7–8 | 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

7.N.1 Read, write, represent, and compare rational numbers, expressed as integers, fractions, and decimals. Explain and apply the concept of absolute value.

Oklahoma Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
7.N.1.1 Compare and order rational numbers expressed in various forms using the symbols “<”, “>”, and “=”.	6 M3 Lesson 5: Comparing Rational Numbers 6 M3 Lesson 6: Ordering Rational Numbers 6 M3 Lesson 8: Absolute Value and Order
7.N.1.2 Recognize and generate equivalent representations of rational numbers, including equivalent fractions.	6 M1 Topic E: Percents 7–8 M1 Lesson 8: Dividing Integers and Rational Numbers 7–8 M1 Lesson 9: Decimal Expansions of Rational Numbers 7–8 M2 Lesson 6: Expressing Repeating Decimals as Fractions
7.N.1.3 Explain the relationship between the absolute value of a rational number and the distance of that number from zero on a number line. Use the symbol for absolute value. Apply the concept of absolute value to model and solve problems.	6 M3 Lesson 7: Absolute Value 6 M3 Lesson 8: Absolute Value and Order 7–8 M1 Lesson 3: Finding Distances to Find Differences

Numbers & Operations

7.N.2 Calculate with rational numbers, with and without positive integer exponents, to model and solve mathematical problems.

Oklahoma Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
7.N.2.1 Estimate solutions to multiplication and division of integers in order to assess the reasonableness of results.	*Supplemental material is necessary to address this objective.*
7.N.2.2 Illustrate multiplication and division of integers using a variety of representations.	7–8 M1 Lesson 6: Multiplying Integers and Rational Numbers 7–8 M1 Lesson 7: Exponential Expressions and Relating Multiplication to Division 7–8 M1 Lesson 8: Dividing Integers and Rational Numbers
7.N.2.3 Multiply and divide integers in a variety of situations; use efficient and generalizable procedures, including standard algorithms.	7–8 M1 Lesson 6: Multiplying Integers and Rational Numbers 7–8 M1 Lesson 7: Exponential Expressions and Relating Multiplication to Division 7–8 M1 Lesson 8: Dividing Integers and Rational Numbers
7.N.2.4 Raise rational numbers (integers, fractions, and decimals) to positive integer exponents.	6 M4 Lesson 3: Exploring Exponents 6 M4 Lesson 4: Evaluating Expressions with Exponents 7–8 M1 Lesson 7: Exponential Expressions and Relating Multiplication to Division

Oklahoma Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
7.N.2.5 Model and solve problems using rational numbers involving addition, subtraction, multiplication, division, and positive integer exponents.	7–8 M1 Lesson 1: Adding Integers and Rational Numbers 7–8 M1 Lesson 3: Finding Distances to Find Differences 7–8 M1 Lesson 4: Subtracting Integers 7–8 M1 Lesson 5: Subtracting Rational Numbers 7–8 M1 Lesson 6: Multiplying Integers and Rational Numbers 7–8 M1 Lesson 7: Exponential Expressions and Relating Multiplication to Division 7–8 M1 Lesson 8: Dividing Integers and Rational Numbers

Numbers & Operations

PA.N.1 Read, write, compare, classify, and represent real numbers, and use them to solve problems in various contexts.

Oklahoma Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
PA.N.1.1 Develop and apply the properties of integer exponents, including $a^0 = 1$ (with $a \neq 0$), to generate equivalent numerical and algebraic expressions.	7–8 M1 Lesson 11: Products of Exponential Expressions with Positive Whole-Number Exponents 7–8 M1 Lesson 12: More Properties of Exponents 7–8 M1 Lesson 13: Making Sense of Integer Exponents
PA.N.1.2 Express and compare approximations of very large and very small numbers using scientific notation.	7–8 M1 Lesson 10: Large and Small Positive Numbers 7–8 M1 Lesson 14: Writing Very Large and Very Small Numbers in Scientific Notation 7–8 M1 Lesson 15: Operations with Numbers Written in Scientific Notation 7–8 M1 Lesson 16: Applications with Numbers Written in Scientific Notation 7–8 M1 Lesson 17: Get to the Point

Oklahoma Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
PA.N.1.3 Multiply and divide numbers expressed in scientific notation and express the answer in scientific notation.	7–8 M1 Lesson 15: Operations with Numbers Written in Scientific Notation 7–8 M1 Lesson 16: Applications with Numbers Written in Scientific Notation 7–8 M1 Lesson 17: Get to the Point
PA.N.1.4 Compare and order real numbers; locate real numbers on a number line. Identify the square roots of perfect squares to 400 or, if it is not a perfect square root, locate it as an irrational number between two consecutive positive integers.	7–8 M1 Topic D: Rational and Irrational Numbers

Algebraic Reasoning & Algebra

7.A.1 Explain the concept of proportionality in mathematical models and situations and distinguish between proportional and non-proportional relationships.

Oklahoma Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
7.A.1.1 Identify a relationship between two varying quantities, x and y, as proportional if it can be expressed in the form $\frac{y}{x} = k$ or $y = kx$; distinguish proportional relationships from non-proportional relationships.	7–8 M2 Topic C: From Ratio Relationships to Proportional Relationships 7–8 M2 Lesson 19: Proportional Reasoning and Percents

Oklahoma Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
7.A.1.2 Recognize that the graph of a proportional relationship is a line through the origin and the coordinate $(1, r)$, where r is the slope and the unit rate (constant of proportionality, k).	7–8 M2 Lesson 14: Exploring Graphs of Proportional Relationships 7–8 M2 Lesson 15: Relating Representations of Proportional Relationships 7–8 M2 Lesson 16: Applying Proportional Reasoning 7–8 M4 Lesson 4: Comparing Proportional Relationships 7–8 M4 Lesson 5: Proportional Relationships and Slope

Algebraic Reasoning & Algebra

7.A.2 Identify and justify proportional relationships using mathematical models and situations; solve problems involving proportional relationships and interpret results in the original context.

Oklahoma Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
7.A.2.1 Represent proportional relationships with tables, verbal descriptions, symbols, and graphs; translate from one representation to another. Determine and compare the unit rate (constant of proportionality, slope, or rate of change) given any of these representations.	7–8 M2 Topic C: From Ratio Relationships to Proportional Relationships 7–8 M4 Lesson 4: Comparing Proportional Relationships 7–8 M4 Lesson 5: Proportional Relationships and Slope

Oklahoma Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
7.A.2.2 Solve multi-step problems with proportional relationships (e.g., distance-time, percent increase or decrease, discounts, tips, unit pricing, mixtures and concentrations, similar figures, other mathematical situations).	7–8 M2 Lesson 16: Applying Proportional Reasoning 7–8 M2 Lesson 17: Using Proportional Reasoning to Solve Multi-Step Problems 7–8 M2 Lesson 18: Handstand Sprint 7–8 M2 Topic D: Percents and Proportional Relationships 7–8 M3 Topic D: Scale Drawings and Dilations 7–8 M3 Lesson 27: Similar Figures 7–8 M3 Lesson 28: Exploring Angles in Similar Triangles
7.A.2.3 Use proportional reasoning to solve problems involving ratios.	7–8 M2 Lesson 17: Using Proportional Reasoning to Solve Multi-Step Problems
7.A.2.4 Use proportional reasoning to assess the reasonableness of solutions.	*Supplemental material is necessary to address this objective.*

Algebraic Reasoning & Algebra

7.A.3 Represent mathematical situations using equations and inequalities involving variables and rational numbers.

Oklahoma Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
7.A.3.1 Write and solve problems leading to linear equations with one variable in the form $px + q = r$ and $p(x + q) = r$, where p, q, and r are rational numbers.	7–8 M2 Lesson 1: Finding Unknown Angle Measures 7–8 M2 Lesson 3: Solving Equations 7–8 M2 Lesson 5: Solving Problems Involving Equations and Inequalities

Oklahoma Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
7.A.3.2 Represent, write, solve, and graph problems leading to linear inequalities with one variable in the form $x + p > q$ and $x + p < q$, where p, and q are nonnegative rational numbers.	6 M4 Lesson 18: Inequalities and Solutions 7–8 M2 Lesson 4: Using Equations to Solve Inequalities

Algebraic Reasoning & Algebra

7.A.4 Use order of operations and properties of operations to generate and evaluate equivalent numerical and algebraic expressions.

Oklahoma Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
7.A.4.1 Use properties of operations (associative, commutative, and distributive) to generate equivalent numerical and algebraic expressions containing rational numbers, grouping symbols and whole number exponents.	6 M 4 Topic A: Numerical Expressions 7–8 M2 Lesson 2: Using Equivalent Expressions to Solve Equations 7–8 M2 Lesson 21: Discount, Markup, Sales Tax, and Tip 7–8 M2 Lesson 22: Percent Increase and Percent Decrease
7.A.4.2 Evaluate numerical expressions using calculators and other technologies and justify solutions using order of operations and grouping symbols.	*Supplemental material is necessary to address this objective.*

Algebraic Reasoning & Algebra

PA.A.1 Explain the concept of function in mathematical situations and distinguish between the concepts of linear and nonlinear functions.

Oklahoma Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
PA.A.1.1 Recognize that a function is a relationship between an independent variable and a dependent variable in which the value of the independent variable determines the value of the dependent variable.	7–8 M5 Lesson 1: Motion and Speed 7–8 M5 Lesson 2: Definition of a Function 7–8 M5 Lesson 4: More Examples of Functions 7–8 M5 Lesson 5: Graphs of Functions and Equations
PA.A.1.2 Use linear functions to represent and model mathematical situations.	7–8 M5 Lesson 6: Linear Functions and Rate of Change 7–8 M5 Lesson 7: Interpreting Rate of Change and Initial Value 7–8 M5 Lesson 23: Applications of Volume
PA.A.1.3 Identify a function as linear if it can be expressed in the form $y = mx + b$ or if its graph is a non-vertical straight line.	7–8 M5 Lesson 3: Linear Functions and Proportionality 7–8 M5 Lesson 6: Linear Functions and Rate of Change 7–8 M5 Lesson 10: Graphs of Nonlinear Functions

Algebraic Reasoning & Algebra

PA.A.2 Identify and justify linear functions using mathematical models and situations; solve problems involving linear functions and interpret results in the original context.

Oklahoma Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
PA.A.2.1 Represent linear functions with tables, verbal descriptions, symbols, and graphs; translate from one representation to another.	7–8 M5 Topic A: Functions 7–8 M5 Lesson 6: Linear Functions and Rate of Change 7–8 M5 Lesson 7: Interpreting Rate of Change and Initial Value 7–8 M5 Lesson 8: Comparing Functions 7–8 M5 Lesson 10: Graphs of Nonlinear Functions
PA.A.2.2 Identify, describe, and analyze linear relationships between two variables.	7–8 M5 Lesson 3: Linear Functions and Proportionality 7–8 M5 Lesson 6: Linear Functions and Rate of Change 7–8 M5 Lesson 7: Interpreting Rate of Change and Initial Value 7–8 M5 Lesson 23: Applications of Volume
PA.A.2.3 Identify graphical properties of linear functions, including slope and intercepts. Know that the slope equals the rate of change, and that the y-intercept is zero when the function represents a proportional relationship.	7–8 M4 Lesson 4: Comparing Proportional Relationships 7–8 M4 Lesson 5: Proportional Relationships and Slope 7–8 M5 Lesson 6: Linear Functions and Rate of Change 7–8 M5 Lesson 7: Interpreting Rate of Change and Initial Value 7–8 M5 Lesson 23: Applications of Volume
PA.A.2.4 Predict the effect on the graph of a linear function when the slope or y-intercept changes. Use appropriate tools to examine these effects.	*Supplemental material is necessary to address this objective.*

Oklahoma Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
PA.A.2.5 Solve problems involving linear functions and interpret results in the original context.	7–8 M5 Lesson 6: Linear Functions and Rate of Change 7–8 M5 Lesson 7: Interpreting Rate of Change and Initial Value 7–8 M5 Lesson 23: Applications of Volume

Algebraic Reasoning & Algebra

PA.A.3 Generate equivalent numerical and algebraic expressions and use algebraic properties to evaluate expressions.

Oklahoma Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
PA.A.3.1 Use substitution to simplify and evaluate algebraic expressions.	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
PA.A.3.2 Justify steps in generating equivalent expressions by combining like terms and using order of operations (to include grouping symbols). Identify the properties used, including the properties of operations (associative, commutative, and distributive).	7–8 M2 Lesson 2: Using Equivalent Expressions to Solve Equations

Algebraic Reasoning & Algebra

PA.A.4 Represent and solve problems using mathematical models and situations with equations and inequalities involving linear expressions.

Oklahoma Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
PA.A.4.1 Solve mathematical problems using linear equations with one variable where there could be one, infinitely many, or no solutions. Represent situations using linear equations and interpret solutions in the original context.	7–8 M2 Lesson 8: Solving Equations with Rational Coefficients 7–8 M2 Lesson 9: Linear Equations with More Than One Solution 7–8 M2 Lesson 10: Another Possible Number of Solutions
PA.A.4.2 Represent, write, solve, and graph problems leading to linear inequalities with one variable in the form $px + q > r$ and $px + q < r$, where p, q, and r are rational numbers.	7–8 M2 Lesson 5: Solving Problems Involving Equations and Inequalities
PA.A.4.3 Represent real-world situations using equations and inequalities involving one variable.	7–8 M2 Lesson 5: Solving Problems Involving Equations and Inequalities 7–8 M2 Lesson 11: Using Linear Equations to Solve Real-World Problems

Geometry & Measurement

7.GM.1 Develop and understand the concept of surface area and volume of rectangular prisms with rational-valued edge lengths.

Oklahoma Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
7.GM.1.1 Recognize that the surface area of a rectangular prism can be found by finding the area of each component of the net of that figure. Know that rectangular prisms of different dimensions can have the same surface area.	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
7.GM.1.2 Using a variety of tools and strategies, develop the concept that surface area of a rectangular prism can be found by wrapping the figure with same-sized square units without gaps or overlap. Use appropriate measurements (e.g., cm^2).	6 M5 Lesson 12: From Nets to Surface Area *Supplemental material is necessary to address the notation* cm^2 *for this objective.*
7.GM.1.3 Using a variety of tools and strategies, develop the concept that the volume of rectangular prisms can be found by counting the total number of same-sized unit cubes that fill a shape without gaps or overlaps. Use appropriate measurements (e.g., cm^3).	6 M5 Topic D: Volumes of Right Rectangular Prisms *Supplemental material is necessary to address the notation* cm^3 *for this objective.*

Geometry & Measurement

7.GM.2 Use mathematical models and problems to calculate and justify the area of trapezoids and the area and perimeter of composite figures with rational measurements.

Oklahoma Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
7.GM.2.1 Develop and use the formula to determine the area of a trapezoid.	6 M5 Lesson 7: Areas of Trapezoids and Other Polygons *Supplemental material is necessary to address the area formula for a trapezoid.*
7.GM.2.2 Find the area and perimeter of composite figures.	6 M5 Lesson 5: Perimeter and Area in the Coordinate Plane 6 M5 Lesson 8: Areas of Composite Figures in Real-World Situations 7 M4 Lesson 14: Composite Figures with Circular Regions 7 M4 Lesson 16: Solving Area Problems by Composition and Decomposition

Geometry & Measurement

7.GM.3 Use mathematical models and reasoning with proportions and ratios to determine measurements, justify formulas, and solve problems.

Oklahoma Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
7.GM.3.1 Solve problems that require the conversion of weights and capacities within the same measurement systems using appropriate units.	6 M1 Lesson 19: Using Rates to Convert Units

Oklahoma Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
7.GM.3.2 Demonstrate an understanding of the proportional relationship between the diameter and circumference of a circle and that the unit rate (constant of proportionality) is pi (π) and can be approximated by rational numbers such as $\frac{22}{7}$ and 3.14.	7–8 M3 Lesson 3: Exploring and Constructing Circles 7–8 M3 Lesson 4: Area and Circumference of a Circle 7–8 M3 Lesson 5: Area and Circumference of Circular Regions *Supplemental material is necessary to address the approximation of pi as $\frac{22}{7}$.*
7.GM.3.3 Calculate the circumference and area of circles to solve problems in various contexts, in terms of pi (π) and using approximations for pi (π).	7–8 M3 Lesson 3: Exploring and Constructing Circles 7–8 M3 Lesson 4: Area and Circumference of a Circle 7–8 M3 Lesson 5: Area and Circumference of Circular Regions 7–8 M3 Lesson 6: Watering a Lawn

Geometry & Measurement

7.GM.4 Analyze the effect of translations, reflections, rotations, and dilations on the attributes of two-dimensional figures on and off the coordinate plane.

Oklahoma Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
7.GM.4.1 Describe the properties of similarity, compare geometric figures for similarity, and determine scale factors resulting from dilations.	7–8 M3 Lesson 22: Dilations 7–8 M3 Lesson 23: Using Lined Paper to Explore Dilations 7–8 M3 Lesson 24: Figures and Dilations 7–8 M3 Lesson 25: The Shadowy Hand 7–8 M3 Lesson 26: Dilations on the Coordinate Plane 7–8 M3 Lesson 27: Similar Figures 7–8 M3 Lesson 28: Exploring Angles in Similar Triangles

Oklahoma Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
7.GM.4.2 Apply proportions, ratios, and scale factors to solve problems involving scale drawings and to determine side lengths and areas of similar triangles and rectangles.	7–8 M3 Lesson 18: Scale Drawings 7–8 M3 Lesson 19: Finding Actual Distances from a Scale Drawing 7–8 M3 Lesson 20: Scale and Scale Factor 7–8 M3 Lesson 21: Modeling with Scale Drawings 7–8 M3 Lesson 27: Similar Figures 7–8 M3 Lesson 29: Using Similar Figures to Find Unknown Side Lengths
7.GM.4.3 Graph and describe translations (with directional and algebraic instructions), reflections across the x- and y-axes, and rotations in $90°$ increments about the origin of figures on a coordinate plane, and determine the coordinates of the vertices of a figure after a transformation.	7–8 M3 Lesson 9: Rigid Motions on the Coordinate Plane

Geometry & Measurement

PA.GM.1 Apply the Pythagorean theorem to solve problems involving triangles.

Oklahoma Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
PA.GM.1.1 Justify the Pythagorean theorem using measurements, diagrams, or dynamic software to solve problems in two dimensions involving right triangles.	7–8 M1 Lesson 19: The Pythagorean Theorem 7–8 M3 Lesson 15: Proving the Pythagorean Theorem 7–8 M3 Lesson 16: Proving the Converse of the Pythagorean Theorem 7–8 M3 Lesson 17: Applications of the Pythagorean Theorem 7–8 M3 Lesson 29: Using Similar Figures to Find Unknown Side Lengths 7–8 M5 Lesson 19: Volumes of Pyramids and Cones

Oklahoma Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
PA.GM.1.2 Use the Pythagorean theorem to find the distance between any two points in a coordinate plane.	7–8 M3 Lesson 17: Applications of the Pythagorean Theorem

Geometry & Measurement

PA.GM.2 Justify and use formulas to calculate surface area and volume of three-dimensional figures.

Oklahoma Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
PA.GM.2.1 Calculate the surface area of a rectangular prism using decomposition or nets. Use appropriate units (e.g., cm^2).	7–8 M5 Lesson 11: Surface Areas of Prisms and Pyramids 7–8 M5 Lesson 18: Designing a Fish Tank *Supplemental material is necessary to address the notation cm^2 for this objective.*
PA.GM.2.2 Calculate the surface area of a cylinder, in terms of pi (π) and using approximations for pi (π), using decomposition or nets. Use appropriate units (e.g., cm^2).	7–8 M5 Lesson 12: Surface Area of Cylinders *Supplemental material is necessary to address the notation cm^2 for this objective.*
PA.GM.2.3 Justify why base area (B) and height (h) in the formula $V = Bh$ are multiplied to find the volume of a rectangular prism. Use appropriate units (e.g., cm^3).	7–8 M5 Lesson 16: Volume of Prisms 7–8 M5 Lesson 18: Designing a Fish Tank *Supplemental material is necessary to address the notation cm^3 for this objective.*

Oklahoma Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
PA.GM.2.4 Develop and use the formulas $V = \pi r^2 h$ and $V = Bh$ to determine the volume of right cylinders, in terms of π and using approximations for pi (π). Justify why base area (B) and height (h) are multiplied to find the volume of a right cylinder. Use appropriate units (e.g., cm^3).	7–8 M5 Lesson 17: Volume of Cylinders *Supplemental material is necessary to address the notation cm^3 for this objective.*

Data & Probability

7.D.1 Interpret and analyze data, creating the most appropriate display, using a variety of tools.

Oklahoma Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
7.D.1.1 Design simple experiments, collect data, and calculate measures of center (mean, median, and mode) and spread (range and interquartile range). Use these quantities to draw conclusions about the data collected and make predictions.	6 M6 Lesson 2: Describing a Data Distribution 6 M6 Topic B: Mean and Mean Absolute Deviation 6 M6 Topic C: Median, Interquartile Range, and Box Plots 6 M6 Lesson 17: Developing a Statistical Project 6 M6 Lesson 22: Presenting Statistical Projects *Supplemental material is necessary to address mode.*
7.D.1.2 Use reasoning with proportions to display and interpret data in circle graphs (pie charts) and histograms.	6 M6 Lesson 4: Creating a Histogram 6 M6 Lesson 5: Comparing Data Displays *Supplemental material is necessary to address circle graphs.*

Oklahoma Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
7.D.1.3 Use technology to create and analyze box plots.	6 M6 Lesson 15: More Practice with Box Plots

Data & Probability

7.D.2 Calculate and use proportional reasoning with probabilities to model and solve mathematical problems.

Oklahoma Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
7.D.2.1 Determine the theoretical probability of an event using the ratio between the size of the event and the size of the sample space; represent probabilities as percents, fractions and decimals between 0 and 1.	7–8 M6 Lesson 1: What Is Probability? 7–8 M6 Lesson 3: Theoretical Probability 7–8 M6 Lesson 6: The Law of Large Numbers
7.D.2.2 Calculate probability as a fraction of sample space or as a fraction of area. Express probabilities as percents, decimals and fractions.	7–8 M6 Lesson 3: Theoretical Probability 7–8 M6 Lesson 6: The Law of Large Numbers
7.D.2.3 Use proportional reasoning to draw conclusions about and predict relative frequencies of outcomes based on theoretical probabilities.	7–8 M6 Lesson 1: What Is Probability? 7–8 M6 Lesson 2: Outcomes of Chance Experiments 7–8 M6 Lesson 5: Outcomes That Are Not Equally Likely 7–8 M6 Lesson 7: Picking Blue

Data & Probability

PA.D.1 Display and interpret data in a variety of ways, including using scatter plots and approximate lines of best fit. Use the line of best fit and average rate of change to make predictions and draw conclusions about data.

Oklahoma Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
PA.D.1.1 Describe the impact that inserting or deleting a data point has on the mean and the median of a data set. Create data displays using technology to examine this impact.	6 M6 Lesson 8: The Mean as a Balance Point 6 M6 Lesson 20: Choosing a Measure of Center
PA.D.1.2 Explain how outliers affect measures of center and spread.	6 M6 Lesson 16: Interpreting Box Plots 6 M6 Lesson 20: Choosing a Measure of Center 6 M6 Lesson 22: Presenting Statistical Projects
PA.D.1.3 Collect, display, and interpret data using scatter plots. Use the shape of the scatter plot to find the informal line of best fit, make statements about the average rate of change, and make predictions about values not in the original data set. Use appropriate titles, labels, and units.	7–8 M6 Topic E: Bivariate Numerical Data

Data & Probability

PA.D.2 Calculate experimental probabilities and reason about probabilities to model and solve problems.

Oklahoma Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
PA.D.2.1 Calculate experimental probabilities and represent them as percents, fractions, and decimals between 0 and 1. Use experimental probabilities to predict relative frequencies when actual probabilities are unknown.	7–8 M6 Lesson 1: What Is Probability? 7–8 M6 Lesson 2: Outcomes of Chance Experiments 7–8 M6 Lesson 5: Outcomes That Are Not Equally Likely 7–8 M6 Lesson 6: The Law of Large Numbers 7–8 M6 Lesson 7: Picking Blue
PA.D.2.2 Determine how samples are chosen (randomness) to draw and support conclusions about generalizing a sample to a population, including identifying limitations and biases.	7–8 M6 Lesson 12: Sampling Variability When Estimating a Population Mean 7–8 M6 Lesson 13: Sampling Variability and the Effect of Sample Size 7–8 M6 Lesson 14: Sampling Variability When Estimating a Population Proportion
PA.D.2.3 Define, compare, and contrast the probabilities of dependent and independent events.	*Supplemental material is necessary to address this objective.*