Grade 2 | Pennsylvania Core Standards Mathematics 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.

Standards for Mathematical Practice	Aligned Components of *Eureka Math²*
MP.1 Make sense of problems and persevere in solving them.	Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.
MP.2 Reason abstractly and quantitatively.	Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.
MP.3 Construct viable arguments and critique the reasoning of others.	Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.
MP.4 Model with mathematics.	Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.
MP.5 Use appropriate tools strategically.	Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.
MP.6 Attend to precision.	Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.
MP.7 Look for and make use of structure.	Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.
MP.8 Look for and express regularity in repeated reasoning.	Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.

Numbers and Operations

CC.2.1.2.B Numbers and Operations in Base Ten

Pennsylvania Core Standards Mathematics	Aligned Components of *Eureka Math²*
CC.2.1.2.B.1 Use place-value concepts to represent amounts of tens and ones and to compare three-digit numbers.	2 M1 Lesson 24: Count up to 1,000 by using place value units. 2 M1 Lesson 25: Write three-digit numbers in unit form and show the value that each digit represents. 2 M1 Lesson 27: Read, write, and relate base-ten numbers in all forms. 2 M1 Lesson 28: Use place value understanding to count and exchange $1, $10, and $100 bills. 2 M1 Lesson 30: Determine how many $10 bills are equal to $1,000. 2 M1 Topic H: Compose and Decompose with Place Value Disks 2 M1 Topic I: Compare Two Three-Digit Numbers in Different Forms
CC.2.1.2.B.2 Use place-value concepts to read, write, and skip count to 1,000.	2 M1 Lesson 21: Count efficiently within 1,000 by using ones, tens, and hundreds. 2 M1 Lesson 22: Use counting strategies to solve *add to with change unknown* word problems. 2 M1 Lesson 23: Organize, count, and record a collection of objects. 2 M1 Lesson 24: Count up to 1,000 by using place value units. 2 M1 Lesson 26: Write base-ten numbers in expanded form. 2 M1 Lesson 27: Read, write, and relate base-ten numbers in all forms. 2 M1 Lesson 29: Count by $1, $10, and $100. 2 M1 Lesson 30: Determine how many $10 bills are equal to $1,000. 2 M1 Lesson 31: Count the total value of ones, tens, and hundreds with place value disks. 2 M1 Lesson 37: Organize, count, represent, and compare a collection of objects. 2 M1 Lesson 38: Compare numbers in different forms. 2 M3 Lesson 17: Relate the clock to a number line to count by fives. 2 M3 Lesson 18: Tell time to the nearest 5 minutes.

Pennsylvania Core Standards Mathematics	Aligned Components of *Eureka Math²*
CC.2.1.2.B.3 Use place-value understanding and properties of operations to add and subtract within 1,000.	2 M2 Topic A: Simplifying Strategies for Addition 2 M2 Topic B: Strategies for Composing a Ten and a Hundred to Add 2 M2 Lesson 14: Use addition and subtraction strategies to find an unknown part. 2 M2 Lesson 15: Use compensation to subtract within 100. 2 M2 Lesson 16: Use compensation to subtract within 200. 2 M2 Lesson 17: Take from a ten to subtract within 200. 2 M2 Lesson 18: Take from a hundred to subtract within 200. 2 M2 Lesson 19: Solve word problems with simplifying strategies for subtraction. 2 M2 Lesson 20: Reason about when to unbundle a ten to subtract. 2 M2 Lesson 21: Use concrete models to decompose a ten with two-digit totals. 2 M2 Lesson 22: Use place value drawings to decompose a ten and relate them to written recordings. 2 M2 Lesson 23: Use concrete models and drawings to decompose a hundred. 2 M2 Lesson 24: Use place value drawings to decompose a hundred and relate them to written recordings. 2 M2 Lesson 25: Use place value drawings to subtract with two decompositions. 2 M4 Lesson 4: Represent and solve *compare with bigger unknown* word problems. 2 M4 Topic B: Strategies for Composing Tens and Hundreds Within 1,000 2 M4 Topic C: Simplifying Strategies for Subtracting Within 1,000 2 M4 Topic D: Strategies for Decomposing Tens and Hundreds Within 1,000 2 M4 Topic E: Apply Efficient Addition and Subtraction Strategies

Algebraic Concepts

CC.2.2.2.A Operations and Algebraic Thinking

Pennsylvania Core Standards Mathematics	Aligned Components of *Eureka Math²*
CC.2.2.2.A.1 Represent and solve problems involving addition and subtraction within 100.	2 M1 Lesson 22: Use counting strategies to solve *add to with change unknown* word problems. 2 M2 Lesson 7: Solve word problems by using simplifying strategies for addition. 2 M2 Lesson 13: Represent and solve *take from* word problems. 2 M2 Lesson 19: Solve word problems with simplifying strategies for subtraction. 2 M2 Lesson 26: Solve *add to* and *take from with start unknown* word problems. 2 M4 Lesson 3: Solve multi-step word problems and reason about equal expressions. 2 M4 Lesson 4: Represent and solve *compare with bigger unknown* word problems. 2 M4 Lesson 22: Solve *compare with smaller unknown* word problems. 2 M4 Lesson 23: Solve two-step addition and subtraction word problems. 2 M6 Lesson 1: Compose equal groups and write repeated addition equations. 2 M6 Lesson 4: Represent equal groups with a tape diagram. 2 M6 Lesson 17: Solve word problems that involve equal groups and arrays.
CC.2.2.2.A.2 Use mental strategies to add and subtract within 20.	2 M4 Lesson 7: Use concrete models to add and relate them to written recordings. 2 M4 Lesson 8: Use place value drawings to represent addition and relate them to written recordings, part 1. 2 M4 Lesson 9: Use place value drawings to represent addition and relate them to written recordings, part 2. 2 M4 Lesson 10: Choose and defend efficient solution strategies for addition. 2 M4 Lesson 11: Choose and defend efficient strategies to add up to four two-digit numbers. 2 M4 Topic D: Strategies for Decomposing Tens and Hundreds Within 1,000

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CC.2.2.2.A.3 Work with equal groups of objects to gain foundations for multiplication.	2 M6 Topic A: Count and Problem Solve with Equal Groups 2 M6 Topic B: Arrays and Equal Groups 2 M6 Topic C: Rectangular Arrays as a Foundation for Multiplication and Division 2 M6 Lesson 14: Relate doubles to even numbers and write equations to express the sums. 2 M6 Lesson 15: Pair objects and skip-count to determine whether a number is even or odd. 2 M6 Lesson 16: Use rectangular arrays to investigate combinations of even and odd numbers. 2 M6 Lesson 17: Solve word problems that involve equal groups and arrays.

Geometry

CC.2.3.2.A Geometry

Pennsylvania Core Standards Mathematics	Aligned Components of *Eureka Math²*
CC.2.3.2.A.1 Analyze and draw two- and three-dimensional shapes having specified attributes.	2 M3 Topic A: Attributes of Geometric Shapes 2 M3 Lesson 6: Recognize that a whole polygon can be decomposed into smaller parts and the parts can be composed to make a whole. 2 M3 Lesson 7: Combine shapes to create a composite shape and create a new shape from composite shapes.
CC.2.3.2.A.2 Use the understanding of fractions to partition shapes into halves, quarters, and thirds.	2 M3 Lesson 8: Create composite shapes by using equal parts and name them as halves, thirds, and fourths. 2 M3 Lesson 9: Interpret equal shares in composite shapes as halves, thirds, and fourths. 2 M3 Topic C: Halves, Thirds, and Fourths of Circles and Rectangles

Measurement, Data, and Probability

CC.2.4.2.A Measurement and Data

Pennsylvania Core Standards Mathematics	Aligned Components of *Eureka Math²*
CC.2.4.2.A.1 Measure and estimate lengths in standard units using appropriate tools.	2 M1 Lesson 5: Connect measurement to physical units by iterating a centimeter cube. 2 M1 Lesson 6: Make a 10 cm ruler and measure objects. 2 M1 Lesson 7: Measure lengths and relate 10 cm and 1 cm. 2 M1 Lesson 8: Make a meter stick and measure with various tools. 2 M1 Topic C: Estimate, Measure, and Compare Lengths 2 M5 Lesson 8: Iterate an inch tile to create a unit ruler and measure to the nearest inch. 2 M5 Lesson 9: Use an inch ruler and a yard stick to estimate and measure the length of various objects. 2 M5 Lesson 10: Measure an object twice by using different length units and compare and relate measurement to unit size. 2 M5 Lesson 11: Measure to compare differences in lengths.
CC.2.4.2.A.2 Tell and write time to the nearest five minutes using both analog and digital clocks.	2 M3 Lesson 14: Distinguish between a.m. and p.m. 2 M3 Lesson 16: Use a clock to tell time to the half hour or quarter hour. 2 M3 Lesson 17: Relate the clock to a number line to count by fives. 2 M3 Lesson 18: Tell time to the nearest 5 minutes.
CC.2.4.2.A.3 Solve problems and make change using coins and paper currency with appropriate symbols.	2 M5 Topic A: Problem Solving with Coins and Bills

Pennsylvania Core Standards Mathematics	Aligned Components of *Eureka Math²*
CC.2.4.2.A.4 Represent and interpret data using line plots, picture graphs, and bar graphs.	2 M1 Topic A: Represent Data to Solve Problems 2 M5 Lesson 15: Use measurement data to create a line plot. 2 M5 Lesson 16: Create a line plot to represent data and ask and answer questions.
CC.2.4.2.A.6 Extend the concepts of addition and subtraction to problems involving length.	2 M1 Topic D: Solve *Compare* Problems by Using the Ruler as a Number Line 2 M5 Lesson 12: Identify unknown numbers on a number line by using the interval as a reference point. 2 M5 Lesson 13: Solve word problems that involve measurements and reason about estimates. 2 M5 Lesson 14: Solve addition and subtraction two-step word problems that involve length.