Grade 5 | South Carolina College- and Career-Ready Mathematics Standards 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 Process Standards	Aligned Components of *Eureka Math²*
MPS.PS.1 Make sense of problems and persevere in solving them strategically.	Lessons in every module engage students in mathematical processes. These are indicated in margin notes included with every lesson.
MPS.RC.1 Explain ideas using precise and contextually appropriate mathematical language, tools, and models.	Lessons in every module engage students in mathematical processes. These are indicated in margin notes included with every lesson.
MPS.C.1 Demonstrate a deep and flexible conceptual understanding of mathematical ideas, operations, and relationships while making real-world connections.	Lessons in every module engage students in mathematical processes. These are indicated in margin notes included with every lesson.
MPS.AJ.1 Use critical thinking skills to reason both abstractly and quantitatively.	Lessons in every module engage students in mathematical processes. These are indicated in margin notes included with every lesson.
MPS.SP.1 Identify and apply regularity in repeated reasoning to make generalizations.	Lessons in every module engage students in mathematical processes. These are indicated in margin notes included with every lesson.

Data, Probability, and Statistical Reasoning

5.DPSR.1 Create questions, collect and analyze data, and communicate through multiple representations.

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of *Eureka Math²*
5.DPSR.1.1 Describe data by determining the range and mode, including whole numbers, fractional data, and decimal data. Limit fractions to denominators of 2, 3, 4, 5, 6, 8, and 10, and limit decimals to decimals through the thousandths place.	*Supplemental material is necessary to address this standard.*
5.DPSR.1.2 Solve two-step, real-world situations using whole number and fractional data represented in tables, line graphs, scaled bar graphs, or dot plots. Limit fractions to denominators of 2, 3, 4, 5, 6, 8, 10, 12, 20, 25, 50, and 100.	5 M2 Topic D: Problem Solving and Line Plots with Fractional Measurements 5 M6 Lesson 16: Interpret graphs that represent real-world situations. 5 M6 Lesson 17: Plot data in the coordinate plane and analyze relationships. 5 M6 Lesson 18: Interpret line graphs.
5.DPSR.1.3 Analyze categorical and numerical data in graphical displays to make predictions or draw conclusions. Limit displays to tables, bar graphs, dot plots, line graphs, and circle graphs with scales of whole numbers, halves, fourths, and eighths.	5 M2 Topic D: Problem Solving and Line Plots with Fractional Measurements 5 M6 Lesson 16: Interpret graphs that represent real-world situations. 5 M6 Lesson 17: Plot data in the coordinate plane and analyze relationships. 5 M6 Lesson 18: Interpret line graphs *Supplemental material is necessary to address circle graphs.*

Data, Probability, and Statistical Reasoning

5.DPSR.2 Represent the probability of simple events and determine possible outcomes.

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of *Eureka Math²*
5.DPSR.2.1 Represent the probability of a simple event as 0, a fraction, or 1. Limit fractions to denominators of 2, 3, 4, 5, 6, 8, 10, 20, and 25.	*Supplemental material is necessary to address this standard.*

Measurement, Geometry, and Spatial Reasoning

5.MGSR.1 Solve area, perimeter, and volume problems in real-world and mathematical situations.

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of *Eureka Math²*
5.MGSR.1.1 Solve problems involving area and perimeter of composite figures by decomposing with rectangles.	5 M5 Lesson 14: Solve real-world problems involving areas of composite figures with mixed-number side lengths. *Supplemental material is necessary to fully address this standard.*
5.MGSR.1.2 Estimate and measure the volume of a right rectangular prism with whole-number side lengths by filling it with unit cubes.	5 M5 Lesson 16: Identify attributes and properties of right rectangular prisms. 5 M5 Lesson 17: Find the volume of right rectangular prisms by packing with unit cubes and counting. 5 M5 Lesson 18: Find the volume of right rectangular prisms by packing with improvised units. 5 M5 Lesson 19: Compose and decompose right rectangular prisms to find their volume by using layers.

Measurement, Geometry, and Spatial Reasoning

5.MGSR.2 Convert within a given measurement system and measure length.

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of *Eureka Math²*
5.MGSR.2.1 Given the unit equivalencies, convert within a single system of measurement from larger units to smaller units and smaller units to larger units for length, weight, liquid volume, and time. Use these conversions in solving real-world situations. Limit units to inches, feet, yards, ounces, pounds, fluid ounces, cups, pints, quarts, gallons, seconds, minutes, hours, milli-, centi-, kilo-, and base units (grams, liters, meters).	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 Lesson 26: Solve a real-world problem involving metric measurements. 5 M4 Lesson 27: Convert metric measurements involving decimals. 5 M4 Lesson 28: Convert customary measurements involving decimals. *Supplemental material is necessary to address converting measurements of time from larger units to smaller units.*
5.MGSR.2.2 Estimate and measure lengths to the nearest eighth of an inch or nearest millimeter.	*Supplemental material is necessary to address this standard.*

Measurement, Geometry, and Spatial Reasoning

5.MGSR.3 Graph on the coordinate plane.

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of *Eureka Math²*
5.MGSR.3.1 Identify the origin, x-axis, and y-axis in the coordinate system. Write, plot, and label ordered pairs, including values in a function table, in the first quadrant of the coordinate plane.	5 M6 Lesson 1: Construct a coordinate system on a line. 5 M6 Lesson 2: Construct a coordinate system in a plane. 5 M6 Lesson 3: Identify and plot points by using ordered pairs.
5.MGSR.3.2 Represent mathematical and real-world situations by graphing, labeling, and interpreting points in the first quadrant of the coordinate plane.	5 M6 Lesson 4: Describe the distance and direction between points in the coordinate plane. 5 M6 Lesson 5: Identify properties of horizontal and vertical lines. 5 M6 Lesson 6: Use properties of horizontal and vertical lines to solve problems. 5 M6 Lesson 7: Generate number patterns to form ordered pairs. 5 M6 Lesson 8: Identify addition and subtraction relationships between corresponding terms in number patterns. 5 M6 Lesson 9: Identify multiplication and division relationships between corresponding terms in number patterns. 5 M6 Topic C: Solve Mathematical Problems in the Coordinate Plane 5 M6 Lesson 16: Interpret graphs that represent real-world situations. 5 M6 Lesson 17: Plot data in the coordinate plane and analyze relationships. 5 M6 Lesson 18: Interpret line graphs. 5 M6 Lesson 20: Reason about patterns in real-world situations.

Numerical Reasoning

5.NR.1 Represent and compare numbers using relationships within the base ten number system.

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of *Eureka Math²*
5.NR.1.1 Read, write, and represent multi-digit numbers from 0 to 999 with decimals to the thousandths place. Use pictorial, word, standard, or expanded form with fraction or decimal notation.	5 M4 Lesson 1: Model and relate decimal place value units to thousandths. 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.1.2 Explain how the value of a digit in a multidigit number changes if the digit moves one or more places to the left or right in the base ten system. Include decimals to the thousandths place.	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 Lesson 1: Model and relate decimal place value units to thousandths. 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 M4 Lesson 4: Relate the values of digits in a decimal number by using place value understanding.
5.NR.1.3 Round decimal numbers up to 999 with decimals to the thousandths place to the nearest hundredth, tenth, or whole number.	5 M4 Lesson 7: Round decimal numbers to the nearest one, tenth, or hundredth. 5 M4 Lesson 8: Round decimal numbers to any place value unit.

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of *Eureka Math²*
5.NR.1.4 Use patterns to explain the exponents when multiplying and dividing by powers of 10, not to exceed the thousandths place.	5 M1 Lesson 2: Multiply and divide by 10, 100, and 1,000 and identify patterns in the products and quotients. 5 M1 Lesson 3: Use exponents to multiply and divide by powers of 10. 5 M1 Lesson 4: Estimate products and quotients by using powers of 10 and their multiples. 5 M4 Lesson 5: Multiply and divide decimal numbers by powers of 10.

Numerical Reasoning

5.NR.2 Represent and compare fractions in multiple ways.

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of *Eureka Math²*
5.NR.2.1 Compare fractions and mixed numbers with like and unlike denominators of 2, 3, 4, 5, 6, 8, 10, 12, 20, 25, and 100 using equivalence to create a common denominator. Use the symbols for *is less than* (<), *is more than* (>), or *is equal to* (=) to record the comparison.	4 M4 Topic C: Compare Fractions

Patterns, Algebra, and Functional Reasoning

5.PAFR.1 Use multiple representations to reason and solve problems involving operational properties of whole numbers and decimals.

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of *Eureka Math²*
5.PAFR.1.1 Use a strategy to compute the product of a two- or three-digit factor times a two-digit factor to include real-world situations.	5 M1 Topic B: Multiplication of Whole Numbers
5.PAFR.1.2 Use a strategy to compute the quotient of a multi-digit whole number dividend divided by a two-digit whole number divisor, with and without remainders, to include real-world situations. Limit the dividend to four digits.	5 M1 Topic C: Division of Whole Numbers
5.PAFR.1.3 Use a strategy to compute sums and differences of decimal numbers to the hundredths.	5 M4 Lesson 9: Add decimal numbers by using different methods. 5 M4 Lesson 10: Add decimal numbers by using place value understanding. 5 M4 Lesson 11: Subtract decimal numbers by using different methods. 5 M4 Lesson 12: Subtract decimal numbers by using place value understanding. 5 M4 Topic C: Multiplication of Decimal Numbers 5 M4 Topic D: Division of Decimal Numbers

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of *Eureka Math²*
5.PAFR.1.4 Use a strategy to multiply a one-digit whole number by a decimal to the hundredths and divide a decimal to the hundredths (dividend) by a one-digit whole number (divisor). Justify the calculation.	5 M4 Lesson 9: Add decimal numbers by using different methods. 5 M4 Lesson 10: Add decimal numbers by using place value understanding. 5 M4 Lesson 11: Subtract decimal numbers by using different methods. 5 M4 Lesson 12: Subtract decimal numbers by using place value understanding. 5 M4 Topic C: Multiplication of Decimal Numbers 5 M4 Topic D: Division of Decimal Numbers

Patterns, Algebra, and Functional Reasoning

5.PAFR.2 Use multiple representations to reason and solve problems involving operational properties of fractions.

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of *Eureka Math²*
5.PAFR.2.1 Use a strategy to compute sums and differences of fractions and mixed numbers with unlike denominators and justify the sum or difference to include real-world situations. Limit denominators to 2, 3, 4, 5, 6, 8, 10, 12, 20, 25, and 100.	5 M2 Topic B: Addition and Subtraction of Fractions by Making Like Units 5 M2 Topic C: Addition and Subtraction of Fractions, Whole Numbers, and Mixed Numbers 5 M2 Lesson 17: Solve problems by equally redistributing a total amount.

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of *Eureka Math²*
5.PAFR.2.2 Use a strategy to multiply a fraction by a fraction or a fraction by a whole to include real-world situations. Limit denominators to 2, 3, 4, 5, 6, 8, 10, and 12.	5 M3 Topic A: Multiplication of a Whole Number by a Fraction 5 M3 Topic B: Multiplication of Fractions 5 M3 Lesson 17: Solve word problems involving fractions with multiplication and division. 5 M3 Lesson 21: Solve multi-step word problems involving fractions. 5 M5 Topic B: Areas of Rectangular Figures with Fraction Side Lengths 5 M6 Lesson 15: Use the coordinate plane to reason about perimeters and areas of rectangles.
5.PAFR.2.3 Interpret and represent division of a whole number dividend by a unit fraction divisor and a unit fraction dividend by a whole number divisor and apply to real-world situations. Limit denominators to 2, 3, 4, 5, 6, 8, 10, and 12.	5 M3 Topic C: Division with a Unit Fraction and a Whole Number 5 M3 Lesson 19: Create and solve one-step word problems involving fractions. 5 M3 Lesson 20: Solve multi-step word problems involving fractions and write equations with parentheses. 5 M3 Lesson 21: Solve multi-step word problems involving fractions.

Patterns, Algebra, and Functional Reasoning

5.PAFR.3 Use reasoning to represent and solve algebraic and numerical situations.

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of *Eureka Math²*
5.PAFR.3.1 Determine the least common multiple (LCM) to find a common denominator. Limit denominators to 2, 3, 4, 5, 6, 8, 10, 12, 20, 25, 50, and 100.	6 M2 Lesson 1: Factors and Multiples 6 M2 Lesson 2: Divisibility 6 M2 Lesson 4: The Least Common Multiple *Supplemental material is necessary to address using the least common multiple to find a common denominator.*

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of *Eureka Math²*
5.PAFR.3.2 Determine the greatest common factor (GCF) of two numbers both less than or equal to 50 to simplify a fraction into its standard form.	6 M2 Lesson 1: Factors and Multiples 6 M2 Lesson 2: Divisibility 6 M2 Lesson 3: The Greatest Common Factor *Supplemental material is necessary to address using the greatest common factor to simplify a fraction.*
5.PAFR.3.3 Identify a rule that can describe the pattern from the data of a function table and write it as an expression.	5 M6 Lesson 7: Generate number patterns to form ordered pairs. 5 M6 Lesson 8: Identify addition and subtraction relationships between corresponding terms in number patterns. 5 M6 Lesson 9: Identify multiplication and division relationships between corresponding terms in number patterns. *Supplemental material is necessary for writing the rule that can describe the pattern as an expression.*
5.PAFR.3.4 Translate a two-step real-world situation into a numerical expression using parentheses as grouping symbols and evaluate the expression.	5 M1 Topic D: Multi-Step Problems with Whole Numbers 5 M3 Lesson 18: Compare and evaluate expressions with parentheses. 5 M3 Lesson 22: Evaluate expressions involving nested grouping symbols. 5 M4 Lesson 29: Interpret, evaluate, and compare numerical expressions involving decimals. 5 M4 Lesson 30: Create and solve real-world problems for given numerical expressions involving decimals.