



ABOUT EUREKA MATH

Created by the nonprofit Great Minds, *Eureka Math* helps teachers deliver unparalleled math instruction that provides students with a deep understanding of and fluency in math. Crafted by teachers and math scholars, the curriculum carefully sequences the mathematical progressions to maximize coherence from Prekindergarten through Precalculus—a principle tested and proven to be essential in students' mastery of math.

Teachers and students using *Eureka Math* find the trademark "Aha!" moments in *Eureka Math* to be a source of joy and inspiration, lesson after lesson, year after year.

ALIGNED

Eureka Math is the only curriculum found by <u>EdReports.org</u> to align fully with the Common Core State Standards for Mathematics for all grades, Kindergarten through Grade 8. Great Minds offers detailed analyses that demonstrate how each grade of *Eureka Math* aligns with specific state standards. Access these free alignment studies at <u>greatminds.org/state-studies</u>.

DATA

Schools and districts nationwide are experiencing student growth and impressive test scores after using *Eureka Math*. See their stories and data at <u>greatminds.org/data</u>.

FULL SUITE OF RESOURCES

As a nonprofit, Great Minds offers the *Eureka Math* curriculum as PDF downloads for free, noncommercial use. Access the free PDFs at greatminds.org/resources.

The teacher–writers who created the curriculum have also developed essential resources, available only from Great Minds, including the following:

- Printed material in English and Spanish
- Digital resources
- Professional development
- Classroom tools and manipulatives
- Teacher support materials
- Parent resources

Florida Benchmarks for Excellent Student Thinking (B.E.S.T.) Standards in Mathematics Correlation to *Eureka Math*®

GRADE 4 MATHEMATICS

The majority of the Grade 4 Florida B.E.S.T. Mathematics Standards are fully covered by the Grade 4 *Eureka Math* curriculum. The primary area where the Grade 4 Mathematics Florida Standards and Grade 4 *Eureka Math* do not align is in the domain of Algebraic Reasoning. Standards from this domain, as well as Number Sense and Operations, Fractions, Measurement, and Data Analysis and Probability will require the use of *Eureka Math* content from another grade level. A detailed analysis of alignment is provided in the table below.

INDICATORS

GREEN indicates the Florida standard is addressed in Eureka Math.

YELLOW indicates the Florida standard may not be completely addressed in Eureka Math.

RED indicates the Florida standard is not addressed in *Eureka Math*.

BLUE indicates there is a discrepancy between the grade level at which this standard is addressed in Florida and in *Eureka Math*.

Number Sense and Operations	Standard: MA.4.NSO.1 Understand place value for multi-digit numbers.		
	MA.4.NSO.1.1 Express how the value of a digit in a multi-digit whole number changes if the digit moves one place to the left or right.		G4 M1 Topic A: Place Value of Multi-Digit Whole Numbers
	MA.4.NSO.1.2 Read and write multi-digit whole numbers from 0 to 1,000,000 using standard form, expanded form and word form.		G4 M1 Topic A: Place Value of Multi-Digit Whole Numbers
	MA.4.NSO.1.3 Plot, order and compare multi-digit whole numbers up to 1,000,000.		G4 M1 Topic B: Comparing Multi-Digit Whole Numbers
	MA.4.NSO.1.4 Round whole numbers from 0 to 10,000 to the nearest 10, 100 or 1,000.		G4 M1 Topic C: Rounding Multi-Digit Whole Numbers
	MA.4.NSO.1.5		G4 M6 Topic C: Decimal Comparison
	Plot, order and compare decimals up to the hundredths.		

Standard: MA.4.NSO.2 Build an understanding of operations with multi-digit numbers, including decimals.		
MA.4.NSO.2.1		G3 Pattern Sheets
Recall multiplication facts with factors up to 12 and related division facts with automaticity.		G4 Fluency and Group Counting Exercises Extended to Include 11s and 12s
MA.4.NSO.2.2 Multiply two whole numbers, up to three digits by up to two digits, with procedural reliability.		G5 M2 Lesson 5: Connect visual models and the distributive property to partial products of the standard algorithm without renaming. G4 M3 Topic B: Multiplication by 10, 100 and 1,000 G4 M3 Topic C: Multiplication of up to Four Digits by Single-Digit Numbers G4 M3 Topic H: Multiplication of Two-Digit by Two-Digit Numbers
MA.4.NSO.2.3 Multiply two whole numbers, each up to two digits, including using a standard algorithm with procedural fluency.		G4 M3 Topic B: Multiplication by 10, 100 and 1,000 G4 M3 Topic C: Multiplication of up to Four Digits by Single-Digit Numbers G4 M3 Topic H: Multiplication of Two-Digit by Two-Digit Numbers

Strand	Benchmark	Aligned Components of Eureka Math
	MA.4.NSO.2.4 Divide a whole number up to four digits by a one-digit whole number with procedural reliability. Represent remainders as fractional parts of the divisor.	G4 M3 Topic E: Division of Tens and Ones with Successive Remainders G4 M3 Topic G: Division of Thousands, Hundreds, Tens and Ones G5 M4 Lesson 2: Interpret a fraction as division
	MA.4.NSO.2.5 Explore the multiplication and division of multi-digit whole numbers using estimation, rounding and place value.	G4 M3 Topic B: Multiplication by 10, 100 and 1,000 G4 M3 Topic C: Multiplication of up to Four Digits by Single-Digit Numbers G4 M3 Topic E: Division of Tens and Ones with Successive Remainders G4 M3 Topic G: Division of Thousands, Hundreds, Tens and Ones G5 M2 Lesson 2: Estimate multi-digit products by rounding factors to a basic fact and using place value patterns.
	MA.4.NSO.2.6 Identify the number that is one-tenth more, one-tenth less, one-hundredth more and one-hundredth less than a given number.	G4 M6 Topic D: Addition with Tenths and Hundredths

Strand	Benchmark	Aligned Components of Eureka Math
	MA.4.NSO.2.7 Explore the addition and subtraction of multi-digit numbers with decimals to the hundredths.	G4 M6 Topic D: Addition with Tenths and Hundredths
Fractions Standard: MA.4.FR.1 Develop an understanding of the relationship between different fractions and fractions and decimals.		erent fractions and the relationship between
	MA.4.FR.1.1 Model and express a fraction, including mixed numbers and fractions greater than one, with the denominator 10 as an equivalent fraction with the denominator 100.	G4 M5 Topic A: Decomposition and Fraction Equivalence G4 M5 Topic B: Fraction Equivalence Using Multiplication and Division G4 M5 Topic E: Extending Fraction Equivalence to Fractions Greater than 1
	MA.4.FR.1.2 Use decimal notation to represent fractions with denominators of 10 or 100, including mixed numbers and fractions greater than 1, and use fractional notation with denominators of 10 or 100 to represent decimals.	G4 M6 Topic A: Exploration of Tenths G4 M6 Topic B: Tenths and Hundredths
	MA.4.FR.1.3 Identify and generate equivalent fractions, including fractions greater than one. Describe how the numerator and denominator are affected when the equivalent fraction is created.	G4 M5 Topic A: Decomposition and Fraction Equivalence G4 M5 Topic B: Fraction Equivalence Using Multiplication and Division G4 M5 Topic E: Extending Fraction Equivalence to Fractions Greater than 1

Strand	Benchmark		Aligned Components of Eureka Math
	MA.4.FR.1.4 Plot, order and compare fractions, including mixed numbers and fractions greater than one, with different numerators and different denominators.		G4 M5 Topic C: Fraction Comparison G4 M5 Lesson 26: Compare fractions greater than 1 by reasoning using benchmark fractions. G4 M5 Lesson 27: Compare fractions greater than 1 by creating common numerators or denominators.
	Standard MA.4.FR.2 Build a foundation of addition, subtraction and multiplicati	ior	n operations with fractions.
	MA.4.FR.2.1 Decompose a fraction, including mixed numbers and fractions greater than one, into a sum of fractions with the same denominator in multiple ways. Demonstrate each decomposition with objects, drawings and equations.		G4 M5 Topic A: Decomposition and Fraction Equivalence G4 M5 Topic E: Extending Fraction Equivalence to Fractions Greater than 1
	MA.4.FR.2.2 Add and subtract fractions with like denominators, including mixed numbers and fractions greater than one, with procedural reliability.		G4 M5 Topic D: Fraction Addition and Subtraction
	MA.4.FR.2.3 Explore the addition of a fraction with denominator of 10 to a fraction with denominator of 100 using equivalent fractions.		G4 M5 Topic D: Fraction Addition and Subtraction

Strand	Benchmark	Aligned Components of Eureka Math
	MA.4.FR.2.4 Extend previous understanding of multiplication to explore the multiplication of a fraction by a whole number or a whole number by a fraction.	G4 M5 Topic G: Repeated Addition of Fractions as Multiplication G5 M4 Topic C: Multiplication of a Whole Number by a Fraction
Algebraic Reasoning	Standard: MA.4.AR.1 Represent and solve problems involving the four operation	s with whole numbers and fractions.
	MA.4.AR.1.1 Solve real-world problems involving multiplication and division of whole numbers, including problems in which remainders must be interpreted within the context.	G4 M3 Topic A: Multiplicative Comparison Word Problems G4 M3 Topic D: Multiplication Word Problems G4 M3 Lesson 14: Solve division word problems with remainders.
	MA.4.AR.1.2 Solve real-world problems involving addition and subtraction of fractions with like denominators, including mixed numbers and fractions greater than one.	G4 M5 Lesson 19: Solve word problems involving addition and subtraction of fractions.
	MA.4.AR.1.3 Solve real-world problems involving multiplication of a fraction by a whole number or a whole number by a fraction.	G4 M5 Lesson 39: Solve multiplicative comparison word problems involving fractions. G4 M5 Lesson 40: Solve word problems involving the multiplication of a whole number and a fraction, including those involving line plots. G5 M4 Lesson 9: Find a fraction of a measurement and solve word problems.

Determine whether a whole number from 1 to 144 is a

multiple of a given one-digit number.

Strand	Benchmark	Aligned Components of Eureka Math
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Measurement	Standard: MA.4.M.1 Measure the length of objects and solve problems involving measurement.		
	MA.4.M.1.1	G2 M2 Topic B: Measure and Estimate Length using Different Measurement Tools	
	Select and use appropriate tools to measure attributes of objects.	G4 M2: Unit Conversions and Problem Solving with Metric Measurement	
	MA.4.M.1.2	G4 M2 Topic A: Metric Unit Conversions	
	Convert within a single system of measurement using the units yards, feet, inches; kilometers, meters, centimeters, millimeters; pounds, ounces; kilograms, grams; gallons, quarts, pints, cups; liters, milliliters; and hours, minutes, seconds.	G4 M2 Topic B: Application of Metric Unit Conversions	
		G4 M7 Topic A: Measurement Conversion Tables	
		G4 M7 Topic B: Problem Solving with Measurement	
		G4 M7 Topic C: Investigation of Measurements Expressed as Mixed Numbers	
	Standard: MA.4.M.2 Solve problems involving time and money.		
	MA.4.M.2.1	G4 M2 Topic B: Application of Metric Unit Conversions	
	Using analog and digital clocks, tell and write time to the nearest minute using a.m. and p.m. appropriately.	G4 M7 Topic B: Problem Solving with Measurement	
		G4 M7 Topic C: Investigation of Measurements Expressed as Mixed Numbers	

Strand	Benchmark		Aligned Components of Eureka Math
	MA.4.M.2.2 Solve one- and two-step addition and subtraction real-world problems involving money using decimal notation.		G4 M6 Topic E: Money Amounts as Decimal Numbers
Geometric Reasoning	Standard: MA.4.GR.1 Draw, classify and measure angles.		
	MA.4.GR.1.1 Informally explore angles as an attribute of two-dimensional figures. Identify and classify angles as acute, right, obtuse, straight or reflex.		G4 M4 Lesson 2: Use right angles to determine whether angles are equal to, greater than or less than right angles. Draw right, obtuse and acute angles.
	MA.4.GR.1.2	(G4 M4 Topic B: Angle Measurement
	Estimate angle measures. Using a protractor, measure angles in whole-number degrees and draw angles of specified measure in whole-number degrees. Demonstrate that angle measure is additive.		G4 M4 Topic C: Problem Solving with the Addition of Angle Measures
	MA.4.GR.1.3 Solve real-world and mathematical problems involving unknown whole-number angle measures. Write an equation to represent the unknown.		G4 M4 Topic C: Problem Solving with the Addition of Angle Measures
	Standard: MA.4.GR.2 Solve problems involving the perimeter and area of rectangles.		
	MA.4.GR.2.1 Solve problems involving rectangles with the same perimeter and different areas or with the same area and different perimeters.		G4 M3 Topic A: Multiplicative Comparison Word Problems

Strand	Benchmark	Aligned Components of Eureka Math	
	MA.4.GR.2.2	G4 M3 Lesson 1: Investigate and use the formulas for area and perimeter of rectangles.	
	Find the area of a rectangle with whole-number side lengths using a visual model and a multiplication formula.	romando for disa dina pomineter el rectangico.	
Data Analysis and Probability	Standard: MA.4.DP.1 Collect, represent and interpret data and find the mode, median and range of a data set.		
	MA.4.DP.1.1 Collect and represent numerical data, including fractional values, using tables, stem-and-leaf plots or line plots.	G4 M5 Lesson 28: Solve word problems with line plots. G4 M5 Lesson 40: Solve word problems involving the multiplication of a whole number and a fraction including those involving line plots.	
	MA.4.DP.1.2 Determine the mode, median or range to interpret numerical data, including fractional values, represented with tables, stem-and-leaf plots or line plots.	G6 M5 Topic C: Summarizing a Distribution that is Skewed Using the Median and the Interquartile Range	
	MA.4.DP.1.3 Solve real-world problems involving numerical data.	G4 M5 Lesson 28: Solve word problems with line plots. G4 M5 Lesson 40: Solve word problems involving the multiplication of a whole number and a fraction, including those involving line plots.	