Grade K | Minnesota K–12 Academic Standards in Mathematics 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.

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.

Data and Probability

Data Sciences: Identify, formulate and investigate statistical questions by collecting data considering cultural perspectives, analyzing and interpreting dat a and communicating the results.

Minnesota K–12 Academic Standards in Mathematics	Aligned Components of *Eureka Math²*
0.1.1.1 Notice and describe patterns in data-rich situations.	K Data Talk: Time Spent Asleep and Awake K Data Talk: Pele in the 1958 World Cup Final K Data Talk: What's in Our Garbage? K Data Talk: Official State Insects K Data Talk: Speedy Land Animals K Data Talk: Corn Usage in the United States K Data Talk: Kids' Beverage Consumption K Data Talk: Time for Ice Cream K Data Talk: Erupting Volcanoes Worldwide K Data Talk: Giraffe Heights K Data Talk: Stars and Stripes K Data Talk: Penguins and Their Environments K Data Talk: Pets People Get K Data Talk: Wheels All Around K Data Investigation: Recycling K Data Investigation: Pets K Data Investigation: Ice Cream

Minnesota K–12 Academic Standards in Mathematics	Aligned Components of *Eureka Math²*
0.1.1.2 Organize objects, draw pictures or use tally marks to represent data and communicate observations.	K M1 Topic A: Classify to Make Categories and Count K M1 Lesson 15: Sort the same group of objects in more than one way and count. K M1 Lesson 16: Decompose a set shown in a picture. K M3 Lesson 15: Classify flat shapes into groups and compare the number of shapes in each group.

Spatial Reasoning

Measurement: Investigate measurement using a variety of tools, units, systems, processes and techniques in various cultures. Explain and reason with attributes, estimations and formulas to communicate measurement(s) and relationships effectively. Justify decisions and consider the reasonableness of the measurement.

Minnesota K–12 Academic Standards in Mathematics	Aligned Components of *Eureka Math²*
0.2.3.1 Compare objects with a measurable attribute in common, to see which object has “more of,” “less of” or the “same as” the attribute and explain the reasoning.	K M3 Topic A: Compare Heights and Lengths K M3 Topic B: Compare Weights
0.2.3.2 Describe several measurable attributes of objects such as length and weight.	K M3 Lesson 21: Describe and compare several measurable attributes of objects and sets. K M3 Topic A: Compare Heights and Lengths K M3 Topic B: Compare Weights

Spatial Reasoning

Geometry: Analyze characteristics of geometric shapes to make mathematical arguments and justifications about geometric relationships. Use visualization and geometric modeling to compare, solve problems and communicate ideas.

Minnesota K–12 Academic Standards in Mathematics	Aligned Components of *Eureka Math²*
0.2.4.1 Sort objects using characteristics such as shape, size, color and thickness.	K M1 Topic A: Classify to Make Categories and Count K M1 Lesson 15: Sort the same group of objects in more than one way and count. K M1 Lesson 16: Decompose a set shown in a picture. K M2 Lesson 1: Find and describe attributes of flat shapes. K M2 Lesson 2: Classify shapes as triangles or nontriangles. K M2 Lesson 3: Classify shapes as circles, hexagons, or neither. K M2 Lesson 4: Classify shapes as rectangles or nonrectangles, with square rectangles as a special case. K M3 Lesson 15: Classify flat shapes into groups and compare the number of shapes in each group
0.2.4.2 Identify and compare two- and three-dimensional shapes such as squares, circles, triangles, rectangles, trapezoids, hexagons, cubes, cones, cylinders and spheres using informal language to describe their similarities, differences, parts and other attributes.	K M2 Lesson 2: Classify shapes as triangles or nontriangles. K M2 Lesson 3: Classify shapes as circles, hexagons, or neither. K M2 Lesson 4: Classify shapes as rectangles or nonrectangles, with square rectangles as a special case. K M2 Topic B: Analyze and Name Three-Dimensional Shapes K M2 Lesson 10: Construct a circle. K M2 Lesson 11: Construct and classify polygons. K M2 Lesson 12: Construct solid shapes by using a square base. K M2 Lesson 14: Compose flat shapes.

Minnesota K–12 Academic Standards in Mathematics	Aligned Components of *Eureka Math²*
0.2.4.3 Compose, decompose and name simple shapes. Recognize shapes regardless of their overall size and orientation.	K M2 Lesson 2: Classify shapes as triangles or nontriangles. K M2 Lesson 3: Classify shapes as circles, hexagons, or neither. K M2 Lesson 4: Classify shapes as rectangles or nonrectangles, with square rectangles as a special case. K M2 Lesson 7: Name solid shapes and discuss their attributes. K M2 Lesson 10: Construct a circle. K M2 Lesson 11: Construct and classify polygons. K M2 Lesson 13: Draw flat shapes. K M2 Lesson 14: Compose flat shapes. K M4 Lesson 1: Compose flat shapes and count the parts. K M4 Lesson 2: Decompose flat shapes and count the parts. K M4 Lesson 9: Compose shapes in more than one way. K M5 Lesson 25: Extend growing patterns.
0.2.4.4 Describe objects in the environment using names of shapes. Describe the relative positions of these objects using terms such as above, below, beside, in front of, behind and next to.	K M2 Lesson 2: Classify shapes as triangles or nontriangles. K M2 Lesson 3: Classify shapes as circles, hexagons, or neither. K M2 Lesson 4: Classify shapes as rectangles or nonrectangles, with square rectangles as a special case. K M2 Lesson 5: Communicate the position of flat shapes by using position words. K M2 Lesson 14: Compose flat shapes.

Patterns and Relationships

Number Relationships: Describe, interpret and use quantities, relationships between quantities, representations of quantities and number systems. Describe operations and the relationship between operations. Use strategies and procedures accurately, efficiently and flexibly. Assess the reasonableness of the results.

Minnesota K–12 Academic Standards in Mathematics	Aligned Components of *Eureka Math²*
0.3.5.1 Recognize that a number can be used to represent how many objects are in a set or to represent the position of an object in a sequence. When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number with one and only one object. Understand that the last number said tells the number of objects counted. Understand that each successive number refers to a quantity that is one more. Name the position of an object in a sequence (ordinal count).	K M1 Lesson 3: Classify objects into two categories and count. K M1 Lesson 6: Organize, count, and represent a collection of objects. K M1 Lesson 7: Practice counting accurately. K M1 Lesson 8: Count sets in linear, array, and scattered configurations. K M1 Lesson 10: Count out a group of objects to match a numeral. K M1 Lesson 13: Count out enough objects and write the numeral. K M1 Topic E: Answer *How Many* Questions with Up to 10 Objects K M1 Lesson 24: Count out a group of objects to match a numeral. K M1 Topic G: Analyze the Count Sequence K M2 Lesson 16: Organize, count, and represent a collection of objects. K M3 Lesson 22: Organize, count, and represent a collection of objects. K M4 Lesson 17: Organize, count, and represent a collection of objects. K M5 Lesson 25: Extend growing patterns. K M5 Lesson 27: Organize, count, and represent a collection of objects. K M6 Lesson 1: Describe teen numbers as 10 ones and ___ ones. K M6 Lesson 6: Count out a group of objects to match a numeral. K M6 Lesson 7: Decompose numbers 10–20 with 10 as a part. K M6 Lesson 12: Investigate different ways to decompose teen numbers. K M6 Lesson 13: Organize, count, and represent a collection of objects. K M6 Lesson 24: Organize, count, and represent a collection of objects.

Minnesota K–12 Academic Standards in Mathematics	Aligned Components of *Eureka Math²*
0.3.5.2 Count collections of objects up to 31 by grouping in 10s using ten-frames, cups or other tools.	K M1 Lesson 3: Classify objects into two categories and count. K M1 Lesson 6: Organize, count, and represent a collection of objects. K M1 Lesson 7: Practice counting accurately. K M1 Lesson 8: Count sets in linear, array, and scattered configurations. K M1 Lesson 10: Count out a group of objects to match a numeral. K M1 Lesson 19: Organize, count, and represent a collection of objects. K M1 Lesson 20: Count objects in 5-group and array configurations and match to a numeral. K M1 Lesson 21: Count sets in circular configurations and match to a numeral. K M1 Lesson 22: Count sets in scattered configurations and match to a numeral. K M1 Lesson 24: Count out a group of objects to match a numeral. K M1 Lesson 33: Organize, count, and represent a collection of objects. K M2 Lesson 16: Organize, count, and represent a collection of objects. K M3 Lesson 22: Organize, count, and represent a collection of objects. K M4 Lesson 17: Organize, count, and represent a collection of objects. K M5 Lesson 27: Organize, count, and represent a collection of objects. K M6 Lesson 1: Describe teen numbers as 10 ones and ___ ones. K M6 Lesson 6: Count out a group of objects to match a numeral. K M6 Lesson 7: Decompose numbers 10–20 with 10 as a part. K M6 Lesson 12: Investigate different ways to decompose teen numbers. K M6 Lesson 13: Organize, count, and represent a collection of objects. K M6 Lesson 24: Organize, count, and represent a collection of objects.

Minnesota K–12 Academic Standards in Mathematics	Aligned Components of *Eureka Math²*
0.3.5.3 Read, write, compare, order and represent whole numbers from 0 to at least 31 (with 0 representing the count of no objects) to answer the question "how many?" Representations may include numerals, pictures, real objects, picture graphs, spoken words and manipulatives, such as connecting cubes. The numbers from 11 to 19 are composed of a 10 and one, two, three, four, five, six, seven, eight or nine ones.	K M1 Lesson 3: Classify objects into two categories and count. K M1 Lesson 5: Classify objects into three categories, count, and match to a numeral. K M1 Lesson 6: Organize, count, and represent a collection of objects. K M1 Lesson 7: Practice counting accurately. K M1 Lesson 8: Count sets in linear, array, and scattered configurations. K M1 Lesson 10: Count out a group of objects to match a numeral. K M1 Lesson 11: Write numerals 1–3 to answer *how many* questions. K M1 Lesson 12: Write numerals 4 and 5 to answer *how many* questions. K M1 Lesson 14: Understand the meaning of zero and write the numeral. K M1 Topic E: Answer *How Many* Questions with Up to 10 Objects K M1 Topic F: Write Numerals and Create Sets of Up to 10 Objects K M1 Lesson 33: Organize, count, and represent a collection of objects. K M2 Lesson 16: Organize, count, and represent a collection of objects. K M3 Lesson 12: Relate *more* and *fewer* to length. K M3 Lesson 13: Compare sets by using *more than, fewer than,* and *the same number* as. K M3 Lesson 14: Use number to compare sets with like units. K M3 Lesson 16: Count and compare sets with unlike units. K M3 Lesson 17: Count and compare sets in pictures. K M3 Topic D: Compare Numbers Within 10 K M4 Lesson 17: Organize, count, and represent a collection of objects. K M5 Lesson 27: Organize, count, and represent a collection of objects. K M6 Lesson 1: Describe teen numbers as 10 ones and ___ ones. K M6 Lesson 3: Write numerals 11–20. K M6 Lesson 4: Order numerals 0–20.

Minnesota K–12 Academic Standards in Mathematics	Aligned Components of *Eureka Math²*
0.3.5.3 ***continued***	K M6 Lesson 5: Reason about a number's position in the number sequence. K M6 Lesson 6: Count out a group of objects to match a numeral. K M6 Lesson 7: Decompose numbers 10–20 with 10 as a part. K M6 Lesson 12: Investigate different ways to decompose teen numbers. K M6 Lesson 13: Organize, count, and represent a collection of objects. K M6 Lesson 17: Use patterns in the number sequence to count by ones within 100. K M6 Lesson 24: Organize, count, and represent a collection of objects. K M6 Topic D: Compare
0.3.5.4 Count forward, with and without objects, to at least 31. Count backward from 20.	K M1 Lesson 4: Classify objects into three categories and count. K M1 Lesson 6: Organize, count, and represent a collection of objects. K M1 Lesson 7: Practice counting accurately. K M1 Lesson 9: Conserve number regardless of the arrangement of objects. K M1 Lesson 12: Write numerals 4 and 5 to answer *how many* questions. K M1 Lesson 13: Count out enough objects and write the numeral. K M1 Lesson 19: Organize, count, and represent a collection of objects. K M1 Lesson 20: Count objects in 5-group and array configurations and match to a numeral. K M1 Lesson 23: Conserve number regardless of the order in which objects are counted. K M1 Lesson 28: Order numerals 1–10 and reason about an unknown number in the number sequence. K M1 Topic G: Analyze the Count Sequence K M5 Lesson 18: Count starting from a number other than 1 to find the total. K M5 Lesson 22: Identify and extend linear patterns. K M5 Lesson 23: Use a pattern to make a prediction. K M6 Lesson 2: Find 10 ones in a teen number.

Minnesota K–12 Academic Standards in Mathematics	Aligned Components of *Eureka Math²*
0.3.5.4 ***continued***	K M6 Lesson 4: Order numerals 0–20. K M6 Lesson 5: Reason about a number's position in the number sequence. K M6 Topic C: Count to 100
0.3.5.5 Find a number that is 1 more or 1 less than a given number.	K M1 Lesson 29: Model the pattern of 1 more in the forward count sequence. K M1 Lesson 30: Build number stairs to show the pattern of 1 more in the forward count sequence. K M1 Lesson 31: Model the pattern of 1 less in the backward count sequence. K M1 Lesson 32: Build number stairs to show the pattern of 1 less in the backward count sequence. K M6 Lesson 4: Order numerals 0–20.

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0.3.5.6 Solve and represent a variety of addition and subtraction contextual situation types using objects, drawings, mental images or equations within 10.	K M4 Lesson 4: Decompose a group and record parts and total by using a number bond. K M4 Lesson 6: Decompose a number in more than one way and record. K M4 Lesson 7: Find partners to 5. K M4 Lesson 10: Sort and record the decomposition with a number bond. K M4 Lesson 11: Model *put together with total unknown* story problems. K M4 Lesson 12: Draw to represent *put together with total unknown* story problems. K M4 Lesson 13: Choose a math tool to solve *put together with total unknown* story problems. K M4 Lesson 14: Model *take apart with both addends unknown* situations. K M4 Lesson 15: Choose a math tool to solve *take apart with both addends unknown* situations. K M4 Lesson 16: Compose and decompose numbers and shapes. K M5 Topic A: Represent Addition K M5 Topic B: Represent Subtraction K M5 Lesson 15: Identify the action in a problem to represent and solve it. K M5 Lesson 16: Relate addition and subtraction through word problems. K M5 Lesson 17: Reason about different units to solve story problems. K M5 Lesson 19: Represent and solve take *from with change unknown* problems. K M5 Lesson 21: Organize drawings to solve problems efficiently. K M5 Lesson 24: Solve story problems by using repeated reasoning. K M5 Lesson 26: Reason about numbers to add and subtract. K M6 Topic B: Composition of Shapes

Minnesota K–12 Academic Standards in Mathematics	Aligned Components of *Eureka Math²*
0.3.5.7 Compose and decompose numbers less than or equal to 10 into pairs in more than one way with objects and pictures. Record each decomposition with a drawing or equation.	K M4 Lesson 6: Decompose a number in more than one way and record. K M4 Lesson 7: Find partners to 5. K M4 Lesson 8: Find partners to 10. K M4 Lesson 18: Use the structure of 5 and 10 to build a rekenrek. K M5 Lesson 4: Represent decomposition situations by using number bonds and addition sentences. K M5 Lesson 20: Find the number that makes 10 and record with a number sentence. K M5 Lesson 26: Reason about numbers to add and subtract
0.3.5.8 Fluently add and subtract within 5.	K M5 Lesson 7: Find the total in an addition sentence. K M5 Lesson 14: Find the difference in a subtraction sentence.

Patterns and Relationships

Equivalence and Relational Thinking: Use concepts and properties of equivalence and relational thinking to represent and compare numerical expressions, proportional relationships, algebraic expressions and equations.

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0.3.6.1 Identify whether the number of objects in one group is greater than, less than or equal to the number of objects in another group (by using matching, counting strategies and a number line).	K M1 Lesson 28: Order numerals 1–10 and reason about an unknown number in the number sequence. K M3 Lesson 12: Relate *more* and *fewer* to length. K M3 Lesson 13: Compare sets by using *more than, fewer than*, and *the same number as*. K M3 Lesson 14: Use number to compare sets with like units. K M3 Lesson 16: Count and compare sets with unlike units. K M3 Lesson 17: Count and compare sets in pictures. K M3 Lesson 18: Compare the capacity of containers by using numerals. K M3 Lesson 19: Compare numbers by using *greater than, less than*, and *equal to*. K M3 Lesson 20: Compare two numbers in story situations. K M3 Lesson 21: Describe and compare several measurable attributes of objects and sets. K M6 Lesson 4: Order numerals 0–20. K M6 Lesson 5: Reason about a number's position in the number sequence. K M6 Topic D: Compare
0.3.6.2 Recognize that the equal sign (=) is a comparison symbol of two math expressions of equal value number.	K M5 Topic A: Represent Addition K M5 Topic B: Represent Subtraction 1 M1 Lesson 18: Determine whether number sentences are true or false. 1 M1 Lesson 19: Reason about the meaning of the equal sign

Patterns and Relationships

Patterns and Relationships: Represent and connect mathematical patterns and relationships using verbal descriptions, generalizations, tables and graphs. Use representations to generate questions, make predictions and solve mathematical problems.

Minnesota K–12 Academic Standards in Mathematics	Aligned Components of *Eureka Math²*
0.3.7.1 Recognize, create, complete and extend simple patterns using shape, color, size, number, sounds and movements. Patterns may be repeating, growing or shrinking.	K M1 Topic G: Analyze the Count Sequence K M5 Lesson 22: Identify and extend linear patterns. K M5 Lesson 23: Use a pattern to make a prediction. K M5 Lesson 25: Extend growing patterns. 1 M4 Lesson 14: Measure to find patterns.
0.3.7.2 Recognize patterns in counting. Skip count by 10s starting at zero up to 100.	K M6 Topic C: Count to 100