6 M1 Topic E: Percents
6.N.1.4 Determine equivalencies among fractions, mixed numbers, decimals, and percents.	6 M1 Topic E: Percents

Numbers & Operations
6.N.2 Read, write, and model whole-number and integer operations to solve problems.

Oklahoma Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
6.N.2.1 Estimate solutions for integer addition and subtraction of problems in order to assess the reasonableness of results.	7 M2 Lesson 2: Adding Integers 7 M2 Lesson 3: Adding Integers Efficiently
6.N.2.2 Illustrate addition and subtraction of integers using a variety of representations.	7 M2 Lesson 1: Combining Opposites 7 M2 Lesson 2: Adding Integers 7 M2 Lesson 3: Adding Integers Efficiently 7 M2 Lesson 7: What Subtraction Means 7 M2 Lesson 8: Subtracting Integers, Part 1 7 M2 Lesson 9: Subtracting Integers, Part 2
6.N.2.3 Add and subtract integers in a variety of situations; use efficient and generalizable procedures including but not limited to standard algorithms.	7 M2 Lesson 3: Adding Integers Efficiently 7 M2 Lesson 4: KAKOOMA® 7 M2 Lesson 9: Subtracting Integers, Part 2 7 M2 Lesson 11: Subtracting Rational Numbers, Part 2 7 M2 Lesson 12: The Integer Game
6.N.2.4 Identify and represent patterns with whole-number exponents and perfect squares. Evaluate powers with whole-number bases and exponents.	6 M4 Lesson 3: Exploring Exponents 6 M4 Lesson 4: Evaluating Expressions with Exponents

Oklahoma Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
6.N.2.5 Factor whole numbers and express prime and composite numbers as a product of prime factors with exponents.	6 M2 Lesson 3: The Greatest Common Factor 6 M4 Lesson 3: Exploring Exponents
6.N.2.6 Determine the greatest common factors and least common multiples. Use common factors and multiples to calculate with fractions, find equivalent fractions, and express the sum of two-digit numbers with a common factor using the distributive property.	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

Numbers & Operations

6.N.3 Explain and use the concept of ratio and its relationship to other rational numbers and to the multiplication and division of whole numbers. Use ratios to solve problems.

Oklahoma Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
6.N.3.1 Identify and use ratios to compare and relate quantities in multiple ways. Recognize that multiplicative comparison and additive comparison are different.	6 M1 Topic A: Ratios 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

Oklahoma Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
6.N.3.2 Determine the unit rate for ratios.	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.N.3.3 Apply the relationship between ratios, equivalent fractions, unit rates, and percents to solve problems in various contexts.	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 M4 Lesson 22: Relationship Between Two Variables 6 M4 Lesson 23: Graphs of Ratio Relationships

Numbers & Operations

6.N.4 Multiply and divide decimals, fractions, and mixed numbers; solve real-world and mathematical problems with rational numbers.

Oklahoma Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
6.N.4.1 Estimate solutions to problems with whole numbers, decimals, fractions, and mixed numbers, and use the estimates to assess the reasonableness of results in the context of the problem.	6 M1 Lesson 1: Jars of Jelly Beans 6 M1 Lesson 7: Graphs of Ratio Relationships 6 M1 Lesson 16: Speed 6 M1 Lesson 18: Comparing Rates 6 M1 Lesson 23: Finding the Percent 6 M2 Lesson 13: Decimal Addition and Subtraction 6 M2 Lesson 15: Decimal Multiplication 6 M2 Topic E: Division of Multi-Digit Numbers 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 M3 Lesson 14: Modeling with the Coordinate Plane 6 M4 Lesson 25: The Statue of Liberty 6 M5 Lesson 8: Areas of Composite Figures in Real-World Situations 6 M6 Lesson 2: Describing a Data Distribution
6.N.4.2 Illustrate multiplication and division of fractions and decimals to show connections to fractions, whole number multiplication, and inverse relationships.	5 M3 Topic B: Multiplication of Fractions 5 M4 Topic C: Multiplication of Decimal Numbers 5 M4 Topic D: Division of Decimal Numbers 6 M2 Topic B: Dividing Fractions

Oklahoma Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
6.N.4.3 Multiply and divide fractions and decimals using efficient and generalizable procedures.	5 M3 Lesson 11: Multiply fractions. 5 M4 Lesson 19: Multiply a decimal number by a decimal number. 5 M4 Lesson 24: Divide decimal numbers by decimal numbers, resulting in whole-number quotients. 5 M4 Lesson 25: Divide decimal numbers by decimal numbers, resulting in decimal-number quotients. 6 M2 Topic C: Dividing Fractions Fluently
6.N.4.4 Use mathematical modeling to solve and interpret problems including money, measurement, geometry, and data requiring arithmetic with decimals, fractions and mixed numbers.	6 M2 Lesson 11: Applications of Fraction Division 6 M2 Lesson 12: Fraction Operations in a Real-World Situation 6 M2 Lesson 16: Applications of Decimal Operations 6 M2 Lesson 20: Real-World Division Problems

Algebraic Reasoning & Algebra

6.A.1 Recognize and represent relationships between varying quantities; translate from one representation to another; use patterns, tables, graphs, and rules to model and solve mathematical problems.

Oklahoma Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
6.A.1.1 Plot integer- and rational-valued (limited to halves and fourths) ordered-pairs as coordinates in all four quadrants and recognize the reflective relationships among coordinates that differ only by their signs.	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 Topic D: Solving Problems in the Coordinate Plane 6 M5 Lesson 5: Perimeter and Area in the Coordinate Plane

Oklahoma Academic Standards for Mathematics	**Aligned Components of *Eureka Math²***
6.A.1.2 Represent relationships between two varying positive quantities involving no more than two operations with rules, graphs, and tables; translate between any two of these representations.	6 M4 Topic E: Relating Variables by Using Tables, Graphs, and Equations
6.A.1.3 Use and evaluate variables in expressions, equations, and inequalities that arise from various contexts, including determining when or if, for a given value of the variable, an equation or inequality involving a variable is true or false.	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 16: Equivalent Algebraic Expressions 6 M4 Topic D: Equations and Inequalities

Algebraic Reasoning & Algebra

6.A.2 Use properties of arithmetic to generate equivalent numerical expressions and evaluate expressions involving positive rational numbers.

Oklahoma Academic Standards for Mathematics	**Aligned Components of *Eureka Math²***
6.A.2.1 Generate equivalent expressions and evaluate expressions involving positive rational numbers by applying the commutative, associative, and distributive properties and order of operations to model and solve mathematical problems.	6 M4 Topic C: Equivalent Expressions Using the Properties of Operations

Algebraic Reasoning & Algebra

6.A.3 Use equations and inequalities to model and solve mathematical problems and use the idea of maintaining equality to solve equations. Interpret solutions in the original context.

Oklahoma Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
6.A.3.1 Model mathematical situations using expressions, equations and inequalities involving variables and rational numbers.	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 17: Equations and Solutions 6 M4 Lesson 18: Inequalities and Solutions 6 M4 Lesson 21: Solving Problems with Equations
6.A.3.2 Use number sense and properties of operations and equality to model and solve mathematical problems involving equations in the form $x + p = q$ and $px = q$, where p and q are nonnegative rational numbers. Graph the solution on a number line, interpret the solution in the original context, and assess the reasonableness of the solution.	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

Geometry & Measurement

6.GM.1 Use translations, reflections, and rotations to establish congruence and understand symmetry (not on a coordinate plane).

Oklahoma Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
6.GM.1.1 Predict, describe, and apply translations (slides), reflections (flips), and rotations (turns) to a two-dimensional figure.	8 M2 Topic A: Rigid Motions and Their Properties
6.GM.1.2 Recognize that translations, reflections, and rotations preserve congruence and use them to show that two figures are congruent.	8 M2 Topic B: Rigid Motions and Congruent Figures
6.GM.1.3 Identify and describe the line(s) of symmetry in two-dimensional shapes.	*Supplemental material is necessary to address this objective.*

Geometry & Measurement

6.GM.2 Use mathematical modeling to calculate the area of squares, parallelograms, and triangles to solve problems.

Oklahoma Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
6.GM.2.1 Develop and use formulas for the area of squares and parallelograms using a variety of methods including but not limited to the standard algorithms and finding unknown measures.	6 M5 Lesson 1: The Area of a Parallelogram *Supplemental material is necessary to address this objective.*

Oklahoma Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
6.GM.2.2 Develop and use formulas to determine the area of triangles and find unknown measures.	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.GM.2.3 Find the area of right triangles, other triangles, special quadrilaterals, and polygons that can be decomposed into triangles and other shapes.	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 Topic B: Problem Solving with Area

Geometry & Measurement

6.GM.3 Understand and use relationships between angles in geometric figures.

Oklahoma Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
6.GM.3.1 Solve problems using the relationships between the angles (vertical, complementary, and supplementary) formed by intersecting lines.	7 M3 Topic B: Unknown Angle Measurements
6.GM.3.2 Develop and use the fact that the sum of the interior angles of a triangle is 180° to determine missing angle measures in a triangle.	8 M2 Lesson 13: Angle Sum of a Triangle 8 M2 Lesson 16: Find Unknown Angle Measures

Geometry & Measurement

6.GM.4 Choose appropriate units of measurement and use ratios to convert within measurement systems to model and solve real-world and mathematical problems.

Oklahoma Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
6.GM.4.1 Estimate weights and capacities using benchmarks in customary and metric measurement systems with appropriate units.	*Supplemental material is necessary to address this objective.*
6.GM.4.2 Solve problems that require the conversion of lengths within the same measurement systems using appropriate units.	6 M1 Lesson 19: Using Rates to Convert Units

Data & Probability

6.D.1 Interpret and analyze data.

Oklahoma Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
6.D.1.1 Interpret the mean, median, and mode 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 *Supplemental material is necessary to address mode.*

Oklahoma Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
6.D.1.2 Explain and justify which measure of center (mean, median, or mode) would provide the most descriptive information for a given set of data.	6 M6 Lesson 20: Choosing a Measure of Center *Supplemental material is necessary to address mode.*

Data & Probability

6.D.2 Use probability to model and solve mathematical problems; represent probabilities using fractions and decimals.

Oklahoma Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
6.D.2.1 Represent possible outcomes using a probability continuum from impossible to certain.	7 M6 Lesson 1: What is Probability?
6.D.2.2 Determine the sample space for a given experiment and determine which members of the sample space are related to certain events. Sample space may be determined by the use of tree diagrams, tables or pictorial representations.	7 M6 Lesson 3: Outcomes of Chance Experiments 7 M6 Lesson 4: Theoretical Probability 7 M6 Lesson 5: Multistage Experiments

Oklahoma Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
6.D.2.3 Demonstrate simple experiments in which the probabilities are known and compare the resulting relative frequencies with the known probabilities, recognizing that there may be differences between the two results.	7 M6 Lesson 7: The Law of Large Numbers