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## Grade 2 | Kentucky Mathematics Course Standards (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.

Standards for Mathematical Practice	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 addition and subtraction.

Kentucky Mathematics Course Standards	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
<p><b>KY.2.OA.1</b></p> <p>Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart and comparing, with unknowns in all positions, by using drawings and equations with a symbol for the unknown number to represent the problem.</p>	<p>2 M1 Lesson 22: Use counting strategies to solve <i>add to with change unknown</i> word problems.</p> <p>2 M2 Lesson 7: Solve word problems by using estimation and simplifying strategies for addition.</p> <p>2 M2 Lesson 13: Estimate and represent to solve <i>take from</i> word problems.</p> <p>2 M2 Lesson 19: Solve word problems with simplifying strategies for subtraction.</p> <p>2 M2 Lesson 26: Solve <i>add to</i> and <i>take from with start unknown</i> word problems.</p> <p>2 M2 Lesson 27: Solve two-step word problems within 100.</p> <p>2 M4 Lesson 3: Solve multi-step word problems and reason about equal expressions.</p> <p>2 M4 Lesson 4: Represent and solve <i>compare with bigger unknown</i> word problems.</p> <p>2 M4 Lesson 22: Solve <i>compare with smaller unknown</i> word problems.</p> <p>2 M4 Lesson 23: Solve two-step addition and subtraction word problems.</p> <p>2 M6 Lesson 1: Compose equal groups and write repeated addition equations.</p> <p>2 M6 Lesson 4: Represent equal groups with a tape diagram.</p> <p>2 M6 Lesson 17: Solve word problems that involve equal groups and arrays.</p>

## Operations and Algebraic Thinking

### Add and subtract within 20.

Kentucky Mathematics Course Standards	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
<p><b>KY.2.OA.2</b></p> <p>Fluently add and subtract within 20 using mental strategies.</p>	<p>2 M4 Lesson 7: Use concrete models to add and relate them to written recordings.</p> <p>2 M4 Lesson 8: Use place value drawings to represent addition and relate them to written recordings, part 1.</p> <p>2 M4 Lesson 9: Use place value drawings to represent addition and relate them to written recordings, part 2.</p> <p>2 M4 Lesson 10: Choose and defend efficient solution strategies for addition.</p> <p>2 M4 Lesson 11: Choose and defend efficient strategies to add up to four two-digit numbers.</p> <p>2 M4 Lesson 16: Use concrete models to subtract and relate them to written recordings.</p> <p>2 M4 Lesson 17: Use place value drawings to represent subtraction with one decomposition and relate them to written recordings.</p> <p>2 M4 Lesson 18: Use place value drawings to represent subtraction with up to two decompositions and relate them to written recordings.</p> <p>2 M4 Lesson 19: Use place value drawings to represent subtraction from numbers with 0 in the tens and/or ones place and relate to a written recording.</p> <p>2 M4 Lesson 20: Subtract by using multiple strategies and defend an efficient strategy.</p> <p>2 M6 Lesson 18: Use various strategies to fluently add and subtract within 100 and know all sums and differences within 20 from memory.</p>

## Operations and Algebraic Thinking

Work with equal groups of objects to gain foundations for multiplication.

Kentucky Mathematics Course Standards	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
<p><b>KY.2.OA.3</b></p> <p>Determine whether a group of objects (up to 20) has an odd or even number of members; write an equation to express an even number as a sum of two equal addends.</p>	<p>2 M6 Lesson 5: Compose arrays with rows and columns and use a repeated count to find the total.</p> <p>2 M6 Lesson 6: Decompose arrays into rows and columns and relate them to repeated addition.</p> <p>2 M6 Lesson 7: Distinguish between rows and columns and use math drawings to represent arrays.</p> <p>2 M6 Lesson 8: Use square tiles to create arrays with gaps.</p> <p>2 M6 Lesson 9: Determine the attributes of a square array.</p> <p>2 M6 Lesson 10: Use math drawings to compose a rectangle.</p> <p>2 M6 Lesson 11: Decompose an array to find the total efficiently.</p> <p>2 M6 Lesson 12: Reason about how equal arrays can be composed differently.</p> <p>2 M6 Lesson 13: Decompose an array and relate it to a number bond.</p> <p>2 M6 Lesson 14: Relate doubles to even numbers and write equations to express the sums.</p> <p>2 M6 Lesson 15: Pair objects and skip-count to determine whether a number is even or odd.</p> <p>2 M6 Lesson 16: Use rectangular arrays to investigate combinations of even and odd numbers.</p> <p>2 M6 Lesson 17: Solve word problems that involve equal groups and arrays.</p>

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<p><b>KY.2.OA.4</b></p> <p>Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.</p>	<p>2 M6 Lesson 1: Compose equal groups and write repeated addition equations.</p> <p>2 M6 Lesson 2: Organize, count, and represent a collection of objects.</p> <p>2 M6 Lesson 3: Use math drawings to represent equal groups and relate them to repeated addition.</p> <p>2 M6 Lesson 4: Represent equal groups with a tape diagram.</p> <p>2 M6 Lesson 5: Compose arrays with rows and columns and use a repeated count to find the total.</p> <p>2 M6 Lesson 6: Decompose arrays into rows and columns and relate them to repeated addition.</p> <p>2 M6 Lesson 7: Distinguish between rows and columns and use math drawings to represent arrays.</p> <p>2 M6 Lesson 8: Use square tiles to create arrays with gaps.</p> <p>2 M6 Lesson 9: Determine the attributes of a square array.</p> <p>2 M6 Lesson 10: Use math drawings to compose a rectangle.</p> <p>2 M6 Lesson 11: Decompose an array to find the total efficiently.</p> <p>2 M6 Lesson 12: Reason about how equal arrays can be composed differently.</p> <p>2 M6 Lesson 13: Decompose an array and relate it to a number bond.</p> <p>2 M6 Lesson 17: Solve word problems that involve equal groups and arrays.</p>
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## Number and Operations in Base Ten

### Understand place value.

Kentucky Mathematics Course Standards	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
<p><b>KY.2.NBT.1</b></p> <p>Understand that the three digits of a three-digit number represent amounts of hundreds, tens and ones. Understand the following as special cases:</p>	<p>2 M1 Lesson 24: Count up to 1,000 by using place value units.</p> <p>2 M1 Lesson 25: Write three-digit numbers in unit form and show the value that each digit represents.</p> <p>2 M1 Lesson 27: Read, write, and relate base-ten numbers in all forms.</p> <p>2 M1 Lesson 28: Use place value understanding to count and exchange \$1, \$10, and \$100 bills.</p> <p>2 M1 Lesson 30: Determine how many \$10 bills are equal to \$1,000.</p> <p>2 M1 Lesson 31: Count the total value of ones, tens, and hundreds with place value disks.</p> <p>2 M1 Lesson 32: Exchange 10 ones for 1 ten, 10 tens for 1 hundred, and 10 hundreds for 1 thousand.</p> <p>2 M1 Lesson 33: Model numbers with more than 9 ones or 9 tens.</p> <p>2 M1 Lesson 34: Problem solve in situations with more than 9 ones or 9 tens.</p>
<p><b>KY.2.NBT.1.a</b></p> <p>100 can be thought of as a bundle of ten tens—called a “hundred.”</p>	<p>2 M1 Lesson 20: Count and bundle ones, tens, and hundreds to 1,000.</p> <p>2 M1 Lesson 23: Organize, count, and record a collection of objects.</p> <p>2 M1 Lesson 28: Use place value understanding to count and exchange \$1, \$10, and \$100 bills.</p> <p>2 M1 Lesson 30: Determine how many \$10 bills are equal to \$1,000.</p> <p>2 M1 Lesson 32: Exchange 10 ones for 1 ten, 10 tens for 1 hundred, and 10 hundreds for 1 thousand.</p> <p>2 M1 Lesson 34: Problem solve in situations with more than 9 ones or 9 tens.</p>
<p><b>KY.2.NBT.1.b</b></p> <p>The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).</p>	<p>2 M1 Lesson 24: Count up to 1,000 by using place value units.</p> <p>2 M1 Lesson 25: Write three-digit numbers in unit form and show the value that each digit represents.</p> <p>2 M1 Lesson 27: Read, write, and relate base-ten numbers in all forms.</p> <p>2 M1 Lesson 28: Use place value understanding to count and exchange \$1, \$10, and \$100 bills.</p> <p>2 M1 Lesson 30: Determine how many \$10 bills are equal to \$1,000.</p> <p>2 M1 Lesson 31: Count the total value of ones, tens, and hundreds with place value disks.</p>

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<p><b>KY.2.NBT.1.b <i>continued</i></b></p>	<p>2 M1 Lesson 32: Exchange 10 ones for 1 ten, 10 tens for 1 hundred, and 10 hundreds for 1 thousand.</p> <p>2 M1 Lesson 33: Model numbers with more than 9 ones or 9 tens.</p> <p>2 M1 Lesson 34: Problem solve in situations with more than 9 ones or 9 tens.</p>
<p><b>KY.2.NBT.2</b></p> <p>Count forwards and backwards within 1,000; skip-count by 5s, 10s and 100s.</p>	<p>2 M1 Lesson 21: Count efficiently within 1,000 by using ones, tens, and hundreds.</p> <p>2 M1 Lesson 22: Use counting strategies to solve <i>add to with change unknown</i> word problems.</p> <p>2 M1 Lesson 23: Organize, count, and record a collection of objects.</p> <p>2 M1 Lesson 24: Count up to 1,000 by using place value units.</p> <p>2 M1 Lesson 29: Count by \$1, \$10, and \$100.</p> <p>2 M1 Lesson 30: Determine how many \$10 bills are equal to \$1,000.</p> <p>2 M1 Lesson 37: Organize, count, represent, and compare a collection of objects.</p> <p>2 M3 Lesson 17: Relate the clock to a number line to count by fives.</p> <p>2 M3 Lesson 18: Tell time to the nearest 5 minutes.</p> <p>2 M6 Lesson 14: Relate doubles to even numbers and write equations to express the sums.</p>
<p><b>KY.2.NBT.3</b></p> <p>Read and write numbers to 1,000 using base-ten numerals, number names and expanded form.</p>	<p>2 M1 Lesson 23: Organize, count, and record a collection of objects.</p> <p>2 M1 Lesson 26: Write base-ten numbers in expanded form.</p> <p>2 M1 Lesson 27: Read, write, and relate base-ten numbers in all forms.</p> <p>2 M1 Lesson 31: Count the total value of ones, tens, and hundreds with place value disks.</p> <p>2 M1 Lesson 38: Compare numbers in different forms.</p>
<p><b>KY.2.NBT.4</b></p> <p>Compare two three-digit numbers based on meanings of the hundreds, tens and ones digits, using <math>&gt;</math>, <math>=</math>, and <math>&lt;</math> symbols to record the results of comparisons.</p>	<p>2 M1 Lesson 35: Compare three-digit numbers by using <math>&gt;</math>, <math>=</math>, and <math>&lt;</math>.</p> <p>2 M1 Lesson 36: Apply place value understanding to compare by using <math>&gt;</math>, <math>=</math>, and <math>&lt;</math>.</p> <p>2 M1 Lesson 37: Organize, count, represent, and compare a collection of objects.</p> <p>2 M1 Lesson 38: Compare numbers in different forms.</p>

## Number and Operations in Base Ten

Use place value understanding and properties of operations to add and subtract.

Kentucky Mathematics Course Standards	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
<p><b>KY.2.NBT.5</b></p> <p>Fluently add and subtract within 100 using strategies based on place value, properties of operations and/or the relationship between addition and subtraction.</p>	<p>2 M4 Lesson 4: Represent and solve <i>compare with bigger unknown</i> word problems.</p> <p>2 M4 Lesson 5: Use the associative property to make a benchmark number to add within 1,000.</p> <p>2 M4 Lesson 6: Use compensation to add within 1,000.</p> <p>2 M4 Lesson 10: Choose and defend efficient solution strategies for addition.</p> <p>2 M4 Lesson 11: Choose and defend efficient strategies to add up to four two-digit numbers.</p> <p>2 M4 Lesson 12: Take from a ten or a hundred to subtract.</p> <p>2 M4 Lesson 13: Use compensation to subtract within 1,000.</p> <p>2 M4 Lesson 20: Subtract by using multiple strategies and defend an efficient strategy.</p> <p>2 M4 Lesson 22: Solve <i>compare with smaller unknown</i> word problems.</p> <p>2 M4 Lesson 23: Solve two-step addition and subtraction word problems.</p> <p>2 M6 Lesson 18: Use various strategies to fluently add and subtract within 100 and know all sums and differences within 20 from memory.</p>
<p><b>KY.2.NBT.6</b></p> <p>Add up to four two-digit numbers using strategies based on place value and properties of operations.</p>	<p>2 M2 Lesson 1: Reason about addition with four addends.</p> <p>2 M4 Lesson 11: Choose and defend efficient strategies to add up to four two-digit numbers.</p>
<p><b>KY.2.NBT.7</b></p> <p>Add and subtract within 1,000.</p>	<p>2 M2 Lesson 2: Break apart and add like units.</p> <p>2 M2 Lesson 3: Use compensation to add within 100.</p> <p>2 M2 Lesson 4: Use compensation to add within 200.</p> <p>2 M2 Lesson 5: Make a ten to add within 100.</p> <p>2 M2 Lesson 6: Make a ten to add within 200.</p> <p>2 M2 Lesson 7: Solve word problems by using estimation and simplifying strategies for addition.</p>

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

<p><b>KY.2.NBT.7 <i>continued</i></b></p>	<p>2 M2 Lesson 8: Use concrete models to compose a ten.</p> <p>2 M2 Lesson 9: Use place value drawings to compose a ten and relate to written recordings.</p> <p>2 M2 Lesson 10: Use concrete models to compose a hundred.</p> <p>2 M2 Lesson 11: Use math drawings to compose a hundred and relate to written recordings</p> <p>2 M2 Lesson 12: Use place value drawings to compose a ten and a hundred with two- and three-digit addends. Relate to written recordings.</p> <p>2 M2 Lesson 13: Estimate and represent to solve <i>take from</i> word problems.</p> <p>2 M2 Lesson 14: Use addition and subtraction strategies to find an unknown part.</p> <p>2 M2 Lesson 15: Use compensation to subtract within 100.</p> <p>2 M2 Lesson 16: Use compensation to subtract within 200.</p> <p>2 M2 Lesson 17: Take from a ten to subtract within 200.</p> <p>2 M2 Lesson 18: Take from a hundred to subtract within 200.</p> <p>2 M2 Lesson 19: Solve word problems with simplifying strategies for subtraction.</p> <p>2 M2 Lesson 20: Reason about when to unbundle a ten to subtract.</p> <p>2 M2 Lesson 21: Use concrete models to decompose a ten with two-digit totals.</p> <p>2 M2 Lesson 22: Use place value drawings to decompose a ten and relate them to written recordings.</p> <p>2 M2 Lesson 23: Use concrete models and drawings to decompose a hundred.</p> <p>2 M2 Lesson 24: Use place value drawings to decompose a hundred and relate them to written recordings.</p> <p>2 M2 Lesson 25: Use place value drawings to subtract with two decompositions.</p> <p>2 M4 Lesson 5: Use the associative property to make a benchmark number to add within 1,000.</p> <p>2 M4 Lesson 6: Use compensation to add within 1,000.</p> <p>2 M4 Lesson 7: Use concrete models to add and relate them to written recordings.</p>

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

<p><b>KY.2.NBT.7 <i>continued</i></b></p>	<p>2 M4 Lesson 8: Use place value drawings to represent addition and relate them to written recordings, part 1.</p> <p>2 M4 Lesson 9: Use place value drawings to represent addition and relate them to written recordings, part 2.</p> <p>2 M4 Lesson 10: Choose and defend efficient solution strategies for addition.</p> <p>2 M4 Lesson 12: Take from a ten or a hundred to subtract.</p> <p>2 M4 Lesson 13: Use compensation to subtract within 1,000.</p> <p>2 M4 Lesson 14: Use compensation to keep a constant difference by adding the same amount to both numbers.</p> <p>2 M4 Lesson 15: Use compensation to keep a constant difference by subtracting the same amount from both numbers.</p> <p>2 M4 Lesson 16: Use concrete models to subtract and relate them to written recordings.</p> <p>2 M4 Lesson 17: Use place value drawings to represent subtraction with one decomposition and relate them to written recordings.</p> <p>2 M4 Lesson 18: Use place value drawings to represent subtraction with up to two decompositions and relate them to written recordings.</p> <p>2 M4 Lesson 19: Use place value drawings to represent subtraction from numbers with 0 in the tens and/or ones place and relate to a written recording.</p> <p>2 M4 Lesson 20: Subtract by using multiple strategies and defend an efficient strategy.</p> <p>2 M4 Lesson 21: Apply strategies to find sums and differences and relate addition to subtraction.</p> <p>2 M4 Lesson 22: Solve <i>compare with smaller unknown</i> word problems.</p> <p>2 M4 Lesson 24: Organize, count, and represent a collection of objects.</p>
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**Kentucky Mathematics Course Standards**

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

<p><b>KY.2.NBT.7.a</b></p> <p>Represent and solve addition and subtraction problems using ...</p> <ul style="list-style-type: none"> <li>• concrete models or drawings;</li> <li>• strategies based on place value;</li> <li>• properties of operations;</li> <li>• the relationship between addition and subtraction; and</li> <li>• relate drawings and strategies to expressions or equations.</li> </ul>	<p>2 M2 Lesson 2: Break apart and add like units.</p> <p>2 M2 Lesson 3: Use compensation to add within 100.</p> <p>2 M2 Lesson 4: Use compensation to add within 200.</p> <p>2 M2 Lesson 5: Make a ten to add within 100.</p> <p>2 M2 Lesson 6: Make a ten to add within 200.</p> <p>2 M2 Lesson 7: Solve word problems by using estimation and simplifying strategies for addition.</p> <p>2 M2 Lesson 8: Use concrete models to compose a ten.</p> <p>2 M2 Lesson 9: Use place value drawings to compose a ten and relate to written recordings.</p> <p>2 M2 Lesson 10: Use concrete models to compose a hundred.</p> <p>2 M2 Lesson 11: Use math drawings to compose a hundred and relate to written recordings.</p> <p>2 M2 Lesson 12: Use place value drawings to compose a ten and a hundred with two- and three-digit addends. Relate to written recordings.</p> <p>2 M2 Lesson 13: Estimate and represent to solve <i>take from</i> word problems.</p> <p>2 M2 Lesson 14: Use addition and subtraction strategies to find an unknown part.</p> <p>2 M2 Lesson 15: Use compensation to subtract within 100.</p> <p>2 M2 Lesson 16: Use compensation to subtract within 200.</p> <p>2 M2 Lesson 17: Take from a ten to subtract within 200.</p> <p>2 M2 Lesson 18: Take from a hundred to subtract within 200.</p> <p>2 M2 Lesson 19: Solve word problems with simplifying strategies for subtraction.</p> <p>2 M2 Lesson 20: Reason about when to unbundle a ten to subtract.</p> <p>2 M2 Lesson 21: Use concrete models to decompose a ten with two-digit totals.</p> <p>2 M2 Lesson 22: Use place value drawings to decompose a ten and relate them to written recordings.</p> <p>2 M2 Lesson 23: Use concrete models and drawings to decompose a hundred.</p> <p>2 M2 Lesson 24: Use place value drawings to decompose a hundred and relate them to written recordings.</p>
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**Kentucky Mathematics Course Standards**

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

<p><b>KY.2.NBT.7.a <i>continued</i></b></p>	<p>2 M2 Lesson 25: Use place value drawings to subtract with two decompositions.</p> <p>2 M4 Lesson 5: Use the associative property to make a benchmark number to add within 1,000.</p> <p>2 M4 Lesson 6: Use compensation to add within 1,000.</p> <p>2 M4 Lesson 7: Use concrete models to add and relate them to written recordings.</p> <p>2 M4 Lesson 8: Use place value drawings to represent addition and relate them to written recordings, part 1.</p> <p>2 M4 Lesson 9: Use place value drawings to represent addition and relate them to written recordings, part 2.</p> <p>2 M4 Lesson 10: Choose and defend efficient solution strategies for addition.</p> <p>2 M4 Lesson 12: Take from a ten or a hundred to subtract.</p> <p>2 M4 Lesson 13: Use compensation to subtract within 1,000.</p> <p>2 M4 Lesson 14: Use compensation to keep a constant difference by adding the same amount to both numbers.</p> <p>2 M4 Lesson 15: Use compensation to keep a constant difference by subtracting the same amount from both numbers.</p> <p>2 M4 Lesson 16: Use concrete models to subtract and relate them to written recordings.</p> <p>2 M4 Lesson 17: Use place value drawings to represent subtraction with one decomposition and relate them to written recordings.</p> <p>2 M4 Lesson 18: Use place value drawings to represent subtraction with up to two decompositions and relate them to written recordings.</p> <p>2 M4 Lesson 19: Use place value drawings to represent subtraction from numbers with 0 in the tens and/or ones place and relate to a written recording.</p> <p>2 M4 Lesson 20: Subtract by using multiple strategies and defend an efficient strategy.</p> <p>2 M4 Lesson 21: Apply strategies to find sums and differences and relate addition to subtraction.</p> <p>2 M4 Lesson 22: Solve <i>compare with smaller unknown</i> word problems.</p> <p>2 M4 Lesson 24: Organize, count, and represent a collection of objects.</p>
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**Kentucky Mathematics Course Standards**

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

<p><b>KY.2.NBT.7.b</b></p> <p>Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.</p>	<p>2 M2 Lesson 2: Break apart and add like units.</p> <p>2 M2 Lesson 4: Use compensation to add within 200.</p> <p>2 M2 Lesson 6: Make a ten to add within 200.</p> <p>2 M2 Lesson 7: Solve word problems by using estimation and simplifying strategies for addition.</p> <p>2 M2 Lesson 9: Use place value drawings to compose a ten and relate to written recordings.</p> <p>2 M2 Lesson 10: Use concrete models to compose a hundred.</p> <p>2 M2 Lesson 11: Use math drawings to compose a hundred and relate to written recordings.</p> <p>2 M2 Lesson 12: Use place value drawings to compose a ten and a hundred with two- and three-digit addends. Relate to written recordings.</p> <p>2 M2 Lesson 14: Use addition and subtraction strategies to find an unknown part.</p> <p>2 M2 Lesson 16: Use compensation to subtract within 200.</p> <p>2 M2 Lesson 17: Take from a ten to subtract within 200.</p> <p>2 M2 Lesson 18: Take from a hundred to subtract within 200.</p> <p>2 M2 Lesson 20: Reason about when to unbundle a ten to subtract.</p> <p>2 M2 Lesson 22: Use place value drawings to decompose a ten and relate them to written recordings.</p> <p>2 M2 Lesson 23: Use concrete models and drawings to decompose a hundred.</p> <p>2 M2 Lesson 24: Use place value drawings to decompose a hundred and relate them to written recordings.</p> <p>2 M2 Lesson 25: Use place value drawings to subtract with two decompositions.</p> <p>2 M4 Lesson 5: Use the associative property to make a benchmark number to add within 1,000.</p> <p>2 M4 Lesson 6: Use compensation to add within 1,000.</p> <p>2 M4 Lesson 7: Use concrete models to add and relate them to written recordings.</p> <p>2 M4 Lesson 8: Use place value drawings to represent addition and relate them to written recordings, part 1.</p>
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**Kentucky Mathematics Course Standards**

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

<p><b>KY.2.NBT.7.b <i>continued</i></b></p>	<p>2 M4 Lesson 9: Use place value drawings to represent addition and relate them to written recordings, part 2.</p> <p>2 M4 Lesson 10: Choose and defend efficient solution strategies for addition.</p> <p>2 M4 Lesson 12: Take from a ten or a hundred to subtract.</p> <p>2 M4 Lesson 13: Use compensation to subtract within 1,000.</p> <p>2 M4 Lesson 14: Use compensation to keep a constant difference by adding the same amount to both numbers.</p> <p>2 M4 Lesson 15: Use compensation to keep a constant difference by subtracting the same amount from both numbers.</p> <p>2 M4 Lesson 16: Use concrete models to subtract and relate them to written recordings.</p> <p>2 M4 Lesson 17: Use place value drawings to represent subtraction with one decomposition and relate them to written recordings.</p> <p>2 M4 Lesson 18: Use place value drawings to represent subtraction with up to two decompositions and relate them to written recordings.</p> <p>2 M4 Lesson 19: Use place value drawings to represent subtraction from numbers with 0 in the tens and/or ones place and relate to a written recording.</p> <p>2 M4 Lesson 20: Subtract by using multiple strategies and defend an efficient strategy.</p> <p>2 M4 Lesson 21: Apply strategies to find sums and differences and relate addition to subtraction.</p> <p>2 M4 Lesson 24: Organize, count, and represent a collection of objects.</p>
<p><b>KY.2.NBT.8</b></p> <p>Mentally add 10 or 100 to a given number 100–900 and mentally subtract 10 or 100 from a given number 100–900.</p>	<p>2 M4 Lesson 1: Organize, count, and represent a collection of objects.</p> <p>2 M4 Lesson 2: Mentally add and subtract multiples of 10 and 100 with unknowns in various positions.</p> <p>2 M4 Lesson 3: Solve multi-step word problems and reason about equal expressions.</p>

**Kentucky Mathematics Course Standards**

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

<p><b>KY.2.NBT.9</b></p> <p>Explain why addition and subtraction strategies work, using place value and the properties of operations.</p>	<p>2 M4 Lesson 5: Use the associative property to make a benchmark number to add within 1,000.</p> <p>2 M4 Lesson 6: Use compensation to add within 1,000.</p> <p>2 M4 Lesson 10: Choose and defend efficient solution strategies for addition.</p> <p>2 M4 Lesson 11: Choose and defend efficient strategies to add up to four two-digit numbers.</p> <p>2 M4 Lesson 12: Take from a ten or a hundred to subtract.</p> <p>2 M4 Lesson 13: Use compensation to subtract within 1,000.</p> <p>2 M4 Lesson 14: Use compensation to keep a constant difference by adding the same amount to both numbers.</p> <p>2 M4 Lesson 15: Use compensation to keep a constant difference by subtracting the same amount from both numbers.</p> <p>2 M4 Lesson 20: Subtract by using multiple strategies and defend an efficient strategy.</p> <p>2 M4 Lesson 21: Apply strategies to find sums and differences and relate addition to subtraction.</p>
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## Measurement and Data

Measure and estimate lengths in standard units.

Kentucky Mathematics Course Standards	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
<p><b>KY.2.MD.1</b></p> <p>Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks and measuring tapes.</p>	<p>2 M1 Lesson 5: Connect measurement to physical units by iterating a centimeter cube.</p> <p>2 M1 Lesson 6: Make a 10 cm ruler and measure objects.</p> <p>2 M1 Lesson 7: Measure lengths and relate 10 cm and 1 cm.</p> <p>2 M1 Lesson 8: Make a meter stick and measure with various tools.</p> <p>2 M1 Lesson 13: Estimate and measure height to model metric relationships.</p> <p>2 M5 Lesson 8: Iterate an inch tile to create a unit ruler and measure to the nearest inch.</p> <p>2 M5 Lesson 9: Use an inch ruler and a yard stick to estimate and measure the length of various objects.</p>
<p><b>KY.2.MD.2</b></p> <p>Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.</p>	<p>2 M5 Lesson 10: Measure an object twice by using different length units and compare and relate measurement to unit size.</p>
<p><b>KY.2.MD.3</b></p> <p>Estimate lengths using units of inches, feet, yards, centimeters and meters.</p>	<p>2 M1 Lesson 11: Estimate and compare lengths.</p> <p>2 M1 Lesson 13: Estimate and measure height to model metric relationships.</p> <p>2 M5 Lesson 9: Use an inch ruler and a yard stick to estimate and measure the length of various objects.</p>
<p><b>KY.2.MD.4</b></p> <p>Measure to determine how much longer one object is than another, expressing the length difference in terms of either a customary or metric standard length unit.</p>	<p>2 M1 Lesson 11: Estimate and compare lengths.</p> <p>2 M1 Lesson 12: Model and reason about the difference in length.</p> <p>2 M1 Lesson 14: Represent and compare students' heights.</p> <p>2 M5 Lesson 11: Measure to compare differences in lengths.</p>

## Measurement and Data

Relate addition and subtraction to length.

Kentucky Mathematics Course Standards	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
<p><b>KY.2.MD.5</b></p> <p>Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units by using drawings and equations with a symbol for the unknown number to represent the problem.</p>	<p>2 M1 Lesson 17: Represent and solve comparison problems by using measurement contexts.</p> <p>2 M1 Lesson 18: Solve <i>compare with difference unknown</i> word problems by using measurement contexts.</p> <p>2 M1 Lesson 19: Solve <i>compare with difference unknown</i> word problems in various contexts.</p> <p>2 M5 Lesson 13: Solve word problems that involve measurements and reason about estimates.</p> <p>2 M5 Lesson 14: Solve addition and subtraction two-step word problems that involve length.</p>
<p><b>KY.2.MD.6</b></p> <p>Represent whole numbers as lengths from 0 on a number line with equally spaced points corresponding to the numbers 0, 1, 2, ... and represent whole-number sums and differences within 100 on a number line.</p>	<p>2 M1 Lesson 15: Use a measuring tape as a number line to add efficiently.</p> <p>2 M1 Lesson 16: Use a measuring tape as a number line to subtract efficiently.</p> <p>2 M1 Lesson 17: Represent and solve comparison problems by using measurement contexts.</p> <p>2 M1 Lesson 18: Solve <i>compare with difference unknown</i> word problems by using measurement contexts.</p> <p>2 M1 Lesson 19: Solve <i>compare with difference unknown</i> word problems in various contexts.</p> <p>2 M5 Lesson 12: Identify unknown numbers on a number line by using the interval as a reference point.</p>

## Measurement and Data

### Work with time and money.

Kentucky Mathematics Course Standards	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
<p><b>KY.2.MD.7</b></p> <p>Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.</p>	<p>2 M3 Lesson 14: Distinguish between a.m. and p.m.</p> <p>2 M3 Lesson 15: Recognize time as measurement units.</p> <p>2 M3 Lesson 16: Use a clock to tell time to the half hour or quarter hour.</p> <p>2 M3 Lesson 17: Relate the clock to a number line to count by fives.</p> <p>2 M3 Lesson 18: Tell time to the nearest 5 minutes.</p>
<p><b>KY.2.MD.8</b></p> <p>Solve word problems with adding and subtracting within 100, (not using dollars and cents simultaneously) using the \$ and ¢ symbols appropriately (not including decimal notation).</p>	<p>2 M5 Lesson 1: Organize, count, and represent a collection of coins.</p> <p>2 M5 Lesson 2: Use the fewest number of coins to make a given value.</p> <p>2 M5 Lesson 3: Solve one- and two-step word problems to find the total value of a group of coins.</p> <p>2 M5 Lesson 4: Solve one- and two-step word problems to find the total value of a group of bills.</p> <p>2 M5 Lesson 5: Use different strategies to make 1 dollar or to make change from 1 dollar.</p> <p>2 M5 Lesson 6: Solve word problems by using different ways to make change from 1 dollar.</p> <p>2 M5 Lesson 7: Solve word problems by using bills and coins.</p>

## Measurement and Data

Understand and apply the statistics process.

Kentucky Mathematics Course Standards	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
<p><b>KY.2.MD.9</b> Investigate questions involving measurements.</p>	<p>1 Data Investigation: Airplanes 2 Data Investigation: Growing Bean Plants</p>
<p><b>KY.2.MD.9.a</b> Identify a statistical question focused on measurements.</p>	<p>1 Data Investigation: Airplanes 2 Data Investigation: Growing Bean Plants</p>
<p><b>KY.2.MD.9.b</b> Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object.</p>	<p>2 M5 Lesson 15: Use measurement data to create a line plot. 2 M5 Lesson 16: Create a line plot to represent data and ask and answer questions.</p>
<p><b>KY.2.MD.9.c</b> Show the measurements by making a dot plot, where the horizontal scale is marked off in whole-number units.</p>	<p>2 M5 Lesson 15: Use measurement data to create a line plot. 2 M5 Lesson 16: Create a line plot to represent data and ask and answer questions.</p>
<p><b>KY.2.MD.10</b> Create a pictograph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put together, take-apart and compare problems using information presented in a bar graph.</p>	<p>2 M1 Lesson 1: Draw and label a picture graph to represent data. 2 M1 Lesson 2: Draw and label a bar graph to represent data. 2 M1 Lesson 3: Use information presented in a bar graph to solve <i>put together</i> and <i>take apart</i> problems. 2 M1 Lesson 4: Use information presented in a bar graph to solve <i>compare</i> problems.</p>

## Geometry

### Reason with shapes and their attributes.

Kentucky Mathematics Course Standards	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
<p><b>KY.2.G.1</b></p> <p>Recognize and draw shapes having specified attributes, such as a given number of angles or sides. Identify triangles, quadrilaterals, pentagons, hexagons and cubes (identify number of faces).</p>	<p>2 M3 Lesson 1: Determine the defining attributes of a polygon.</p> <p>2 M3 Lesson 2: Use attributes to identify, build, and describe two-dimensional shapes.</p> <p>2 M3 Lesson 3: Identify, build, and describe right angles and parallel lines.</p> <p>2 M3 Lesson 4: Use attributes to identify, classify, and compose different quadrilaterals.</p> <p>2 M3 Lesson 5: Relate the square to the cube and use attributes to describe a cube.</p> <p>2 M3 Lesson 6: Recognize that a whole polygon can be decomposed into smaller parts and the parts can be composed to make a whole.</p> <p>2 M3 Lesson 7: Combine shapes to create a composite shape and create a new shape from composite shapes.</p>
<p><b>KY.2.G.2</b></p> <p>Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.</p>	<p>2 M6 Lesson 11: Decompose an array to find the total efficiently.</p> <p>2 M6 Lesson 12: Reason about how equal arrays can be composed differently.</p> <p>2 M6 Lesson 13: Decompose an array and relate it to a number bond.</p>
<p><b>KY.2.G.3</b></p> <p>Partition circles and rectangles into two, three, or four equal shares; describe the shares using the words <i>halves</i>, <i>thirds</i>, <i>half of</i>, <i>a third of</i>, etc.; and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.</p>	<p>2 M3 Lesson 8: Create composite shapes by using equal parts and name them as halves, thirds, and fourths.</p> <p>2 M3 Lesson 9: Interpret equal shares in composite shapes as halves, thirds, and fourths.</p> <p>2 M3 Lesson 10: Partition circles and rectangles into equal parts and describe those parts as halves.</p> <p>2 M3 Lesson 11: Partition circles and rectangles into equal parts, and describe those parts as halves, thirds, or fourths.</p> <p>2 M3 Lesson 12: Describe a whole by the number of equal parts in halves, thirds, and fourths.</p> <p>2 M3 Lesson 13: Recognize that equal parts of an identical rectangle can be different shapes.</p>