EUREKA MATH²®

GREAT MINDS™

Grade 3 | Indiana Academic Standards for 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.

Mathematical Process Standards	Aligned Components of *Eureka Math²*
PS.1 Make sense of problems and persevere in solving them.	3 M1 Lesson 6: Explore measurement and partitive division by modeling concretely and drawing. 3 M1 Lesson 8: Model measurement and partitive division by drawing arrays. 3 M2 Lesson 7: Solve one-step word problems using metric units. 3 M2 Lesson 22: Subtract measurements using the standard algorithm to decompose larger units once. 3 M3 Lesson 12: Solve one-step word problems involving multiplication and division. 3 M3 Lesson 17: Identify and complete patterns with input–output tables. 3 M3 Lesson 25: Apply multiplication and division concepts to complete a multi-part task. 3 M4 Lesson 7: Draw rows and columns to complete a rectangular array and determine its area. 3 M4 Lesson 16: Solve historical math problems involving area. 3 M4 Lesson 19: Apply area concepts to complete a multi-part task. 3 M5 Lesson 19: Compare fractions with unlike units but the same numerator by using number lines. 3 M6 Lesson 12: Reason about composing polygons by using tangrams. 3 M6 Lesson 18: Solve real-world problems involving perimeter and unknown measurements by using all four operations. 3 M6 Lesson 22: Generate categorical data and represent it by using a scaled picture graph.
PS.2 Reason abstractly and quantitatively.	3 M1 Lesson 3: Relate multiplication to the array model. 3 M1 Lesson 7: Model measurement and partitive division by drawing equal groups. 3 M1 Lesson 14: Demonstrate the distributive property using units of 2, 3, 4, 5, and 10. 3 M1 Lesson 18: Represent and solve measurement and partitive division word problems. 3 M2 Lesson 3: Use all four operations to solve one-step word problems involving weight. 3 M2 Lesson 9: Round two-digit numbers to the nearest ten on the vertical number line. 3 M2 Lesson 13: Collect and represent data in a scaled bar graph and solve related problems. 3 M2 Lesson 19: Use compensation to subtract.

Mathematical Process Standards	Aligned Components of *Eureka Math²*
PS.2 *continued*	3 M3 Lesson 2: Count by units of 6 to multiply and divide by using arrays.
	3 M3 Lesson 3: Count by units of 8 to multiply and divide by using arrays.
	3 M3 Lesson 8: Use the break apart and distribute strategy to multiply with units of 7.
	3 M3 Lesson 18: Create multiplication and division word problems.
	3 M4 Lesson 14: Reason to find the area of composite shapes by using grids.
	3 M5 Lesson 2: Partition different wholes into fractional units concretely.
	3 M5 Lesson 7: Identify and represent a whole as two parts: a unit fraction and a non-unit fraction.
	3 M5 Lesson 11: Locate fractions from 0 to 1 on a number line by using fraction tiles.
	3 M5 Lesson 13: Identify equivalent fractions from 0 to 1 with tape diagrams and on number lines.
	3 M5 Lesson 22: Identify fractions equivalent to whole numbers by using number lines.
	3 M5 Lesson 24: Generate equivalent fractions greater than 1 by using a number line.
	3 M6 Lesson 16: Solve problems to determine the perimeters of rectangles with the same area.
PS.3 Construct viable arguments and critique the reasoning of others.	3 M1 Lesson 10: Demonstrate the commutative property of multiplication using a unit of 2 and the array model.
	3 M1 Lesson 16: Model the quotient as the number of groups using units of 2, 3, 4, 5, and 10.
	3 M1 Lesson 20: Use the distributive property to break apart division problems into known facts.
	3 M2 Lesson 6: Use all four operations to solve one-step word problems involving liquid volume.
	3 M2 Lesson 15: Use the associative property to make the next ten to add.
	3 M2 Lesson 24: Subtract measurements using the standard algorithm to decompose larger units across two place values.
	3 M3 Lesson 1: Organize, count, and represent a collection of objects.
	3 M3 Lesson 6: Use the break apart and distribute strategy to divide with units of 6 and 8.
	3 M3 Lesson 11: Use the break apart and distribute strategy to divide with units of 7.
	3 M4 Lesson 3: Tile polygons to find their areas.

Mathematical Process Standards	Aligned Components of *Eureka Math²*
PS.3 *continued*	3 M4 Lesson 6: Tile rectangles with squares to make arrays and relate the side lengths to area.
	3 M4 Lesson 12: Find all possible side lengths of rectangles with a given area.
	3 M5 Lesson 9: Compare unit fractions by reasoning about their size concretely.
	3 M5 Lesson 18: Compare fractions with like units by using a number line.
	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.
	3 M6 Lesson 8: Compare and classify quadrilaterals.
	3 M6 Lesson 21: Create and analyze a line plot for measurement data to the nearest half unit and quarter unit.
	3 M6 Lesson 26: Fluently multiply and divide within 100 and add and subtract within 1,000.
PS.4 Model with mathematics.	3 M1 Lesson 5: Represent and solve multiplication word problems by using drawings and equations.
	3 M1 Lesson 15: Model division as an unknown factor problem.
	3 M1 Lesson 17: Model the quotient as the size of each group using units of 2, 3, 4, 5, and 10.
	3 M2 Lesson 20: Add measurements using the standard algorithm to compose larger units once.
	3 M4 Lesson 11: Decompose to find the total area of a rectangle.
	3 M4 Lesson 17: Apply area concepts to a real-world context.
	3 M5 Lesson 25: Express whole numbers as fractions with a denominator of 1.
	3 M5 Lesson 27: Apply fraction concepts to complete a multi-part task.
	3 M6 Lesson 3: Solve time word problems where the end time is unknown.
	3 M6 Lesson 6: Solve time word problems and use time data to create a line plot.

Mathematical Process Standards	Aligned Components of *Eureka Math²*
PS.5 Use appropriate tools strategically.	3 M1 Lesson 9: Represent and solve division word problems using drawings and equations. 3 M1 Lesson 22: Represent and solve two-step word problems using the properties of multiplication. 3 M1 Lesson 23: Represent and solve two-step word problems using drawings and equations. 3 M2 Lesson 2: Estimate the weight of familiar objects and read scales when weighing objects. 3 M2 Lesson 8: Read temperatures on a thermometer using number line concepts. 3 M2 Lesson 16: Use compensation to add. 3 M2 Lesson 21: Add measurements using the standard algorithm to compose larger units twice. 3 M3 Lesson 7: Count by units of 7 to multiply and divide by using arrays and tape diagrams. 3 M3 Lesson 24: Organize, count, and represent a collection of objects. 3 M4 Lesson 2: Recognize area as an attribute of polygons. 3 M4 Lesson 9: Multiply side lengths to find the area of a rectangle. 3 M4 Lesson 13: Apply area understanding to real-world situations. 3 M5 Lesson 20: Compare fractions with related units by using a number line. 3 M5 Lesson 23: Reason to find fractions equivalent to whole numbers by using patterns and number lines. 3 M6 Lesson 4: Solve time word problems where the start time is unknown. 3 M6 Lesson 10: Draw polygons with specified attributes. 3 M6 Lesson 13: Decompose quadrilaterals to understand perimeter as the boundary of a shape. 3 M6 Lesson 24: Organize, count, and represent a collection of objects.

Mathematical Process Standards	Aligned Components of *Eureka Math²*
PS.6 Attend to precision.	3 M1 Lesson 2: Interpret equal groups as multiplication.
	3 M1 Lesson 4: Interpret the meaning of factors as number of groups or number in each group.
	3 M1 Lesson 19: Use the distributive property to break apart multiplication problems into known facts.
	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.
	3 M2 Lesson 12: Estimate sums and differences by rounding.
	3 M2 Lesson 17: Use place value understanding to subtract efficiently using take from a ten.
	3 M2 Lesson 23: Subtract measurements using the standard algorithm to decompose larger units twice.
	3 M3 Lesson 5: Use the break apart and distribute strategy to multiply with units of 6 and 8.
	3 M3 Lesson 10: Use parentheses in expressions with different operations.
	3 M4 Lesson 1: Explore attributes of squares, rectangles, and trapezoids.
	3 M4 Lesson 4: Compose rectangles to compare areas.
	3 M4 Lesson 8: Determine the area of a rectangle by using side lengths.
	3 M4 Lesson 18: Find the area of shapes and represent area data on a line plot.
	3 M5 Lesson 1: Partition a whole into equal parts and name the fractional unit.
	3 M5 Lesson 3: Partition a whole into fractional units by folding fraction strips.
	3 M5 Lesson 5: Partition a whole into fractional units and write fractions in fraction form.
	3 M5 Lesson 10: Compare non-unit fractions less than 1 with the same numerator by using tape diagrams.
	3 M5 Lesson 15: Identify fractions on a ruler as numbers on a number line.
	3 M5 Lesson 21: Compare various fractions by representing them on number lines.
	3 M6 Lesson 9: Compare and classify other polygons.
	3 M6 Lesson 19: Measure the perimeter of various circles to the nearest quarter inch by using string.
	3 M6 Lesson 20: Record measurement data in a line plot.

Mathematical Process Standards	Aligned Components of *Eureka Math²*
PS.7 Look for and make use of structure.	3 M1 Lesson 1: Organize, count, and represent a collection of objects.
	3 M1 Lesson 11: Demonstrate the commutative property of multiplication using a unit of 4 and the array model.
	3 M1 Lesson 12: Demonstrate the distributive property using a unit of 4.
	3 M2 Lesson 1: Connect the composition of 1 kilogram to the composition of 1 thousand.
	3 M2 Lesson 4: Connect decomposition of 1 liter to the decomposition of 1 thousand.
	3 M2 Lesson 11: Round to the nearest hundred on the vertical number line.
	3 M2 Lesson 14: Use place value understanding to add and subtract like units.
	3 M2 Lesson 18: Use place value understanding to subtract efficiently using take from a hundred.
	3 M3 Lesson 4: Decompose pictorial arrays to create expressions with three factors.
	3 M3 Lesson 9: Model the associative property as a strategy to multiply.
	3 M3 Lesson 13: Count by units of 9 to multiply.
	3 M3 Lesson 14: Apply strategies and identify patterns to multiply with units of 9.
	3 M3 Lesson 21: Multiply by multiples of 10 by using place value strategies and the associative property.
	3 M4 Lesson 10: Compose large rectangles and reason about their areas.
	3 M4 Lesson 15: Reason to find the area of composite shapes by using rectangles.
	3 M5 Lesson 4: Partition a whole into fractional units pictorially and identify the unit fraction.
	3 M5 Lesson 6: Build non-unit fractions less than 1 from unit fractions concretely.
	3 M5 Lesson 8: Identify and represent a whole as two non-unit fractions.
	3 M5 Lesson 14: Recognize that equivalent fractions share the same location on a number line.
	3 M5 Lesson 17: Represent fractions greater than 1 on a number line and identify fractions equivalent to whole numbers.
	3 M5 Lesson 26: Create a ruler with 1-inch, half-inch, and quarter-inch intervals.
	3 M6 Lesson 1: Relate skip-counting by fives on the clock to telling time on the number line.

Mathematical Process Standards	Aligned Components of *Eureka Math²*
PS.7 *continued*	3 M6 Lesson 5: Solve time word problems where the change in time is unknown.
	3 M6 Lesson 14: Measure side lengths in whole-number units to determine the perimeters of polygons.
	3 M6 Lesson 15: Recognize perimeter as an attribute of shapes and solve problems with unknown measurements.
PS.8 Look for and express regularity in repeated reasoning.	3 M1 Lesson 13: Demonstrate the commutative property of multiplication using a unit of 3 and the array model.
	3 M1 Lesson 21: Compose and decompose arrays to create expressions with three factors.
	3 M2 Lesson 10: Round two- and three-digit numbers to the nearest ten on the vertical number line.
	3 M3 Lesson 15: Reason about and explain patterns of multiplication and division with units of 1 and 0.
	3 M4 Lesson 5: Relate side lengths to the number of tiles on a side.
	3 M5 Lesson 12: Represent fractions from 0 to 1 on a number line.
	3 M5 Lesson 16: Measure lengths and record data on a line plot.
	3 M6 Lesson 11: Reason about composing polygons by using tetrominoes.
	3 M6 Lesson 17: Solve problems to determine the areas of rectangles with the same perimeter.
	3 M6 Lesson 25: Name and count numbers greater than 1,000.

Number Sense

Students represent and round whole numbers up to 10,000. Students model, compare, and generate simple equivalent unit and non-unit fractions.

Indiana Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
3.NS.1 Read and write whole numbers up to 10,000. Use words, models, standard form, and expanded form to represent and show equivalent forms of whole numbers up to 10,000.	*Supplemental material is necessary to address this standard.*
3.NS.2 Model unit fractions as the quantity formed by 1 part when a whole is partitioned into equal parts; model non-unit fractions as the quantity formed by iterations of unit fractions. [In grade 3, limit denominators of fractions to 2, 3, 4, 6, 8.] (E)	3 M5 Lesson 4: Partition a whole into fractional units pictorially and identify the unit fraction. 3 M5 Lesson 5: Partition a whole into fractional units and write fractions in fraction form. 3 M5 Lesson 6: Build non-unit fractions less than 1 from unit fractions concretely. 3 M5 Lesson 7: Identify and represent a whole as two parts: a unit fraction and a non-unit fraction. 3 M5 Lesson 8: Identify and represent a whole as two non-unit fractions. 3 M5 Lesson 27: Apply fraction concepts to complete a multi-part task.
3.NS.3 Model a non-unit fraction on a number line by marking equal lengths from 0, identifying each part as a unit fraction and locating the non-unit fraction as the endpoint on the number line. (E)	3 M5 Lesson 11: Locate fractions from 0 to 1 on a number line by using fraction tiles. 3 M5 Lesson 12: Represent fractions from 0 to 1 on a number line. 3 M5 Lesson 15: Identify fractions on a ruler as numbers on a number line. 3 M5 Lesson 18: Compare fractions with like units by using a number line. 3 M5 Lesson 26: Create a ruler with 1-inch, half-inch, and quarter-inch intervals. 3 M5 Lesson 27: Apply fraction concepts to complete a multi-part task.

Indiana Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
3.NS.4 Use fraction models to represent two simple equivalent fractions with attention to how the number and size of the parts differ even though the quantities are the same. Use this principle to generate simple equivalent fractions (e.g., $\frac{1}{2} = \frac{2}{4}$, $\frac{4}{6} = \frac{2}{3}$).	3 M5 Lesson 8: Identify and represent a whole as two non-unit fractions. 3 M5 Lesson 13: Identify equivalent fractions from 0 to 1 with tape diagrams and on number lines. 3 M5 Lesson 14: Recognize that equivalent fractions share the same location on a number line. 3 M5 Lesson 16: Measure lengths and record data on a line plot. 3 M5 Lesson 17: Represent fractions greater than 1 on a number line and identify fractions equivalent to whole numbers. 3 M5 Lesson 22: Identify fractions equivalent to whole numbers by using number lines. 3 M5 Lesson 23: Reason to find fractions equivalent to whole numbers by using patterns and number lines. 3 M5 Lesson 24: Generate equivalent fractions greater than 1 by using a number line. 3 M5 Lesson 25: Express whole numbers as fractions with a denominator of 1. 3 M5 Lesson 26: Create a ruler with 1-inch, half-inch, and quarter-inch intervals.
3.NS.5 Compare two fractions with the same numerator or the same denominator by reasoning about their size based on the same whole. Record the results of comparisons with the symbols $>$, $=$, or $<$, and justify the conclusions (e.g., by using a visual fraction model). (E)	3 M5 Lesson 9: Compare unit fractions by reasoning about their size concretely. 3 M5 Lesson 10: Compare non-unit fractions less than 1 with the same numerator by using tape diagrams. 3 M5 Lesson 18: Compare fractions with like units by using a number line. 3 M5 Lesson 19: Compare fractions with unlike units but the same numerator by using number lines. 3 M5 Lesson 20: Compare fractions with related units by using a number line. 3 M5 Lesson 21: Compare various fractions by representing them on number lines. 3 M5 Lesson 27: Apply fraction concepts to complete a multi-part task.

Indiana Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
3.NS.6 Use place value understanding to round two- and three-digit whole numbers to the nearest 10 or 100.	3 M2 Lesson 8: Read temperatures on a thermometer using number line concepts. 3 M2 Lesson 9: Round two-digit numbers to the nearest ten on the vertical number line. 3 M2 Lesson 10: Round two- and three-digit numbers to the nearest ten on the vertical number line. 3 M2 Lesson 11: Round to the nearest hundred on the vertical number line. 3 M2 Lesson 12: Estimate sums and differences by rounding.

Computation and Algebraic Thinking

Students use modeling and conceptual strategies to multiply and divide numbers within 100 in real-world situations. Students apply concepts and strategies of addition and subtraction to solve real-world problems and investigate number patterns through the application of concepts of multiplication and more complex concepts of addition within 100.

Indiana Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
3.CA.1 Fluently add and subtract multi-digit whole numbers using strategies and algorithms based on place value, properties of operations, and relationships between addition and subtraction.	3 M2 Lesson 12: Estimate sums and differences by rounding. 3 M2 Lesson 14: Use place value understanding to add and subtract like units. 3 M2 Lesson 15: Use the associative property to make the next ten to add. 3 M2 Lesson 16: Use compensation to add. 3 M2 Lesson 17: Use place value understanding to subtract efficiently using take from a ten. 3 M2 Lesson 18: Use place value understanding to subtract efficiently using take from a hundred. 3 M2 Lesson 19: Use compensation to subtract. 3 M2 Lesson 20: Add measurements using the standard algorithm to compose larger units once. 3 M2 Lesson 21: Add measurements using the standard algorithm to compose larger units twice. 3 M2 Lesson 22: Subtract measurements using the standard algorithm to decompose larger units once.

Indiana Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
3.CA.1 *continued*	3 M2 Lesson 23: Subtract measurements using the standard algorithm to decompose larger units twice.
	3 M2 Lesson 24: Subtract measurements using the standard algorithm to decompose larger units across two place values.
3.CA.2 Solve real-world problems involving addition and subtraction of multi-digit whole numbers (e.g., by using drawings and equations with a symbol for the unknown number to represent the problem). (E)	3 M2 Lesson 12: Estimate sums and differences by rounding.
	3 M2 Lesson 14: Use place value understanding to add and subtract like units.
	3 M2 Lesson 15: Use the associative property to make the next ten to add.
	3 M2 Lesson 16: Use compensation to add.
	3 M2 Lesson 17: Use place value understanding to subtract efficiently using take from a ten.
	3 M2 Lesson 18: Use place value understanding to subtract efficiently using take from a hundred.
	3 M2 Lesson 19: Use compensation to subtract.
	3 M2 Lesson 20: Add measurements using the standard algorithm to compose larger units once.
	3 M2 Lesson 21: Add measurements using the standard algorithm to compose larger units twice.
	3 M2 Lesson 22: Subtract measurements using the standard algorithm to decompose larger units once.
	3 M2 Lesson 23: Subtract measurements using the standard algorithm to decompose larger units twice.
	3 M2 Lesson 24: Subtract measurements using the standard algorithm to decompose larger units across two place values.

Indiana Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
3.CA.3 Model the concept of multiplication of whole numbers using equal-sized groups, arrays, area models, and equal intervals on a number line. Model the properties of 0 and 1 in multiplication using objects or drawings. (E)	3 M1 Lesson 2: Interpret equal groups as multiplication. 3 M1 Lesson 3: Relate multiplication to the array model. 3 M1 Lesson 4: Interpret the meaning of factors as number of groups or number in each group. 3 M1 Lesson 10: Demonstrate the commutative property of multiplication using a unit of 2 and the array model. 3 M1 Lesson 11: Demonstrate the commutative property of multiplication using a unit of 4 and the array model. 3 M1 Lesson 13: Demonstrate the commutative property of multiplication using a unit of 3 and the array model. 3 M3 Lesson 15: Reason about and explain patterns of multiplication and division with units of 1 and 0. 3 M3 Lesson 18: Create multiplication and division word problems.
3.CA.4 Model the concept of division of whole numbers with the following models: partitioning, sharing, and an inverse of multiplication. Model the properties of 0 and 1 in division using objects or drawings. (E)	3 M1 Lesson 6: Explore measurement and partitive division by modeling concretely and drawing. 3 M1 Lesson 7: Model measurement and partitive division by drawing equal groups. 3 M1 Lesson 8: Model measurement and partitive division by drawing arrays. 3 M1 Lesson 9: Represent and solve division word problems using drawings and equations. 3 M1 Lesson 15: Model division as an unknown factor problem. 3 M1 Lesson 16: Model the quotient as the number of groups using units of 2, 3, 4, 5, and 10. 3 M1 Lesson 17: Model the quotient as the size of each group using units of 2, 3, 4, 5, and 10. 3 M1 Lesson 18: Represent and solve measurement and partitive division word problems. 3 M1 Lesson 20: Use the distributive property to break apart division problems into known facts. 3 M3 Lesson 2: Count by units of 6 to multiply and divide by using arrays. 3 M3 Lesson 3: Count by units of 8 to multiply and divide by using arrays.

Indiana Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
3.CA.4 *continued*	3 M3 Lesson 7: Count by units of 7 to multiply and divide by using arrays and tape diagrams. 3 M3 Lesson 15: Reason about and explain patterns of multiplication and division with units of 1 and 0. 3 M3 Lesson 18: Create multiplication and division word problems.
3.CA.5 Multiply and divide within 100 using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations. (E)	3 M1 Lesson 10: Demonstrate the commutative property of multiplication using a unit of 2 and the array model. 3 M1 Lesson 11: Demonstrate the commutative property of multiplication using a unit of 4 and the array model. 3 M1 Lesson 12: Demonstrate the distributive property using a unit of 4. 3 M1 Lesson 13: Demonstrate the commutative property of multiplication using a unit of 3 and the array model. 3 M1 Lesson 14: Demonstrate the distributive property using units of 2, 3, 4, 5, and 10. 3 M1 Lesson 19: Use the distributive property to break apart multiplication problems into known facts. 3 M1 Lesson 20: Use the distributive property to break apart division problems into known facts. 3 M1 Lesson 21: Compose and decompose arrays to create expressions with three factors. 3 M1 Lesson 22: Represent and solve two-step word problems using the properties of multiplication. 3 M1 Lesson 23: Represent and solve two-step word problems using drawings and equations. 3 M3 Lesson 1: Organize, count, and represent a collection of objects. 3 M3 Lesson 3: Count by units of 8 to multiply and divide by using arrays. 3 M3 Lesson 4: Decompose pictorial arrays to create expressions with three factors. 3 M3 Lesson 5: Use the break apart and distribute strategy to multiply with units of 6 and 8. 3 M3 Lesson 6: Use the break apart and distribute strategy to divide with units of 6 and 8. 3 M3 Lesson 8: Use the break apart and distribute strategy to multiply with units of 7. 3 M3 Lesson 9: Model the associative property as a strategy to multiply.

Indiana Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
3.CA.5 *continued*	3 M3 Lesson 10: Use parentheses in expressions with different operations.
	3 M3 Lesson 11: Use the break apart and distribute strategy to divide with units of 7.
	3 M3 Lesson 14: Apply strategies and identify patterns to multiply with units of 9.
	3 M3 Lesson 17: Identify and complete patterns with input–output tables.
	3 M3 Lesson 21: Multiply by multiples of 10 by using place value strategies and the associative property.
	3 M3 Lesson 23: Identify patterns and apply strategies to multiply with units of 11 and 12.
	3 M3 Lesson 24: Organize, count, and represent a collection of objects.
3.CA.6 Demonstrate fluency with mastery of multiplication facts and corresponding division facts of 0 to 10.	3 M1 Lesson 12: Demonstrate the distributive property using a unit of 4.
	3 M1 Lesson 14: Demonstrate the distributive property using units of 2, 3, 4, 5, and 10.
	3 M1 Lesson 19: Use the distributive property to break apart multiplication problems into known facts.
	3 M1 Lesson 20: Use the distributive property to break apart division problems into known facts.
	3 M1 Lesson 21: Compose and decompose arrays to create expressions with three factors.
	3 M1 Lesson 22: Represent and solve two-step word problems using the properties of multiplication.
	3 M1 Lesson 23: Represent and solve two-step word problems using drawings and equations.
	3 M3 Lesson 1: Organize, count, and represent a collection of objects.
	3 M3 Lesson 14: Apply strategies and identify patterns to multiply with units of 9.
	3 M3 Lesson 17: Identify and complete patterns with input–output tables.
	3 M3 Lesson 24: Organize, count, and represent a collection of objects.
	3 M6 Lesson 26: Fluently multiply and divide within 100 and add and subtract within 1,000.

Indiana Academic Standards for Mathematics	**Aligned Components of *Eureka Math²***
3.CA.7 Solve real-world problems involving whole number multiplication and division within 100 in situations involving equal groups, arrays, and measurement quantities (e.g., by using drawings and equations with a symbol for the unknown number to represent the problem). (E)	3 M1 Lesson 5: Represent and solve multiplication word problems by using drawings and equations. 3 M1 Lesson 8: Model measurement and partitive division by drawing arrays. 3 M1 Lesson 9: Represent and solve division word problems using drawings and equations. 3 M1 Lesson 16: Model the quotient as the number of groups using units of 2, 3, 4, 5, and 10. 3 M1 Lesson 17: Model the quotient as the size of each group using units of 2, 3, 4, 5, and 10. 3 M1 Lesson 18: Represent and solve measurement and partitive division word problems. 3 M1 Lesson 22: Represent and solve two-step word problems using the properties of multiplication. 3 M1 Lesson 23: Represent and solve two-step word problems using drawings and equations. 3 M3 Lesson 2: Count by units of 6 to multiply and divide by using arrays. 3 M3 Lesson 7: Count by units of 7 to multiply and divide by using arrays and tape diagrams. 3 M3 Lesson 8: Use the break apart and distribute strategy to multiply with units of 7. 3 M3 Lesson 12: Solve one-step word problems involving multiplication and division. 3 M3 Lesson 25: Apply multiplication and division concepts to complete a multi-part task.
3.CA.8 Create, extend, and give an appropriate rule for number patterns within 100 (including patterns in the addition table or multiplication table).	3 M3 Lesson 13: Count by units of 9 to multiply. 3 M3 Lesson 14: Apply strategies and identify patterns to multiply with units of 9. 3 M3 Lesson 15: Reason about and explain patterns of multiplication and division with units of 1 and 0. 3 M3 Lesson 16: Identify patterns using the multiplication table. 3 M3 Lesson 17: Identify and complete patterns with input–output tables. 3 M3 Lesson 23: Identify patterns and apply strategies to multiply with units of 11 and 12.

Geometry

Students continue to investigate and classify more complex two-dimensional shapes based on their attributes.

Indiana Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
3.G.1 Define, identify, and classify four-sided shapes such as rhombuses, rectangles, and squares as quadrilaterals. Identify and draw examples and non-examples of quadrilaterals.	3 M4 Lesson 1: Explore attributes of squares, rectangles, and trapezoids. 3 M4 Lesson 5: Relate side lengths to the number of tiles on a side. 3 M6 Lesson 8: Compare and classify quadrilaterals. 3 M6 Lesson 9: Compare and classify other polygons. 3 M6 Lesson 10: Draw polygons with specified attributes. 3 M6 Lesson 11: Reason about composing polygons by using tetrominoes. 3 M6 Lesson 12: Reason about composing polygons by using tangrams.
3.G.2 Identify, describe, and draw points, lines, and line segments using appropriate tools (e.g., ruler, straightedge, and technology), and use these terms when describing two-dimensional shapes.	4 M6 Lesson 1: Identify and draw points, lines, line segments, rays, and angles. 4 M6 Lesson 2: Identify right, acute, obtuse, and straight angles. 4 M6 Lesson 3: Draw right, acute, obtuse, and straight angles. 4 M6 Lesson 4: Identify, define, and draw perpendicular lines. 4 M6 Lesson 5: Identify, define, and draw parallel lines. 4 M6 Lesson 6: Relate geometric figures to a real-world context. 4 M6 Lesson 10: Use $180°$ protractors to measure angles. 4 M6 Lesson 11: Estimate and measure angles with a $180°$ protractor. 4 M6 Lesson 12: Use a protractor to draw angles up to $180°$. 4 M6 Lesson 18: Analyze and classify triangles based on side length, angle measures, or both. 4 M6 Lesson 19: Construct and classify triangles based on given attributes. 4 M6 Lesson 20: Sort polygons based on a given rule.

Indiana Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
3.G.3 Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole (i.e., $\frac{1}{2}, \frac{1}{3}, \frac{1}{4}, \frac{1}{6}, \frac{1}{8}$).	3 M5 Lesson 1: Partition a whole into equal parts and name the fractional unit. 3 M5 Lesson 2: Partition different wholes into fractional units concretely. 3 M5 Lesson 3: Partition a whole into fractional units by folding fraction strips. 3 M5 Lesson 4: Partition a whole into fractional units pictorially and identify the unit fraction. 3 M5 Lesson 5: Partition a whole into fractional units and write fractions in fraction form. 3 M5 Lesson 6: Build non-unit fractions less than 1 from unit fractions concretely. 3 M5 Lesson 7: Identify and represent a whole as two parts: a unit fraction and a non-unit fraction. 3 M5 Lesson 8: Identify and represent a whole as two non-unit fractions. 3 M5 Lesson 9: Compare unit fractions by reasoning about their size concretely. 3 M5 Lesson 10: Compare non-unit fractions less than 1 with the same numerator by using tape diagrams.

Measurement

Students use appropriate tools, computation strategies, and relationships of measurement to solve real-world problems including more specific measurements of length, weight, temperature, mass, time, and money. Students investigate and model the area of rectangles and perimeter of all polygons.

Indiana Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
3.M.1 Estimate and measure the mass of objects in grams (g) and kilograms (kg) and the volume of objects in quarts (qt), gallons (gal), and liters (l). Add, subtract, multiply, or divide to solve one-step, real-world problems involving masses or volumes that are given in the same units or obtained through investigation. (E)	3 M2 Lesson 1: Connect the composition of 1 kilogram to the composition of 1 thousand. 3 M2 Lesson 2: Estimate the weight of familiar objects and read scales when weighing objects. 3 M2 Lesson 3: Use all four operations to solve one-step word problems involving weight. 3 M2 Lesson 4: Connect decomposition of 1 liter to the decomposition of 1 thousand. 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. 3 M2 Lesson 6: Use all four operations to solve one-step word problems involving liquid volume. 3 M2 Lesson 7: Solve one-step word problems using metric units.
3.M.2 Choose and use appropriate units and tools to estimate and measure length, weight, and temperature. Estimate and measure length to a quarter-inch, weight in pounds, and temperature in degrees Celsius and Fahrenheit.	3 M2 Lesson 2: Estimate the weight of familiar objects and read scales when weighing objects. 3 M2 Lesson 8: Read temperatures on a thermometer using number line concepts. 3 M5 Lesson 16: Measure lengths and record data on a line plot. 3 M6 Lesson 20: Record measurement data in a line plot. 3 M6 Lesson 21: Create and analyze a line plot for measurement data to the nearest half unit and quarter unit.

Indiana Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
3.M.3 Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes (e.g., by representing the problem on a number line diagram). (E)	3 M6 Lesson 1: Relate skip-counting by fives on the clock to telling time on the number line. 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. 3 M6 Lesson 3: Solve time word problems where the end time is unknown. 3 M6 Lesson 4: Solve time word problems where the start time is unknown. 3 M6 Lesson 5: Solve time word problems where the change in time is unknown. 3 M6 Lesson 6: Solve time word problems and use time data to create a line plot.
3.M.4 Find the value of any collection of coins and bills. Write amounts less than a dollar using the ¢ symbol and write larger amounts using the $ symbol in the form of dollars and cents (e.g., $4.59). Solve real-world problems to determine whether there is enough money to make a purchase. (E)	3 M6 Lesson 7: Count coins and create money word problems. *Supplemental material is necessary to fully address this standard.*
3.M.5 Find the area of a rectangle with whole-number side lengths by modeling with unit squares, and show that the area is the same as would be found by multiplying the side lengths. Identify and draw rectangles with the same perimeter and different areas or with the same area and different perimeters. (E)	3 M4 Lesson 1: Explore attributes of squares, rectangles, and trapezoids. 3 M4 Lesson 2: Recognize area as an attribute of polygons. 3 M4 Lesson 3: Tile polygons to find their areas. 3 M4 Lesson 4: Compose rectangles to compare areas. 3 M4 Lesson 5: Relate side lengths to the number of tiles on a side. 3 M4 Lesson 6: Tile rectangles with squares to make arrays and relate the side lengths to the area. 3 M4 Lesson 7: Draw rows and columns to complete a rectangular array and determine its area. 3 M4 Lesson 8: Determine the area of a rectangle by using side lengths. 3 M4 Lesson 9: Multiply side lengths to find the area of a rectangle.

Indiana Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
3.M.5 *continued*	3 M4 Lesson 11: Decompose to find the total area of a rectangle.
	3 M4 Lesson 12: Find all possible side lengths of rectangles with a given area.
	3 M4 Lesson 13: Apply area understanding to real-world situations.
	3 M4 Lesson 14: Reason to find the area of composite shapes by using grids.
	3 M4 Lesson 15: Reason to find the area of composite shapes by using rectangles.
	3 M4 Lesson 16: Solve historical math problems involving area.
	3 M4 Lesson 17: Apply area concepts to a real-world context.
	3 M4 Lesson 18: Find the area of shapes and represent area data on a line plot.
	3 M4 Lesson 19: Apply area concepts to complete a multi-part task.
	3 M6 Lesson 13: Decompose quadrilaterals to understand perimeter as the boundary of a shape.
	3 M6 Lesson 14: Measure side lengths in whole-number units to determine the perimeters of polygons.
	3 M6 Lesson 15: Recognize perimeter as an attribute of shapes and solve problems with unknown measurements.
	3 M6 Lesson 16: Solve problems to determine the perimeters of rectangles with the same area.
	3 M6 Lesson 17: Solve problems to determine the areas of rectangles with the same perimeter.
	3 M6 Lesson 18: Solve real-world problems involving perimeter and unknown measurements by using all four operations.
	3 M6 Lesson 19: Measure the perimeter of various circles to the nearest quarter inch by using string.

Indiana Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
3.M.6 Find perimeters of polygons given the side lengths or given an unknown side length.	3 M6 Lesson 13: Decompose quadrilaterals to understand perimeter as the boundary of a shape. 3 M6 Lesson 14: Measure side lengths in whole-number units to determine the perimeters of polygons. 3 M6 Lesson 15: Recognize perimeter as an attribute of shapes and solve problems with unknown measurements. 3 M6 Lesson 16: Solve problems to determine the perimeters of rectangles with the same area. 3 M6 Lesson 17: Solve problems to determine the areas of rectangles with the same perimeter. 3 M6 Lesson 18: Solve real-world problems involving perimeter and unknown measurements by using all four operations. 3 M6 Lesson 19: Measure the perimeter of various circles to the nearest quarter inch by using string.

Data Analysis

Students collect and present data in multiple manners and solve multi-step problems with the data.

Indiana Academic Standards for Mathematics	Aligned Components of *Eureka Math²*
3.DA.1 Collect, organize, and graph data from observations, surveys, and experiments using scaled bar graphs and pictographs. Solve real-world problems by analyzing and interpreting the data using grade-level computation and comparison strategies. (E)	3 M2 Lesson 13: Collect and represent data in a scaled bar graph and solve related problems. 3 M6 Lesson 22: Generate categorical data and represent it by using a scaled picture graph. 3 M6 Lesson 23: Solve word problems by creating scaled picture graphs and scaled bar graphs.

Integrated STEM
Communication and Collaboration

Indiana Academic Standards: Integrated STEM	Aligned Components of *Eureka Math²*
3.CC.1 Collect and document evidence to share information with others in charts, tables, presentations, or text.	3 M2 Lesson 12: Estimate sums and differences by rounding. 3 M2 Lesson 24: Subtract measurements using the standard algorithm to decompose larger units across two place values. 3 M3 Lesson 1: Organize, count, and represent a collection of objects. 3 M3 Lesson 24: Organize, count, and represent a collection of objects. 3 M4 Lesson 2: Recognize area as an attribute of polygons. 3 M4 Lesson 9: Multiply side lengths to find the area of a rectangle. 3 M5 Lesson 1: Partition a whole into equal parts and name the fractional unit. 3 M5 Lesson 16: Measure lengths and record data on a line plot. 3 M6 Lesson 1: Relate skip-counting by fives on the clock to telling time on the number line. 3 M6 Lesson 8: Compare and classify quadrilaterals. 3 M6 Lesson 16: Solve problems to determine the perimeters of rectangles with the same area.
3.CC.2 Communicate the solution(s) of a problem/analysis either orally, visually, or in writing, including process steps, findings, or conclusions.	3 M1 Lesson 5: Represent and solve multiplication word problems by using drawings and equations. 3 M1 Lesson 9: Represent and solve division word problems using drawings and equations. 3 M1 Lesson 22: Represent and solve two-step word problems using the properties of multiplication. 3 M1 Lesson 23: Represent and solve two-step word problems using drawings and equations. 3 M2 Lesson 6: Use all four operations to solve one-step word problems involving liquid volume. 3 M2 Lesson 18: Use place value understanding to subtract efficiently using take from a hundred. 3 M3 Lesson 1: Organize, count, and represent a collection of objects. 3 M3 Lesson 12: Solve one-step word problems involving multiplication and division. 3 M3 Lesson 24: Organize, count, and represent a collection of objects. 3 M4 Lesson 13: Apply area understanding to real-world situations.

Indiana Academic Standards: Integrated STEM	Aligned Components of *Eureka Math²*
3.CC.2 *continued*	3 M4 Lesson 14: Reason to find the area of composite shapes by using grids.
	3 M4 Lesson 19: Apply area concepts to complete a multi-part task.
	3 M5 Lesson 27: Apply fraction concepts to complete a multi-part task.
	3 M6 Lesson 3: Solve time word problems where the end time is unknown.
	3 M6 Lesson 18: Solve real-world problems involving perimeter and unknown measurements by using all four operations.
3.CC.3 Identify and implement roles and responsibilities to collaborate in various group settings (i.e., online, onsite and/or hybrid) and situations.	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.
	3 M4 Lesson 2: Recognize area as an attribute of polygons.
	3 M5 Lesson 10: Compare non-unit fractions less than 1 with the same numerator by using tape diagrams.
	3 M5 Lesson 13: Identify equivalent fractions from 0 to 1 with tape diagrams and on number lines.
	3 M5 Lesson 18: Compare fractions with like units by using a number line.
	3 M5 Lesson 19: Compare fractions with unlike units but the same numerator by using number lines.
	3 M5 Lesson 21: Compare various fractions by representing them on number lines.
	3 M5 Lesson 24: Generate equivalent fractions greater than 1 by using a number line.
	3 M6 Lesson 4: Solve time word problems where the start time is unknown.
3.CC.4 Communicate specific constraints and criteria established for an investigation.	3 M2 Lesson 2: Estimate the weight of familiar objects and read scales when weighing objects.
	3 M2 Lesson 4: Connect decomposition of 1 liter to the decomposition of 1 thousand.
	3 M4 Lesson 16: Solve historical math problems involving area.
	3 M5 Lesson 2: Partition different wholes into fractional units concretely.
	3 M5 Lesson 15: Identify fractions on a ruler as numbers on a number line.
	3 M6 Lesson 11: Reason about composing polygons by using tetrominoes.
	3 M6 Lesson 22: Generate categorical data and represent it by using a scaled picture graph.

Indiana Academic Standards: Integrated STEM	Aligned Components of *Eureka Math²*
3.CC.5 Critique or support methods, investigations or arguments using evidence-based reasoning.	3 M1 Lesson 16: Model the quotient as the number of groups using units of 2, 3, 4, 5, and 10. 3 M2 Lesson 2: Estimate the weight of familiar objects and read scales when weighing objects. 3 M2 Lesson 9: Round two-digit numbers to the nearest ten on the vertical number line. 3 M2 Lesson 13: Collect and represent data in a scaled bar graph and solve related problems. 3 M2 Lesson 15: Use the associative property to make the next ten to add. 3 M2 Lesson 17: Use place value understanding to subtract efficiently using take from a ten. 3 M2 Lesson 24: Subtract measurements using the standard algorithm to decompose larger units across two place values. 3 M3 Lesson 3: Count by units of 8 to multiply and divide by using arrays. 3 M3 Lesson 6: Use the break apart and distribute strategy to divide with units of 6 and 8. 3 M3 Lesson 11: Use the break apart and distribute strategy to divide with units of 7. 3 M4 Lesson 9: Multiply side lengths to find the area of a rectangle. 3 M4 Lesson 15: Reason to find the area of composite shapes by using rectangles. 3 M6 Lesson 1: Relate skip-counting by fives on the clock to telling time on the number line. 3 M6 Lesson 3: Solve time word problems where the end time is unknown. 3 M6 Lesson 8: Compare and classify quadrilaterals. 3 M6 Lesson 14: Measure side lengths in whole-number units to determine the perimeters of polygons. 3 M6 Lesson 18: Solve real-world problems involving perimeter and unknown measurements by using all four operations. 3 M6 Lesson 22: Generate categorical data and represent it by using a scaled picture graph. 3 M6 Lesson 23: Solve word problems by creating scaled picture graphs and scaled bar graphs.

Integrated STEM
Data Analysis and Measurement

Indiana Academic Standards: Integrated STEM	Aligned Components of *Eureka Math²*
3.DM.1 Determine appropriate measurement tools to perform measurements and calculations (e.g., fractions, pounds, temperature, perimeter, area) defined in grade level content standards to analyze real-world scenarios.	3 M2 Lesson 1: Connect the composition of 1 kilogram to the composition of 1 thousand. 3 M2 Lesson 2: Estimate the weight of familiar objects and read scales when weighing objects. 3 M2 Lesson 3: Use all four operations to solve one-step word problems involving weight. 3 M2 Lesson 4: Connect decomposition of 1 liter to the decomposition of 1 thousand. 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. 3 M2 Lesson 6: Use all four operations to solve one-step word problems involving liquid volume. 3 M2 Lesson 7: Solve one-step word problems using metric units. 3 M2 Lesson 8: Read temperatures on a thermometer using number line concepts. 3 M2 Lesson 20: Add measurements using the standard algorithm to compose larger units once. 3 M2 Lesson 21: Add measurements using the standard algorithm to compose larger units twice. 3 M2 Lesson 22: Subtract measurements using the standard algorithm to decompose larger units once. 3 M2 Lesson 23: Subtract measurements using the standard algorithm to decompose larger units twice. 3 M2 Lesson 24: Subtract measurements using the standard algorithm to decompose larger units across two place values. 3 M4 Lesson 3: Tile polygons to find their areas. 3 M4 Lesson 4: Compose rectangles to compare areas. 3 M4 Lesson 5: Relate side lengths to the number of tiles on a side. 3 M4 Lesson 6: Tile rectangles with squares to make arrays and relate the side lengths to the area. 3 M4 Lesson 7: Draw rows and columns to complete a rectangular array and determine its area. 3 M4 Lesson 8: Determine the area of a rectangle by using side lengths.

Indiana Academic Standards: Integrated STEM	Aligned Components of *Eureka Math²*
3.DM.1 *continued*	3 M4 Lesson 9: Multiply side lengths to find the area of a rectangle.
	3 M4 Lesson 11: Decompose to find the total area of a rectangle.
	3 M4 Lesson 12: Find all possible side lengths of rectangles with a given area.
	3 M4 Lesson 13: Apply area understanding to real-world situations.
	3 M4 Lesson 14: Reason to find the area of composite shapes by using grids.
	3 M4 Lesson 15: Reason to find the area of composite shapes by using rectangles.
	3 M4 Lesson 16: Solve historical math problems involving area.
	3 M4 Lesson 17: Apply area concepts to a real-world context.
	3 M4 Lesson 18: Find the area of shapes and represent area data on a line plot.
	3 M4 Lesson 19: Apply area concepts to complete a multi-part task.
	3 M5 Lesson 15: Identify fractions on a ruler as numbers on a number line.
	3 M5 Lesson 16: Measure lengths and record data on a line plot.
	3 M5 Lesson 26: Create a ruler with 1-inch, half-inch, and quarter-inch intervals.
	3 M6 Lesson 1: Relate skip-counting by fives on the clock to telling time on the number line.
	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.
	3 M6 Lesson 3: Solve time word problems where the end time is unknown.
	3 M6 Lesson 4: Solve time word problems where the start time is unknown.
	3 M6 Lesson 5: Solve time word problems where the change in time is unknown.
	3 M6 Lesson 6: Solve time word problems and use time data to create a line plot.
	3 M6 Lesson 14: Measure side lengths in whole-number units to determine the perimeters of polygons.
	3 M6 Lesson 15: Recognize perimeter as an attribute of shapes and solve problems with unknown measurements.
	3 M6 Lesson 16: Solve problems to determine the perimeters of rectangles with the same area.
	3 M6 Lesson 17: Solve problems to determine the areas of rectangles with the same perimeter.

Indiana Academic Standards: Integrated STEM	Aligned Components of *Eureka Math²*
3.DM.1 *continued*	3 M6 Lesson 18: Solve real-world problems involving perimeter and unknown measurements by using all four operations. 3 M6 Lesson 19: Measure the perimeter of various circles to the nearest quarter inch by using string. 3 M6 Lesson 20: Record measurement data in a line plot. 3 M6 Lesson 21: Create and analyze a line plot for measurement data to the nearest half unit and quarter unit.
3.DM.2 Construct visual representations defined in grade level content standards (e.g., bar graphs, pictographs) to determine patterns, using digital tools when possible and feasible.	3 M2 Lesson 13: Collect and represent data in a scaled bar graph and solve related problems. 3 M4 Lesson 18: Find the area of shapes and represent area data on a line plot. 3 M5 Lesson 16: Measure lengths and record data on a line plot. 3 M6 Lesson 6: Solve time word problems and use time data to create a line plot. 3 M6 Lesson 20: Record measurement data in a line plot. 3 M6 Lesson 21: Create and analyze a line plot for measurement data to the nearest half unit and quarter unit. 3 M6 Lesson 22: Generate categorical data and represent it by using a scaled picture graph. 3 M6 Lesson 23: Solve word problems by creating scaled picture graphs and scaled bar graphs.
3.DM.3 Evaluate reasonableness of observations, results, and solutions throughout processes.	3 M1 Lesson 22: Represent and solve two-step word problems using the properties of multiplication. 3 M2 Lesson 8: Read temperatures on a thermometer using number line concepts. 3 M2 Lesson 12: Estimate sums and differences by rounding. 3 M2 Lesson 14: Use place value understanding to add and subtract like units. 3 M2 Lesson 20: Add measurements using the standard algorithm to compose larger units once. 3 M2 Lesson 21: Add measurements using the standard algorithm to compose larger units twice. 3 M2 Lesson 22: Subtract measurements using the standard algorithm to decompose larger units once.

Indiana Academic Standards: Integrated STEM	Aligned Components of *Eureka Math²*
3.DM.3 *continued*	3 M2 Lesson 23: Subtract measurements using the standard algorithm to decompose larger units twice.
	3 M2 Lesson 24: Subtract measurements using the standard algorithm to decompose larger units across two place values.
	3 M3 Lesson 1: Organize, count, and represent a collection of objects.
	3 M3 Lesson 13: Count by units of 9 to multiply.
	3 M3 Lesson 24: Organize, count, and represent a collection of objects.
	3 M4 Lesson 13: Apply area understanding to real-world situations.
	3 M4 Lesson 16: Solve historical math problems involving area.
	3 M4 Lesson 17: Apply area concepts to a real-world context.
	3 M6 Lesson 6: Solve time word problems and use time data to create a line plot.
	3 M6 Lesson 21: Create and analyze a line plot for measurement data to the nearest half unit and quarter unit.
3.DM.4 Choose data sets and analysis methods to support the inquiry process.	3 M1 Lesson 5: Represent and solve multiplication word problems by using drawings and equations.
	3 M1 Lesson 15: Model division as an unknown factor problem.
	3 M1 Lesson 17: Model the quotient as the size of each group using units of 2, 3, 4, 5, and 10.
	3 M2 Lesson 3: Use all four operations to solve one-step word problems involving weight.
	3 M2 Lesson 20: Add measurements using the standard algorithm to compose larger units once.
	3 M3 Lesson 24: Organize, count, and represent a collection of objects.
	3 M4 Lesson 17: Apply area concepts to a real-world context.
	3 M5 Lesson 27: Apply fraction concepts to complete a multi-part task.
	3 M6 Lesson 3: Solve time word problems where the end time is unknown.
	3 M6 Lesson 6: Solve time word problems and use time data to create a line plot.
	3 M6 Lesson 16: Solve problems to determine the perimeters of rectangles with the same area.

Integrated STEM
Inquiry-Based Approaches and Problem Solving

Indiana Academic Standards: Integrated STEM	Aligned Components of *Eureka Math²*
3.IPS.1 Plan and conduct an investigation to answer a specific question or solve a specific problem.	3 M1 Lesson 6: Explore measurement and partitive division by modeling concretely and drawing. 3 M1 Lesson 8: Model measurement and partitive division by drawing arrays. 3 M1 Lesson 16: Model the quotient as the number of groups using units of 2, 3, 4, 5, and 10. 3 M2 Lesson 7: Solve one-step word problems using metric units. 3 M2 Lesson 22: Subtract measurements using the standard algorithm to decompose larger units once. 3 M3 Lesson 12: Solve one-step word problems involving multiplication and division. 3 M3 Lesson 17: Identify and complete patterns with input–output tables. 3 M3 Lesson 25: Apply multiplication and division concepts to complete a multi-part task. 3 M4 Lesson 6: Tile rectangles with squares to make arrays and relate the side lengths to the area. 3 M4 Lesson 12: Find all possible side lengths of rectangles with a given area. 3 M4 Lesson 16: Solve historical math problems involving area. 3 M4 Lesson 19: Apply area concepts to complete a multi-part task. 3 M5 Lesson 19: Compare fractions with unlike units but the same numerator by using number lines. 3 M6 Lesson 12: Reason about composing polygons by using tangrams. 3 M6 Lesson 18: Solve real-world problems involving perimeter and unknown measurements by using all four operations.

Indiana Academic Standards: Integrated STEM	Aligned Components of *Eureka Math²*
3.IPS.2 Decompose a complex problem into smaller steps or sequences to evaluate (e.g., what should be done first, second).	3 M1 Lesson 18: Represent and solve measurement and partitive division word problems. 3 M1 Lesson 23: Represent and solve two-step word problems using drawings and equations. 3 M2 Lesson 6: Use all four operations to solve one-step word problems involving liquid volume. 3 M2 Lesson 21: Add measurements using the standard algorithm to compose larger units twice. 3 M3 Lesson 2: Count by units of 6 to multiply and divide by using arrays. 3 M4 Lesson 16: Solve historical math problems involving area.
3.IPS.3 Determine one or more viable solutions using data and information to resolve a scenario given criteria and constraints.	3 M1 Lesson 21: Compose and decompose arrays to create expressions with three factors. 3 M2 Lesson 2: Estimate the weight of familiar objects and read scales when weighing objects. 3 M2 Lesson 6: Use all four operations to solve one-step word problems involving liquid volume. 3 M2 Lesson 12: Estimate sums and differences by rounding. 3 M3 Lesson 2: Count by units of 6 to multiply and divide by using arrays. 3 M4 Lesson 7: Draw rows and columns to complete a rectangular array and determine its area. 3 M4 Lesson 12: Find all possible side lengths of rectangles with a given area. 3 M4 Lesson 17: Apply area concepts to a real-world context. 3 M5 Lesson 21: Compare various fractions by representing them on number lines. 3 M6 Lesson 6: Solve time word problems and use time data to create a line plot. 3 M6 Lesson 12: Reason about composing polygons by using tangrams.

Integrated STEM
Applications and Modeling

Indiana Academic Standards: Integrated STEM	Aligned Components of *Eureka Math²*
3.AM.1 Apply symbols and relationships (e.g., equations) to represent physical or conceptual objects (e.g., letters, numbers, or displays of color may represent objects).	3 M1 Lesson 3: Relate multiplication to the array model. 3 M1 Lesson 5: Represent and solve multiplication word problems by using drawings and equations. 3 M1 Lesson 9: Represent and solve division word problems using drawings and equations. 3 M1 Lesson 14: Demonstrate the distributive property using units of 2, 3, 4, 5, and 10. 3 M1 Lesson 23: Represent and solve two-step word problems using drawings and equations. 3 M2 Lesson 9: Round two-digit numbers to the nearest ten on the vertical number line. 3 M3 Lesson 2: Count by units of 6 to multiply and divide by using arrays. 3 M3 Lesson 18: Create multiplication and division word problems. 3 M4 Lesson 6: Tile rectangles with squares to make arrays and relate the side lengths to the area. 3 M4 Lesson 14: Reason to find the area of composite shapes by using grids. 3 M4 Lesson 19: Apply area concepts to complete a multi-part task. 3 M5 Lesson 2: Partition different wholes into fractional units concretely. 3 M5 Lesson 6: Build non-unit fractions less than 1 from unit fractions concretely. 3 M5 Lesson 25: Express whole numbers as fractions with a denominator of 1.
3.AM.2 Create a model showing a subsystem as part of a larger system.	3 M2 Lesson 4: Connect decomposition of 1 liter to the decomposition of 1 thousand. 3 M4 Lesson 11: Decompose to find the total area of a rectangle. 3 M4 Lesson 15: Reason to find the area of composite shapes by using rectangles. 3 M5 Lesson 5: Partition a whole into fractional units and write fractions in fraction form. 3 M5 Lesson 15: Identify fractions on a ruler as numbers on a number line.

Integrated STEM
Information and Digital Literacy

Indiana Academic Standards: Integrated STEM	Aligned Components of *Eureka Math²*
3.IDL.1 Identify and evaluate the impact of technology when selecting tools to solve a problem in order to determine the most effective solution.	*Supplemental material is necessary to address this standard.*
3.IDL.2 Review and compile information from multiple sources to solve a problem.	3 M1 Lesson 5: Represent and solve multiplication word problems by using drawings and equations. 3 M1 Lesson 7: Model measurement and partitive division by drawing equal groups. 3 M1 Lesson 18: Represent and solve measurement and partitive division word problems. 3 M2 Lesson 6: Use all four operations to solve one-step word problems involving liquid volume. 3 M2 Lesson 9: Round two-digit numbers to the nearest ten on the vertical number line. 3 M2 Lesson 18: Use place value understanding to subtract efficiently using take from a hundred. 3 M4 Lesson 6: Tile rectangles with squares to make arrays and relate the side lengths to the area. 3 M4 Lesson 19: Apply area concepts to complete a multi-part task. 3 M5 Lesson 1: Partition a whole into equal parts and name the fractional unit. 3 M5 Lesson 6: Build non-unit fractions less than 1 from unit fractions concretely. 3 M5 Lesson 10: Compare non-unit fractions less than 1 with the same numerator by using tape diagrams. 3 M6 Lesson 3: Solve time word problems where the end time is unknown. 3 M6 Lesson 7: Count coins and create money word problems. 3 M6 Lesson 14: Measure side lengths in whole-number units to determine the perimeters of polygons.

Indiana Academic Standards: Integrated STEM	**Aligned Components of *Eureka Math²***
3.IDL.3 Describe how solutions or technologies are adapted to meet the changing needs and wants of individuals or communities.	*Supplemental material is necessary to address this standard.*