# EUREKA MATH<sup>2</sup>.

### **Grade 7** | Florida's B.E.S.T. Standards for Mathematics Correlation to *Eureka Math*<sup>2®</sup>

When the original *Eureka Math*<sup>®</sup> curriculum was released, it quickly became the most widely used K-5 mathematics curriculum in the country. Now, the Great Minds<sup>®</sup> teacher-writers have created *Eureka Math*<sup>2®</sup>, 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*<sup>2</sup> 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* and moments that have been delighting students and teachers for years, it also boasts these exciting new features:

### Teachability

*Eureka Math*<sup>2</sup> 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 Math*<sup>2</sup> 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 Math*<sup>2</sup> 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*<sup>2</sup> 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 Thinking and Reasoning Standards	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
<b>MA.K12.MTR.1.1</b> Actively participate in effortful learning both individually and collectively.	Lessons in every module engage students in mathematical thinking and reasoning. These are indicated in margin notes included with every lesson.
<b>MA.K12.MTR.2.1</b> Demonstrate understanding by representing problems in multiple ways.	Lessons in every module engage students in mathematical thinking and reasoning. These are indicated in margin notes included with every lesson.
MA.K12.MTR.3.1 Complete tasks with mathematical fluency.	Lessons in every module engage students in mathematical thinking and reasoning. These are indicated in margin notes included with every lesson.
MA.K12.MTR.4.1 Engage in discussions that reflect on the mathematical thinking of self and others.	Lessons in every module engage students in mathematical thinking and reasoning. These are indicated in margin notes included with every lesson.
<b>MA.K12.MTR.5.1</b> Use patterns and structure to help understand and connect mathematical concepts.	Lessons in every module engage students in mathematical thinking and reasoning. These are indicated in margin notes included with every lesson.
MA.K12.MTR.6.1 Assess the reasonableness of solutions.	Lessons in every module engage students in mathematical thinking and reasoning. These are indicated in margin notes included with every lesson.
MA.K12.MTR.7.1 Apply mathematics to real-world contexts.	Lessons in every module engage students in mathematical thinking and reasoning. These are indicated in margin notes included with every lesson.

7 | Florida's B.E.S.T. Standards for Mathematics Correlation to Eureka Math<sup>2</sup>

### **Number Sense and Operations**

MA.7.NSO.1 Rewrite numbers in equivalent forms.

#### Florida's B.E.S.T. Standards for Mathematics Aligned Components of *Eureka Math*<sup>2</sup>

MA.7.NSO.1.1	6 M4 Topic A: Numerical Expressions
Know and apply the Laws of Exponents to evaluate numerical expressions and generate equivalent numerical expressions, limited to whole-number exponents and rational number bases.	
MA.7.NSO.1.2	7 M2 Lesson 19: Rational Numbers as Decimals, Part 1
Rewrite rational numbers in different but equivalent forms including fractions, mixed numbers, repeating decimals and percentages to solve mathematical and real-world problems.	7 M2 Lesson 20: Rational Numbers as Decimals, Part 2 Supplemental material is necessary to fully address this standard.

### **Number Sense and Operations**

MA.7.NSO.2 Add, subtract, multiply and divide rational numbers.

Florida's B.E.S.T. Standards for Mathematics	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
MA.7.NSO.2.1	7 M2 Lesson 24: Order of Operations with Rational Numbers
Solve mathematical problems using multi-step order of operations with rational numbers including grouping symbols, whole-number exponents and absolute value.	7 M2 Lesson 25: Writing and Evaluating Expressions with Rational Numbers, Part 1 7 M2 Lesson 26: Writing and Evaluating Expressions with Rational Numbers, Part 2

<b>MA.7.NSO.2.2</b> 7	7 M2 Topic A: Adding Rational Numbers
Add, subtract, multiply and divide 7	7 M2 Topic B: Subtracting Rational Numbers
rational numbers with procedural fluency.	7 M2 Topic C: Multiplying Rational Numbers
7	7 M2 Topic D: Dividing Rational Numbers
<b>MA.7.NSO.2.3</b> 7	7 M2 Topic A: Adding Rational Numbers
Solve real-world problems involving any of the four operations with rational numbers.	7 M2 Topic B: Subtracting Rational Numbers
	7 M2 Topic C: Multiplying Rational Numbers
	7 M2 Topic D: Dividing Rational Numbers
7	7 M2 Topic E: Numerical Expressions with Rational Numbers

#### Florida's B.E.S.T. Standards for Mathematics

### Aligned Components of Eureka Math<sup>2</sup>

### **Algebraic Reasoning**

MA.7.AR.1 Rewrite algebraic expressions in equivalent forms.

Florida's B.E.S.T. Standards for Mathematics	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
MA.7.AR.1.1	7 M3 Lesson 4: Adding and Subtracting Expressions
Apply properties of operations to add and subtract linear expressions with rational coefficients.	
MA.7.AR.1.2	7 M3 Topic A: Equivalent Expressions
Determine whether two linear expressions are equivalent.	7 M3 Lesson 9: Solving Equations to Determine Unknown Angle Measures

### **Algebraic Reasoning**

MA.7.AR.2 Write and solve equations and inequalities in one variable.

## Florida's B.E.S.T. Standards Aligned Components of Eureka Math<sup>2</sup> for Mathematics Aligned Components of Eureka Math<sup>2</sup>

<b>MA.7.AR.2.1</b> Write and solve one-step inequalities in one variable within a mathematical context and represent solutions algebraically or graphically.	7 M3 Topic D: Inequalities
<b>MA.7.AR.2.2</b> Write and solve two-step equations in one variable within a mathematical or real-world context, where all terms are rational numbers.	<ul> <li>7 M3 Lesson 7: Angle Relationships and Unknown Angle Measures</li> <li>7 M3 Lesson 8: Strategies to Determine Unknown Angle Measures</li> <li>7 M3 Lesson 12: Solving Equations Algebraically and Arithmetically</li> <li>7 M3 Lesson 13: Solving Equations—Puzzles</li> <li>7 M3 Lesson 14: Solving Equations—Scavenger Hunt</li> <li>7 M3 Lesson 15: Solving Equations Fluently</li> <li>7 M3 Lesson 16: Using Equations to Solve Pate Problems</li> </ul>

### **Algebraic Reasoning**

MA.7.AR.3 Use percentages and proportional reasoning to solve problems.

### Florida's B.E.S.T. Standards for Mathematics

### Aligned Components of Eureka Math<sup>2</sup>

MA.7.AR.3.1	7 M5 Lesson 2: Racing for Percents
Apply previous understanding of percentages and ratios to solve	7 M5 Lesson 3: Percent as a Rate per 100
	7 M5 Lesson 4: Proportion and Percent
muti-step redi-wond percent problems.	7 M5 Lesson 5: Common Denominators or Common Numerators
	7 M5 Topic B: Part of 100
	7 M5 Lesson 10: Percent Increase
	7 M5 Lesson 11: Percent Decrease
	7 M5 Lesson 12: More Discounts
	7 M5 Lesson 13: What Is the Best Deal?
	7 M5 Topic D: Applications of Percent
	7 M5 Lesson 20: Making Money, Day 1
	7 M5 Lesson 21: Making Money, Day 2
	7 M5 Lesson 22: Making Mixtures
	7 M5 Lesson 23: Percents of Percents
MA.7.AR.3.2	7 M1 Lesson 7: Handstand Sprint
Apply previous understanding of ratios to solve real-world problems involving proportions.	7 M1 Lesson 10: Applying Proportional Reasoning
	7 M1 Lesson 11: Constant Rates
	7 M1 Lesson 12: Multi-Step Ratio Problems, Part 1
	7 M1 Lesson 13: Multi-Step Ratio Problems, Part 2

for Mathematics	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
MA.7.AR.3.3	Supplemental material is necessary to address this standard.
Solve mathematical and real-world problems involving the conversion of units across different measurement systems.	

### Elorida's REST Standards

**Algebraic Reasoning** 

MA.7.AR.4 Analyze and represent two-variable proportional relationships.

Florida's B.E.S.T. Standards for Mathematics	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
MA.7.AR.4.1	7 M1 Topic A: Understanding Proportional Relationships
Determine whether two quantities have a proportional relationship by examining a table, graph or written description.	7 M1 Lesson 14: Extreme Bicycles
MA.7.AR.4.2	7 M1 Lesson 4: Exploring Graphs of Proportional Relationships
Determine the constant of proportionality	7 M1 Lesson 5: Analyzing Graphs of Proportional Relationships
within a mathematical or real-world context given a table, graph or written description of a proportional relationship.	7 M1 Lesson 6: Identifying Proportional Relationships in Written Descriptions
	7 M1 Lesson 8: Relating Representations of Proportional Relationships
	7 M1 Lesson 9: Comparing Proportional Relationships
	7 M1 Lesson 11: Constant Rates
	7 M1 Lesson 12: Multi-Step Ratio Problems, Part 1
	7 M1 Lesson 13: Multi-Step Ratio Problems, Part 2
	7 M1 Lesson 16: Using a Scale Factor
	7 M1 Lesson 18: Relating Areas of Scale Drawings

for Mathematics	Aligned Components of Eureka Math <sup>2</sup>
MA.7.AR.4.3	7 M1 Lesson 4: Exploring Graphs of Proportional Relationships
Given a mathematical or real-world context, graph proportional relationships from a table, equation or a written description.	7 M1 Lesson 5: Analyzing Graphs of Proportional Relationships Supplemental material is necessary to fully address this standard.
MA.7.AR.4.4	7 M1 L8: Relating Representations in Proportional Relationships
Given any representation of a proportional relationship, translate the representation to a written description, table or equation.	Supplemental material is necessary to fully address this standard.
MA.7.AR.4.5	7 M1 Lesson 4: Exploring Graphs of Proportional Relationships
Solve real-world problems involving	7 M1 Lesson 5: Analyzing Graphs of Proportional Relationships
proportional relationships.	7 M1 Lesson 6: Identifying Proportional Relationships in Written Descriptions
	7 M1 Lesson 8: Relating Representations of Proportional Relationships
	7 M1 Lesson 9: Comparing Proportional Relationships
	7 M1 Lesson 11: Constant Rates
	7 M1 Lesson 12: Multi-Step Ratio Problems, Part 1
	7 M1 Lesson 13: Multi-Step Ratio Problems, Part 2
	7 M1 Lesson 16: Using a Scale Factor
	7 M1 Lesson 18: Relating Areas of Scale Drawings

### Florida's B.E.S.T. Standards

### **Geometric Reasoning**

MA.7.GR.1 Solve problems involving two-dimensional figures, including circles.

Florida's B.E.S.T. Standards for Mathematics	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
<b>MA.7.GR.1.1</b> Apply formulas to find the areas of trapezoids, parallelograms and rhombi.	6 M5 Lesson 1: The Area of a Parallelogram 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 Supplemental material is necessary to address formulas to find the areas of rhombi.
<b>MA.7.GR.1.2</b> Solve mathematical or real-world problems involving the area of polygons or composite figures by decomposing them into triangles or quadrilaterals.	6 M5 Topic A: Areas of Polygons 6 M5 Topic B: Problem Solving with Area
<b>MA.7.GR.1.3</b> Explore the proportional relationship between circumferences and diameters of circles. Apply a formula for the circumference of a circle to solve mathematical and real-world problems.	7 M4 Lesson 10: The Outside of a Circle 7 M4 Lesson 11: The Inside of a Circle 7 M4 Lesson 12: Exploring the Area and Circumference of a Circle 7 M4 Lesson 14: Composite Figures with Circular Regions 7 M4 Lesson 15: Watering a Lawn
MA.7.GR.1.4 Explore and apply a formula to find the area of a circle to solve mathematical and real-world problems.	7 M4 Lesson 13: Finding Areas of Circular Regions 7 M4 Lesson 14: Composite Figures with Circular Regions 7 M4 Lesson 15: Watering a Lawn

tor Mathematics	
MA.7.GR.1.5	7 M1 Lesson 15: Scale Drawings
Solve mathematical and real-world problems involving dimensions and areas of geometric figures, including scale drawings and scale factors.	7 M1 Lesson 16: Using a Scale Factor
	7 M1 Lesson 17: Finding Actual Distances from a Scale Drawing
	7 M1 Lesson 18: Relating Areas of Scale Drawings
	7 M1 Lesson 19: Scale and Scale Factor
	7 M1 Lesson 20: Creating Multiple Scale Drawings
	7 M5 Lesson 1: Proportionality and Scale Factor
	7 M5 Lesson 14: Scale Factor–Percent Increase and Decrease

#### Florida's B.E.S.T. Standards for Mathematics

### Aligned Components of Eureka Math<sup>2</sup>

### **Geometric Reasoning**

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MA.7.GR.2 Solve problems involving three-dimensional figures, including right circular cylinders.

Florida's B.E.S.T. Standards for Mathematics	Aligned Components of Eureka Math <sup>2</sup>
MA.7.GR.2.1	7 M4 Lesson 19: Surface Area of Cylinders
Given a mathematical or real-world context, find the surface area of a right circular cylinder using the figure's net.	
MA.7.GR.2.2	7 M4 Lesson 19: Surface Area of Cylinders
Solve real-world problems involving surface area of right circular cylinders.	

for Mathematics	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
MA.7.GR.2.3	7 M4 Lesson 19: Surface Area of Cylinders
Solve mathematical and real-world problems involving volume of right circular cylinders.	

### Florida's B.F.S.T. Standards

Data Analysis and Probability

MA.7.DP.1 Represent and interpret numerical and categorical data.

Florida's B.E.S.T. Standards for Mathematics	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
MA.7.DP.1.1	6 M6 Topic B: Mean and Mean Absolute Deviation
Determine an appropriate measure of center or measure of variation to summarize numerical data, represented numerically or graphically, taking into consideration the context and any outliers.	<ul> <li>6 M6 Lesson 12: Using the Median to Describe the Center</li> <li>6 M6 Lesson 13: Using the Interquartile Range to Describe Variability</li> <li>6 M6 Lesson 15: More Practice with Box Plots</li> <li>6 M6 Lesson 16: Interpreting Box Plots</li> <li>6 M6 Lesson 19: Comparing Data Distributions</li> <li>6 M6 Lesson 22: Presenting Statistical Projects</li> <li>Supplemental material is necessary to address outliers.</li> </ul>
MA.7.DP.1.2	7 M6 Topic D: Comparing Populations
Given two numerical or graphical representations of data, use the measure(s) of center and measure(s) of variability to make comparisons, interpret results and draw conclusions about the two populations.	

for Mathematics	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
MA.7.DP.1.3	Supplemental material is necessary to address this standard.
Given categorical data from a random sample, use proportional relationships to make predictions about a population.	
MA.7.DP.1.4	Supplemental material is necessary to address this standard.
Use proportional reasoning to construct, display and interpret data in circle graphs.	
MA.7.DP.1.5	6 M6 Lesson 3: Creating a Dot Plot
Given a real-world numerical or categorical data set, choose and create an appropriate graphical representation.	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 19: Comparing Data Distributions
	6 M6 Lesson 22: Presenting Statistical Projects
	Supplemental material is necessary to address graphical representations for categorical data sets.

### Florida's B.E.S.T. Standards

7 | Florida's B.E.S.T. Standards for Mathematics Correlation to Eureka Math<sup>2</sup>

### Data Analysis and Probability

Florida's B.E.S.T. Standards

MA.7.DP.2 Develop an understanding of probability. Find and compare experimental and theoretical probabilities.

for Mathematics	Alighed Components of Eureka Math-
<b>MA.7.DP.2.1</b> Determine the sample space for a simple experiment.	7 M6 Lesson 5: Multistage Experiments
<b>MA.7.DP.2.2</b> Given the probability of a chance event, interpret the likelihood of it occurring. Compare the probabilities of chance events.	7 M6 Lesson 7: The Law of Large Numbers
<b>MA.7.DP.2.3</b> Find the theoretical probability of an event related to a simple experiment.	7 M6 Lesson 4: Theoretical Probability 7 M6 Lesson 7: The Law of Large Numbers
MA.7.DP.2.4 Use a simulation of a simple experiment to find experimental probabilities and compare them to theoretical probabilities.	7 M6 Lesson 7: The Law of Large Numbers 7 M6 Lesson 9: Probability Simulations 7 M6 Lesson 10: Simulations with Random Number Tables

Aligned Components of Eureka Math<sup>2</sup>

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