## Grade 3 | Missouri Mathematics Learning Standards Correlation to Eureka Math ${ }^{2 \mathrm{TM}}$

When the original Eureka Math ${ }^{\circledR}$ curriculum was released, it quickly became the most widely used K-5 mathematics curriculum in the country. Now, the Great Minds ${ }^{\circledR}$ teacher-writers have created Eureka Math ${ }^{2 T M}$, a groundbreaking new curriculum that helps teachers deliver exponentially better math instruction while still providing students with the same deep understanding of and fluency in math. Eureka Math ${ }^{2}$ carefully sequences mathematical content to maximize vertical alignment-a principle tested and proven to be essential in students' mastery of math-from kindergarten through high school.

While this innovative new curriculum includes all the trademark Eureka Math aha moments that have been delighting students and teachers for years, it also boasts these exciting new features:

## Teachability

Eureka Math ${ }^{2}$ employs streamlined materials that allow teachers to plan more efficiently and focus their energy on delivering highquality 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 Math ${ }^{2}$ add to students' engagement with the math. The curriculum provides teachers with digital slides for each lesson. In addition, each grade level includes wordless videos that spark students' interest and curiosity. Students at all levels work through mathematical explorations that help lead to their own mathematical discoveries. Digital lessons and videos provide opportunities for students to wonder, explore, and make sense of mathematics, which contributes to the development of a strong, positive mathematical identity.

Standards for Mathematical Practice

| MP. $\mathbf{1}$ <br> Make sense of problems and persevere in solving them. | Lessons in every module engage students in mathematical practices. <br> These are indicated in margin notes included with every lesson. |
| :--- | :--- |
| MP. $\mathbf{2}$ <br> Reason abstractly and quantitatively. | Lessons in every module engage students in mathematical practices. <br> These are indicated in margin notes included with every lesson. |
| MP. $\mathbf{3}$ <br> Construct viable arguments and critique the reasoning of others. | Lessons in every module engage students in mathematical practices. <br> These are indicated in margin notes included with every lesson. |
| MP. $\mathbf{4}$ <br> Model with mathematics. | Lessons in every module engage students in mathematical practices. <br> These are indicated in margin notes included with every lesson. |
| MP. $\mathbf{5}$ | Lessons in every module engage students in mathematical practices. <br> These are indicated in margin notes included with every lesson. |
| MP. $\mathbf{6}$ | Lessons in every module engage students in mathematical practices. <br> These are indicated in margin notes included with every lesson. |
| Attend to precision. | Lessons in every module engage students in mathematical practices. <br> These are indicated in margin notes included with every lesson. |
| MP. $\mathbf{C}$ | Lessons in every module engage students in mathematical practices. <br> These are indicated in margin notes included with every lesson. |
| MP. $\mathbf{8}$ |  |
| Look for and make use of structure. |  |

## Number Sense and Operations in Base Ten

3.NBT.A Use place value understanding and properties of operations to perform multi-digit arithmetic.

## Missouri Mathematics <br> Learning Standards

## Aligned Components of Eureka Math ${ }^{2}$

## 3.NBT.A. 1

Round whole numbers to the nearest 10 or 100.

## 3.NBT.A. 2

Read, write and identify whole numbers within 100,000 using base ten numerals, number names and expanded form.

## 3.NBT.A. 3

Demonstrate fluency with addition and subtraction within 1,000.

3 M2 Topic B: Rounding to the Nearest Ten and Hundred

Supplemental material is necessary to address this standard.

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.
3 M6 Lesson 26: Fluently multiply and divide within 100 and add and subtract within 1,000.

## Missouri Mathematics Learning Standards

## Aligned Components of Eureka Math ${ }^{2}$

## 3.NBT.A. 4

Multiply whole numbers by multiples of 10 in the range 10-90.

3 M3 Lesson 20: Multiply by multiples of 10 by using the place value chart.
3 M3 Lesson 21: Multiply by multiples of 10 by using place value strategies and the associative property.
3 M3 Lesson 22: Solve two-step word problems involving multiplication of single-digit factors and multiples of 10 .

## Number Sense and Operations in Fractions

 3.NF.A Develop understanding of fractions as numbers.
## Missouri Mathematics <br> Learning Standards

## Aligned Components of Eureka Math ${ }^{2}$

| 3.NF.A. 1 | 3 M5 Lesson 4: Partition a whole into fractional units pictorially and identify the unit fraction. |
| :---: | :---: |
| Understand a unit fraction as the quantity formed by one part when a whole is partitioned into equal parts. | 3 M5 Lesson 5: Partition a whole into fractional units and write fractions in fraction form. <br> 3 M5 Lesson 6: Build non-unit fractions less than 1 from unit fractions concretely. <br> 3 M5 Lesson 7: Identify and represent a whole as two parts: a unit fraction and a non-unit fraction. <br> 3 M5 Lesson 8: Identify and represent a whole as two non-unit fractions. <br> 3 M5 Lesson 27: Apply fraction concepts to complete a multi-part task. |
| 3.NF.A. 2 | This standard is fully addressed by the lessons aligned to its subsections. |
| Understand that when a whole is partitioned equally, a fraction can be used to represent a portion of the whole. |  |

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## Aligned Components of Eureka Math ${ }^{2}$

| 3.NF.A.2.a <br> Describe the numerator as representing the number of pieces being considered. | 3 M5 Lesson 4: Partition a whole into fractional units pictorially and identify the unit fraction. <br> 3 M5 Lesson 5: Partition a whole into fractional units and write fractions in fraction form. <br> 3 M5 Lesson 6: Build non-unit fractions less than 1 from unit fractions concretely. <br> 3 M5 Lesson 7: Identify and represent a whole as two parts: a unit fraction and a non-unit fraction. <br> 3 M5 Lesson 8: Identify and represent a whole as two non-unit fractions. <br> 3 M5 Lesson 27: Apply fraction concepts to complete a multi-part task. <br> Supplemental material is necessary to introduce the term numerator. |
| :---: | :---: |
| 3.NF.A.2.b <br> Describe the denominator as the number of pieces that make the whole. | 3 M5 Lesson 4: Partition a whole into fractional units pictorially and identify the unit fraction. <br> 3 M5 Lesson 5: Partition a whole into fractional units and write fractions in fraction form. <br> 3 M5 Lesson 6: Build non-unit fractions less than 1 from unit fractions concretely. <br> 3 M5 Lesson 7: Identify and represent a whole as two parts: a unit fraction and a non-unit fraction. <br> 3 M5 Lesson 8: Identify and represent a whole as two non-unit fractions. <br> 3 M5 Lesson 27: Apply fraction concepts to complete a multi-part task. <br> Supplemental material is necessary to introduce the term denominator. |
| 3.NF.A. 3 <br> Represent fractions on a number line. | This standard is fully addressed by the lessons aligned to its subsections. |
| 3.NF.A.3.a <br> Understand the whole is the interval from 0 to 1 . | 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. <br> 3 M5 Lesson 15: Identify fractions on a ruler as numbers on a number line. |

## Missouri Mathematics Learning Standards

## Aligned Components of Eureka Math ${ }^{2}$

## 3.NF.A.3.b

Understand the whole is partitioned into equal parts.

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 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.

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.

## Missouri Mathematics Learning Standards

## Aligned Components of Eureka Math ${ }^{2}$

## 3.NF.A. 5

Recognize and generate equivalent fractions using visual models, and justify why the fractions are equivalent.

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 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.

## Missouri Mathematics Learning Standards

## Aligned Components of Eureka Math ${ }^{2}$

## 3.NF.A. 7

Explain why fraction comparisons are only valid when the two fractions refer to the same whole.

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.

## Relationships and Algebraic Thinking

## 3.RA.A Represent and solve problems involving multiplication and division.

## Missouri Mathematics <br> Learning Standards

## Aligned Components of Eureka Math ${ }^{2}$

## 3.RA.A. 1

Interpret products of whole numbers.

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.

## Missouri Mathematics Learning Standards

## Aligned Components of Eureka Math ${ }^{2}$

## 3.RA.A. 2

Interpret quotients of whole numbers.

## 3.RA.A. 3

Describe in words or drawings a problem that illustrates a multiplication or division situation.

## 3.RA.A. 4

Use multiplication and division within 100 to solve problems.

3 M1 Topic B: Conceptual Understanding of Division
3 M1 Topic D: Two Interpretations of Division
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 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 Topic B: Conceptual Understanding of Division
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 M1 Topic D: Two Interpretations of Division
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 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 .

## Missouri Mathematics Learning Standards

## Aligned Components of Eureka Math ${ }^{2}$

## 3.RA.A. 4 continued

3.RA.A. 5

Determine the unknown number in a multiplication or division equation relating three whole numbers.

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 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 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.
3 M3 Lesson 7: Count by units of 7 to multiply and divide by using arrays and tape diagrams.

## Relationships and Algebraic Thinking

## 3.RA.B Understand properties of multiplication and the relationship between multiplication and division.

## Missouri Mathematics <br> Learning Standards

## Aligned Components of Eureka Math ${ }^{2}$

## 3.RA.B. 6

Apply properties of operations as strategies to multiply and divide.

## 3 M1 Topic C: Properties of Multiplication

3 M1 Lesson 19: Use the distributive property to break apart multiplication problems into known facts.
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.
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 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.

## Relationships and Algebraic Thinking

## 3.RA.C Multiply and divide within 100.

## Missouri Mathematics <br> Learning Standards

## Aligned Components of Eureka Math ${ }^{2}$

## 3.RA.C. 7

Multiply and divide with numbers and results within 100 using strategies such as the relationship between multiplication and division or properties of operations. Know all products of two one-digit numbers.

## 3.RA.C. 8

Demonstrate fluency with products within 100.

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 Topic E: Application of Multiplication and Division Concepts
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.

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 Topic E: Application of Multiplication and Division Concepts
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.

## Relationships and Algebraic Thinking

## 3.RA.D Use the four operations to solve word problems.

## Missouri Mathematics <br> Learning Standards

## Aligned Components of Eureka Math ${ }^{2}$

## 3.RA.D. 9

Write and solve two-step problems involving variables using any of the four operations.

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 25: Solve two-step word problems.
3 M3 Lesson 19: Solve two-step word problems involving all four operations and assess the reasonableness of solutions.

3 M3 Lesson 22: Solve two-step word problems involving multiplication of single-digit factors and multiples of 10 .

3 M3 Lesson 25: Apply multiplication and division concepts to complete a multi-part task.
3 M6 Lesson 7: Count coins and create money 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 M2 Lesson 25: Solve two-step word problems.
3 M3 Lesson 19: Solve two-step word problems involving all four operations and assess the reasonableness of solutions.

3 M3 Lesson 22: Solve two-step word problems involving multiplication of single-digit factors and multiples of 10 .

3 M3 Lesson 25: Apply multiplication and division concepts to complete a multi-part task.
3 M6 Lesson 7: Count coins and create money word problems.

## Relationships and Algebraic Thinking

## 3.RA.E Identify and explain arithmetic patterns.

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## 3.RA.E. 11

Identify arithmetic patterns and explain the patterns using properties of operations.

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 and Measurement

## 3.GM.A Reason with shapes and their attributes.

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## 3.GM.A. 1

Understand that shapes in different categories may share attributes and that the shared attributes can define a larger category.

## 3.GM.A. 2

Distinguish rhombuses and rectangles as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to these subcategories.

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 Topic B: Attributes of Two-Dimensional Figures

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 Topic B: Attributes of Two-Dimensional Figures

## Missouri Mathematics Learning Standards

## Aligned Components of Eureka Math ${ }^{2}$

## 3.GM.A. 3

Partition shapes into parts with equal areas, and express the area of each part as a unit fraction of the whole.

3 M5 Topic A: Partition a Whole into Equal Parts
3 M5 Topic B: Unit Fractions and Their Relationship to the Whole

## Geometry and Measurement

## 3.GM.B Solve problems involving the measurement of time, liquid volumes and weights of objects.

## Missouri Mathematics Learning Standards

Aligned Components of Eureka Math ${ }^{2}$

## 3.GM.B. 4

Tell and write time to the nearest minute.
3.GM.B. 5

Estimate time intervals in minutes.
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 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.

## Missouri Mathematics Learning Standards

## Aligned Components of Eureka Math ${ }^{2}$

## 3.GM.B. 6

Solve problems involving addition and subtraction of minutes.

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.GM.B. 7

Measure or estimate length, liquid volume and weight of objects.

## 3.GM.B. 8

Use the four operations to solve problems involving lengths, liquid volumes or weights given in the same units.

3 M2 Topic A: Understanding Place Value Concepts through Metric Measurement
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 M6 Lesson 14: Measure side lengths in whole-number units to determine the perimeters of polygons.
3 M6 Lesson 19: Measure the perimeter of various circles to the nearest quarter inch by using string.

3 M2 Topic A: Understanding Place Value Concepts Through Metric Measurement
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.

## Missouri Mathematics Learning Standards

## Aligned Components of Eureka Math ${ }^{2}$

## 3.GM.B. 8 continued

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.

## Geometry and Measurement

## 3.GM.C Understand concepts of area.

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Aligned Components of Eureka Math ${ }^{2}$

## 3.GM.C. 9

Calculate area by using unit squares to cover a plane figure with no gaps or overlaps.

## 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 16: Solve historical math problems involving area.
3 M4 Lesson 18: Find the area of shapes and represent area data on a line plot.

3 M4 Lesson 2: Recognize area as an attribute of polygons.
3 M4 Lesson 3: Tile polygons to find their area.
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 16: Solve historical math problems involving area.

## Missouri Mathematics Learning Standards

## Aligned Components of Eureka Math ${ }^{2}$

## 3.GM.C. 11

Demonstrate that tiling a rectangle to find the area and multiplying the side lengths result in the same value.

## 3.GM.C. 12

Multiply whole-number side lengths to solve problems involving the area of rectangles.

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 12: Find all possible side lengths of rectangles with a given 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.
3 M4 Topic C: Applying Properties of Operations to 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 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 M4 Lesson 12: Find all possible side lengths of rectangles with a given area.

3 M4 Lesson 10: Compose large rectangles and reason about their areas.
3 M4 Lesson 11: Decompose to find the total area of a rectangle.
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 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.

## Geometry and Measurement

## 3.GM.D Understand concepts of perimeter.

## Missouri Mathematics <br> Learning Standards

## Aligned Components of Eureka Math ${ }^{2}$

## 3.GM.D. 15

Solve problems involving perimeters of polygons.

## 3.GM.D. 16

Understand that rectangles can have equal perimeters but different areas, or rectangles can have equal areas but different perimeters.

3 M6 Topic C: Problem Solving with Perimeter
3 M6 Lesson 19: Measure the perimeter of various circles to the nearest quarter inch by using string.

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## Data and Statistics

## 3.DS.A Represent and analyze data.

## Missouri Mathematics Learning Standards

## Aligned Components of Eureka Math ${ }^{2}$

| 3.DS.A.1 | 3 M 2 Lesson 13: Collect and represent data in a scaled bar graph and solve related problems. |
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| Create frequency tables, scaled picture <br> graphs and bar graphs to represent <br> a data set with several categories. | 3 M 6 Lesson 22: Generate categorical data and represent it by using a scaled picture graph. |
| 3 M 6 Lesson 23: Solve word problems by creating scaled picture graphs and scaled bar graphs. |  |
| 3.DS.A.2 | 3 M 2 Lesson 13: Collect and represent data in a scaled bar graph and solve related problems. |
| Solve one- and two-step problems using <br> information presented in bar and/or <br> picture graphs. | 3 M 6 Lesson 22: Generate categorical data and represent it by using a scaled picture graph. |

## Missouri Mathematics Learning Standards

## Aligned Components of Eureka Math ${ }^{2}$

| 3.DS.A.3 | 3 M 5 Lesson 16: Measure lengths and record data on a line plot. <br> Create a line plot to represent data. <br> 3 M 6 Lesson 20: Record measurement data in a line plot. <br> 3 M 6 Lesson 21: Create and analyze a line plot for measurement data to the nearest half unit and <br> quarter unit. |
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| 3.DS.A.4 | 3 M 5 Lesson 16: Measure lengths and record data on a line plot. <br> Use data shown in a line plot to answer <br> questions. <br> 3 M 6 Lesson 20: Record measurement data in a line plot. <br> 3 M 6 Lesson 21: Create and analyze a line plot for measurement data to the nearest half unit and <br> quarter unit. |

