



# Grade 1 | North Carolina Standard Course of Study–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.

### North Carolina Standard Course of Study-Mathematics

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

#### NC.1.OA.1

Represent and solve addition and subtraction word problems, within 20, with unknowns, by using objects, drawings, and equations with a symbol for the unknown number to represent the problem, when solving:

- Add to/Take from-Change Unknown
- Put together/Take Apart-Addend Unknown
- Compare-Difference Unknown

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>

#### NC.1.OA.2

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

1M3 Lesson 2: Make ten with three addends.

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

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

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

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

### **Operations and Algebraic Thinking**

Understand and apply the properties of operations.

## North Carolina Standard Course of Study-Mathematics

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

NC.1.OA.3	1 M1 Lesson 9: Count on from both parts and record part-total relationships.
Apply the commutative and associative properties as strategies for solving addition problems.	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.
NC.1.OA.4  Solve an unknown-addend problem, within 20, by using addition strategies and/or changing it to a subtraction problem.	1 M2 Lesson 17: Use related addition facts to subtract from 10.  1 M2 Lesson 18: Use related addition facts to subtract.  1 M2 Lesson 19: Determine the value of the unknown in various positions.

### **Operations and Algebraic Thinking**

Add and subtract within 20.

## North Carolina Standard Course of Study-Mathematics

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

#### NC.1.OA.6

Add and subtract, within 20, using strategies such as:

- Counting on
- · Making ten
- Decomposing a number leading to a ten
- Using the relationship between addition and subtraction
- · Using a number line
- Creating equivalent but simpler or known sums

1 M1 Lesson 14: Count on to find the total of an addition expression.

1 M1 Lesson 17: Add 0 and 1 to any number.

1 M1 Lesson 20: Find all two-part expressions equal to 6.

1 M1 Lesson 21: Find all two-part expressions equal to 7 and 8.

1 M1 Lesson 22: Find all two-part expressions equal to 9 and 10.

1 M1 Lesson 23: Find the totals of doubles +1 facts.

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

1 M2 Lesson 2: Subtract all or subtract 0.

1 M2 Lesson 3: Subtract 1 or subtract 1 less than the total.

1 M2 Lesson 4: Use fingers to subtract 4, 5, and 6 efficiently.

1 M2 Lesson 7: Count on or count back to solve related addition and subtraction problems.

1 M2 Lesson 16: Compare the efficiency of counting on and counting back to subtract.

1 M3 Lesson 1: Group to make ten when there are three parts.

1 M3 Lesson 4: Use properties of addition to make three-addend expressions easier.

1 M3 Topic B: Make Easier Problems to Add

1 M3 Lesson 13: Count on to make ten within 20.

1 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.

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

NC.1.OA.6 continued	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.
	Supplemental material is necessary to fully address the use of number lines.

### **Operations and Algebraic Thinking**

Analyze addition and subtraction equations within 20.

## North Carolina Standard Course of Study-Mathematics

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

Ν	C.	1.	O	А	./

Apply understanding of the equal sign to determine if equations involving addition and subtraction are true.

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.

1M5 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>

#### NC.1.OA.8

Determine the unknown whole number in an addition or subtraction equation involving 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.

### **Operations and Algebraic Thinking**

Add and subtract within 20.

## North Carolina Standard Course of Study-Mathematics

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

#### NC.1.OA.9

Demonstrate fluency with addition and subtraction within 10.

1 M1 Lesson 14: Count on to find the total of an addition expression.

1 M1 Lesson 17: Add 0 and 1 to any number.

1 M1 Lesson 20: Find all two-part expressions equal to 6.

1 M1 Lesson 21: Find all two-part expressions equal to 7 and 8.

1 M1 Lesson 22: Find all two-part expressions equal to 9 and 10.

1 M1 Lesson 23: Find the totals of doubles +1 facts.

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

1 M2 Lesson 2: Subtract all or subtract 0.

 $1\,\mathrm{M2}$  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 | North Carolina Standard Course of Study-Mathematics Correlation to Eureka Math<sup>2</sup>

### Number and Operations in Base Ten

Extend and recognize patterns in the counting sequence.

## North Carolina Standard Course of Study-Mathematics

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

NC.1.NBT.1	1 M3 Lesson 15: Count and record a collection of objects.
Count to $150$ , starting at any number less than $150$ .	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
NC.1.NBT.7	1 M3 Lesson 15: Count and record a collection of objects.
Read and write numerals, and represent a number of objects with a written numeral, to 100.	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.

## North Carolina Standard Course of Study-Mathematics

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

#### NC.1.NBT.2

Understand that the two digits of a two-digit number represent amounts of tens and ones.

- Unitize by making a ten from a collection of ten ones.
- Model the numbers from 11 to 19 as composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.
- Demonstrate that the numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens, with 0 ones.

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.

#### NC.1.NBT.3

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

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

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

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

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

1 M4 Lesson 5: Measure and compare lengths.

1 M5 Topic B: Use Place Value to Compare

1 | North Carolina Standard Course of Study–Mathematics Correlation to Eureka Math²

### Number and Operations in Base Ten

Use place value understanding and properties of operations.

## North Carolina Standard Course of Study-Mathematics

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

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
1M6 Topic F: Extending Addition to 100
1M5 Lesson 6: Add 10 or take 10 from a two-digit number.

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

#### NC.1.NBT.6

Subtract multiples of 10 in the range 10–90 from multiples of 10 in the range 10–90, explaining the reasoning, using:

- Concrete models and drawings
- Number lines
- Strategies based on place value
- Properties of operations
- The relationship between addition and subtraction

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.

Supplemental material is necessary to fully address the use of number lines.

#### **Measurement and Data**

### Measure lengths.

## North Carolina Standard Course of Study-Mathematics

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

#### NC.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>

NC.1.MD.2	1 M4 Topic B: Length Measurement and Comparison
Measure lengths with non-standard units.	1 M4 Lesson 10: Compare to find how much longer.
<ul> <li>Express the length of an object as a whole number of non-standard length units.</li> </ul>	1 M4 Lesson 11: Compare to find how much shorter.  1 M4 Lesson 14: Measure to find patterns.
<ul> <li>Measure by laying multiple copies of a shorter object (the length unit) end to end (iterating) with no gaps or overlaps.</li> </ul>	

#### **Measurement and Data**

Build understanding of time and money.

## North Carolina Standard Course of Study-Mathematics

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

NC.1.MD.3  Tell and write time in hours and half-hours using analog and digital clocks.	<ul> <li>1 M5 Lesson 1: Tell time to the hour and half hour by using digital and analog clocks.</li> <li>1 M6 Lesson 14: Tell time to the half hour with the term half past.</li> <li>1 M6 Lesson 15: Reason about the location of the hour hand to tell time.</li> </ul>
NC.1.MD.5  Identify quarters, dimes, and nickels and relate their values to pennies.	Supplemental material is necessary to address this standard.

1 | North Carolina Standard Course of Study-Mathematics Correlation to Eureka Math<sup>2</sup>

#### **Measurement and Data**

#### Represent and interpret data.

## North Carolina Standard Course of Study-Mathematics

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

#### NC.1.MD.4

Organize, represent, and interpret data with up to three categories.

- Ask and answer questions about the total number of data points.
- Ask and answer questions about how many in each category.
- Ask and answer questions about 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.

#### **Geometry**

Reason with shapes and their attributes.

## North Carolina Standard Course of Study-Mathematics

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

#### NC.1.G.1

Distinguish between defining and non-defining attributes and create shapes with defining attributes by:

- Building and drawing triangles, rectangles, squares, trapezoids, hexagons, circles.
- Building cubes, rectangular prisms, cones, spheres, and cylinders.

1 M6 Topic A: Attributes of Shapes

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

NC.1.G.2	1 M6 Topic B: Composition of Shapes
Create composite shapes by:	
<ul> <li>Making a two-dimensional composite shape using rectangles, squares, trapezoids, triangles, and half-circles naming the components of the new shape.</li> </ul>	
<ul> <li>Making a three-dimensional composite shape using cubes, rectangular prisms, cones, and cylinders, naming the components of the new shape.</li> </ul>	
NC.1.G.3	1 M6 Lesson 10: Reason about equal and not equal shares.
Partition circles and rectangles into two and four equal shares.	1 M6 Lesson 11: Name equal shares as halves or fourths.
	1 M6 Lesson 12: Partition shapes into halves, fourths, and quarters.
<ul> <li>Describe the shares as halves and fourths, as half of and fourth of.</li> </ul>	1 M6 Lesson 13: Relate the number of equal shares to the size of the shares.
<ul> <li>Describe the whole as two of, or four of the shares.</li> </ul>	
<ul> <li>Explain that decomposing into more equal shares creates smaller shares.</li> </ul>	