Grade 6 | 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

6.DPSR.1 Analyze data sets to identify their statistical elements.

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of *Eureka Math²*
6.DPSR.1.1 Identify the sample size for a numerical set of data in mathematical and real-world situations.	6 M6 Lesson 2: Describing a Data Distribution
6.DPSR.1.2 Create box plots to represent numerical data sets in mathematical and real-world situations.	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 22: Presenting Statistical Projects
6.DPSR.1.3 Use the shape of the graph to determine whether median or mode best describes the data set.	6 M6 Lesson 12: Using the Median to Describe the Center 6 M6 Lesson 18: Connecting Graphical Representations and Summary Measures 6 M6 Lesson 19: Comparing Data Distributions 6 M6 Lesson 20: Choosing a Measure of Center *Supplemental material is necessary to address mode.*
6.DPSR.1.4 Calculate and interpret the median, mode, range, interquartile range in mathematical and real-world situations.	6 M6 Lesson 2: Describing a Data Distribution 6 M6 Lesson 12: Using the Median to Describe the Center 6 M6 Lesson 13: Using the Interquartile Range to Describe Variability 6 M6 Lesson 18: Connecting Graphical Representations and Summary Measures 6 M6 Lesson 20: Choosing a Measure of Center 6 M6 Lesson 21: Comparing Measures of Variability *Supplemental material is necessary to address mode.*

Data, Probability, and Statistical Reasoning

6.DPSR.2 Calculate and interpret probability.

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of *Eureka Math²*
6.DPSR.2.1 Given the probability of a random event, expressed as a number from 0 to 1, state the likelihood of the event occurring.	7 M6 Lesson 1: What is Probability?
6.DPSR.2.2 Find the probability of simple events in mathematical and real-world situations. Limit denominators to 2, 4, 5, 8, 10, 25, 50 and 100.	7 M6 Lesson 1: What is Probability? 7 M6 Lesson 4: Theoretical Probability
6.DPSR.2.3 Given the probability of an event, identify and calculate the complement of that event.	*Supplemental material is necessary to address this standard.*

Measurement, Geometry, and Spatial Reasoning

6.MGSR.1 Determine the measurements of geometric figures.

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of *Eureka Math²*
6.MGSR.1.1 Find the area of a triangle, square, rectangle, parallelogram, and trapezoid.	6 M5 Topic A: Areas of Polygons 6 M5 Topic B: Problem Solving with Area

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of *Eureka Math²*
6.MGSR.1.2 Create nets to represent three-dimensional shapes.	6 M5 Topic C: Nets and Surface Area 6 M5 Lesson 19: Volume and Surface Area in Real-World Situations
6.MGSR.1.3 Calculate the surface area of rectangular prisms, right triangular prisms, rectangular pyramids, and right triangular pyramids using two-dimensional nets.	6 M5 Topic C: Nets and Surface Area 6 M5 Lesson 19: Volume and Surface Area in Real-World Situations
6.MGSR.1.4 Find the area of composite figures by decomposing them into triangles and rectangles to solve mathematical and real-world situations.	6 M5 Topic A: Areas of Polygons 6 M5 Topic B: Problem Solving with Area
6.MGSR.1.5 Calculate the volume of a right rectangular prism using the formula ($V = Bh$) in mathematical and real-world situations.	6 M5 Topic D: Volumes of Right Rectangular Prisms

Measurement, Geometry, and Spatial Reasoning

6.MGSR.2 Determine angle and/or side relationships.

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of *Eureka Math²*
6.MGSR.2.1 Determine if two angles are complementary or supplementary.	7 M4 Lesson 1: Sketching, Drawing, and Constructing Geometric Figures
6.MGSR.2.2 Determine the measure of angles using a protractor.	7 M4 Lesson 1: Sketching, Drawing, and Constructing Geometric Figures 7 M4 Lesson 2: Constructing Parallelograms and Other Quadrilaterals 7 M4 Lesson 4: Angles of a Triangle 7 M4 Topic B: Constructing Triangles

Measurement, Geometry, and Spatial Reasoning

6.MGSR.3 Graph on the coordinate plane.

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of *Eureka Math²*
6.MGSR.3.1 Plot ordered pairs in all four quadrants and identify points on a graph by writing ordered pairs.	6 M3 Topic C: The Coordinate Plane 6 M3 Lesson 17: Problem Solving with the Coordinate Plane
6.MGSR.3.2 Graph a polygon on a coordinate plane given the coordinates of the vertices.	6 M3 Lesson 15: Distance in the Coordinate Plane 6 M3 Lesson 16: Figures in the Coordinate Plane 6 M5 Lesson 5: Perimeter and Area in the Coordinate Plane 6 M5 Lesson 6: Problem Solving with Area in the Coordinate Plane

Numerical Reasoning

6.NR.1 Translate among multiple representations of rational numbers.

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of *Eureka Math²*
6.NR.1.1 Convert positive rational numbers into equivalent forms among terminating decimals, fractions (including mixed numbers), and percentages. Limit fractions to denominators of 2, 4, 5, 8, 10, 20, 25, 50, 100, and 200.	6 M1 Lesson 22: Introduction to Percents

Numerical Reasoning

6.NR.2 Utilize rational numbers in mathematical and real-world situations.

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of *Eureka Math²*
6.NR.2.1 Compare two positive rational numbers and write statements using the symbols for *is equal to* (=), *is not equal to* (≠), *is less than* (<), and/or *is greater than* (>) in mathematical and real-world situations. Limit fractions to denominators of 2, 4, 5, 8, 10, 20, 25, 50, 100, and 200.	*Supplemental material is necessary to address this standard.*

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of *Eureka Math²*
6.NR.2.2 Sort a set of positive rational numbers in ascending and/or descending order in mathematical and real-world situations. Limit sets to no more than 5 numbers. Limit fractions to denominators of 2, 4, 5, 8, 10, 20, 25, 50, 100, and 200.	*Supplemental material is necessary to address this standard.*
6.NR.2.3 Represent quantities with integers in real-world situations and explain the meaning of zero.	6 M3 Lesson 1: Positive and Negative Numbers 6 M3 Lesson 4: Rational Numbers in Real-World Situations
6.NR.2.4 Identify and compare the opposite value and absolute value of positive and negative rational numbers.	6 M3 Lesson 2: Integers 6 M3 Lesson 3: Rational Numbers 6 M3 Topic B: Ordering and Magnitude

Patterns, Algebra, and Functional Reasoning

6.PAFR.1 Use tables, graphs, verbal descriptions, or equations to represent a function.

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of *Eureka Math²*
6.PAFR.1.1 Use tables, graphs, verbal descriptions, and equations to represent the relationship between independent and dependent variables of functions.	6 M4 Topic E: Relating Variables by Using Tables, Graphs, and Equations
6.PAFR.1.2 Identify the independent and dependent variable of a function in mathematical and real-world situations.	6 M4 Topic E: Relating Variables by Using Tables, Graphs, and Equations

Patterns, Algebra, and Functional Reasoning

6.PAFR.2 Write, simplify, and evaluate algebraic expressions; write and solve algebraic equations and inequalities.

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of *Eureka Math²*
6.PAFR.2.1 Identify parts of an algebraic expression using the mathematical terms *sum*, *difference*, *term*, *variable*, *product*, *factor*, *quotient*, *coefficient*, and *constant*.	6 M4 Lesson 7: Algebraic Expressions with Addition and Subtraction 6 M4 Lesson 8: Algebraic Expressions with Addition, Subtraction, Multiplication, and Division 6 M4 Lesson 9: Addition and Subtraction Expressions from Real-World Situations 6 M4 Lesson 11: Modeling Real-World Situations with Expressions

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of *Eureka Math²*
6.PAFR.2.2 Write and evaluate numerical expressions containing powers. Limit to positive whole number bases and positive whole number exponents.	6 M4 Topic A: Numerical Expressions
6.PAFR.2.3 Evaluate numerical expressions with positive whole number bases and positive whole number exponents using the Order of Operations.	6 M4 Topic A: Numerical Expressions
6.PAFR.2.4 Write and evaluate expressions using variables to represent quantities in mathematical and real-world situations.	6 M4 Topic B: Expressions and Real-World Problems 6 M4 Lesson 16: Equivalent Algebraic Expressions
6.PAFR.2.5 Write and solve one-step equations and inequalities with one variable involving positive rational numbers in mathematical and real-world situations.	6 M4 Topic D: Equations and Inequalities 6 M5 Lesson 2: The Area of a Right Triangle

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of *Eureka Math²*
6.PAFR.2.6 Interpret the concept of a ratio as the relationship between two quantities, including part-to-part and part-to-whole.	6 M1 Lesson 2: Introduction to Ratios 6 M1 Lesson 3: Ratios and Tape Diagrams 6 M1 Lesson 4: Exploring Ratios by Making Batches 6 M1 Lesson 5: Equivalent Ratios 6 M1 Lesson 8: Addition Patterns in Ratio Relationships 6 M1 Lesson 10: Multiplicative Reasoning in Ratio Relationships 6 M1 Lesson 11: Applications of Ratio Reasoning
6.PAFR.2.7 Explain the relationship between ratios and rates, including unit rates.	6 M1 Lesson 15: The Value of the Ratio 6 M1 Lesson 16: Speed 6 M1 Lesson 17: Rates 6 M1 Lesson 18: Comparing Rates 6 M1 Lesson 19: Using Rates to Convert Units 6 M1 Lesson 20: Solving Rate Problems
6.PAFR.2.8 Solve ratio and rate problems in real-world situations.	6 M1 Lesson 1: Jars of Jelly Beans 6 M1 Lesson 3: Ratios and Tape Diagrams 6 M1 Lesson 4: Exploring Ratios by Making Batches 6 M1 Lesson 5: Equivalent Ratios 6 M1 Topic B: Collections of Equivalent Ratios 6 M1 Topic C: Comparing Ratio Relationships 6 M1 Topic D: Rates 6 M4 Lesson 22: Relationship Between Two Variables

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of *Eureka Math²*
6.PAFR.2.8 ***continued***	6 M4 Lesson 23: Graphs of Ratio Relationships 6 M5 Lesson 8: Areas of Composite Figures in Real-World Situations 6 M5 Lesson 13: Surface Area in Real-World Situations
6.PAFR.2.9 Use one-step dimensional analysis to convert units within the metric or customary systems.	6 M1 Lesson 19: Using Rates to Convert Units 6 M1 Lesson 20: Solving Rate Problems 6 M1 Lesson 21: Solving Multi-Step Rate Problems

Patterns, Algebra, and Functional Reasoning

6.PAFR.3 Apply mathematical patterns, properties, and algorithms to the set of rational numbers to find sums, differences, products, and quotients and to write equivalent expressions.

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of *Eureka Math²*
6.PAFR.3.1 Represent the solutions of inequalities on a number line and explain that the solution set may contain an infinite number of solutions. Limited to the symbols for *is less than* (<) and *is greater than* (>).	6 M4 Lesson 18: Inequalities and Solutions

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of *Eureka Math²*
6.PAFR.3.2 Identify the multiplicative inverse of a number and multiply multiplicative inverses to find their product is equal to 1.	6 M4 Lesson 20: Solving Equations with Multiplication and Division
6.PAFR.3.3 Identify the additive inverse of a number and add additive inverses to find their sum is equal to zero.	7 M2 Lesson 1: Combining Opposites 7 M2 Lesson 3: Adding Integers Efficiently
6.PAFR.3.4 Apply the properties of operations to create equivalent algebraic expressions and justify the properties used. Limit properties to the *Identity*, *Inverse*, *Commutative*, *Associative*, and *Distributive Properties*.	6 M4 Topic C: Equivalent Expressions Using the Properties of Operations
6.PAFR.3.5 Add, subtract, multiply, and divide integers in mathematical and real-world situations.	7 M2 Lesson 1: Combining Opposites 7 M2 Lesson 2: Adding Integers 7 M2 Lesson 3: Adding Integers Efficiently 7 M2 Lesson 4: KAKOOMA® 7 M2 Lesson 7: What Subtraction Means 7 M2 Lesson 8: Subtracting Integers, Part 1 7 M2 Lesson 9: Subtracting Integers, Part 2 7 M2 Lesson 12: The Integer Game 7 M2 Lesson 13: Understanding Multiples of Negative Numbers

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of *Eureka Math²*
6.PAFR.3.5 ***continued***	7 M2 Lesson 14: Understanding the Product of Two Negative Numbers 7 M2 Lesson 17: Understanding Negative Dividends 7 M2 Lesson 18: Understanding Negative Divisors
6.PAFR.3.6 Add, subtract, multiply, and divide positive fractions, including mixed numbers in mathematical and real-world situations.	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. 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 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. 6 M2 Topic B: Dividing Fractions 6 M2 Topic C: Dividing Fractions Fluently
6.PAFR.3.7 Add, subtract, multiply, and divide multi-digit positive decimals, up to the thousandths place, to solve problems in mathematical and real-world situations.	6 M2 Topic D: Decimal Addition, Subtraction, and Multiplication 6 M2 Lesson 20: Real-World Division Problems 6 M2 Topic F: Decimal Division