# EUREKA MATH<sup>2</sup>.

### Grade 2 | South Dakota State Standards for Mathematics Correlation to Eureka Math<sup>2®</sup>

When the original *Eureka Math*<sup>®</sup> curriculum was released, it quickly became the most widely used K-5 mathematics curriculum in the country. Now, the Great Minds<sup>®</sup> teacher-writers have created *Eureka Math*<sup>2®</sup>, 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*<sup>2</sup> 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* and moments that have been delighting students and teachers for years, it also boasts these exciting new features:

#### Teachability

*Eureka Math*<sup>2</sup> employs streamlined materials that allow teachers to plan more efficiently and focus their energy on delivering highquality 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 Math*<sup>2</sup> 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 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.

#### **Digital Engagement**

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

#### **Operations and Algebraic Thinking**

2.OA.A Represent and solve problems involving addition and subtraction.

#### South Dakota State Standards for Mathematics

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

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

#### **Operations and Algebraic Thinking**

2.OA.B Add and subtract within 20.

South Dakota State Standards for Mathematics	Aligned Components of Eureka Math <sup>2</sup>
2.OA.B.2	This standard is fully addressed by the lessons aligned to its subsections.
Add and subtract within 20.	

for Mathematics	
2.OA.B.2.a	2 M4 Lesson 7: Use concrete models to add and relate them to written recordings.
Fluently add and subtract within 20 using mental strategies.	2 M4 Lesson 8: Use place value drawings to represent addition and relate them to written recordings, part 1.
	2 M4 Lesson 9: Use place value drawings to represent addition and relate them to written recordings, part 2.
	2 M4 Lesson 10: Choose and defend efficient solution strategies for addition.
	2 M4 Lesson 11: Choose and defend efficient strategies to add up to four two-digit numbers.
	2 M4 Topic D: Strategies for Decomposing Tens and Hundreds Within 1,000
	2 M6 Lesson 18: Use various strategies to fluently add and subtract within 100 and know all sums and differences within 20 from memory.
2.OA.B.2.b	2 M6 Lesson 18: Use various strategies to fluently add and subtract within 100 and know all sums and
By end of Grade 2, know from memory all sums of two one-digit numbers.	differences within 20 from memory.

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

#### South Dakota State Standards for Mathematics

#### **Operations and Algebraic Thinking**

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

South Dakota State Standards for Mathematics	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
2.0A.C.3	2 M6 Topic B: Arrays and Equal Groups
Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends.	<ul> <li>2 M6 Topic C: Rectangular Arrays as a Foundation for Multiplication and Division</li> <li>2 M6 Lesson 14: Relate doubles to even numbers and write equations to express the sums.</li> <li>2 M6 Lesson 15: Pair objects and skip-count to determine whether a number is even or odd.</li> <li>2 M6 Lesson 16: Use rectangular arrays to investigate combinations of even and odd numbers.</li> <li>2 M6 Lesson 17: Solve word problems that involve equal groups and arrays.</li> </ul>

for Mathematics	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
2.OA.C.4	2 M6 Topic A: Count and Problem Solve with Equal Groups
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.	2 M6 Topic B: Arrays and Equal Groups 2 M6 Topic C: Rectangular Arrays as a Foundation for Multiplication and Division 2 M6 Lesson 17: Solve word problems that involve equal groups and arrays.

### South Dakata State Standards

#### Number and Operations in Base Ten

2.NBT.A Understand place value.

#### South Dakota State Standards for Mathematics

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

2.NBT.A.1	2 M1 Lesson 24: Count up to 1,000 by using place value units.
Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following	<ul> <li>2 M1 Lesson 25: Write three-digit numbers in unit form and show the value that each digit represents.</li> <li>2 M1 Lesson 27: Read, write, and relate base-ten numbers in all forms.</li> <li>2 M1 Lesson 28: Use place value understanding to count and exchange \$1, \$10, and \$100 bills.</li> <li>2 M1 Lesson 30: Determine how many \$10 bills are equal to \$1,000.</li> </ul>
as special cases:	2 M1 Topic H: Compose and Decompose with Place Value Disks
<b>2.NBT.A.1.a</b> 100 can be thought of as a bundle of ten tens–called a "hundred."	<ul> <li>2 M1 Lesson 20: Count and bundle ones, tens, and hundreds to 1,000.</li> <li>2 M1 Lesson 23: Organize, count, and record a collection of objects.</li> <li>2 M1 Lesson 28: Use place value understanding to count and exchange \$1, \$10, and \$100 bills.</li> <li>2 M1 Lesson 30: Determine how many \$10 bills are equal to \$1,000.</li> <li>2 M1 Lesson 32: Exchange 10 ones for 1 ten, 10 tens for 1 hundred, and 10 hundreds for 1 thousand.</li> <li>2 M1 Lesson 34: Problem solve in situations with more than 9 ones or 9 tens.</li> </ul>

for Mathematics	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
2.NBT.A.1.b	2 M1 Lesson 24: Count up to 1,000 by using place value units.
The numbers 100, 200, 300, 400, 500, 600,	2 M1 Lesson 25: Write three-digit numbers in unit form and show the value that each digit represents.
700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds	2 M1 Lesson 27: Read, write, and relate base-ten numbers in all forms.
(and 0 tens and 0 ones).	2 M1 Lesson 28: Use place value understanding to count and exchange $1, 10, 100$ bills.
	2 M1 Lesson 30: Determine how many \$10 bills are equal to \$1,000.
	2 M1 Topic H: Compose and Decompose with Place Value Disks
2.NBT.A.2	2 M1 Lesson 21: Count efficiently within 1,000 by using ones, tens, and hundreds.
Count within $1,000$ ; skip-count by 5s, $10$ s,	2 M1 Lesson 22: Use counting strategies to solve add to with change unknown word problems.
and 100s, starting from any number in its skip counting sequence.	2 M1 Lesson 23: Organize, count, and record a collection of objects.
skip counting sequence.	2 M1 Lesson 24: Count up to 1,000 by using place value units.
	2 M1 Lesson 29: Count by \$1, \$10, and \$100.
	2 M1 Lesson 30: Determine how many \$10 bills are equal to \$1,000.
	2 M1 Lesson 37: Organize, count, represent, and compare a collection of objects.
	2 M3 Lesson 17: Relate the clock to a number line to count by fives.
	2 M3 Lesson 18: Tell time to the nearest 5 minutes.
2.NBT.A.3	2 M1 Lesson 23: Organize, count, and record a collection of objects.
Read and write numbers to 1,000 using base-ten numerals (standard form), number names (word form), and expanded form.	2 M1 Lesson 26: Write base-ten numbers in expanded form.
	2 M1 Lesson 27: Read, write, and relate base-ten numbers in all forms.
	2 M1 Lesson 31: Count the total value of ones, tens, and hundreds with place value disks.
	2 M1 Lesson 38: Compare numbers in different forms.

#### South Dakota State Standards for Mathematics

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

South Dakota State Standards for Mathematics	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
2.NBT.A.4	2 M1 Topic I: Compare Two Three-Digit Numbers in Different Forms
Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and <, symbols to record the results of comparisons.	

## Couth Delete State Standards

Number and Operations in Base Ten

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

South Dakota State Standards for Mathematics	Aligned Components of Eureka Math <sup>2</sup>
2.NBT.B.5	2 M4 Lesson 4: Represent and solve compare with bigger unknown word problems.
Fluently add and subtract within $100$	2 M4 Lesson 5: Use the associative property to make a benchmark number to add within 1,000.
using strategies based on place value,	2 M4 Lesson 6: Use compensation to add within 1,000.
properties of operations, and/or the relationship between addition and	2 M4 Lesson 10: Choose and defend efficient solution strategies for addition.
subtraction.	2 M4 Lesson 11: Choose and defend efficient strategies to add up to four two-digit numbers.
	2 M4 Lesson 12: Take from a ten or a hundred to subtract.
	2 M4 Lesson 13: Use compensation to subtract within 1,000.
	2 M4 Lesson 20: Subtract by using multiple strategies and defend an efficient strategy.
	2 M4 Lesson 22: Solve compare with smaller unknown word problems.
	2 M4 Lesson 23: Solve two-step addition and subtraction word problems.
	2 M6 Lesson 18: Use various strategies to fluently add and subtract within 100 and know all sums and differences within 20 from memory.

#### South Dakota State Standards for Mathematics

2.NBT.B.6	2 M2 Lesson 1: Reason about addition with four addends.
Add up to four two-digit numbers using strategies based on place value and properties of operations.	2 M4 Lesson 11: Choose and defend efficient strategies to add up to four two-digit numbers.
2.NBT.B.7	2 M2 Lesson 2: Break apart and add like units.
Add and subtract within 1,000, using	2 M2 Lesson 3: Use compensation to add within 100.
concrete models or drawings and strategies based on place value,	2 M2 Lesson 4: Use compensation to add within 200.
properties of operations, and/or	2 M2 Lesson 5: Make a ten to add within 100.
the relationship between addition	2 M2 Lesson 6: Make a ten to add within 200.
and subtraction; relate the strategy to a written method. Understand that	2 M2 Lesson 7: Solve word problems by using simplifying strategies for addition.
in adding or subtracting three-digit	2 M2 Topic B: Strategies for Composing a Ten and a Hundred to Add
numbers, one adds or subtracts hundreds	2 M2 Lesson 14: Use addition and subtraction strategies to find an unknown part.
and hundreds, tens and tens, ones and ones; and sometimes it is necessary	2 M2 Lesson 15: Use compensation to subtract within 100.
to compose or decompose tens	2 M2 Lesson 16: Use compensation to subtract within 200.
or hundreds.	2 M2 Lesson 17: Take from a ten to subtract within 200.
	2 M2 Lesson 18: Take from a hundred to subtract within 200.
	2 M2 Lesson 19: Solve word problems with simplifying strategies for subtraction.
	2 M2 Lesson 20: Reason about when to unbundle a ten to subtract.
	2 M2 Lesson 21: Use concrete models to decompose a ten with two-digit totals.
	2 M2 Lesson 22: Use place value drawings to decompose a ten and relate them to written recordings.
	2 M2 Lesson 23: Use concrete models and drawings to decompose a hundred.
	2 M2 Lesson 24: Use place value drawings to decompose a hundred and relate them to written recordings.
	2 M2 Lesson 25: Use place value drawings to subtract with two decompositions.

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

South Dakota State Standards for Mathematics	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
2.NBT.B.7 continued	2 M4 Lesson 5: Use the associative property to make a benchmark number to add within 1,000.
	2 M4 Lesson 6: Use compensation to add within 1,000.
	2 M4 Lesson 7: Use concrete models to add and relate them to written recordings.
	2 M4 Lesson 8: Use place value drawings to represent addition and relate them to written recordings, part 1.
	2 M4 Lesson 9: Use place value drawings to represent addition and relate them to written recordings, part 2.
	2 M4 Lesson 10: Choose and defend efficient solution strategies for addition.
	2 M4 Topic C: Simplifying Strategies for Subtracting Within 1,000
	2 M4 Topic D: Strategies for Decomposing Tens and Hundreds Within $1,000$
	2 M4 Lesson 21: Apply strategies to find sums and differences and relate addition to subtraction.
	2 M4 Lesson 24: Organize, count, and represent a collection of objects.
2.NBT.B.8	2 M4 Lesson 1: Organize, count, and represent a collection of objects.
Mentally add $10 \mbox{ or } 100 \mbox{ to a given number}$	2 M4 Lesson 2: Mentally add and subtract multiples of 10 and 100 with unknowns in various positions.
100-900, and mentally subtract 10 or 100 from a given number 100-900.	2 M4 Lesson 3: Solve multi-step word problems and reason about equal expressions.
2.NBT.B.9	2 M4 Lesson 5: Use the associative property to make a benchmark number to add within 1,000.
Explain why addition and subtraction	2 M4 Lesson 6: Use compensation to add within 1,000.
strategies work, using place value and the properties of operations. (Explanations may be supported by words, drawings	2 M4 Lesson 10: Choose and defend efficient solution strategies for addition.
	2 M4 Lesson 11: Choose and defend efficient strategies to add up to four two-digit numbers.
or objects.)	2 M4 Topic C: Simplifying Strategies for Subtracting Within 1,000
	2 M4 Lesson 20: Subtract by using multiple strategies and defend an efficient strategy.
	2 M4 Lesson 21: Apply strategies to find sums and differences and relate addition to subtraction.

### South Dakota State Standards

2 | South Dakota State Standards for Mathematics Correlation to Eureka Math<sup>2</sup>

#### **Measurement and Data**

2.MD.A Measure and estimate lengths in standard units.

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

#### **Measurement and Data**

2.MD.B Relate addition and subtraction to length.

South Dakota State Standards for Mathematics	Aligned Components of Eureka Math <sup>2</sup>
2.MD.B.5	2 M1 Lesson 17: Represent and solve comparison problems by using measurement contexts.
Use addition and subtraction within 100 to solve word problems involving lengths	2 M1 Lesson 18: Solve <i>compare with difference unknown</i> word problems by using measurement contexts.
that are given in the same units, e.g., by	2 M1 Lesson 19: Solve compare with difference unknown word problems in various contexts.
using drawings (such as drawings of rulers) and equations with a symbol	2 M5 Lesson 13: Solve word problems that involve measurements and reason about estimates.
for the unknown number to represent the problem.	2 M5 Lesson 14: Solve addition and subtraction two-step word problems that involve length.
2.MD.B.6	2 M1 Topic D: Solve <i>Compare</i> Problems by Using the Ruler as a Number Line
Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2,, and represent whole-number sums and differences within 100 on a number line diagram.	2 M5 Lesson 12: Identify unknown numbers on a number line by using the interval as a reference point.

#### **Measurement and Data**

2.MD.C Work with time and money.

South Dakota State Standards for Mathematics	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
2.MD.C.7	2 M3 Lesson 14: Distinguish between a.m. and p.m.
Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.	<ul> <li>2 M3 Lesson 16: Use a clock to tell time to the half hour or quarter hour.</li> <li>2 M3 Lesson 17: Relate the clock to a number line to count by fives.</li> <li>2 M3 Lesson 18: Tell time to the nearest 5 minutes.</li> </ul>

for Mathematics	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
2.MD.C.8	This standard is fully addressed by the lessons aligned to its subsections.
Identify and count coins and bills and apply that understanding to solve word problems.	
2.MD.C.8.a	2 M5 Topic A: Problem Solving with Coins and Bills
Recognize and know the value of coins up to one dollar.	
2.MD.C.8.b	2 M5 Topic A: Problem Solving with Coins and Bills
Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately.	

### South Dakota State Standards

#### **Measurement and Data**

2.MD.D Represent and interpret data.

South Dakota State Standards for Mathematics	Aligned Components of Eureka Math <sup>2</sup>
2.MD.D.9	2 M5 Lesson 15: Use measurement data to create a line plot.
Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.	2 M5 Lesson 16: Create a line plot to represent data and ask and answer questions.

for Mathematics	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
2.MD.D.10	2 M1 Topic A: Represent Data to Solve Problems
Draw a picture graph 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.	

### South Dakata Stata Standarda

#### Geometry

#### 2.G.A Reason with shapes and their attributes.

South Dakota State Standards for Mathematics	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
2.G.A.1	2 M3 Topic A: Attributes of Geometric Shapes
Recognize, identify, and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces; to include triangles, quadrilaterals, pentagons, hexagons, and cubes. (Sizes are compared directly or visually, not compared by measuring.)	<ul> <li>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.</li> <li>2 M3 Lesson 7: Combine shapes to create a composite shape and create a new shape from composite shapes.</li> </ul>
2642	2 M6 Lesson 11: Decompose an array to find the total efficiently

2.G.A.2	2 Mb Lesson II: Decompose an array to find the total efficiently.
Partition a rectangle into rows and	2 M6 Lesson 12: Reason about how equal arrays can be composed differently.
columns of same-size squares and count	2 M6 Lesson 13: Decompose an array and relate it to a number bond.
to find the total number of them.	

South Dakota State Standards for Mathematics	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
2.G.A.3 Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, 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.	<ul> <li>2 M3 Lesson 8: Create composite shapes by using equal parts and name them as halves, thirds, and fourths.</li> <li>2 M3 Lesson 9: Interpret equal shares in composite shapes as halves, thirds, and fourths.</li> <li>2 M3 Topic C: Halves, Thirds, and Fourths of Circles and Rectangles</li> </ul>