
Grade 3 | Pennsylvania Core Standards Mathematics (2014) Correlation to *Eureka Math*²® (2027)

*Eureka Math*² is a research-proven math curriculum that empowers teachers to center instructional techniques on student success. Teachers can foster more “aha!” learning moments by providing the support needed for all learners to build a more confident math mindset.

This *Eureka Math*² edition builds on a strong foundation of effective instruction. It provides teachers with guidance on delivering rigorous instruction that honors student choice and encourages confident problem-solving.

*Eureka Math*² carefully sequences mathematical content to maximize vertical alignment from kindergarten through high school. This kind of sequencing has proven to be essential in students’ mastery of math.

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 into the teacher materials.

Accessibility

*Eureka Math*² incorporates Universal Design for Learning (UDL) principles so all learners can access the mathematics and take on challenging math concepts. UDL, Differentiation, and Multilingual Learner supports are built into the instructional design and are clearly identified in the *Teach* book.

The curriculum also carries a focus on readability. By eliminating unnecessary words and using 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.

Math Confidence

*Eureka Math*² fosters a classroom culture of learning by encouraging student-led discourse and cognitive engagement that results in confident learners. By leveraging consistent models, routines, and progressions, teachers can remove barriers and allow all students an avenue to success. Within the digital platform, each grade includes wordless videos and digital interactives that spark students’ curiosity and help them make conceptual connections. Using the *Learn* books, students wonder, explore, and make sense of mathematics, which helps them develop 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 Lesson 8: Read temperatures on a thermometer using number line concepts.</p> <p>3 M2 Lesson 9: Round two-digit numbers to the nearest ten on the vertical number line.</p> <p>3 M2 Lesson 10: Round two- and three-digit numbers to the nearest ten on the vertical number line.</p> <p>3 M2 Lesson 11: Round to the nearest hundred on the vertical number line.</p> <p>3 M2 Lesson 12: Estimate sums and differences by rounding.</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 *Eureka Math*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 Lesson 6: Build non-unit fractions less than 1 from unit fractions concretely.</p> <p>3 M5 Lesson 7: Identify and represent a whole as two parts: a unit fraction and a non-unit fraction.</p> <p>3 M5 Lesson 8: Identify and represent a whole as two non-unit fractions.</p> <p>3 M5 Lesson 9: Compare unit fractions by reasoning about their size concretely.</p> <p>3 M5 Lesson 10: Compare non-unit fractions less than 1 with the same numerator by using tape diagrams.</p> <p>3 M5 Lesson 11: Locate fractions from 0 to 1 on a number line by using fraction tiles.</p> <p>3 M5 Lesson 12: Represent fractions from 0 to 1 on a number line.</p> <p>3 M5 Lesson 13: Identify equivalent fractions from 0 to 1 with tape diagrams and on number lines.</p> <p>3 M5 Lesson 14: Recognize that equivalent fractions share the same location on a number line.</p> <p>3 M5 Lesson 15: Identify fractions on a ruler as numbers on a number line.</p> <p>3 M5 Lesson 16: Measure lengths and record data on a line plot.</p> <p>3 M5 Lesson 17: Represent fractions greater than 1 on a number line and identify fractions equivalent to whole numbers.</p> <p>3 M5 Lesson 18: Compare fractions with like units by using a number line.</p> <p>3 M5 Lesson 19: Compare fractions with unlike units but the same numerator by using number lines.</p> <p>3 M5 Lesson 20: Compare fractions with related units by using a number line.</p> <p>3 M5 Lesson 21: Compare various fractions by representing them on number lines.</p> <p>3 M5 Lesson 22: Identify fractions equivalent to whole numbers by using number lines.</p> <p>3 M5 Lesson 23: Reason to find fractions equivalent to whole numbers by using patterns and number lines.</p>

**Pennsylvania Core Standards
Mathematics**

Aligned Components of *Eureka Math*²

<p>CC.2.1.3.C.1 <i>continued</i></p>	<p>3 M5 Lesson 24: Generate equivalent fractions greater than 1 by using a number line.</p> <p>3 M5 Lesson 25: Express whole numbers as fractions with a denominator of 1.</p> <p>3 M5 Lesson 26: Create a ruler with 1-inch, half-inch, and quarter-inch intervals.</p> <p>3 M5 Lesson 27: Apply fraction concepts to complete a multi-part task.</p>
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Algebraic Concepts

CC.2.2.3.A Operations and Algebraic Thinking

**Pennsylvania Core Standards
Mathematics**

Aligned Components of *Eureka Math*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 Lesson 6: Explore measurement and partitive division by modeling concretely and drawing.</p> <p>3 M1 Lesson 7: Model measurement and partitive division by drawing equal groups.</p> <p>3 M1 Lesson 8: Model measurement and partitive division by drawing arrays.</p> <p>3 M1 Lesson 9: Represent and solve division word problems using drawings and equations.</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> <p>3 M1 Lesson 15: Model division as an unknown factor problem.</p>
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**Pennsylvania Core Standards
Mathematics**

Aligned Components of *Eureka Math*²

<p>CC.2.2.3.A.1 <i>continued</i></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 18: Represent and solve measurement and partitive division word problems.</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 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 12: Demonstrate the distributive property using a unit of 4.</p> <p>3 M1 Lesson 13: Demonstrate the commutative property of multiplication using a unit of 3 and the array model.</p> <p>3 M1 Lesson 14: Demonstrate the distributive property using units of 2, 3, 4, 5, and 10.</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>

**Pennsylvania Core Standards
Mathematics**

Aligned Components of *Eureka Math*²

<p>CC.2.2.3.A.2 <i>continued</i></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 Lesson 1: Organize, count, and represent a collection of objects.</p> <p>3 M3 Lesson 2: Count by units of 6 to multiply and divide by using arrays.</p> <p>3 M3 Lesson 3: Count by units of 8 to multiply and divide by using arrays.</p> <p>3 M3 Lesson 4: Decompose pictorial arrays to create expressions with three factors.</p> <p>3 M3 Lesson 5: Use the break apart and distribute strategy to multiply with units of 6 and 8.</p> <p>3 M3 Lesson 6: Use the break apart and distribute strategy to divide with 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> <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 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 M1 Lesson 21: Compose and decompose arrays to create expressions with three factors.</p>

**Pennsylvania Core Standards
Mathematics**

Aligned Components of *Eureka Math*²

<p>CC.2.2.3.A.3 <i>continued</i></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 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> <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
<p>CC.2.3.3.A.1</p> <p>Identify, compare, and classify shapes and their attributes.</p>	<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 Lesson 8: Compare and classify quadrilaterals.</p> <p>3 M6 Lesson 9: Compare and classify other polygons.</p> <p>3 M6 Lesson 10: Draw polygons with specified attributes.</p> <p>3 M6 Lesson 11: Reason about composing polygons by using tetrominoes.</p> <p>3 M6 Lesson 12: Reason about composing polygons by using tangrams.</p>
<p>CC.2.3.3.A.2</p> <p>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>	<p>3 M5 Lesson 1: Partition a whole into equal parts and name the fractional unit.</p> <p>3 M5 Lesson 2: Partition different wholes into fractional units concretely.</p> <p>3 M5 Lesson 3: Partition a whole into fractional units by folding fraction strips.</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 Lesson 6: Build non-unit fractions less than 1 from unit fractions concretely.</p> <p>3 M5 Lesson 7: Identify and represent a whole as two parts: a unit fraction and a non-unit fraction.</p> <p>3 M5 Lesson 8: Identify and represent a whole as two non-unit fractions.</p> <p>3 M5 Lesson 9: Compare unit fractions by reasoning about their size concretely.</p> <p>3 M5 Lesson 10: Compare non-unit fractions less than 1 with the same numerator by using tape diagrams.</p>

Measurement, Data, and Probability

CC.2.4.3.A Measurement and Data

<p style="text-align: center;">Pennsylvania Core Standards Mathematics</p>	<p style="text-align: center;">Aligned Components of <i>Eureka Math</i>²</p>
<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 Lesson 1: Connect the composition of 1 kilogram to the composition of 1 thousand.</p> <p>3 M2 Lesson 2: Estimate the weight of familiar objects and read scales when weighing objects.</p> <p>3 M2 Lesson 3: Use all four operations to solve one-step word problems involving weight.</p> <p>3 M2 Lesson 4: Connect decomposition of 1 liter to the decomposition of 1 thousand.</p> <p>3 M2 Lesson 5: Estimate and measure liquid volume using a vertical number line and connect composition of 1 liter to composition of 1 thousand.</p> <p>3 M2 Lesson 6: Use all four operations to solve one-step word problems involving liquid volume.</p> <p>3 M2 Lesson 7: Solve one-step word problems using metric units.</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>

**Pennsylvania Core Standards
Mathematics**

Aligned Components of *Eureka Math*²

<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>
<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 Lesson 1: Explore attributes of squares, rectangles, and trapezoids.</p> <p>3 M4 Lesson 2: Recognize area as an attribute of polygons.</p> <p>3 M4 Lesson 3: Tile polygons to find their areas.</p> <p>3 M4 Lesson 4: Compose rectangles to compare areas.</p> <p>3 M4 Lesson 5: Relate side lengths to the number of tiles on a side.</p> <p>3 M4 Lesson 6: Tile rectangles with squares to make arrays and relate the side lengths to area.</p> <p>3 M4 Lesson 7: Draw rows and columns to complete a rectangular array and determine its area.</p> <p>3 M4 Lesson 8: Determine the area of a rectangle by using side lengths.</p> <p>3 M4 Lesson 9: Multiply side lengths to find the area of a rectangle.</p> <p>3 M4 Lesson 10: Compose large rectangles and reason about their areas.</p> <p>3 M4 Lesson 11: Decompose to find the total area of a rectangle.</p> <p>3 M4 Lesson 12: Find all possible side lengths of rectangles with a given area.</p> <p>3 M4 Lesson 13: Apply area understanding to real-world situations.</p> <p>3 M4 Lesson 14: Reason to find the area of composite shapes by using grids.</p> <p>3 M4 Lesson 15: Reason to find the area of composite shapes by using rectangles.</p> <p>3 M4 Lesson 16: Solve historical math problems involving area.</p>

**Pennsylvania Core Standards
Mathematics**

Aligned Components of *Eureka Math*²

<p>CC.2.4.3.A.5 <i>continued</i></p>	<p>3 M4 Lesson 17: Apply area concepts to a real-world context.</p> <p>3 M4 Lesson 18: Find the area of shapes and represent area data on a line plot.</p> <p>3 M4 Lesson 19: Apply area concepts to complete a multi-part task.</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 Lesson 13: Decompose quadrilaterals to understand perimeter as the boundary of a shape.</p> <p>3 M6 Lesson 14: Measure side lengths in whole-number units to determine the perimeters of polygons.</p> <p>3 M6 Lesson 15: Recognize perimeter as an attribute of shapes and solve problems with unknown measurements.</p> <p>3 M6 Lesson 16: Solve problems to determine the perimeters of rectangles with the same area.</p> <p>3 M6 Lesson 17: Solve problems to determine the areas of rectangles with the same perimeter.</p> <p>3 M6 Lesson 18: Solve real-world problems involving perimeter and unknown measurements by using all four operations.</p> <p>3 M6 Lesson 19: Measure the perimeter of various circles to the nearest quarter inch by using string.</p>