



# Grade 1 | Utah Core State Standards for Mathematics Correlation to Eureka Math<sup>2®</sup>

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*<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 aha 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 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*<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>

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 involving addition and subtraction within 20.

# Utah Core State Standards for Mathematics

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

#### 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 Math<sup>2</sup>

1.OA.2	1 M3 Lesson 2: Make ten with three addends.
Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20.	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.

Utah	Core	<b>State</b>	<b>Standards</b>
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## Aligned Components of Eureka Math<sup>2</sup>

1.OA.3	1 M1 Lesson 9: Count on from both parts and record part-total relationships.
Apply properties of operations as strategies to add and subtract. First grade students need not use formal terms for these properties.	1 M1 Lesson 15: Use the commutative property to count on from the larger addend.  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.
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**

Represent and solve problems involving addition and subtraction within 20.

# Utah Core State Standards for Mathematics

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

1.OA.5	1 M1 Topic B: Count On from a Visible Part
Relate counting to addition and subtraction.	1 M1 Lesson 13: Count on from an addend in add to with result unknown situations.
	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.
1.OA.6	This standard is fully addressed by the lessons aligned to its subsections.
Add and subtract within 20.	
1.OA.6.a	1 M1 Lesson 14: Count on to find the total of an addition expression.
Use strategies such as counting on;	1 M1 Lesson 17: Add $0$ and $1$ to any number.
making ten; decomposing a number leading to a ten; using the relationship between addition and subtraction; and creating equivalent but easier or known sums.	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.

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

1.OA.6.a continued	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 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.
1.OA.6.b	1 M1 Lesson 14: Count on to find the total of an addition expression.
By the end of Grade 1, demonstrate	1 M1 Lesson 17: Add $0$ and $1$ to any number.
fluency for addition and subtraction 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 M1 Lesson 23: Find the totals of doubles $+1$ facts.

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

1.OA.6.b continued	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.

### **Operations and Algebraic Thinking**

Work with addition and subtraction equations.

# Utah Core State Standards for Mathematics

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

#### 1.OA.7

Understand the meaning of the equal sign, and determine whether equations involving addition and subtraction are true or false.

1 M1 Lesson 18: Determine whether number sentences are true or false.

1 M1 Lesson 19: Reason about the meaning of the equal sign.

1 M1 Lesson 24: Use known facts to make easier problems.

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.

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

#### 1.OA.8

Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. 1 M2 Lesson 10: Represent and find an unknown addend in equations.

1 M2 Lesson 12: Represent and find an unknown subtrahend in equations.

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.

# Utah Core State Standards for Mathematics

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

#### 1.NBT.1

Count to 120, starting at any number less than 120. 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.

# Utah Core State Standards for Mathematics

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

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.
1 M3 Lesson 15: Count and record a collection of objects.
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.
1 M5 Lesson 5: Reason about equivalent representations of a number.

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

1.NBT.2.b	1 M1 Lesson 12: Count on from $10$ to find an unknown total.
The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.	1 M3 Lesson 16: Identify ten as a unit.
	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 19: Solve take from with change unknown problems with totals in the teens.
	1M4 Lesson 8: Draw to represent a length measurement.
	1M4 Lesson 9: Represent a total length as units of tens and ones.
	1M5 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.
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,	1 M3 Lesson 18: Subtract a one-digit number from a two-digit number.
90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).	1 M3 Lesson 19: Solve take from with change unknown problems with totals in the teens.
	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.
1.NBT.3	1 M1 Lesson 2: Organize and represent data to compare two categories.
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 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.

# Utah Core State Standards for Mathematics

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

#### 1.NBT.4

Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens to tens and ones to ones, and that it is sometimes necessary to compose a ten.

1 M5 Topic C: Addition of One-Digit and Two-Digit Numbers

1 M5 Topic D: Addition and Subtraction of Tens

1 M5 Topic E: Addition of Two-Digit Numbers

 $1\,\mathrm{M6}$  Topic F: Extending Addition to 100

#### 1.NBT.5

Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.

 $1\,\mathrm{M}5$  Lesson 6: Add 10 or take 10 from a two-digit number.

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

#### 1.NBT.6

Subtract multiples of 10 in the range 10–90 from multiples of 10 in the range 10–90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

1 M5 Lesson 15: Count on and back by tens to add and subtract.

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 units.

# Utah Core State Standards for Mathematics

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

#### 1.MD.1

Order three objects by length; compare the lengths of two objects indirectly by using a third object. 1 M4 Topic A: Direct and Indirect Length Comparison

1 M4 Lesson 5: Measure and compare lengths.

1 M4 Lesson 6: Measure and order lengths.

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

#### 1.MD.2

Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.

1 M4 Topic B: Length Measurement and Comparison

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**

Tell and write time.

# Utah Core State Standards for Mathematics

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

#### 1.MD.3

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.

#### **Measurement and Data**

Represent and interpret data.

# Utah Core State Standards for Mathematics

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

#### 1.MD.4

Organize, represent, and interpret data with up to three categories; ask and answer questions about the 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.

#### **Measurement and Data**

Identify the value of coins.

# Utah Core State Standards for Mathematics

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

#### 1.MD.5

Identify the values of pennies, nickels, dimes and quarters, and know their comparative values. Use appropriate notation to designate a coin's value.

Supplemental material is necessary to address this standard.

## Geometry

Reason with shapes and their attributes.

# Utah Core State Standards for Mathematics

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

1.G.1	1 M6 Topic A: Attributes of Shapes
Distinguish between defining attributes (for example, triangles are closed and three-sided) versus non-defining attributes (for example, color, orientation, overall size); build and draw shapes that possess defining attributes.	
1.G.2	This standard is fully addressed by the lessons aligned to its subsections.
Compose shapes.	
1.G.2.a	1 M6 Topic B: Composition of Shapes
Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) to create a composite shape, and compose new shapes from the composite shape.	
1.G.2.b	1 M6 Lesson 6: Create composite shapes and identify shapes within two- and three-dimensional
Compose 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 shape. First grade students do not need to learn formal names such as "right rectangular prism."	composite shapes.

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

#### 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 or four of the shares. Understand that, for these examples, 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.