



Grade 5 | Georgia State Standards for Mathematics Correlation to Eureka Math^{2®}

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 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 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 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.

Standards for Mathematical Practice

Aligned Components of Eureka Math²

MP.1 Make sense of problems and persevere in solving them.	Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson. Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.		
MP.2 Reason abstractly and quantitatively.			
MP.3 Construct viable arguments and critique the reasoning of others.	Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.		
MP.4 Model with mathematics.	Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.		
MP.5 Use appropriate tools strategically.	Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.		
MP.6 Attend to precision.	Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.		
MP.7 Look for and make use of structure.	Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.		
MP.8 Look for and express regularity in repeated reasoning.	Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.		

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Numerical Reasoning

5.NR.1 Use place value understanding to solve real-life, mathematical problems.

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Aligned Components of Eureka Math²

5.NR.1.1 Explain that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and $\frac{1}{10}$ of what it represents in the place to its left.	 5 M1 Lesson 1: Relate adjacent place value units by using place value understanding. 5 M1 Lesson 2: Multiply and divide by 10, 100, and 1,000 and identify patterns in the products and quotients. 5 M4 Topic A: Understanding Decimal Numbers with Place Value and Fraction Thinking
5.NR.1.2 Explain patterns in the placement of digits when multiplied or divided by a power of 10 . Use whole-number exponents to denote powers of 10 , up to 10^3 .	5 M1 Topic A: Place Value Understanding for Whole Numbers 5 M4 Lesson 5: Multiply and divide decimal numbers by powers of 10.

Numerical Reasoning

5.NR.2 Multiply and divide multi-digit whole numbers to solve relevant, mathematical problems.

Georgia State Standards for Mathematics

Aligned Components of Eureka Math²

5.NR.2.1	5 M1 Topic B: Multiplication of Whole Numbers
Fluently multiply multi-digit (up to 3-digit by 2-digit) whole numbers to solve authentic problems.	

Aligned Components of Eureka Math²

5.NR.2.2	5 M1 Topic C: Division of Whole Numbers
Fluently divide multi-digit whole numbers (up to 4-digit dividends and 2-digit divisors no greater than 25) to solve practical problems.	

Numerical Reasoning

5.NR.3 Describe fractions and perform operations with fractions to solve relevant, mathematical problems using part-whole strategies and visual models.

Georgia State Standards for Mathematics

Aligned Components of Eureka Math²

5.NR.3.1	5 M2 Topic A: Fractions and Division		
Explain the meaning of a fraction as division of the numerator by the denominator $\left(\frac{a}{b}=a\div b\right)$. Solve problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers.			
5.NR.3.2	4 M4 Topic C: Compare Fractions		
Compare and order up to three fractions with different numerators and/or different denominators by flexibly using a variety of tools and strategies.			

Aligned Components of Eureka Math²

5.NR.3.3	5 M2: Addition and Subtraction with Fractions
Model and solve problems involving addition and subtraction of fractions and mixed numbers with unlike denominators.	
5.NR.3.4	5 M3: Multiplication and Division with Fractions
Model and solve problems involving multiplication of a fraction and a whole number.	
5.NR.3.5	5 M3: Multiplication and Division with Fractions
Explain why multiplying a whole number by a fraction greater than one results in a product greater than the whole number, and why multiplying a whole number by a fraction less than one results in a product less than the whole number and multiplying a whole number by a fraction equal to one results in a product equal to the whole number.	 5 M5 Lesson 10: Find the area of a rectangle with fraction side lengths by relating the rectangle to a unit square. 5 M5 Lesson 14: Solve real-world problems involving areas of composite figures with mixed-number side lengths. 5 M5 Lesson 15: Solve multi-step word problems involving multiplication of mixed numbers.
5.NR.3.6 Model and solve problems involving division of a unit fraction by a whole number and a whole number by a unit fraction.	5 M3: Multiplication and Division with Fractions

Numerical Reasoning

5.NR.4 Read, write, and compare decimal numbers to the thousandths place, and round and perform operations with decimal numbers to the hundredths place to solve relevant, mathematical problems.

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Aligned Components of Eureka Math²

5.NR.4.1	5 M4 Lesson 1: Model and relate decimal place value units to thousandths.
Read and write decimal numbers to the thousandths place using base-ten numerals written in standard form and expanded form.	5 M4 Lesson 2: Represent thousandths as a place value unit. 5 M4 Lesson 3: Represent decimal numbers to the thousandths place in different forms.
5.NR.4.2 Represent, compare, and order decimal numbers to the thousandths place based on the meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.	5 M4 Lesson 6: Compare decimal numbers to the thousandths place.
5.NR.4.3	5 M4 Lesson 7: Round decimal numbers to the nearest one, tenth, or hundredth.
Use place value understanding to round decimal numbers to the hundredths place.	5 M4 Lesson 8: Round decimal numbers to any place value unit.
5.NR.4.4	5 M4: Place Value Concepts for Decimal Operations
Solve problems involving addition and subtraction of decimal numbers to the hundredths place using a variety of strategies.	

Numerical Reasoning

5.NR.5 Write, interpret, and evaluate numerical expressions within authentic problems.

Georgia State Standards for Mathematics

Aligned Components of Eureka Math²

5.NR.5.1

Write, interpret, and evaluate simple numerical expressions involving whole numbers with or without grouping symbols to represent actual situations. 5 M1 Lesson 1: Relate adjacent place value units by using place value understanding.

5 M1 Lesson 2: Multiply and divide by 10, 100, and $1{,}000$ and identify patterns in the products and quotients.

5 M4 Topic A: UnderstandingDecimal Numbers with Place Value and Fraction Thinking

Patterning and Algebraic Reasoning

5.PAR.6 Solve relevant problems by creating and analyzing numerical patterns using the given rule(s).

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Aligned Components of Eureka Math²

5.PAR.6.1	5 M6 Topic B: Patterns in the Coordinate Plane				
Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms by completing a table.	5 M6 Lesson 11: Draw lines in the coordinate plane and identify points on the lines.5 M6 Lesson 20: Reason about patterns in real-world situations.				
5.PAR.6.2 Represent problems by plotting ordered pairs and explain coordinate values of points in the first quadrant of the coordinate plane.	5 M6: Foundations to Geometry in the Coordinate Plane				

Measurement and Data Reasoning

5.MDR.7 Solve problems involving customary measurements, metric measurements, and time and analyze graphical displays of data to answer relevant questions.

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Aligned Components of Eureka Math²

5.MDR.7.1	4 M1 Topic E: Metric Measurement Conversion Tables			
Explore realistic problems involving	4 M2 Lesson 17: Express measurements of length in terms of smaller units.			
different units of measurement, including distance, mass, weight, volume, and time.	4 M3 Topic E: Problem Solving with Measurement			
distance, mass, weight, volume, and time.	5 M1 Lesson 5: Convert measurements and describe relationships between metric units.			
	5 M1 Lesson 6: Solve multi-step word problems by using metric measurement conversion.			
	5 M3 Lesson 5: Convert larger customary measurement units to smaller measurement units.			
	5 M3 Lesson 6: Convert smaller customary measurement units to larger measurement units.			
	5 M4 Topic E: Applications of Decimals			
5.MDR.7.2	5 M2 Topic D: Problem Solving and Line Plots with Fractional Measurements			
Ask questions and answer them based on gathered information, observations, and appropriate graphical displays to solve problems relevant to everyday life.	Supplemental material is necessary to address the statistical investigative process.			
5.MDR.7.3	5 M1 Lesson 5: Convert measurements and describe relationships between metric units.			
Convert among units within the metric	5 M1 Lesson 6: Solve multi-step word problems by using metric measurement conversion.			
system and then apply these conversions to solve multistep, practical problems.	5 M3 Lesson 5: Convert larger customary measurement units to smaller measurement units.			
to solve mainstep, practical problems.	5 M3 Lesson 6: Convert smaller customary measurement units to larger measurement units.			
	5 M4 Topic E: Applications of Decimals			

Aligned Components of Eureka Math²

5.MDR.7.4	4 M1 Topic E: Metric Measurement Conversion Tables
Convert among units within relative sizes of measurement units within the customary measurement system.	4 M2 Lesson 17: Express measurements of length in terms of smaller units. 4 M3 Topic E: Problem Solving with Measurement

Geometric and Spatial Reasoning

5.GSR.8 Examine properties of polygons and rectangular prisms, classify polygons by their properties, and discover volume of right rectangular prisms.

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Aligned Components of Eureka Math²

5.GSR.8.1	5 M5 Topic A: Drawing, Analysis, and Classification of Two-Dimensional Figures		
Classify, compare, and contrast polygons based on properties.	5 M6 Lesson 12: Graph and classify quadrilaterals in the coordinate plane.		
5.GSR.8.2	5 M5 Topic A: Drawing, Analysis, and Classification of Two-Dimensional Figures		
Determine, through exploration and investigation, that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category.			
5.GSR.8.3	5 M5 Topic C: Volume Concepts		
Investigate volume of right rectangular	5 M5 Lesson 22: Find the volumes of right rectangular prisms by using the area of the base.		
prisms by packing them with unit cubes without gaps or overlaps.	5 M5 Lesson 23: Find the volumes of right rectangular prisms by multiplying the edge lengths.		
Then, determine the total volume to solve problems.			

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Discover and explain how the volume of a right rectangular prism can be found by multiplying the area of the base times the height to solve authentic, mathematical problems.

5 M5: Addition and Multiplication with Area and Volume