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

Numbers and Operations

CC.2.1.3.B Numbers and Operations in Base Ten

Pennsylvania Core Standards Mathematics	Aligned Components of <i>Eureka Math</i> ²
<p>CC.2.1.3.B.1</p> <p>Apply place-value understanding and properties of operations to perform multi-digit arithmetic.</p>	<p>3 M2 Topic B: Rounding to the Nearest Ten and Hundred</p> <p>3 M2 Lesson 14: Use place value understanding to add and subtract like units.</p> <p>3 M2 Lesson 15: Use the associative property to make the next ten to add.</p> <p>3 M2 Lesson 16: Use compensation to add.</p> <p>3 M2 Lesson 17: Use place value understanding to subtract efficiently using take from a ten.</p> <p>3 M2 Lesson 18: Use place value understanding to subtract efficiently using take from a hundred.</p> <p>3 M2 Lesson 19: Use compensation to subtract.</p> <p>3 M2 Lesson 20: Add measurements using the standard algorithm to compose larger units once.</p> <p>3 M2 Lesson 21: Add measurements using the standard algorithm to compose larger units twice.</p> <p>3 M2 Lesson 22: Subtract measurements using the standard algorithm to decompose larger units once.</p> <p>3 M2 Lesson 23: Subtract measurements using the standard algorithm to decompose larger units twice.</p> <p>3 M2 Lesson 24: Subtract measurements using the standard algorithm to decompose larger units across two place values.</p> <p>3 M3 Lesson 20: Multiply by multiples of 10 by using the place value chart.</p> <p>3 M3 Lesson 21: Multiply by multiples of 10 by using place value strategies and the associative property.</p> <p>3 M3 Lesson 22: Solve two-step word problems involving multiplication of single-digit factors and multiples of 10.</p>

Numbers and Operations

CC.2.1.3.C Numbers and Operations—Fractions

Pennsylvania Core Standards Mathematics	Aligned Components of <i>Eureka Math</i> ²
<p>CC.2.1.3.C.1</p> <p>Explore and develop an understanding of fractions as numbers.</p>	<p>3 M5 Lesson 4: Partition a whole into fractional units pictorially and identify the unit fraction.</p> <p>3 M5 Lesson 5: Partition a whole into fractional units and write fractions in fraction form.</p> <p>3 M5 Topic B: Unit Fractions and Their Relationship to the Whole</p> <p>3 M5 Topic C: Fractions on the Number Line</p> <p>3 M5 Topic D: Comparing Fractions</p> <p>3 M5 Topic E: Equivalent Fractions</p>

Algebraic Concepts

CC.2.2.3.A Operations and Algebraic Thinking

Pennsylvania Core Standards Mathematics	Aligned Components of <i>Eureka Math</i> ²
<p>CC.2.2.3.A.1</p> <p>Represent and solve problems involving multiplication and division.</p>	<p>3 M1 Lesson 2: Interpret equal groups as multiplication.</p> <p>3 M1 Lesson 3: Relate multiplication to the array model.</p> <p>3 M1 Lesson 4: Interpret the meaning of factors as number of groups or number in each group.</p> <p>3 M1 Lesson 5: Represent and solve multiplication word problems by using drawings and equations.</p> <p>3 M1 Topic B: Conceptual Understanding of Division</p> <p>3 M1 Lesson 10: Demonstrate the commutative property of multiplication using a unit of 2 and the array model.</p> <p>3 M1 Lesson 11: Demonstrate the commutative property of multiplication using a unit of 4 and the array model.</p> <p>3 M1 Lesson 13: Demonstrate the commutative property of multiplication using a unit of 3 and the array model.</p>

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<p>CC.2.2.3.A.1 <i>continued</i></p>	<p>3 M1 Topic D: Two Interpretations of Division</p> <p>3 M1 Lesson 22: Represent and solve two-step word problems using the properties of multiplication.</p> <p>3 M1 Lesson 23: Represent and solve two-step word problems using drawings and equations.</p> <p>3 M3 Lesson 2: Count by units of 6 to multiply and divide by using arrays.</p> <p>3 M3 Lesson 7: Count by units of 7 to multiply and divide by using arrays and tape diagrams.</p> <p>3 M3 Lesson 8: Use the break apart and distribute strategy to multiply with units of 7.</p> <p>3 M3 Lesson 12: Solve one-step word problems involving multiplication and division.</p> <p>3 M3 Lesson 15: Reason about and explain patterns of multiplication and division with units of 1 and 0.</p> <p>3 M3 Lesson 18: Create multiplication and division word problems.</p> <p>3 M3 Lesson 25: Apply multiplication and division concepts to complete a multi-part task.</p>
<p>CC.2.2.3.A.2</p> <p>Understand properties of multiplication and the relationship between multiplication and division.</p>	<p>3 M1 Topic C: Properties of Multiplication</p> <p>3 M1 Lesson 15: Model division as an unknown factor problem.</p> <p>3 M1 Lesson 16: Model the quotient as the number of groups using units of 2, 3, 4, 5, and 10.</p> <p>3 M1 Lesson 17: Model the quotient as the size of each group using units of 2, 3, 4, 5, and 10.</p> <p>3 M1 Lesson 19: Use the distributive property to break apart multiplication problems into known facts.</p> <p>3 M1 Lesson 20: Use the distributive property to break apart division problems into known facts.</p> <p>3 M3 Topic A: Multiplication and Division Concepts with an Emphasis on Units of 6 and 8</p> <p>3 M3 Lesson 7: Count by units of 7 to multiply and divide by using arrays and tape diagrams.</p> <p>3 M3 Lesson 8: Use the break apart and distribute strategy to multiply with units of 7.</p> <p>3 M3 Lesson 9: Model the associative property as a strategy to multiply.</p> <p>3 M3 Lesson 10: Use parentheses in expressions with different operations.</p> <p>3 M3 Lesson 11: Use the break apart and distribute strategy to divide with units of 7.</p>

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<p>CC.2.2.3.A.2 <i>continued</i></p>	<p>3 M3 Lesson 14: Apply strategies and identify patterns to multiply with units of 9.</p> <p>3 M3 Lesson 21: Multiply by multiples of 10 by using place value strategies and the associative property.</p> <p>3 M3 Lesson 23: Identify patterns and apply strategies to multiply with units of 11 and 12.</p> <p>3 M3 Lesson 24: Organize, count, and represent a collection of objects.</p>
<p>CC.2.2.3.A.3</p> <p>Demonstrate multiplication and division fluency.</p>	<p>3 M1 Lesson 12: Demonstrate the distributive property using a unit of 4.</p> <p>3 M1 Lesson 14: Demonstrate the distributive property using units of 2, 3, 4, 5, and 10.</p> <p>3 M1 Topic E: Application of Multiplication and Division Concepts</p> <p>3 M3 Lesson 1: Organize, count, and represent a collection of objects.</p> <p>3 M3 Lesson 14: Apply strategies and identify patterns to multiply with units of 9.</p> <p>3 M3 Lesson 17: Identify and complete patterns with input–output tables.</p> <p>3 M3 Lesson 24: Organize, count, and represent a collection of objects.</p>
<p>CC.2.2.3.A.4</p> <p>Solve problems involving the four operations, and identify and explain patterns in arithmetic.</p>	<p>3 M1 Lesson 22: Represent and solve two-step word problems using the properties of multiplication.</p> <p>3 M1 Lesson 23: Represent and solve two-step word problems using drawings and equations.</p> <p>3 M2 Lesson 25: Solve two-step word problems.</p> <p>3 M3 Lesson 13: Count by units of 9 to multiply.</p> <p>3 M3 Lesson 14: Apply strategies and identify patterns to multiply with units of 9.</p> <p>3 M3 Lesson 15: Reason about and explain patterns of multiplication and division with units of 1 and 0.</p> <p>3 M3 Lesson 16: Identify patterns using the multiplication table.</p> <p>3 M3 Lesson 17: Identify and complete patterns with input–output tables.</p> <p>3 M3 Lesson 19: Solve two-step word problems involving all four operations and assess the reasonableness of solutions.</p>

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CC.2.2.3.A.4 <i>continued</i>	<p>3 M3 Lesson 22: Solve two-step word problems involving multiplication of single-digit factors and multiples of 10.</p> <p>3 M3 Lesson 23: Identify patterns and apply strategies to multiply with units of 11 and 12.</p> <p>3 M3 Lesson 25: Apply multiplication and division concepts to complete a multi-part task.</p> <p>3 M6 Lesson 7: Count coins and create money word problems.</p>

Geometry

CC.2.3.3.A Geometry

Pennsylvania Core Standards Mathematics	Aligned Components of <i>Eureka Math</i>²
CC.2.3.3.A.1 Identify, compare, and classify shapes and their attributes.	<p>3 M4 Lesson 1: Explore attributes of squares, rectangles, and trapezoids.</p> <p>3 M4 Lesson 5: Relate side lengths to the number of tiles on a side.</p> <p>3 M6 Topic B: Attributes of Two-Dimensional Figures</p>
CC.2.3.3.A.2 Use the understanding of fractions to partition shapes into parts with equal areas and express the area of each part as a unit fraction of the whole.	<p>3 M5 Topic A: Partition a Whole into Equal Parts</p> <p>3 M5 Topic B: Unit Fractions and Their Relationship to the Whole</p>

Measurement, Data, and Probability

CC.2.4.3.A Measurement and Data

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<p>CC.2.4.3.A.1</p> <p>Solve problems involving measurement and estimation of temperature, liquid volume, mass, and length.</p>	<p>3 M2 Topic A: Understanding Place Value Concepts Through Metric Measurement</p>
<p>CC.2.4.3.A.2</p> <p>Tell and write time to the nearest minute and solve problems by calculating time intervals.</p>	<p>3 M6 Lesson 1: Relate skip-counting by fives on the clock to telling time on the number line.</p> <p>3 M6 Lesson 2: Count by fives and ones on the number line as a strategy for telling time to the nearest minute on the clock.</p> <p>3 M6 Lesson 3: Solve time word problems where the end time is unknown.</p> <p>3 M6 Lesson 4: Solve time word problems where the start time is unknown.</p> <p>3 M6 Lesson 5: Solve time word problems where the change in time is unknown.</p> <p>3 M6 Lesson 6: Solve time word problems and use time data to create a line plot.</p>
<p>CC.2.4.3.A.3</p> <p>Solve problems and make change involving money using a combination of coins and bills.</p>	<p>3 M6 Lesson 7: Count coins and create money word problems.</p>
<p>CC.2.4.3.A.4</p> <p>Represent and interpret data using tally charts, tables, pictographs, line plots, and bar graphs.</p>	<p>3 M2 Lesson 13: Collect and represent data in a scaled bar graph and solve related problems.</p> <p>3 M5 Lesson 16: Measure lengths and record data on a line plot.</p> <p>3 M6 Lesson 20: Record measurement data in a line plot.</p> <p>3 M6 Lesson 21: Create and analyze a line plot for measurement data to the nearest half unit and quarter unit.</p> <p>3 M6 Lesson 22: Generate categorical data and represent it by using a scaled picture graph.</p> <p>3 M6 Lesson 23: Solve word problems by creating scaled picture graphs and scaled bar graphs.</p>

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<p>CC.2.4.3.A.5</p> <p>Determine the area of a rectangle and apply the concept to multiplication and to addition.</p>	<p>3 M4 Topic A: Foundations for Understanding Area</p> <p>3 M4 Topic B: Concepts of Area Measurement</p> <p>3 M4 Topic C: Applying Properties of Operations to Area</p> <p>3 M4 Topic D: Applications of Area</p>
<p>CC.2.4.3.A.6</p> <p>Solve problems involving perimeters of polygons and distinguish between linear and area measures.</p>	<p>3 M6 Topic C: Problem Solving with Perimeter</p> <p>3 M6 Lesson 19: Measure the perimeter of various circles to the nearest quarter inch by using string.</p>