Grade 4 | Kentucky Mathematics Course Standards Correlation to *Eureka Math²®*

When the original *Eureka Math®* curriculum was released, it quickly became the most widely used K–5 mathematics curriculum in the country. Now, the Great Minds® teacher–writers have created *Eureka Math²®*, a groundbreaking new curriculum that helps teachers deliver exponentially better math instruction while still providing students with the same deep understanding of and fluency in math. *Eureka Math²* carefully sequences mathematical content to maximize vertical alignment—a principle tested and proven to be essential in students' mastery of math—from kindergarten through high school.

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

Teachability

Eureka Math² employs streamlined materials that allow teachers to plan more efficiently and focus their energy on delivering high-quality instruction that meets the individual needs of their students. Differentiation suggestions, slide decks, digital interactives, and multiple forms of assessment are just a few of the resources built right into the teacher materials.

Accessibility

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

Digital Engagement

The digital elements of *Eureka Math²* add to students' engagement with the math. The curriculum provides teachers with digital slides for each lesson. In addition, each grade level includes wordless videos that spark students' interest and curiosity. Students at all levels work through mathematical explorations that help lead to their own mathematical discoveries. Digital lessons and videos provide opportunities for students to wonder, explore, and make sense of mathematics, which contributes to the development of a strong, positive mathematical identity.

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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.

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Operations and Algebraic Thinking

Use the four operations with whole numbers to solve problems.

Kentucky Mathematics Course Standards	Aligned Components of *Eureka Math²*
KY.4.OA.1 Interpret a multiplication equation as a comparison. Represent verbal statements of multiplicative comparisons as multiplication equations.	4 M1 Topic A: Multiplication as Multiplicative Comparison 4 M1 Lesson 6: Demonstrate that a digit represents 10 times the value of what it represents in the place to its right.
KY.4.OA.2 Multiply or divide to solve word problems involving multiplicative comparisons by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.	4 M1 Topic A: Multiplication as Multiplicative Comparison 4 M2 Lesson 9: Solve multiplication word problems. 4 M2 Lesson 20: Solve word problems involving additive and multiplicative comparisons.
KY.4.OA.3 Solve multistep problems.	4 M1 Lesson 15: Apply estimation to real-world situations by using rounding. 4 M1 Lesson 16: Add by using the standard algorithm. 4 M1 Lesson 17: Solve multi-step addition word problems by using the standard algorithm. 4 M1 Lesson 21: Solve two-step word problems by using addition and subtraction. 4 M1 Lesson 22: Solve multi-step word problems by using addition and subtraction. 4 M3 Topic F: Remainders, Estimating, and Problem Solving
KY.4.OA.3.a Perform operations in the conventional order when there are no parentheses to specify a particular order.	*Supplemental material is necessary to address this standard.*

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Kentucky Mathematics Course Standards	Aligned Components of *Eureka Math²*
KY.4.OA.3.b Solve multistep word problems posed with whole numbers and having whole number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computations and estimation strategies including rounding.	4 M1 Lesson 15: Apply estimation to real-world situations by using rounding. 4 M1 Lesson 16: Add by using the standard algorithm. 4 M1 Lesson 17: Solve multi-step addition word problems by using the standard algorithm. 4 M1 Lesson 21: Solve two-step word problems by using addition and subtraction. 4 M1 Lesson 22: Solve multi-step word problems by using addition and subtraction. 4 M3 Topic F: Remainders, Estimating, and Problem Solving

Operations and Algebraic Thinking

Gain familiarity with factors and multiples.

Kentucky Mathematics Course Standards	Aligned Components of *Eureka Math²*
KY.4.OA.4 Find factors and multiples of numbers in the range 1–100.	*This standard is fully addressed by the lessons aligned to its subsections.*
KY.4.OA.4.a Find all factor pairs for a given whole number.	4 M2 Lesson 21: Find factor pairs for numbers up to 100 and use factors to identify numbers as prime or composite. 4 M2 Lesson 22: Use division and the associative property of multiplication to find factors. 4 M2 Lesson 23: Determine whether a whole number is a multiple of another number. 4 M2 Lesson 24: Recognize that a number is a multiple of each of its factors. 4 M2 Lesson 25: Explore properties of prime and composite numbers up to 100 by using multiples.

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Kentucky Mathematics Course Standards	Aligned Components of *Eureka Math²*
KY.4.OA.4.b Recognize that a whole number is a multiple of each of its factors.	4 M2 Lesson 21: Find factor pairs for numbers up to 100 and use factors to identify numbers as prime or composite. 4 M2 Lesson 22: Use division and the associative property of multiplication to find factors. 4 M2 Lesson 23: Determine whether a whole number is a multiple of another number. 4 M2 Lesson 24: Recognize that a number is a multiple of each of its factors. 4 M2 Lesson 25: Explore properties of prime and composite numbers up to 100 by using multiples.
KY.4.OA.4.c Determine whether a given whole number is a multiple of a given one-digit number.	4 M2 Lesson 21: Find factor pairs for numbers up to 100 and use factors to identify numbers as prime or composite. 4 M2 Lesson 22: Use division and the associative property of multiplication to find factors. 4 M2 Lesson 23: Determine whether a whole number is a multiple of another number. 4 M2 Lesson 24: Recognize that a number is a multiple of each of its factors. 4 M2 Lesson 25: Explore properties of prime and composite numbers up to 100 by using multiples.
KY.4.OA.4.d Determine whether a given whole number is prime or composite.	4 M2 Lesson 21: Find factor pairs for numbers up to 100 and use factors to identify numbers as prime or composite. 4 M2 Lesson 22: Use division and the associative property of multiplication to find factors. 4 M2 Lesson 23: Determine whether a whole number is a multiple of another number. 4 M2 Lesson 24: Recognize that a number is a multiple of each of its factors. 4 M2 Lesson 25: Explore properties of prime and composite numbers up to 100 by using multiples.

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Operations and Algebraic Thinking

Generate and analyze patterns.

Kentucky Mathematics Course Standards	Aligned Components of *Eureka Math²*
KY.4.OA.5 Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern not explicit in the rule itself.	4 M2 Lesson 26: Use relationships within a pattern to find an unknown term in the sequence.

Number and Operations in Base Ten

Generalize place value understanding for multi-digit whole numbers.

Kentucky Mathematics Course Standards	Aligned Components of *Eureka Math²*
KY.4.NBT.1 Recognize in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right.	4 M1 Lesson 6: Demonstrate that a digit represents 10 times the value of what it represents in the place to its right.
KY.4.NBT.2 Represent and compare multi-digit whole numbers.	*This standard is fully addressed by the lessons aligned to its subsections.*

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Kentucky Mathematics Course Standards	Aligned Components of *Eureka Math²*
KY.4.NBT.2.a Read and write multi-digit whole numbers using base-ten numerals, number names and expanded form.	4 M1 Lesson 5: Organize, count, and represent a collection of objects. 4 M1 Lesson 7: Write numbers to $1{,}000{,}000$ in unit form and expanded form by using place value structure. 4 M1 Lesson 8: Write numbers to $1{,}000{,}000$ in standard form and word form. 4 M1 Lesson 9: Compare numbers within $1{,}000{,}000$ by using $>$, $=$, and $<$. 4 M1 Lesson 10: Name numbers by using place value understanding. 4 M1 Lesson 11: Find 1, 10, and 100 thousand more than and less than a given number.
KY.4.NBT.2.b Compare two multi-digit numbers based on meanings of the digit in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.	4 M1 Lesson 5: Organize, count, and represent a collection of objects. 4 M1 Lesson 7: Write numbers to $1{,}000{,}000$ in unit form and expanded form by using place value structure. 4 M1 Lesson 8: Write numbers to $1{,}000{,}000$ in standard form and word form. 4 M1 Lesson 9: Compare numbers within $1{,}000{,}000$ by using $>$, $=$, and $<$. 4 M1 Lesson 10: Name numbers by using place value understanding. 4 M1 Lesson 11: Find 1, 10, and 100 thousand more than and less than a given number.
KY.4.NBT.3 Use place value understanding to round multi-digit whole numbers to any place.	4 M1 Lesson 12: Round to the nearest thousand. 4 M1 Lesson 13: Round to the nearest ten thousand and hundred thousand. 4 M1 Lesson 14: Round multi-digit numbers to any place. 4 M1 Lesson 15: Apply estimation to real-world situations by using rounding.

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Number and Operations in Base Ten

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

Kentucky Mathematics Course Standards	Aligned Components of *Eureka Math²*
KY.4.NBT.4 Fluently add and subtract multi-digit whole numbers using an algorithm.	4 M1 Topic D: Multi-Digit Whole Number Addition and Subtraction
KY.4.NBT.5 Multiply whole numbers: • Up to four-digit number by a one-digit number • Two-digit number by two-digit number Multiply using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays and/or area models.	4 M2 Lesson 1: Multiply multiples of 10 by one-digit numbers by using the associative property of multiplication. 4 M2 Topic B: Multiplication of Tens and Ones by One-Digit Numbers 4 M3 Lesson 2: Multiply by multiples of 100 and 1,000. 4 M3 Lesson 3: Multiply a two-digit multiple of 10 by a two-digit multiple of 10. 4 M3 Topic C: Multiplication of up to Four-Digit Numbers by One-Digit Numbers 4 M3 Topic D: Multiplication of Two-Digit Numbers by Two-Digit Numbers
KY.4.NBT.6 Divide up to four-digit dividends by one-digit divisors. Find whole number quotients and remainders using: • strategies based on place value • the properties of operations • the relationship between multiplication and division Illustrate and explain the calculation by using equations, rectangular arrays and/or area models.	4 M2 Lesson 2: Divide two- and three-digit multiples of 10 by one-digit numbers. 4 M2 Topic C: Division of Tens and Ones by One-Digit Numbers 4 M3 Lesson 1: Divide multiples of 100 and 1,000. 4 M3 Topic B: Division of Thousands, Hundreds, Tens, and Ones 4 M3 Lesson 21: Find whole-number quotients and remainders. 4 M3 Lesson 22: Represent, estimate, and solve division word problems.

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Number and Operations—Fractions

Extend understanding of fraction equivalence and ordering.

Kentucky Mathematics Course Standards	Aligned Components of *Eureka Math²*
KY.4.NF.1 Understand and generate equivalent fractions.	*This standard is fully addressed by the lessons aligned to its subsections.*
KY.4.NF.1.a Use visual fraction models to recognize and generate equivalent fractions that have different numerators/denominators even though they are the same size.	4 M4 Lesson 8: Generate equivalent fractions with smaller units for unit fractions. 4 M4 Lesson 9: Generate equivalent fractions with smaller units for non-unit fractions. 4 M4 Lesson 10: Generate equivalent fractions with larger units. 4 M4 Lesson 11: Represent equivalent fractions by using tape diagrams, number lines, and multiplication or division. 4 M4 Lesson 12: Generate equivalent fractions for fractions greater than 1 and generate equivalent mixed numbers.
KY.4.NF.1.b Explain why a fraction $\frac{a}{b}$ is equivalent to a fraction $\frac{n \times a}{n \times b}$.	4 M4 Lesson 8: Generate equivalent fractions with smaller units for unit fractions. 4 M4 Lesson 9: Generate equivalent fractions with smaller units for non-unit fractions. 4 M4 Lesson 10: Generate equivalent fractions with larger units. 4 M4 Lesson 11: Represent equivalent fractions by using tape diagrams, number lines, and multiplication or division. 4 M4 Lesson 12: Generate equivalent fractions for fractions greater than 1 and generate equivalent mixed numbers.

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Kentucky Mathematics Course Standards	Aligned Components of *Eureka Math²*
KY.4.NF.2 Compare two fractions with different numerators and different denominators using the symbols $<$, $=$, or $>$. Recognize comparisons are valid only when the two fractions refer to the same whole. Justify the conclusions.	4 M4 Topic C: Compare Fractions

Number and Operations—Fractions

Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.

Kentucky Mathematics Course Standards	Aligned Components of *Eureka Math²*
KY.4.NF.3 Understand a fraction $\frac{a}{b}$ with $a > 1$ as a sum of fractions $\frac{1}{b}$.	*This standard is fully addressed by the lessons aligned to its subsections.*
KY.4.NF.3.a Understand addition and subtraction of fractions as joining and separating parts referring to the same whole.	4 M4 Topic A: Fraction Decomposition and Equivalence 4 M4 Lesson 7: Rename fractions as a sum of equivalent smaller unit fractions. 4 M4 Topic D: Add and Subtract Fractions
KY.4.NF.3.b Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions.	4 M4 Topic A: Fraction Decomposition and Equivalence 4 M4 Lesson 7: Rename fractions as a sum of equivalent smaller unit fractions. 4 M4 Topic D: Add and Subtract Fractions

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Kentucky Mathematics Course Standards	Aligned Components of *Eureka Math²*
KY.4.NF.3.c Add and subtract mixed numbers with like denominators.	4 M4 Lesson 23: Add a fraction to a mixed number. 4 M4 Lesson 24: Add a mixed number to a mixed number. 4 M4 Lesson 25: Subtract a fraction from a mixed number, part 1. 4 M4 Lesson 26: Subtract a fraction from a mixed number, part 2. 4 M4 Lesson 27: Subtract a mixed number from a mixed number.
KY.4.NF.3.d Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators.	4 M4 Lesson 18: Estimate sums and differences of fractions by using benchmarks. 4 M4 Lesson 20: Subtract a fraction from a whole number. 4 M4 Lesson 21: Solve addition and subtraction word problems and estimate the reasonableness of the answers. 4 M4 Lesson 24: Add a mixed number to a mixed number. 4 M4 Lesson 27: Subtract a mixed number from a mixed number. 4 M4 Lesson 28: Represent and solve word problems with mixed numbers by using drawings and equations.
KY.4.NF.4 Apply and extend previous understandings of multiplication to multiply a fraction by a whole number.	*This standard is fully addressed by the lessons aligned to its subsections.*
KY.4.NF.4.a Understand a fraction $\frac{a}{b}$ as a multiple of $\frac{1}{b}$.	4 M4 Lesson 31: Decompose non-unit fractions into a product of a whole number and a unit fraction.
KY.4.NF.4.b Understand a multiple of $\frac{a}{b}$ as a multiple of $\frac{1}{b}$ and use this understanding to multiply a fraction by a whole number.	4 M4 Lesson 32: Multiply a fraction by a whole number by using the associative property. 4 M4 Lesson 33: Solve word problems involving multiplication of a fraction by a whole number. 4 M4 Lesson 34: Multiply a mixed number by a whole number by using the distributive property.

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Kentucky Mathematics Course Standards	Aligned Components of *Eureka Math²*
KY.4.NF.4.c Solve word problems involving multiplication of a fraction by a whole number.	4 M4 Lesson 33: Solve word problems involving multiplication of a fraction by a whole number.

Number and Operations—Fractions

Understand decimal notation for fractions and compare decimal fractions.

Kentucky Mathematics Course Standards	Aligned Components of *Eureka Math²*
KY.4.NF.5 Convert and add fractions with denominators of 10 and 100.	*This standard is fully addressed by the lessons aligned to its subsections.*
KY.4.NF.5.a Convert a fraction with a denominator of 10 to an equivalent fraction with a denominator of 100.	4 M5 Topic B: Tenths and Hundredths 4 M5 Topic D: Addition of Tenths and Hundredths
KY.4.NF.5.b Add two fractions with respective denominators 10 and 100.	4 M5 Topic B: Tenths and Hundredths 4 M5 Topic D: Addition of Tenths and Hundredths
KY.4.NF.6 Use decimal notation for fractions with denominators 10 or 100.	4 M5 Topic A: Exploration of Tenths 4 M5 Topic B: Tenths and Hundredths

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Kentucky Mathematics Course Standards	Aligned Components of *Eureka Math²*
KY.4.NF.7 Compare two decimals to hundredths.	*This standard is fully addressed by the lessons aligned to its subsections.*
KY.4.NF.7.a Compare two decimals to hundredths by reasoning about their size.	4 M5 Topic C: Comparison of Decimal Numbers
KY.4.NF.7.b Recognize that comparisons are valid only when the two decimals refer to the same whole.	4 M5 Topic C: Comparison of Decimal Numbers
KY.4.NF.7.c Record the results of comparisons with the symbols >, =, or < and justify the conclusions.	4 M5 Topic C: Comparison of Decimal Numbers

Measurement and Data

Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.

Kentucky Mathematics Course Standards	Aligned Components of *Eureka Math²*
KY.4.MD.1 Know relative size of measurement units (mass, weight, liquid volume, length, time) within one system of units (metric system, U.S. standard system and time).	*This standard is fully addressed by the lessons aligned to its subsections.*

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Kentucky Mathematics Course Standards	Aligned Components of *Eureka Math²*
KY.4.MD.1.a Understand the relationship of measurement units within any given measurement system.	4 M1 Topic E: Metric Measurement Conversion Tables 4 M2 Lesson 17: Express measurements of length in terms of smaller units. 4 M3 Topic E: Problem Solving with Measurement
KY.4.MD.1.b Within any given measurement system, express measurements in a larger unit in terms of a smaller unit.	4 M1 Topic E: Metric Measurement Conversion Tables 4 M2 Lesson 17: Express measurements of length in terms of smaller units. 4 M3 Topic E: Problem Solving with Measurement
KY.4.MD.1.c Record measurement equivalents in a two-column table.	4 M1 Topic E: Metric Measurement Conversion Tables 4 M2 Lesson 17: Express measurements of length in terms of smaller units. 4 M3 Topic E: Problem Solving with Measurement
KY.4.MD.2 Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects and money.	*This standard is fully addressed by the lessons aligned to its subsections.*
KY.4.MD.2.a Solve measurement problems involving whole numbers, simple fractions or decimals.	4 M2 Lesson 17: Express measurements of length in terms of smaller units. 4 M2 Lesson 20: Solve word problems involving additive and multiplicative comparisons. 4 M3 Topic E: Problem Solving with Measurement 4 M4 Lesson 18: Estimate sums and differences of fractions by using benchmarks. 4 M4 Lesson 20: Subtract a fraction from a whole number. 4 M4 Lesson 21: Solve addition and subtraction word problems and estimate the reasonableness of the answers. 4 M4 Lesson 24: Add a mixed number to a mixed number.

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Kentucky Mathematics Course Standards	Aligned Components of *Eureka Math²*
KY.4.MD.2.a *continued*	4 M4 Lesson 27: Subtract a mixed number from a mixed number. 4 M4 Lesson 28: Represent and solve word problems with mixed numbers by using drawings and equations. 4 M4 Lesson 33: Solve word problems involving multiplication of a fraction by a whole number. 4 M5 Lesson 14: Solve word problems with tenths and hundredths.
KY.4.MD.2.b Solve problems that require converting a given measurement from a larger unit to a smaller unit within a common measurement system, such as $2\text{ km} = 2{,}000\text{ m}$.	4 M2 Lesson 17: Express measurements of length in terms of smaller units. 4 M2 Lesson 20: Solve word problems involving additive and multiplicative comparisons. 4 M3 Topic E: Problem Solving with Measurement 4 M4 Lesson 18: Estimate sums and differences of fractions by using benchmarks. 4 M4 Lesson 20: Subtract a fraction from a whole number. 4 M4 Lesson 21: Solve addition and subtraction word problems and estimate the reasonableness of the answers. 4 M4 Lesson 24: Add a mixed number to a mixed number. 4 M4 Lesson 27: Subtract a mixed number from a mixed number. 4 M4 Lesson 28: Represent and solve word problems with mixed numbers by using drawings and equations. 4 M4 Lesson 33: Solve word problems involving multiplication of a fraction by a whole number. 4 M5 Lesson 14: Solve word problems with tenths and hundredths.
KY.4.MD.2.c Visually display measurement quantities using representations such as number lines that feature a measurement scale.	4 M2 Lesson 17: Express measurements of length in terms of smaller units. 4 M2 Lesson 20: Solve word problems involving additive and multiplicative comparisons. 4 M3 Topic E: Problem Solving with Measurement 4 M4 Lesson 18: Estimate sums and differences of fractions by using benchmarks. 4 M4 Lesson 20: Subtract a fraction from a whole number.

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Kentucky Mathematics Course Standards	Aligned Components of *Eureka Math²*
KY.4.MD.2.c *continued*	4 M4 Lesson 21: Solve addition and subtraction word problems and estimate the reasonableness of the answers. 4 M4 Lesson 24: Add a mixed number to a mixed number. 4 M4 Lesson 27: Subtract a mixed number from a mixed number. 4 M4 Lesson 28: Represent and solve word problems with mixed numbers by using drawings and equations. 4 M4 Lesson 33: Solve word problems involving multiplication of a fraction by a whole number. 4 M5 Lesson 14: Solve word problems with tenths and hundredths.
KY.4.MD.3 Apply the area and perimeter formulas for rectangles in real-world and mathematical problems.	4 M2 Lesson 3: Investigate and use a formula for the area of a rectangle. 4 M2 Lesson 7: Multiply by using an area model and the distributive property. 4 M2 Lesson 18: Investigate and use formulas for the perimeter of a rectangle. 4 M2 Lesson 19: Apply area and perimeter formulas to solve problems. 4 M2 Lesson 20: Solve word problems involving additive and multiplicative comparisons.

Measurement and Data

Understand and apply the statistics process.

Kentucky Mathematics Course Standards	Aligned Components of *Eureka Math²*
KY.4.MD.4 Use dot plots to analyze data to a statistical question.	*Supplemental material is necessary to address this standard.*

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Kentucky Mathematics Course Standards	Aligned Components of *Eureka Math²*
KY.4.MD.4.a Identify a statistical question focused on numerical data.	*Supplemental material is necessary to address this standard.*
KY.4.MD.4.b Make a dot plot to display a data set of measurements in fractions of a unit $\left(\frac{1}{2}, \frac{1}{4}, \frac{1}{8}\right)$.	4 M4 Lesson 29: Solve problems by using data from a line plot. 4 M4 Lesson 30: Represent data on a line plot.
KY.4.MD.4.c Solve problems involving addition and subtraction of fractions by using information presented in dot plots.	4 M4 Lesson 29: Solve problems by using data from a line plot. 4 M4 Lesson 30: Represent data on a line plot.

Measurement and Data

Geometric measurement: understand concepts of angle and measure angles.

Kentucky Mathematics Course Standards	Aligned Components of *Eureka Math²*
KY.4.MD.5 Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint and understand concepts of angle measurement.	4 M6 Lesson 7: Explore angles as fractional turns through a circle. 4 M6 Lesson 8: Use a circular protractor to recognize a $1°$ angle as a turn through $\frac{1}{360}$ of a circle. 4 M6 Lesson 9: Identify and measure angles as turns and recognize them in various contexts. 4 M6 Lesson 10: Use $180°$ protractors to measure angles. 4 M6 Lesson 11: Estimate and measure angles with a $180°$ protractor.

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Kentucky Mathematics Course Standards	Aligned Components of *Eureka Math²*
KY.4.MD.6 Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.	4 M6 Lesson 8: Use a circular protractor to recognize a $1°$ angle as a turn through $\frac{1}{360}$ of a circle. 4 M6 Lesson 10: Use $180°$ protractors to measure angles. 4 M6 Lesson 11: Estimate and measure angles with a $180°$ protractor. 4 M6 Lesson 12: Use a protractor to draw angles up to $180°$.
KY.4.MD.7 Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real-world and mathematical problems.	4 M6 Topic C: Determine Unknown Angle Measures

Geometry

Draw and identify lines and angles and classify shapes by properties of their lines and angles.

Kentucky Mathematics Course Standards	Aligned Components of *Eureka Math²*
KY.4.G.1 Draw points, lines, line segments, rays, angles (right, acute, obtuse) and perpendicular and parallel lines. Identify these in two-dimensional figures.	4 M6 Topic A: Lines and Angles 4 M6 Lesson 10: Use $180°$ protractors to measure angles. 4 M6 Lesson 11: Estimate and measure angles with a $180°$ protractor. 4 M6 Lesson 12: Use a protractor to draw angles up to $180°$. 4 M6 Lesson 18: Analyze and classify triangles based on side length, angle measures, or both. 4 M6 Lesson 19: Construct and classify triangles based on given attributes. 4 M6 Lesson 20: Sort polygons based on a given rule.

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Kentucky Mathematics Course Standards	Aligned Components of *Eureka Math²*
KY.4.G.2 Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence of absence of angles of a specified size. Recognize right triangles as a category and identify right triangles.	4 M6 Lesson 18: Analyze and classify triangles based on side length, angle measures, or both. 4 M6 Lesson 19: Construct and classify triangles based on given attributes. 4 M6 Lesson 20: Sort polygons based on a given rule.
KY.4.G.3 Identify lines of symmetry.	*This standard is fully addressed by the lessons aligned to its subsections.*
KY.4.G.3.a Recognize a line of symmetry for a two-dimensional figure.	4 M6 Lesson 17: Recognize, identify, and draw lines of symmetry.
KY.4.G.3.b Identify line-symmetric figures and draw lines of symmetry.	4 M6 Lesson 17: Recognize, identify, and draw lines of symmetry.

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