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## Grade 3 | Alabama Standards for Mathematical Content (2019) Correlation to *Eureka Math*<sup>2</sup>® (2027)

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

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

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

### Teachability

*Eureka Math*<sup>2</sup> employs streamlined materials that allow teachers to plan more efficiently and focus their energy on delivering high-quality instruction that meets the individual needs of their students. Differentiation suggestions, slide decks, digital interactives, and multiple forms of assessment are just a few of the resources built into the teacher materials.

### Accessibility

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

The curriculum also carries a focus on readability. By eliminating unnecessary words and using clear sentences, the *Eureka Math*<sup>2</sup> teacher-writers have created one of the most readable mathematics curricula on the market. The curriculum’s readability and accessibility help all students see themselves as mathematical thinkers and doers who are fully capable of owning their mathematics learning.

### Math Confidence

*Eureka Math*<sup>2</sup> fosters a classroom culture of learning by encouraging student-led discourse and cognitive engagement that results in confident learners. By leveraging consistent models, routines, and progressions, teachers can remove barriers and allow all students an avenue to success. Within the digital platform, each grade includes wordless videos and digital interactives that spark students’ curiosity and help them make conceptual connections. Using the *Learn* books, students wonder, explore, and make sense of mathematics, which helps them develop a strong, positive mathematical identity.

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

## Operations and Algebraic Thinking

Represent and solve problems involving multiplication and division.

Alabama Standards for Mathematical Content	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
<p><b>3.OA.1</b></p> <p>Illustrate the product of two whole numbers as equal groups by identifying the number of groups and the number in each group and represent as a written expression.</p>	<p>3 M1 Lesson 2: Interpret equal groups as multiplication.</p> <p>3 M1 Lesson 3: Relate multiplication to the array model.</p> <p>3 M1 Lesson 4: Interpret the meaning of factors as number of groups or number in each group.</p> <p>3 M1 Lesson 10: Demonstrate the commutative property of multiplication using a unit of 2 and the array model.</p> <p>3 M1 Lesson 11: Demonstrate the commutative property of multiplication using a unit of 4 and the array model.</p> <p>3 M1 Lesson 13: Demonstrate the commutative property of multiplication using a unit of 3 and the array model.</p> <p>3 M3 Lesson 15: Reason about and explain patterns of multiplication and division with units of 1 and 0.</p> <p>3 M3 Lesson 18: Create multiplication and division word problems.</p>
<p><b>3.OA.2</b></p> <p>Illustrate and interpret the quotient of two whole numbers as the number of objects in each group or the number of groups when the whole is partitioned into equal shares.</p>	<p>3 M1 Lesson 6: Explore measurement and partitive division by modeling concretely and drawing.</p> <p>3 M1 Lesson 7: Model measurement and partitive division by drawing equal groups.</p> <p>3 M1 Lesson 8: Model measurement and partitive division by drawing arrays.</p> <p>3 M1 Lesson 9: Represent and solve division word problems using drawings and equations.</p> <p>3 M1 Lesson 15: Model division as an unknown factor problem.</p> <p>3 M1 Lesson 16: Model the quotient as the number of groups using units of 2, 3, 4, 5, and 10.</p> <p>3 M1 Lesson 17: Model the quotient as the size of each group using units of 2, 3, 4, 5, and 10.</p> <p>3 M1 Lesson 18: Represent and solve measurement and partitive division word problems.</p> <p>3 M3 Lesson 15: Reason about and explain patterns of multiplication and division with units of 1 and 0.</p> <p>3 M3 Lesson 18: Create multiplication and division word problems.</p>

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**Aligned Components of *Eureka Math*<sup>2</sup>**

<p><b>3.OA.3</b></p> <p>Solve word situations using multiplication and division within 100 involving equal groups, arrays, and measurement quantities; represent the situation using models, drawings, and equations with a symbol for the unknown number.</p>	<p>3 M1 Lesson 5: Represent and solve multiplication word problems by using drawings and equations.</p> <p>3 M1 Lesson 8: Model measurement and partitive division by drawing arrays.</p> <p>3 M1 Lesson 9: Represent and solve division word problems using drawings and equations.</p> <p>3 M1 Lesson 16: Model the quotient as the number of groups using units of 2, 3, 4, 5, and 10.</p> <p>3 M1 Lesson 17: Model the quotient as the size of each group using units of 2, 3, 4, 5, and 10.</p> <p>3 M1 Lesson 18: Represent and solve measurement and partitive division word problems.</p> <p>3 M1 Lesson 22: Represent and solve two-step word problems using the properties of multiplication.</p> <p>3 M1 Lesson 23: Represent and solve two-step word problems using drawings and equations.</p> <p>3 M3 Lesson 2: Count by units of 6 to multiply and divide by using arrays.</p> <p>3 M3 Lesson 7: Count by units of 7 to multiply and divide by using arrays and tape diagrams.</p> <p>3 M3 Lesson 8: Use the break apart and distribute strategy to multiply with units of 7.</p> <p>3 M3 Lesson 12: Solve one-step word problems involving multiplication and division.</p> <p>3 M3 Lesson 25: Apply multiplication and division concepts to complete a multi-part task.</p>
<p><b>3.OA.4</b></p> <p>Determine the unknown whole number in a multiplication or division equation relating three whole numbers.</p>	<p>3 M1 Lesson 15: Model division as an unknown factor problem.</p> <p>3 M1 Lesson 16: Model the quotient as the number of groups using units of 2, 3, 4, 5, and 10.</p> <p>3 M1 Lesson 17: Model the quotient as the size of each group using units of 2, 3, 4, 5, and 10.</p> <p>3 M3 Lesson 2: Count by units of 6 to multiply and divide by using arrays.</p> <p>3 M3 Lesson 3: Count by units of 8 to multiply and divide by using arrays.</p> <p>3 M3 Lesson 7: Count by units of 7 to multiply and divide by using arrays and tape diagrams.</p>

## Operations and Algebraic Thinking

Understand properties of multiplication and the relationship between multiplication and division.

### Alabama Standards for Mathematical Content

### Aligned Components of *Eureka Math*<sup>2</sup>

#### 3.OA.5

Develop and apply properties of operations as strategies to multiply and divide.

- 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 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.

**Alabama Standards for Mathematical Content**

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<p><b>3.OA.6</b></p> <p>Use the relationship between multiplication and division to represent division as an equation with an unknown factor.</p>	<p>3 M1 Lesson 15: Model division as an unknown factor problem.</p> <p>3 M1 Lesson 16: Model the quotient as the number of groups using units of 2, 3, 4, 5, and 10.</p> <p>3 M1 Lesson 17: Model the quotient as the size of each group using units of 2, 3, 4, 5, and 10.</p> <p>3 M1 Lesson 20: Use the distributive property to break apart division problems into known facts.</p> <p>3 M3 Lesson 2: Count by units of 6 to multiply and divide by using arrays.</p> <p>3 M3 Lesson 7: Count by units of 7 to multiply and divide by using arrays and tape diagrams.</p>
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**Operations and Algebraic Thinking**  
**Multiply and divide within 100.**

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**Aligned Components of *Eureka Math*<sup>2</sup>**

<p><b>3.OA.7</b></p> <p>Use strategies based on properties and patterns of multiplication to demonstrate fluency with multiplication and division within 100.</p>	<p>3 M1 Lesson 12: Demonstrate the distributive property using a unit of 4.</p> <p>3 M1 Lesson 14: Demonstrate the distributive property using units of 2, 3, 4, 5, and 10.</p> <p>3 M1 Lesson 19: Use the distributive property to break apart multiplication problems into known facts.</p> <p>3 M1 Lesson 20: Use the distributive property to break apart division problems into known facts.</p> <p>3 M1 Lesson 21: Compose and decompose arrays to create expressions with three factors.</p> <p>3 M1 Lesson 22: Represent and solve two-step word problems using the properties of multiplication.</p> <p>3 M1 Lesson 23: Represent and solve two-step word problems using drawings and equations.</p> <p>3 M3 Lesson 1: Organize, count, and represent a collection of objects.</p> <p>3 M3 Lesson 14: Apply strategies and identify patterns to multiply with units of 9.</p> <p>3 M3 Lesson 17: Identify and complete patterns with input-output tables.</p> <p>3 M3 Lesson 24: Organize, count, and represent a collection of objects.</p> <p>3 M6 Lesson 26: Fluently multiply and divide within 100 and add and subtract within 1,000.</p>
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**Alabama Standards for  
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**Aligned Components of *Eureka Math*<sup>2</sup>**

<p><b>3.OA.7.a</b></p> <p>Fluently determine all products obtained by multiplying two one-digit numbers.</p>	<p>3 M1 Lesson 12: Demonstrate the distributive property using a unit of 4.</p> <p>3 M1 Lesson 14: Demonstrate the distributive property using units of 2, 3, 4, 5, and 10.</p> <p>3 M1 Lesson 19: Use the distributive property to break apart multiplication problems into known facts.</p> <p>3 M1 Lesson 20: Use the distributive property to break apart division problems into known facts.</p> <p>3 M1 Lesson 21: Compose and decompose arrays to create expressions with three factors.</p> <p>3 M1 Lesson 22: Represent and solve two-step word problems using the properties of multiplication.</p> <p>3 M1 Lesson 23: Represent and solve two-step word problems using drawings and equations.</p> <p>3 M3 Lesson 14: Apply strategies and identify patterns to multiply with units of 9.</p> <p>3 M6 Lesson 26: Fluently multiply and divide within 100 and add and subtract within 1,000.</p>
<p><b>3.OA.7.b</b></p> <p>State automatically all products of two one-digit numbers by the end of third grade.</p>	<p>3 M1 Lesson 12: Demonstrate the distributive property using a unit of 4.</p> <p>3 M1 Lesson 14: Demonstrate the distributive property using units of 2, 3, 4, 5, and 10.</p> <p>3 M1 Lesson 19: Use the distributive property to break apart multiplication problems into known facts.</p> <p>3 M1 Lesson 20: Use the distributive property to break apart division problems into known facts.</p> <p>3 M1 Lesson 21: Compose and decompose arrays to create expressions with three factors.</p> <p>3 M1 Lesson 22: Represent and solve two-step word problems using the properties of multiplication.</p> <p>3 M1 Lesson 23: Represent and solve two-step word problems using drawings and equations.</p> <p>3 M3 Lesson 14: Apply strategies and identify patterns to multiply with units of 9.</p> <p>3 M6 Lesson 26: Fluently multiply and divide within 100 and add and subtract within 1,000.</p>

## Operations and Algebraic Thinking

Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Alabama Standards for Mathematical Content	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
<p><b>3.OA.8</b></p> <p>Determine and justify solutions for two-step word problems using the four operations and write an equation with a letter standing for the unknown quantity. Determine reasonableness of answers using number sense, context, mental computation, and estimation strategies including rounding.</p>	<p>3 M1 Lesson 22: Represent and solve two-step word problems using the properties of multiplication.</p> <p>3 M1 Lesson 23: Represent and solve two-step word problems using drawings and equations.</p> <p>3 M2 Lesson 25: Solve two-step word problems.</p> <p>3 M3 Lesson 19: Solve two-step word problems involving all four operations and assess the reasonableness of solutions.</p> <p>3 M3 Lesson 22: Solve two-step word problems involving multiplication of single-digit factors and multiples of 10.</p> <p>3 M3 Lesson 25: Apply multiplication and division concepts to complete a multi-part task.</p> <p>3 M6 Lesson 7: Count coins and create money word problems.</p>
<p><b>3.OA.9</b></p> <p>Recognize and explain arithmetic patterns using properties of operations.</p>	<p>3 M3 Lesson 13: Count by units of 9 to multiply.</p> <p>3 M3 Lesson 14: Apply strategies and identify patterns to multiply with units of 9.</p> <p>3 M3 Lesson 15: Reason about and explain patterns of multiplication and division with units of 1 and 0.</p> <p>3 M3 Lesson 16: Identify patterns using the multiplication table.</p> <p>3 M3 Lesson 17: Identify and complete patterns with input-output tables.</p> <p>3 M3 Lesson 23: Identify patterns and apply strategies to multiply with units of 11 and 12.</p>

## Operations with Numbers: Base Ten

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

Alabama Standards for Mathematical Content	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
<p><b>3.NBT.10</b></p> <p>Identify the nearest 10 or 100 when rounding whole numbers, using place value understanding.</p>	<p>3 M2 Lesson 8: Read temperatures on a thermometer using number line concepts.</p> <p>3 M2 Lesson 9: Round two-digit numbers to the nearest ten on the vertical number line.</p> <p>3 M2 Lesson 10: Round two- and three-digit numbers to the nearest ten on the vertical number line.</p> <p>3 M2 Lesson 11: Round to the nearest hundred on the vertical number line.</p> <p>3 M2 Lesson 12: Estimate sums and differences by rounding.</p>
<p><b>3.NBT.11</b></p> <p>Use various strategies to add and subtract fluently within 1,000.</p>	<p>3 M2 Lesson 12: Estimate sums and differences by rounding.</p> <p>3 M2 Lesson 14: Use place value understanding to add and subtract like units.</p> <p>3 M2 Lesson 15: Use the associative property to make the next ten to add.</p> <p>3 M2 Lesson 16: Use compensation to add.</p> <p>3 M2 Lesson 17: Use place value understanding to subtract efficiently using take from a ten.</p> <p>3 M2 Lesson 18: Use place value understanding to subtract efficiently using take from a hundred.</p> <p>3 M2 Lesson 19: Use compensation to subtract.</p> <p>3 M2 Lesson 20: Add measurements using the standard algorithm to compose larger units once.</p> <p>3 M2 Lesson 21: Add measurements using the standard algorithm to compose larger units twice.</p> <p>3 M2 Lesson 22: Subtract measurements using the standard algorithm to decompose larger units once.</p> <p>3 M2 Lesson 23: Subtract measurements using the standard algorithm to decompose larger units twice.</p> <p>3 M2 Lesson 24: Subtract measurements using the standard algorithm to decompose larger units across two place values.</p> <p>3 M6 Lesson 26: Fluently multiply and divide within 100 and add and subtract within 1,000.</p>

**Alabama Standards for Mathematical Content**

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<p><b>3.NBT.12</b></p> <p>Use concrete materials and pictorial models based on place value and properties of operations to find the product of a one-digit whole number by a multiple of ten (from 10 to 90).</p>	<p>3 M3 Lesson 20: Multiply by multiples of 10 by using the place value chart.</p> <p>3 M3 Lesson 21: Multiply by multiples of 10 by using place value strategies and the associative property.</p> <p>3 M3 Lesson 22: Solve two-step word problems involving multiplication of single-digit factors and multiples of 10.</p>
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**Operations with Numbers: Fractions**  
 Develop understanding of fractions as numbers.

**Alabama Standards for Mathematical Content**

**Aligned Components of *Eureka Math*<sup>2</sup>**

<p><b>3.NF.13</b></p> <p>Demonstrate that a unit fraction represents one part of an area model or length model of a whole that has been equally partitioned; explain that a numerator greater than one indicates the number of unit pieces represented by the fraction.</p>	<p>3 M5 Lesson 1: Partition a whole into equal parts and name the fractional unit.</p> <p>3 M5 Lesson 2: Partition different wholes into fractional units concretely.</p> <p>3 M5 Lesson 3: Partition a whole into fractional units by folding fraction strips.</p> <p>3 M5 Lesson 4: Partition a whole into fractional units pictorially and identify the unit fraction.</p> <p>3 M5 Lesson 5: Partition a whole into fractional units and write fractions in fraction form.</p> <p>3 M5 Lesson 6: Build non-unit fractions less than 1 from unit fractions concretely.</p> <p>3 M5 Lesson 7: Identify and represent a whole as two parts: a unit fraction and a non-unit fraction.</p> <p>3 M5 Lesson 8: Identify and represent a whole as two non-unit fractions.</p> <p>3 M5 Lesson 9: Compare unit fractions by reasoning about their size concretely.</p> <p>3 M5 Lesson 10: Compare non-unit fractions less than 1 with the same numerator by using tape diagrams.</p> <p>3 M5 Lesson 27: Apply fraction concepts to complete a multi-part task.</p>
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<p><b>3.NF.14</b></p> <p>Interpret a fraction as a number on the number line; locate or represent fractions on a number line diagram.</p>	<p><i>This standard is fully addressed by the lessons aligned to its subsections.</i></p>
<p><b>3.NF.14.a</b></p> <p>Represent a unit fraction <math>\frac{1}{b}</math> on a number line by defining the interval from 0 to 1 as the whole and partitioning it into <math>b</math> equal parts as specified by the denominator.</p>	<p>3 M5 Lesson 11: Locate fractions from 0 to 1 on a number line by using fraction tiles.</p> <p>3 M5 Lesson 12: Represent fractions from 0 to 1 on a number line.</p> <p>3 M5 Lesson 15: Identify fractions on a ruler as numbers on a number line.</p>
<p><b>3.NF.14.b</b></p> <p>Represent a fraction <math>\frac{a}{b}</math> on a number line by marking off <math>a</math> lengths of size <math>\frac{1}{b}</math> from zero.</p>	<p>3 M5 Lesson 11: Locate fractions from 0 to 1 on a number line by using fraction tiles.</p> <p>3 M5 Lesson 12: Represent fractions from 0 to 1 on a number line.</p> <p>3 M5 Lesson 15: Identify fractions on a ruler as numbers on a number line.</p> <p>3 M5 Lesson 18: Compare fractions with like units by using a number line.</p> <p>3 M5 Lesson 26: Create a ruler with 1-inch, half-inch, and quarter-inch intervals.</p> <p>3 M5 Lesson 27: Apply fraction concepts to complete a multi-part task.</p>

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<p><b>3.NF.15</b></p> <p>Explain equivalence and compare fractions by reasoning about their size using visual fraction models and number lines.</p>	<p>3 M5 Lesson 13: Identify equivalent fractions from 0 to 1 with tape diagrams and on number lines.</p> <p>3 M5 Lesson 14: Recognize that equivalent fractions share the same location on a number line.</p> <p>3 M5 Lesson 16: Measure lengths and record data on a line plot.</p> <p>3 M5 Lesson 17: Represent fractions greater than 1 on a number line and identify fractions equivalent to whole numbers.</p> <p>3 M5 Lesson 22: Identify fractions equivalent to whole numbers by using number lines.</p> <p>3 M5 Lesson 23: Reason to find fractions equivalent to whole numbers by using patterns and number lines.</p> <p>3 M5 Lesson 24: Generate equivalent fractions greater than 1 by using a number line.</p> <p>3 M5 Lesson 26: Create a ruler with 1-inch, half-inch, and quarter-inch intervals.</p>
<p><b>3.NF.15.a</b></p> <p>Express whole numbers as fractions and recognize fractions that are equivalent to whole numbers.</p>	<p>3 M5 Lesson 8: Identify and represent a whole as two non-unit fractions.</p> <p>3 M5 Lesson 17: Represent fractions greater than 1 on a number line and identify fractions equivalent to whole numbers.</p> <p>3 M5 Lesson 22: Identify fractions equivalent to whole numbers by using number lines.</p> <p>3 M5 Lesson 23: Reason to find fractions equivalent to whole numbers by using patterns and number lines.</p> <p>3 M5 Lesson 24: Generate equivalent fractions greater than 1 by using a number line.</p> <p>3 M5 Lesson 25: Express whole numbers as fractions with a denominator of 1.</p>

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<p><b>3.NF.15.b</b></p> <p>Compare two fractions with the same numerator or with the same denominator by reasoning about their size (recognizing that fractions must refer to the same whole for the comparison to be valid). Record comparisons using <math>&lt;</math>, <math>&gt;</math>, or <math>=</math> and justify conclusions.</p>	<p>3 M5 Lesson 9: Compare unit fractions by reasoning about their size concretely.</p> <p>3 M5 Lesson 10: Compare non-unit fractions less than 1 with the same numerator by using tape diagrams.</p> <p>3 M5 Lesson 18: Compare fractions with like units by using a number line.</p> <p>3 M5 Lesson 19: Compare fractions with unlike units but the same numerator by using number lines.</p> <p>3 M5 Lesson 20: Compare fractions with related units by using a number line.</p> <p>3 M5 Lesson 21: Compare various fractions by representing them on number lines.</p> <p>3 M5 Lesson 27: Apply fraction concepts to complete a multi-part task.</p>
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**Data Analysis**

**Represent and interpret data.**

**Alabama Standards for Mathematical Content**

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<p><b>3.DA.16</b></p> <p>For a given or collected set of data, create a scaled (one-to-many) picture graph and scaled bar graph to represent a data set with several categories.</p>	<p>3 M2 Lesson 13: Collect and represent data in a scaled bar graph and solve related problems.</p> <p>3 M6 Lesson 22: Generate categorical data and represent it by using a scaled picture graph.</p> <p>3 M6 Lesson 23: Solve word problems by creating scaled picture graphs and scaled bar graphs.</p>
<p><b>3.DA.16.a</b></p> <p>Determine a simple probability from a context that includes a picture.</p>	<p><i>Supplemental material is necessary to address this standard.</i></p>

Alabama Standards for Mathematical Content	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
<p><b>3.DA.16.b</b></p> <p>Solve one- and two-step “how many more” and “how many less” problems using information presented in scaled graphs.</p>	<p>3 M2 Lesson 13: Collect and represent data in a scaled bar graph and solve related problems.</p> <p>3 M6 Lesson 22: Generate categorical data and represent it by using a scaled picture graph.</p> <p>3 M6 Lesson 23: Solve word problems by creating scaled picture graphs and scaled bar graphs.</p>
<p><b>3.DA.17</b></p> <p>Measure lengths using rulers marked with halves and fourths of an inch to generate data and create a line plot marked off in appropriate units to display the data.</p>	<p>3 M5 Lesson 16: Measure lengths and record data on a line plot.</p> <p>3 M6 Lesson 20: Record measurement data in a line plot.</p> <p>3 M6 Lesson 21: Create and analyze a line plot for measurement data to the nearest half unit and quarter unit.</p>

## Measurement

Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.

Alabama Standards for Mathematical Content	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
<p><b>3.M.18</b></p> <p>Tell and write time to the nearest minute; measure time intervals in minutes (within 90 minutes).</p>	<p>3 M6 Lesson 1: Relate skip-counting by fives on the clock to telling time on the number line.</p> <p>3 M6 Lesson 2: Count by fives and ones on the number line as a strategy for telling time to the nearest minute on the clock.</p> <p>3 M6 Lesson 3: Solve time word problems where the end time is unknown.</p> <p>3 M6 Lesson 4: Solve time word problems where the start time is unknown.</p> <p>3 M6 Lesson 5: Solve time word problems where the change in time is unknown.</p> <p>3 M6 Lesson 6: Solve time word problems and use time data to create a line plot.</p>

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<p><b>3.M.18.a</b></p> <p>Solve real-world problems involving addition and subtraction of time intervals in minutes by representing the problem on a number line diagram.</p>	<p>3 M6 Lesson 3: Solve time word problems where the end time is unknown.</p> <p>3 M6 Lesson 4: Solve time word problems where the start time is unknown.</p> <p>3 M6 Lesson 5: Solve time word problems where the change in time is unknown.</p> <p>3 M6 Lesson 6: Solve time word problems and use time data to create a line plot.</p>
<p><b>3.M.19</b></p> <p>Estimate and measure liquid volumes and masses of objects using liters (l), grams (g), and kilograms (kg).</p>	<p>3 M2 Lesson 2: Estimate the weight of familiar objects and read scales when weighing objects.</p> <p>3 M2 Lesson 3: Use all four operations to solve one-step word problems involving weight.</p> <p>3 M2 Lesson 4: Connect decomposition of 1 liter to the decomposition of 1 thousand.</p> <p>3 M2 Lesson 5: Estimate and measure liquid volume using a vertical number line and connect composition of 1 liter to composition of 1 thousand.</p>
<p><b>3.M.19.a</b></p> <p>Use the four operations to solve one-step word problems involving masses or volumes given in the same metric units.</p>	<p>3 M2 Lesson 1: Connect the composition of 1 kilogram to the composition of 1 thousand.</p> <p>3 M2 Lesson 3: Use all four operations to solve one-step word problems involving weight.</p> <p>3 M2 Lesson 6: Use all four operations to solve one-step word problems involving liquid volume.</p> <p>3 M2 Lesson 7: Solve one-step word problems using metric units.</p>

## Measurement

**Geometric measurement: understand concepts of area and relate area to multiplication and to addition.**

Alabama Standards for Mathematical Content	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
<p><b>3.M.20</b></p> <p>Find the area of a rectangle with whole number side lengths by tiling without gaps or overlaps and counting unit squares.</p>	<p>3 M4 Lesson 1: Explore attributes of squares, rectangles, and trapezoids.</p> <p>3 M4 Lesson 2: Recognize area as an attribute of polygons.</p> <p>3 M4 Lesson 3: Tile polygons to find their areas.</p> <p>3 M4 Lesson 4: Compose rectangles to compare areas.</p> <p>3 M4 Lesson 5: Relate side lengths to the number of tiles on a side.</p> <p>3 M4 Lesson 16: Solve historical math problems involving area.</p>
<p><b>3.M.21</b></p> <p>Count unit squares (square cm, square m, square in, square ft, and improvised or non-standard units) to determine area.</p>	<p>3 M4 Lesson 2: Recognize area as an attribute of polygons.</p> <p>3 M4 Lesson 3: Tile polygons to find their areas.</p> <p>3 M4 Lesson 4: Compose rectangles to compare areas.</p> <p>3 M4 Lesson 5: Relate side lengths to the number of tiles on a side.</p> <p>3 M4 Lesson 6: Tile rectangles with squares to make arrays and relate the side lengths to the area.</p> <p>3 M4 Lesson 7: Draw rows and columns to complete a rectangular array and determine its area.</p> <p>3 M4 Lesson 16: Solve historical math problems involving area.</p> <p>3 M4 Lesson 18: Find the area of shapes and represent area data on a line plot.</p>

**Alabama Standards for  
Mathematical Content**

**Aligned Components of *Eureka Math*<sup>2</sup>**

<p><b>3.M.22</b></p> <p>Relate area to the operations of multiplication using real-world problems, concrete materials, mathematical reasoning, and the distributive property.</p>	<p>3 M4 Lesson 6: Tile rectangles with squares to make arrays and relate the side lengths to area.</p> <p>3 M4 Lesson 7: Draw rows and columns to complete a rectangular array and determine its area.</p> <p>3 M4 Lesson 8: Determine the area of a rectangle by using side lengths.</p> <p>3 M4 Lesson 9: Multiply side lengths to find the area of a rectangle.</p> <p>3 M4 Lesson 10: Compose large rectangles and reason about their areas.</p> <p>3 M4 Lesson 11: Decompose to find the total area of a rectangle.</p> <p>3 M4 Lesson 12: Find all possible side lengths of rectangles with a given area.</p> <p>3 M4 Lesson 13: Apply area understanding to real-world situations.</p> <p>3 M4 Lesson 14: Reason to find the area of composite shapes by using grids.</p> <p>3 M4 Lesson 15: Reason to find the area of composite shapes by using rectangles.</p> <p>3 M4 Lesson 17: Apply area concepts to a real-world context.</p> <p>3 M4 Lesson 18: Find the area of shapes and represent area data on a line plot.</p> <p>3 M4 Lesson 19: Apply area concepts to complete a multi-part task.</p>
<p><b>3.M.23</b></p> <p>Decompose rectilinear figures into smaller rectangles to find the area, using concrete materials.</p>	<p>3 M4 Lesson 10: Compose large rectangles and reason about their areas.</p> <p>3 M4 Lesson 11: Decompose to find the total area of a rectangle.</p> <p>3 M4 Lesson 14: Reason to find the area of composite shapes by using grids.</p> <p>3 M4 Lesson 15: Reason to find the area of composite shapes by using rectangles.</p> <p>3 M4 Lesson 17: Apply area concepts to a real-world context.</p> <p>3 M4 Lesson 18: Find the area of shapes and represent area data on a line plot.</p> <p>3 M4 Lesson 19: Apply area concepts to complete a multi-part task.</p>

## Measurement

**Geometric measurement: Recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.**

Alabama Standards for Mathematical Content	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
<p><b>3.M.24</b></p> <p>Construct rectangles with the same perimeter and different areas or the same area and different perimeters.</p>	<p>3 M6 Lesson 13: Decompose quadrilaterals to understand perimeter as the boundary of a shape.</p> <p>3 M6 Lesson 14: Measure side lengths in whole-number units to determine the perimeters of polygons.</p> <p>3 M6 Lesson 15: Recognize perimeter as an attribute of shapes and solve problems with unknown measurements.</p> <p>3 M6 Lesson 16: Solve problems to determine the perimeters of rectangles with the same area.</p> <p>3 M6 Lesson 17: Solve problems to determine the areas of rectangles with the same perimeter.</p> <p>3 M6 Lesson 18: Solve real-world problems involving perimeter and unknown measurements by using all four operations.</p> <p>3 M6 Lesson 19: Measure the perimeter of various circles to the nearest quarter inch by using string.</p>
<p><b>3.M.25</b></p> <p>Solve real-world problems involving perimeters of polygons, including finding the perimeter given the side lengths and finding an unknown side length of rectangles.</p>	<p>3 M6 Lesson 13: Decompose quadrilaterals to understand perimeter as the boundary of a shape.</p> <p>3 M6 Lesson 14: Measure side lengths in whole-number units to determine the perimeters of polygons.</p> <p>3 M6 Lesson 15: Recognize perimeter as an attribute of shapes and solve problems with unknown measurements.</p> <p>3 M6 Lesson 16: Solve problems to determine the perimeters of rectangles with the same area.</p> <p>3 M6 Lesson 17: Solve problems to determine the areas of rectangles with the same perimeter.</p> <p>3 M6 Lesson 18: Solve real-world problems involving perimeter and unknown measurements by using all four operations.</p> <p>3 M6 Lesson 19: Measure the perimeter of various circles to the nearest quarter inch by using string.</p>

## Geometry

### Reason with shapes and their attributes.

Alabama Standards for Mathematical Content	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
<p><b>3.G.26</b></p> <p>Recognize and describe polygons (up to 8 sides), triangles, and quadrilaterals (rhombuses, rectangles, and squares) based on the number of sides and the presence or absence of square corners.</p>	<p>3 M4 Lesson 1: Explore attributes of squares, rectangles, and trapezoids.</p> <p>3 M4 Lesson 5: Relate side lengths to the number of tiles on a side.</p> <p>3 M6 Lesson 8: Compare and classify quadrilaterals.</p> <p>3 M6 Lesson 9: Compare and classify other polygons.</p> <p>3 M6 Lesson 10: Draw polygons with specified attributes.</p> <p>3 M6 Lesson 11: Reason about composing polygons by using tetrominoes.</p> <p>3 M6 Lesson 12: Reason about composing polygons by using tangrams.</p>
<p><b>3.G.26.a</b></p> <p>Draw examples of quadrilaterals that are and are not rhombuses, rectangles, and squares.</p>	<p>3 M6 Lesson 10: Draw polygons with specified attributes.</p> <p>3 M6 Lesson 11: Reason about composing polygons by using tetrominoes.</p> <p>3 M6 Lesson 12: Reason about composing polygons by using tangrams.</p>