



Grade 1 | Kentucky Mathematics Course Standards Correlation to Eureka Math^{2®}

When the original *Eureka Math*® curriculum was released, it quickly became the most widely used K-5 mathematics curriculum in the country. Now, the Great Minds® teacher-writers have created *Eureka Math*^{2®}, 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 Math² employs streamlined materials that allow teachers to plan more efficiently and focus their energy on delivering high-quality instruction that meets the individual needs of their students. Differentiation suggestions, slide decks, digital interactives, and multiple forms of assessment are just a few of the resources built right into the teacher materials.

Accessibility

Eureka Math² incorporates Universal Design for Learning principles so all learners can access the mathematics and take on challenging math concepts. Student supports are built into the instructional design and are clearly identified in the Teach book. Further, the curriculum carries a focus on readability. By eliminating unnecessary words and using simple, clear sentences, the Eureka Math² teacher-writers have created one of the most readable mathematics curricula on the market. The curriculum's readability and accessibility help all students see themselves as mathematical thinkers and doers who are fully capable of owning their mathematics learning.

Digital Engagement

The digital elements of *Eureka 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

Aligned Components of Eureka Math²

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

Operations and Algebraic Thinking

Represent and solve problems using addition and subtraction.

Kentucky Mathematics Course Standards

Aligned Components of Eureka Math²

KY.1.OA.1

Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions.

1 M2 Lesson 1: Represent *result unknown* problems and record as addition or subtraction number sentences.

1 M2 Topic B: Relate and Distinguish Addition and Subtraction

1 M2 Lesson 8: Interpret and find an unknown change.

1 M2 Lesson 9: Represent and solve add to with change unknown problems.

1 M2 Lesson 11: Represent and solve take from with change unknown problems.

1 M2 Lesson 13: Represent and solve add to and take from with change unknown problems.

1 M2 Lesson 14: Represent and solve put together/take apart with addend unknown problems.

1 M2 Lesson 21: Represent and solve compare with difference unknown problems, part 1.

1 M2 Lesson 22: Represent and solve compare with difference unknown problems, part 2.

1 M3 Lesson 11: Represent and compare related situation equations, part 1.

1 M3 Lesson 12: Represent and compare related situation equations, part 2.

1 M3 Lesson 19: Solve take from with change unknown problems with totals in the teens.

1 M3 Lesson 26: Pose and solve varied word problems.

1 M4 Lesson 10: Compare to find how much longer.

1 M4 Lesson 11: Compare to find how much shorter.

1 M4 Lesson 12: Find the unknown longer length.

1 M4 Lesson 13: Find the unknown shorter length.

1 M6 Topic E: Deepening Problem Solving

Aligned Components of Eureka Math²

KY.1.OA.2

Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, by using objects, drawings and equations with a symbol for one unknown number to represent the problem.

1 M3 Lesson 2: Make ten with three addends.

1 M3 Lesson 3: Represent and solve three-addend word problems.

1 M3 Lesson 11: Represent and compare related situation equations, part 1.

1 M3 Lesson 12: Represent and compare related situation equations, part 2.

1 M3 Lesson 26: Pose and solve varied word problems.

Operations and Algebraic Thinking

Understand and apply properties of operations and the relationship between addition and subtraction.

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Aligned Components of Eureka Math²

KY.1.OA.3	1 M1 Lesson 9: Count on from both parts and record part-total relationships.
Apply properties of operations as	1 M1 Lesson 15: Use the commutative property to count on from the larger addend.
strategies to add and subtract.	1 M1 Lesson 16: Use the commutative property to find larger totals.
	1 M3 Topic A: Make Easier Problems with Three Addends
	1 M3 Topic B: Make Easier Problems to Add
	1 M3 Topic C: Make Easier Addition Problems with a Linear Model
	1 M3 Lesson 26: Pose and solve varied word problems.
KY.1.OA.4	1 M2 Lesson 17: Use related addition facts to subtract from 10.
Understand subtraction as an unknown-addend problem.	1 M2 Lesson 18: Use related addition facts to subtract.
	1 M2 Lesson 19: Determine the value of the unknown in various positions.

Operations and Algebraic Thinking

Add and subtract within 20.

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KY.1.OA.5	1 M1 Topic B: Count On from a Visible Part
Relate counting to addition and	1 M1 Lesson 13: Count on from an addend in add to with result unknown situations.
subtraction.	1 M1 Lesson 14: Count on to find the total of an addition expression.
	1 M1 Lesson 17: Add 0 and 1 to any number.
	1 M1 Lesson 23: Find the totals of doubles +1 facts.
	1 M1 Lesson 24: Use known facts to make easier problems.
	1 M2 Lesson 2: Subtract all or subtract 0.
	1 M2 Lesson 3: Subtract 1 or subtract 1 less than the total.
	1 M2 Lesson 4: Use fingers to subtract 4, 5, and 6 efficiently.
	1 M2 Lesson 7: Count on or count back to solve related addition and subtraction problems.
	1 M2 Lesson 16: Compare the efficiency of counting on and counting back to subtract.
KY.1.OA.6	This standard is fully addressed by the lessons aligned to its subsections.
Add and subtract within 20.	
KY.1.OA.6.a	1 M1 Lesson 17: Add 0 and 1 to any number.
Fluently add and subtract within 10.	1 M1 Lesson 20: Find all two-part expressions equal to 6.
	1 M1 Lesson 21: Find all two-part expressions equal to 7 and 8.
	1 M1 Lesson 22: Find all two-part expressions equal to 9 and 10.
	1 M2 Lesson 2: Subtract all or subtract 0.
	1 M2 Lesson 3: Subtract 1 or subtract 1 less than the total.
	1 M2 Lesson 4: Use fingers to subtract 4, 5, and 6 efficiently.

Aligned Components of Eureka Math²

KY.1.OA.6.b

Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making 10; decomposing a number leading to a 10; using the relationship between addition and subtraction; creating equivalent but easier or known sums.

- 1 M1 Lesson 14: Count on to find the total of an addition expression.
- 1 M1 Lesson 17: Add 0 and 1 to any number.
- 1 M1 Lesson 20: Find all two-part expressions equal to 6.
- 1 M1 Lesson 21: Find all two-part expressions equal to 7 and 8.
- 1 M1 Lesson 22: Find all two-part expressions equal to 9 and 10.
- 1 M1 Lesson 23: Find the totals of doubles +1 facts.
- 1 M1 Lesson 24: Use known facts to make easier problems.
- 1 M2 Lesson 2: Subtract all or subtract 0.
- 1 M2 Lesson 3: Subtract 1 or subtract 1 less than the total.
- 1 M2 Lesson 4: Use fingers to subtract 4, 5, and 6 efficiently.
- 1 M2 Lesson 7: Count on or count back to solve related addition and subtraction problems.
- 1 M2 Lesson 16: Compare the efficiency of counting on and counting back to subtract.
- 1 M3 Lesson 1: Group to make ten when there are three parts.
- 1 M3 Lesson 4: Use properties of addition to make three-addend expressions easier.
- 1 M3 Topic B: Make Easier Problems to Add
- 1 M3 Lesson 13: Count on to make ten within 20.
- $1\,\mathrm{M3}$ Lesson 14: Count on to make the next ten within 100.
- 1 M3 Lesson 17: Add a two-digit number and a one-digit number.
- 1 M3 Lesson 18: Subtract a one-digit number from a two-digit number.
- 1 M3 Lesson 20: Use strategies to subtract from a teen number.
- 1 M3 Lesson 21: Take from ten to subtract from a teen number, part 1.
- 1 M3 Lesson 22: Take from ten to subtract from a teen number, part 2.
- 1 M3 Lesson 23: Subtract by counting on.
- 1 M3 Lesson 24: Decompose the subtrahend to count back.
- 1 M3 Lesson 25: Choose a strategy to make an easier problem.

Operations and Algebraic Thinking

Work with addition and subtraction equations.

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KY.1.OA.7	1 M1 Lesson 18: Determine whether number sentences are true or false.
Understand the meaning of the equal	1 M1 Lesson 19: Reason about the meaning of the equal sign.
sign and determine if equations involving addition and subtraction are true or false.	1 M1 Lesson 24: Use known facts to make easier problems.
addition and subtraction are true or raise.	1 M2 Lesson 20: Add or subtract to make groups equal.
	1 M5 Lesson 18: Determine if number sentences involving addition and subtraction are true or false.
	1 M5 Lesson 22: Decompose both addends and add like units.
	1 M5 Lesson 23: Decompose an addend and add tens first.
	1 M5 Lesson 24: Decompose an addend to make the next ten.
	1 M5 Lesson 25: Compare equivalent expressions used to solve two-digit addition equations.
KY.1.OA.8	1 M2 Lesson 10: Represent and find an unknown addend in equations.
Determine the unknown whole number	1 M2 Lesson 12: Represent and find an unknown subtrahend in equations.
in an addition or subtraction equation relating three whole numbers.	1 M2 Lesson 13: Represent and solve add to and take from with change unknown problems.
	1 M2 Lesson 15: Relate counting on and counting back to find an unknown part.
	1 M2 Lesson 19: Determine the value of the unknown in various positions.

Number and Operations in Base Ten

Extend the counting sequence.

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KY.1.NBT.1	This standard is fully addressed by the lessons aligned to its subsections.
Count and represent numbers.	

Aligned Components of Eureka Math²

KY.1.NBT.1.a Count forward to and backward from 120, starting at any number less than 120.	 1 M3 Lesson 15: Count and record a collection of objects. 1 M5 Lesson 2: Count a collection and record the total in units of tens and ones. 1 M6 Topic D: Count and Represent Numbers Beyond 100
KY.1.NBT.1.b In this range, read and write numerals and represent a number of objects with a written numeral.	 1 M3 Lesson 15: Count and record a collection of objects. 1 M3 Lesson 16: Identify ten as a unit. 1 M5 Lesson 2: Count a collection and record the total in units of tens and ones. 1 M5 Lesson 3: Recognize the place value of digits in a two-digit number. 1 M5 Lesson 5: Reason about equivalent representations of a number. 1 M6 Topic D: Count and Represent Numbers Beyond 100

Number and Operations in Base Ten

Understand place value.

Kentucky Mathematics Course Standards

Aligned Components of Eureka Math²

KY.1.NBT.2

Understand the two-digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases: 1 M1 Lesson 12: Count on from 10 to find an unknown total.

1 M3 Topic D: Reason about Ten as a Unit to Add or Subtract

1 M4 Lesson 8: Draw to represent a length measurement.

1 M4 Lesson 9: Represent a total length as units of tens and ones.

1 M5 Lesson 2: Count a collection and record the total in units of tens and ones.

1 M5 Lesson 3: Recognize the place value of digits in a two-digit number.

1 M5 Lesson 4: Represent a number in multiple ways by trading 10 ones for a ten.

1 M5 Lesson 5: Reason about equivalent representations of a number.

1 M5 Lesson 8: Use place value reasoning to write and compare 2 two-digit numbers.

Aligned Components of Eureka Math²

KY.1.NBT.2.a	1 M3 Lesson 15: Count and record a collection of objects.
10 can be thought of as a bundle of ten ones—called a "ten."	1 M3 Lesson 16: Identify ten as a unit.
	1 M4 Lesson 8: Draw to represent a length measurement.
	1 M4 Lesson 9: Represent a total length as units of tens and ones.
	1 M5 Lesson 2: Count a collection and record the total in units of tens and ones.
	1 M5 Lesson 3: Recognize the place value of digits in a two-digit number.
	1M5 Lesson 5: Reason about equivalent representations of a number.
KY.1.NBT.2.b	1 M1 Lesson 12: Count on from 10 to find an unknown total.
The numbers from $11\ \mathrm{to}\ 19$ are composed	1 M3 Lesson 16: Identify ten as a unit.
of a ten and one, two, three, four, five, six, seven, eight or nine ones.	1 M3 Lesson 17: Add a two-digit number and a one-digit number.
seven, eight of fille ones.	1 M3 Lesson 18: Subtract a one-digit number from a two-digit number.
	1 M3 Lesson 19: Solve take from with change unknown problems with totals in the teens.
	1 M4 Lesson 8: Draw to represent a length measurement.
	1 M4 Lesson 9: Represent a total length as units of tens and ones.
	1 M5 Lesson 4: Represent a number in multiple ways by trading 10 ones for a ten.
	1M5 Lesson 5: Reason about equivalent representations of a number.
KY.1.NBT.2.c	1 M3 Lesson 17: Add a two-digit number and a one-digit number.
The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six,	1 M3 Lesson 18: Subtract a one-digit number from a two-digit number.
	1 M3 Lesson 19: Solve take from with change unknown problems with totals in the teens.
seven, eight or nine tens (and 0 ones).	1 M5 Lesson 4: Represent a number in multiple ways by trading 10 ones for a ten.
	1 M5 Lesson 5: Reason about equivalent representations of a number.

Aligned Components of Eureka Math²

KY.1.NBT.3

Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <.

1 M1 Lesson 2: Organize and represent data to compare two categories.

1 M1 Lesson 3: Sort to represent and compare data with three categories.

1 M1 Lesson 4: Find the total number of data points and compare categories in a picture graph.

1 M1 Lesson 6: Use tally marks to represent and compare data.

1 M4 Lesson 5: Measure and compare lengths.

1 M5 Topic B: Use Place Value to Compare

Number and Operations in Base Ten

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

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KY.1.NBT.4	1 M5 Topic C: Addition of One-Digit and Two-Digit Numbers
Add within 100 including adding a	1 M5 Topic D: Addition and Subtraction of Tens
two-digit number and a one-digit	1 M5 Topic E: Addition of Two-Digit Numbers
number. Add a two-digit number and a multiple of $10.$	1 M6 Topic F: Extending Addition to 100
KY.1.NBT.4.a	1 M5 Topic C: Addition of One-Digit and Two-Digit Numbers
Add within 100 using	1 M5 Topic D: Addition and Subtraction of Tens
 concrete models or drawings; 	1 M5 Topic E: Addition of Two-Digit Numbers
 strategies based on place value; 	1 M6 Topic F: Extending Addition to 100
 properties of operations; 	
 the relationship between addition and subtraction. 	

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KY.1.NBT.4.b	1 M5 Topic C: Addition of One-Digit and Two-Digit Numbers
Relate the addition strategy to a written method and explain the reasoning used. Understand that in adding two-digit	1 M5 Topic D: Addition and Subtraction of Tens
	1 M5 Topic E: Addition of Two-Digit Numbers
numbers, one adds tens and tens, ones	1 M6 Topic F: Extending Addition to 100
and ones; and sometimes it is necessary	
to compose a ten.	
KY.1.NBT.5	1M5 Lesson 6: Add 10 or take 10 from a two-digit number.
Given a two-digit number, mentally	
find 10 more or 10 less than the number, without having to count; explain the	
reasoning used.	
KY.1.NBT.6	1 M5 Lesson 15: Count on and back by tens to add and subtract.
Subtract multiples of 10 in the range 10-90	1 M5 Lesson 16: Use related single-digit facts to add and subtract multiples of ten.
from multiples of 10 in the range 10–90	1 M5 Lesson 17: Use tens to find an unknown part.
(positive or zero differences).	1 M5 Lesson 18: Determine if number sentences involving addition and subtraction are true or false.
KY.1.NBT.6.a	1 M5 Lesson 15: Count on and back by tens to add and subtract.
Subtract using:	1 M5 Lesson 16: Use related single-digit facts to add and subtract multiples of ten.
 concrete models or drawings; 	1 M5 Lesson 17: Use tens to find an unknown part.
 strategies based on place value; 	1 M5 Lesson 18: Determine if number sentences involving addition and subtraction are true or false.
 properties of operations; 	
 the relationship between addition and subtraction. 	

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KY.1.NBT.6.b	1 M5 Lesson 15: Count on and back by tens to add and subtract.
Relate the subtraction strategy to a written method and explain the reasoning used.	 1 M5 Lesson 16: Use related single-digit facts to add and subtract multiples of ten. 1 M5 Lesson 17: Use tens to find an unknown part. 1 M5 Lesson 18: Determine if number sentences involving addition and subtraction are true or false.

Measurement and Data

Measure lengths indirectly and by iterating length in units.

Kentucky Mathematics Course Standards

Aligned Components of Eureka Math²

KY.1.MD.1	1 M4 Topic A: Direct and Indirect Length Comparison
Order three objects by length; compare the lengths of two objects indirectly by using a third object.	1 M4 Lesson 5: Measure and compare lengths. 1 M4 Lesson 6: Measure and order lengths.
KY.1.MD.2	1 M4 Topic B: Length Measurement and Comparison
Express the length of an object as a whole number of same-size length units, by laying multiple copies of a shorter object (the length unit) end to end with no gaps or overlaps.	1 M4 Lesson 10: Compare to find how much longer. 1 M4 Lesson 11: Compare to find how much shorter. 1 M4 Lesson 14: Measure to find patterns.

Measurement and Data

Work with time and money.

Kentucky Mathematics Course Standards

Aligned Components of Eureka Math²

KY.1.MD.3	Supplemental material is necessary to address this standard.
Assign values to time and money.	
KY.1.MD.3.a Tell and write time in hours and half-hours using analog and digital clocks.	 1 M5 Lesson 1: Tell time to the hour and half hour by using digital and analog clocks. 1 M6 Lesson 14: Tell time to the half hour with the term half past. 1 M6 Lesson 15: Reason about the location of the hour hand to tell time.
KY.1.MD.3.b Identify the coins by values (penny, nickel, dime, quarter).	Supplemental material is necessary to address this standard.

Measurement and Data

Understand and apply the statistics process.

Kentucky Mathematics Course Standards

Aligned Components of Eureka Math²

KY.1.MD.4	Supplemental material is necessary to address this standard.
Investigate questions involving categorical data.	
KY.1.MD.4.a	Supplemental material is necessary to address this standard.
Pose a question that can be answered by gathering data.	

Aligned Components of Eureka Math²

KY.1.MD.4.b Determine strategy for gathering data from peers.	Supplemental material is necessary to address this standard.
KY.1.MD.4.c Organize and represent data in a table/chart with up to three categories.	 1 M1 Lesson 2: Organize and represent data to compare two categories. 1 M1 Lesson 3: Sort to represent and compare data with three categories. 1 M1 Lesson 4: Find the total number of data points and compare categories in a picture graph. 1 M1 Lesson 5: Organize and represent categorical data. 1 M1 Lesson 6: Use tally marks to represent and compare data. 1 M2 Lesson 23: Compare categories in a graph to figure out how many more.
KY.1.MD.4.d Interpret data to answer questions about the table/chart that connects to the question posed, including total number of data points, how many in each category and how many more or less are in one category than in another.	 1 M1 Lesson 2: Organize and represent data to compare two categories. 1 M1 Lesson 3: Sort to represent and compare data with three categories. 1 M1 Lesson 4: Find the total number of data points and compare categories in a picture graph. 1 M1 Lesson 5: Organize and represent categorical data. 1 M1 Lesson 6: Use tally marks to represent and compare data. 1 M2 Lesson 23: Compare categories in a graph to figure out how many more.

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Geometry

Reason with shapes and their attributes.

Kentucky Mathematics Course Standards

Aligned Components of Eureka Math²

KY.1.G.1	1 M6 Topic A: Attributes of Shapes
Distinguish between defining attributes versus non-defining attributes; build and draw shapes to possess defining attributes.	
KY.1.G.2	1 M6 Topic B: Composition of Shapes
Compose shapes.	
KY.1.G.2.a	1 M6 Topic B: Composition of Shapes
Compose two-dimensional shapes to create rectangles, squares, trapezoids, triangles, half-circles, quarter-circles and composite shapes to compose new shapes from the composite shapes.	
KY.1.G.2.b	1 M6 Lesson 6: Create composite shapes and identify shapes within two- and three-dimensional composite shapes.
Use three-dimensional shapes (cubes, right rectangular prisms, right circular cones and right circular cylinders) to create a composite shape and compose new shapes from the composite shapes.	

Aligned Components of Eureka Math²

KY.1.G.3

Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths and quarters, and use the phrases half of, fourth of and quarter of. Describe the whole as two of or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.

1 M6 Lesson 10: Reason about equal and not equal shares.

1 M6 Lesson 11: Name equal shares as halves or fourths.

1 M6 Lesson 12: Partition shapes into halves, fourths, and quarters.

1 M6 Lesson 13: Relate the number of equal shares to the size of the shares.