## Grade 6 | Oregon Mathematics Standards Correlation to Eureka Math ${ }^{\text {® }}$

When the original Eureka Math ${ }^{\circledR}$ curriculum was released, it quickly became the most widely used K-5 mathematics curriculum in the country. Now, the Great Minds ${ }^{\circledR}$ teacher-writers have created Eureka Math ${ }^{2 ®}$, 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 Math ${ }^{2}$ 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 Math ${ }^{2}$ employs streamlined materials that allow teachers to plan more efficiently and focus their energy on delivering highquality 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 Math ${ }^{2}$ 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.

## Algebraic Reasoning: Expressions and Equations

## 6.AEE.A Apply and extend previous understandings of arithmetic to algebraic expressions.

## Oregon Mathematics Standards

## Aligned Components of Eureka Math ${ }^{2}$

## 6.AEE.A. 1

Write and evaluate numerical expressions involving whole-number bases and exponents.

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M4 L1: Expressions with Addition and Subtraction
M4 L2: Expressions with Multiplication and Division
M4 L3: Exploring Exponents
M4 L4: Evaluating Expressions with Exponents
M4 L5: Exploring Order of Operations
M4 L6: Order of Operations
M4 L7: Algebraic Expressions with Addition and Subtraction
M4 L8: Algebraic Expressions with Addition, Subtraction, Multiplication, and Division
M4 L9: Addition and Subtraction Expressions from Real-World Situations
M4 L11: Modeling Real-World Situations with Expressions
M4 L12: Applying Properties to Multiplication and Division Expressions
M4 L17: Equations and Solutions
M5 L1: The Area of a Parallelogram
M5 L3: The Area of a Triangle
M5 L12: From Nets to Surface Area
M5 L13: Surface Area in Real-World Situations
M5 L14: Designing a Box
M5 L16: Applying Volume Formulas
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## Oregon Mathematics Standards

## 6.AEE.A. 3

Apply the properties of operations to generate equivalent expressions and to determine when two expressions are equivalent.

## Aligned Components of Eureka Math ${ }^{2}$

M4 L12: Applying Properties to Multiplication and Division Expressions
M4 L13: The Distributive Property
M4 L14: Using the Distributive Property to Factor Expressions
M4 L15: Combining Like Terms by Using the Distributive Property
M4 L16: Equivalent Algebraic Expressions
M5 L4: Areas of Triangles in Real-World Situations
M5 L6: Problem Solving with Area in the Coordinate Plane
M5 L7: Areas of Trapezoids and Other Polygons

## Algebraic Reasoning: Expressions and Equations

6.AEE.B Reason about and solve one-variable equations and inequalities.

## Oregon Mathematics Standards

Aligned Components of Eureka Math ${ }^{2}$

## 6.AEE.B. 4

Understand solving an equation or inequality as a process of answering which values from a specified set, if any, make the equation or inequality true. Use substitution to determine which number(s) in a given set make an equation or inequality true.

## 6.AEE.B. 5

Use variables to represent numbers and write expressions when solving problems in authentic contexts.

M4 L9: Addition and Subtraction Expressions from Real-World Situations
M4 L10: Multiplication and Division Expressions from Real-World Situations
M4 L11: Modeling Real-World Situations with Expressions
M4 L16: Equivalent Algebraic Expressions

## Oregon Mathematics Standards

## Aligned Components of Eureka Math ${ }^{2}$

| 6.AEE.B. 6 |
| :--- |
| Write and solve equations of the form |
| $x+p=q$ and $p x=q$ in problems that |
| arise from authentic contexts for cases |
| in which $p, q$, and $x$ are all nonnegative |
| rational numbers. |
| 6.AEE.B.7 |
| Write inequalities of the form $x>c$ |
| and $x<c$ to represent constraints |
| or conditions to solve problems |
| in authentic contexts. Describe and graph |
| on a number line solutions of inequalities |
| of the form $x>c$ and $x<c$. |

M4 L17: Equations and Solutions
M4 L19: Solving Equations with Addition and Subtraction
M4 L2O: Solving Equations with Multiplication and Division
M4 L21: Solving Problems with Equations
M5 L2: The Area of a Right Triangle

M4 L18: Inequalities and Solutions

## Algebraic Reasoning: Expressions and Equations

## 6.AEE.C Represent and analyze quantitative relationships between dependent and independent variables.

## Oregon Mathematics Standards

Aligned Components of Eureka Math ${ }^{2}$

## 6.AEE.C. 8

Use variables to represent and analyze two quantities to solve problems in authentic contexts. Including those that change in relationship to one another; write an equation to express one quantity in terms of the other quantity.

## Proportional Reasoning: Ratios and Proportions

## 6.RP.A Understand ratio concepts and use ratio reasoning to solve problems.

Oregon Mathematics Standards
Aligned Components of Eureka Math ${ }^{2}$

| 6.RP.A. 1 | M1 L2: Introduction to Ratios |
| :---: | :---: |
| Understand the concept of a ratio in authentic contexts, and use ratio language to describe a ratio relationship between two quantities. | M1 L3: Ratios and Tape Diagrams |
|  | M1 L4: Exploring Ratios by Making Batches |
|  | M1 L5: Equivalent Ratios |
|  | M1 L8: Addition Patterns in Ratio Relationships |
|  | M1 L10: Multiplicative Reasoning in Ratio Relationships |
|  | M1 L11: Applications of Ratio Reasoning |
| 6.RP.A. 2 | M1 L15: The Value of the Ratio |
| Understand the concept of a unit rate in authentic contexts and use rate language in the context of a ratio relationship. | M1 L16: Speed |
|  | M1 L17: Rates |
|  | M1 L18: Comparing Rates |
|  | M1 L19: Using Rates to Convert Units |
|  | M1 L20: Solving Rate Problems |
| 6.RP.A. 3 | M1 L1: Jars of Jelly Beans |
| Use ratio and rate reasoning to solve problems in authentic contexts that use equivalent ratios, unit rates, percents, and/or measurement units. | M1 L3: Ratios and Tape Diagrams |
|  | M1 L4: Exploring Ratios by Making Batches |
|  | M1 L5: Equivalent Ratios |
|  | M1 L6: Ratio Tables and Double Number Lines |
|  | M1 L7: Graphs of Ratio Relationships |
|  | M1 L8: Addition Patterns in Ratio Relationships |
|  | M1 L9: Multiplication Patterns in Ratio Relationships |

Oregon Mathematics Standards
6.RP.A. 3 continued

## Aligned Components of Eureka Math ${ }^{2}$

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M1 L10: Multiplicative Reasoning in Ratio Relationships
M1 L13: Comparing Ratio Relationships, Part 1
M1 L14: Comparing Ratio Relationships, Part 2
M1 L15: The Value of the Ratio
M1 L16: Speed
M1 L17: Rates
M1 L18: Comparing Rates
M1 L19: Using Rates to Convert Units
M1 L2O: Solving Rate Problems
M1 L21: Solving Multi-Step Rate Problems
M1 L22: Introduction to Percents
M1 L23: Finding the Percent
M1 L24: Finding a Part
M1 L25: Finding the Whole
M1 L26: Solving Percent Problems
M4 L22: Relationship Between Two Variables
M4 L23: Graphs of Ratio Relationships
M5 L8: Areas of Composite Figures in Real-World Situations
M5 L13: Surface Area in Real-World Situations
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## Numeric Reasoning: Number Systems

6.NS.A Apply and extend previous understandings of multiplication and division to divide fractions by fractions.

## Oregon Mathematics Standards

Aligned Components of Eureka Math²

## 6.NS.A. 1

Represent, interpret, and compute quotients of fractions to solve problems in authentic contexts involving division of fractions by fractions.

M2 L6: Dividing a Whole Number by a Fraction
M2 L7: Dividing a Fraction by a Whole Number
M2 L8: Dividing Fractions by Making Common Denominators
M2 L9: Dividing Fractions by using Tape Diagrams
M2 L10: Dividing Fractions by using the Invert and Multiply Strategy
M2 L11: Applications of Fraction Division
M2 L12: Fraction Operations in a Real-World Situation

## Numeric Reasoning: Number Systems

6.NS.B Compute fluently with multi-digit numbers and find common factors and multiples.

## Oregon Mathematics Standards

Aligned Components of Eureka Math ${ }^{2}$

## 6.NS.B. 2

Fluently divide multi-digit numbers using accurate, efficient, and flexible strategies and algorithms based on place value and properties of operations.

## 6.NS.B. 3

Fluently add, subtract, multiply, and divide positive rational numbers using accurate, efficient, and flexible strategies and algorithms.
M2 L17: Partial Quotients
M2 L18: The Standard Division Algorithm
M2 L19: Expressing Quotients as Decimals
M2 L13: Decimal Addition and Subtraction
M2 L14: Patterns in Multiplying Decimals
M2 L15: Decimal Multiplication
M2 L21: Dividing a Decimal by a Whole Number
M2 L22: Dividing a Decimal by a Decimal Greater Than 1
M2 L23: Dividing a Decimal by a Decimal Less Than 1
M2 L24: Living on Mars
M2 L13: Decimal Addition and Subtraction
M2 L15: Decimal Multiplication
M2 L21: Dividing a Decimal by a Whole Number
M2 L22: Dividing a Decimal by a Decimal Greater Than 1
M2 L23: Dividing a Decimal by a Decimal Less Than 1
M2 L24: Living on Mars

Oregon Mathematics Standards

## 6.NS.B. 4

Determine greatest common factors and least common multiples using a variety of strategies. Apply the distributive property to express a sum of two whole numbers 1-100 with a common factor as a multiple of a sum of two whole numbers with no common factor.

## Aligned Components of Eureka Math²

M2 L1: Factors and Multiples
M2 L2: Divisibility
M2 L3: The Greatest Common Factor
M2 L4: The Least Common Multiple
M2 L5: The Euclidean Algorithm
M4 L13: The Distributive Property
M4 L14: Using the Distributive Property to Factor Expressions

## Numeric Reasoning: Number Systems

6.NS.C Apply and extend previous understandings of numbers to the system of rational numbers.

## Oregon Mathematics Standards

## 6.NS.C. 5

Understand that positive and negative numbers are used together to describe quantities having opposite directions or values. Use positive and negative numbers to represent quantities in authentic contexts, explaining the meaning of zero in each situation.

Aligned Components of Eureka Math ${ }^{2}$
M3 L1: Positive and Negative Numbers
M3 L4: Rational Numbers in Real-World Situations

Oregon Mathematics Standards

## 6.NS.C. 6

Represent a rational number as a point on the number line. Extend number line diagrams and coordinate axes to represent points on the line and in the coordinate plane with negative number coordinates.

## Aligned Components of Eureka Math ${ }^{2}$

## M3 L2: Integers

M3 L3: Rational Numbers
M3 L4: Rational Numbers in Real-World Situations
M3 L10: The Four Quadrants of the Coordinate Plane
M3 L11: Plotting Points in the Coordinate Plane
M3 L12: Reflections in the Coordinate Plane
M3 L13: Constructing the Coordinate Plane
M3 L15: Distance in the Coordinate Plane
M3 L16: Figures in the Coordinate Plane
M3 L17: Problem Solving with the Coordinate Plane

## 6.NS.C. 7

Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram. Write, interpret, and explain statements of order for rational numbers and absolute value in authentic applications.

## 6.NS.C. 8

Graph points in all four quadrants of the coordinate plane to solve problems in authentic contexts. Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate.

M3 L5: Comparing Rational Numbers
M3 L6: Ordering Rational Numbers
M3 L7: Absolute Value
M3 L8: Absolute Value and Order
M3 L9: Interpreting Order and Distance in Real-World Situations

M3 L14: Modeling with the Coordinate Plane
M3 L15: Distance in the Coordinate Plane
M3 L16: Figures in the Coordinate Plane
M3 L17: Problem Solving with the Coordinate Plane
M5 L5: Perimeter and Area in the Coordinate Plane

## Geometric Reasoning and Measurement

## 6.GM.A Solve real-world and mathematical problems involving area, surface area, and volume.

Oregon Mathematics Standards
Aligned Components of Eureka Math ${ }^{2}$

## 6.GM.A. 1

Find the area of triangles, quadrilaterals, and other polygons by composing into rectangles or decomposing into triangles and other shapes. Apply these techniques to solve problems in authentic contexts.

M5 L1: The Area of a Parallelogram
M5 L2: The Area of a Right Triangle
M5 L3: The Area of a Triangle
M5 L4: Areas of Triangles in Real-World Situations
M5 L5: Perimeter and Area in the Coordinate Plane
M5 L6: Problem Solving with Area in the Coordinate Plane
M5 L7: Areas of Trapezoids and Other Polygons
M5 L8: Areas of Composite Figures in Real-World Situations

## 6.GM.A. 2

Find the volume of a right rectangular prism with fractional edge lengths by filling it with unit cubes of appropriate unit fraction edge lengths. Connect and apply to the formulas $V=l w h$ and $V=b h$ to find volumes of right rectangular prisms with fractional edge lengths to solve problems in authentic contexts.

M5 L15: Exploring Volume
M5 L16: Applying Volume Formulas
M5 L17: Problem Solving with Volume
M5 L18: Volumes of Composite Solids
M5 L19: Volume and Surface Area in Real-World Situations

M5 L5: Perimeter and Area in the Coordinate Plane
M5 L6: Problem Solving with Area in the Coordinate Plane

## Oregon Mathematics Standards

## 6.GM.A. 4

Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures, including those from authentic contexts.

## Aligned Components of Eureka Math ${ }^{2}$

M5 L9: Properties of Solids
M5 L10: Discovering Nets of Solids
M5 L11: Constructing Nets of Solids
M5 L12: From Nets to Surface Area
M5 L13: Surface Area in Real-World Situations
M5 L14: Designing a Box
M5 L19: Volume and Surface Area in Real-World Situations

## Data Reasoning

## 6.DR.A Formulate statistical investigative questions.

## Oregon Mathematics Standards

## Aligned Components of Eureka Math²

## 6.DR.A. 1

Formulate and recognize statistical investigative questions as those that anticipate changes in descriptive data related to the question and account for it in the answers.

M6 L1: Posing Statistical Questions
M6 L6: Selecting a Data Display
M6 L17: Developing a Statistical Project

## Data Reasoning

## 6.DR.B Collect and consider data.

## Oregon Mathematics Standards

## Aligned Components of Eureka Math ${ }^{2}$

## 6.DR.B. 2

Collect and record data with technology to identify and describe the characteristics of numerical data sets using quantitative measures of center and variability.

## Data Reasoning

## 6.DR.C Analyze, summarize, and describe data.

## Oregon Mathematics Standards

Aligned Components of Eureka Math ${ }^{2}$

## 6.DR.C. 3

Analyze data representations and describe measures of center and variability of quantitative data using appropriate displays.

M6 L2: Describing a Data Distribution
M6 L3: Creating a Dot Plot
M6 L9: Variability in a Data Distribution
M6 L14: Using a Box Plot to Summarize a Distribution

| Oregon Mathematics Standards |  |
| :--- | :--- |
| 6.DR.C. 3 | Aligned Components of Eureka Math ${ }^{2}$ |
| Analyze data representations and <br> describe measures of center and <br> variability of quantitative data using <br> appropriate displays. | M6 L7: Using the Mean to Describe the Center Mean as a Balance Point |
|  | M6 L9: Variability in a Data Distribution |
|  | M6 L10: The Mean Absolute Variation |
|  | M6 L11: Using the Mean and Mean Absolute Variation |
|  | M6 L12: Using the Median to Describe the Center |
|  | M6 L13: Using the Interquartile Range to Describe Variability |
|  | M6 L15: More Practice with Box Plots |
| M6 L16: Interpreting Box Plots |  |
|  | M6 L19: Comparing Data Distributions |

## Data Reasoning

## 6.DR.D Interpret data and answer investigative questions.

## Oregon Mathematics Standards

Aligned Components of Eureka Math ${ }^{2}$

## 6.DR.D. 4

Interpret quantitative measures of center to describe differences between groups from data collected to answer investigative questions.

M6 L1: Posing Statistical Questions
M6 L2: Describing a Data Distribution
M6 L5: Comparing Data Displays
M6 L7: Using the Mean to Describe the Center
M6 L8: The Mean as a Balance Point
M6 L10: The Mean Absolute Variation
M6 L11: Using the Mean and Mean Absolute Variation
M6 L12: Using the Median to Describe the Center
M6 L13: Using the Interquartile Range to Describe Variability
M6 L17: Developing a Statistical Project

