## Grade K | North Dakota Mathematics K-12 Standards Correlation to Eureka Math ${ }^{2 ®}$

When the original Eureka Math ${ }^{\circledR}$ curriculum was released, it quickly became the most widely used $\mathrm{K}-5$ mathematics curriculum in the country. Now, the Great Minds ${ }^{\circledR}$ teacher-writers have created Eureka Math ${ }^{2 ®}$, 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 ${ }^{2}$ 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 ${ }^{2}$ 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 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 ${ }^{2}$ 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.

## Math Attributes

## Aligned Components of Eureka Math ${ }^{2}$

| K-2.MA.P |  |
| :--- | :--- |
| Learners can identify and use strategies to problem-solve situations <br> and determine an appropriate solution. | Lessons in every module engage students in math attributes. These are <br> indicated in margin notes included with every lesson. |
| K-2.MA.C <br> Learners can make connections and demonstrate relationships using <br> words, pictures, or symbols. | Lessons in every module engage students in math attributes. These are <br> indicated in margin notes included with every lesson. |
| K-2.MA.R <br> Learners can use prior knowledge and experiences to explain <br> their thinking. | Lessons in every module engage students in math attributes. These are <br> indicated in margin notes included with every lesson. |

Number and Operations: Learners will develop a foundational understanding of the number system, operations, and computational fluency to create connections and solve problems within and across concepts.
K.NO.CC Counting and Cardinality: Learners will understand the relationship between numerical symbols, names, quantities, and counting sequences.

## North Dakota Mathematics <br> K-12 Standards

## Aligned Components of Eureka Math ${ }^{2}$

## K.NO.CC. 1

Count verbally in sequential order by ones and tens to 100, making accurate decuple transitions (e.g., 89 to 90). Count verbally forward from any given number within 100.

K M1 Lesson 6: Organize, count, and represent a collection of objects.
K M1 Lesson 19: Organize, count, and represent a collection of objects.
K M1 Lesson 28: Order numerals 1-10 and reason about an unknown number in the number sequence.
K M1 Lesson 33: Organize, count, and represent a collection of objects.
K M5 Lesson 18: Count starting from a number other than 1 to find the total.
K M6 Lesson 2: Find 10 ones in a teen number.
K M6 Lesson 5: Reason about a number's position in the number sequence.
K M6 Lesson 14: Count by tens.
K M6 Lesson 15: Count by tens by using math tools.
K M6 Lesson 16: Use the structure of ten to count to 100.
K M6 Lesson 17: Use patterns in the number sequence to count by ones within 100.
K M6 Lesson 18: Count within and across decades when counting by ones, part 1.
K M6 Lesson 19: Count within and across decades when counting by ones, part 2.

This standard is fully addressed by Fluency activities suggested for each module.

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.

This standard is partially addressed by Fluency activities suggested for each module.

Supplemental material is necessary to fully address this standard

## North Dakota Mathematics <br> K-12 Standards

## Aligned Components of Eureka Math ${ }^{2}$

| K.NO.CC. 3 <br> Identify and write any given numeral within 20. | K M1 Lesson 5: Classify objects into three categories, count, and match to a numeral. <br> K M1 Lesson 7: Practice counting accurately. <br> K M1 Lesson 11: Write numerals 1-3 to answer how many questions. <br> K M1 Lesson 12: Write numerals 4 and 5 to answer how many questions. <br> K M1 Lesson 14: Understand the meaning of zero and write the numeral. <br> K M1 Lesson 21: Count sets in circular configurations and match to a numeral. <br> K M1 Lesson 22: Count sets in scattered configurations and match to a numeral. <br> K M1 Lesson 25: Write numerals 6 and 7. <br> K M1 Lesson 26: Write numeral 8. <br> K M1 Lesson 27: Write numerals 9 and 10 . <br> K M6 Lesson 3: Write numerals 11-20. <br> K M6 Lesson 17: Use patterns in the number sequence to count by ones within 100 . |
| :---: | :---: |
| K.NO.CC. 4 <br> Recognize and verbally label arrangements, without counting, for briefly shown collections up to 10 (e.g., "I saw 5." How do you know?" "I saw 3 and 2 , that is 5 ."). | K M4 Lesson 3: Decompose a group to identify parts and total. <br> K M4 Lesson 4: Decompose a group and record parts and total by using a number bond. <br> K M5 Lesson 4: Represent decomposition situations by using number bonds and addition sentences. <br> K M5 Lesson 21: Organize drawings to solve problems efficiently. <br> This standard is partially addressed by subitizing Fluency activities in modules 1, 3, 4, and 5. <br> Supplemental material is necessary to fully address this standard. |

## North Dakota Mathematics <br> K-12 Standards

## MK.NO.CC. 5

Count and tell how many objects up to 20 are in an arranged pattern or up to 10 objects in a scattered configuration. Represent a quantity of up to 20 with a numeral.

## Aligned Components of Eureka Math²

Number and Operations: Learners will develop a foundational understanding of the number system, operations, and computational fluency to create connections and solve problems within and across concepts.
K.NO.NBT Base Ten: Learners will understand the place value structure of the base-ten number system and represent, compare, and perform operations with multi-digit whole numbers and decimals.

## North Dakota Mathematics <br> K-12 Standards

Aligned Components of Eureka Math ${ }^{2}$

## K.NO.NBT. 1

Compose and decompose numbers from 11 to 19 using a group of ten ones and some more ones using a model, drawing, or equation.

K M6 Lesson 1: Describe teen numbers as 10 ones and $\qquad$ ones.

K M6 Lesson 2: Find 10 ones in a teen number.
K M6 Lesson 3: Write numerals 11-20
K M6 Lesson 4: Order numerals 0-20.
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 8: Represent teen number compositions and decompositions as addition sentences.
K M6 Lesson 9: Represent teen number decompositions as subtraction sentences.
K M6 Lesson 10: Make sense of word problems involving teen numbers.
K M6 Lesson 11: Represent teen number decompositions as 10 ones and some ones and find a hidden part.

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.

North Dakota Mathematics
K-12 Standards

## Aligned Components of Eureka Math ${ }^{2}$

## K.NO.NBT. 2 continued

> K M3 Lesson 21: Describe and compare several measurable attributes of objects and sets.
> K M6 Lesson 20: Compare totals in story situations.
> K M6 Lesson 21: Count and compare sets with more than 10 objects.
> K M6 Lesson 22: Compare area by comparing number.
> K M6 Lesson 23: Compare lengths of objects by using 10-sticks and individual cubes.

Algebraic Reasoning: Learners will look for, generate, and make sense of patterns, relationships, and algebraic symbols to represent mathematical models while adopting approaches and solutions in novel situations.
K.AR.OA Operations and Algebraic Thinking: Learners will analyze patterns and relationships to generate and interpret numerical expressions.

## North Dakota Mathematics <br> K-12 Standards

## Aligned Components of Eureka Math ${ }^{2}$

| K.AR.OA.1 | K M5 Lesson 7: Find the total in an addition sentence. |
| :--- | :--- |
| Automatically add and subtract within 5. | K M5 Lesson 14: Find the difference in a subtraction sentence. |
| K.AR.OA.2 | K M4 Lesson 8: Find partners to 10. |
| For any number from 1 to 9, find the <br> number that makes 10 when added <br> to the given number, sharing the answer <br> with a model, drawing, or equation. | K M5 Lesson 20: Find the number that makes 10 and record with a number sentence. <br> K M5 Lesson 26: Reason about numbers to add and subtract. |
|  | This standard is fully addressed by Fluency activities suggested for modules 4-6. |

## North Dakota Mathematics <br> K-12 Standards

## Aligned Components of Eureka Math²

## K.AR.OA. 3

Decompose numbers less than or equal to 10 into pairs in more than one way using verbal explanations, objects, or drawings.

K M4 Lesson 5: Sort to decompose a number in more than one way.
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 10: Sort and record the decomposition with a number bond.
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 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 M4 Lesson 3: Decompose a group to identify parts and total.
K M4 Lesson 4: Decompose a group and record parts and total by using 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 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 21: Organize drawings to solve problems efficiently.
K M5 Lesson 24: Solve story problems by using repeated reasoning.

## North Dakota Mathematics

K-12 Standards

## Aligned Components of Eureka Math ${ }^{2}$

## K.AR.OA. 5

Solve authentic word problems with subtraction by taking apart or taking from within 10.
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 19: Represent and solve take from with change unknown problems.
K M5 Lesson 21: Organize drawings to solve problems efficiently.
K M5 Lesson 22: Identify and extend linear patterns.
K M5 Lesson 23: Use a pattern to make a prediction.
K M5 Lesson 24: Solve story problems by using repeated reasoning.
K M5 Lesson 25: Extend growing patterns.
K M5 Lesson 26: Reason about numbers to add and subtract.

Geometry and Measurement: Learners will use visualization, spatial reasoning, geometric modeling, and measurement to investigate the characteristics of figures, perform transformations, and construct logical arguments.
K.GM.G Geometry: Learners will compose and classify figures and shapes based on attributes and properties; represent and solve problems using a coordinate plane.

North Dakota Mathematics<br>K-12 Standards

## Aligned Components of Eureka Math ${ }^{2}$

## K.GM.G. 1

Name shapes and identify them as two-dimensional (squares, circles, triangles, rectangles) regardless of their orientations or overall sizes.

```
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 6: Distinguish between flat and solid shapes.
K M2 Lesson 11: Construct and classify polygons.
K M2 Lesson 14: Compose flat shapes.
```


## North Dakota Mathematics <br> K-12 Standards

## Aligned Components of Eureka Math ${ }^{2}$

| K.GM.G. 2 | K M2 Lesson 6: Distinguish between flat and solid shapes. |
| :---: | :---: |
| Name shapes and identify them as three-dimensional (cubes and spheres) regardless of their orientations or overall sizes. | K M2 Lesson 7: Name solid shapes and discuss their attributes. |
|  | K M2 Lesson 9: Match solid shapes to their two-dimensional faces. |
|  | K M2 Lesson 12: Construct solid shapes by using a square base. |
|  | K M2 Lesson 15: Compose solid shapes to create a structure that can fit a toy inside. |
| K.GM.G. 3 | K M2 Lesson 1: Find and describe attributes of flat shapes. |
| Compare and classify two-dimensional shapes to describe their similarities, differences, and attributes (squares, circles, triangles, rectangles). | 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 10: Construct a circle. |
|  | K M2 Lesson 13: Draw flat shapes. |
| K.GM.G. 4 | K M2 Lesson 12: Construct solid shapes by using a square base. |
| Compose a geometric shape by combining two or more simple shapes. | K M 2 Lesson 15: Compose solid shapes to create a structure that can fit a toy inside. |
|  | 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. |
|  | Supplemental material is necessary to fully address this standard. |

Geometry and Measurement: Learners will use visualization, spatial reasoning, geometric modeling, and measurement to investigate the characteristics of figures, perform transformations, and construct logical arguments.
K.GM.M Measurement: Learners will represent and calculate measurement data, including time, money, and geometric measurement, and convert like measurement units within a given system.
North Dakota Mathematics
K-12 Standards

Aligned Components of Eureka Math ${ }^{2}$

| K.GM.M.1 | K M3 Topic A: Compare Heights and Lengths |
| :--- | :--- |
| Compare and order two objects with <br> a common measurable attribute. | K M3 Topic B: Compare Weights <br> K M3 Lesson 12: Relate more and fewer to length. <br> K M3 Lesson 21: Describe and compare several measurable attributes of objects and sets. |
| K.GM.M. 2 | Supplemental material is necessary to address this standard. |
| Tell time related to daily life (today, <br> yesterday, tomorrow, morning, <br> afternoon, night). |  |

Data, Probability, and Statistics: Learners will ask and answer questions by collecting, organizing, and displaying relevant data, drawing inferences and conclusions, making predictions, and understanding and applying basic probability concepts.

## K.DPS.D Data: Learners will represent and interpret data.

North Dakota Mathematics
K-12 Standards

## K.DPS.D. 1

Sort and classify objects (up to 10)
based on attributes and explain the reasoning used.

Aligned Components of Eureka Math ${ }^{2}$

