EUREKA MATH²®

Grade 1 | Alaska Mathematics Standards 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 eis onxplorations 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.

Counting and Cardinality
Know ordinal names and counting flexibility.

Alaska Mathematics Standards	Aligned Components of *Eureka Math²*
1.CC.1 Skip count by 2s and 5s.	*Supplemental material is necessary to address this standard.*
1.CC.2 Use ordinal numbers correctly when identifying object position (e.g., first, second, third, etc.).	*Supplemental material is necessary to address this standard.*
1.CC.3 Order numbers from 1–100. Demonstrate ability in counting forward and backward.	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. *Supplemental material is necessary to fully address this standard.*

Counting and Cardinality
Count to tell the number of objects.

Alaska Mathematics Standards	Aligned Components of *Eureka Math²*
1.CC.4 Count a large quantity of objects by grouping into 10s and counting by 10s and 1s to find the quantity.	1 M3 Lesson 15: Count and record a collection of objects. 1 M5 Lesson 2: Count a collection and record the total in units of tens and ones. 1 M6 Lesson 16: Count and record totals for collections greater than 100. 1 M6 Lesson 17: Read, write, and represent numbers greater than 100. 1 M6 Lesson 19: Write totals for collections larger than 100 shown in various groups of tens and ones. *Supplemental material is necessary to fully address this standard.*

Counting and Cardinality
Compare numbers.

Alaska Mathematics Standards	Aligned Components of *Eureka Math²*
1.CC.5 Use the symbols for greater than, less than or equal to when comparing two numbers or groups of objects.	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 M4 Lesson 6: Measure and order lengths. 1 M5 Lesson 7: Use place value reasoning to compare two quantities. 1 M5 Lesson 8: Use place value reasoning to write and compare 2 two-digit numbers. 1 M5 Lesson 9: Compare two quantities and make them equal. *Supplemental material is necessary to fully address this standard.*
1.CC.6 Estimate how many and how much in a given set to 20 and then verify estimate by counting.	1 M1 Lesson 5: Organize and represent categorical data. *Supplemental material is necessary to fully address this standard.*

Operations and Algebraic Thinking
Represent and solve problems involving addition and subtraction.

Alaska Mathematics Standards	Aligned Components of *Eureka Math²*
1.OA.1 Use addition and subtraction strategies to solve word problems (using numbers up to 20), involving situations of adding to, taking from, putting together, taking apart and comparing, with unknowns in all positions, using a number line (e.g., by using objects, drawings and equations). Record and explain using equation symbols and a symbol for the unknown number to represent the problem.	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

Alaska Mathematics Standards	Aligned Components of *Eureka Math²*
1.OA.2 Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20 (e.g., by using objects, drawings and equations). Record and explain using equation symbols and a symbol for the unknown number to represent the problem.	1 M3 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 properties of operations and the relationship between addition and subtraction.

Alaska Mathematics Standards	Aligned Components of *Eureka Math²*
1.OA.3 Apply properties of operations as strategies to add and subtract. (Students need not know the name of the property.)	1 M1 Lesson 9: Count on from both parts and record part–total relationships. 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 Understand subtraction as an unknown-addend 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 using numbers up to 20.

Alaska Mathematics Standards	Aligned Components of *Eureka Math²*
1.OA.5 Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).	1 M1 Topic B: Count On from a Visible Part 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 Add and subtract using numbers up to 20, demonstrating fluency for addition and subtraction up to 10. Use strategies such as counting on, making ten $(8 + 6 = 8 + 2 + 4 = 10 + 4 = 14)$, decomposing a number leading to a ten $(13 - 4 = 13 - 3 - 1 = 10 - 1 = 9)$, using the relationship between addition and subtraction, such as fact families, $(8 + 4 = 12 \text{ and } 12 - 8 = 4)$, creating equivalent but easier or known sums (e.g., adding $6 + 7$ by creating the known equivalent $6 + 6 + 1 = 12 + 1 = 13$).	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.

Alaska Mathematics Standards	Aligned Components of *Eureka Math²*
1.OA.6 *continued*	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.

Operations and Algebraic Thinking
Work with addition and subtraction equations.

Alaska Mathematics Standards	Aligned Components of *Eureka Math²*
1.OA.7 Understand the meaning of the equal sign (e.g., read equal sign as "same as") and determine if 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.

Alaska Mathematics Standards	Aligned Components of *Eureka Math²*
1.OA.7 *continued*	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.
1.OA.8 Determine the unknown whole number in an addition or subtraction equation.	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
Identify and continue patterns.

Alaska Mathematics Standards	Aligned Components of *Eureka Math²*
1.OA.9 Identify, continue and label patterns (e.g., aabb, abab). Create patterns using number, shape, size, rhythm or color.	*Supplemental material is necessary to address this standard.*

Number and Operations in Base Ten
Extend the counting sequence.

Alaska Mathematics Standards	Aligned Components of *Eureka Math²*
1.NBT.1 Count to 120. In this range, read, write and order 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.

Alaska Mathematics Standards	Aligned Components of *Eureka Math²*
1.NBT.2 Model and identify place value positions of two digit numbers. Include:	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.

Alaska Mathematics Standards	Aligned Components of *Eureka Math²*
1.NBT.2.a 10 can be thought of as a bundle of ten ones, called a "ten."	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.
1.NBT.2.b The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight or nine ones.	1 M1 Lesson 12: Count on from 10 to find an unknown total. 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. 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 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.NBT.2.c The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90, refer to one, two, three, four, five, six, seven, eight or nine tens (and 0 ones).	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. 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.

Alaska Mathematics Standards	Aligned Components of *Eureka Math²*
1.NBT.3 Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, <.	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

Number and Operations in Base Ten

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

Alaska Mathematics Standards	Aligned Components of *Eureka Math²*
1.NBT.4 Add using numbers up to 100 including adding a two-digit number and a one-digit number and adding a two-digit number and a multiple of 10. • Use: concrete models or drawings and strategies based on place value, properties of operations, and/or relationship between addition and subtraction. • Relate the strategy to a written method and explain the reasoning used. • Demonstrate in adding two-digit numbers, tens and tens are added, ones and ones are added and sometimes it is necessary to compose a ten from ten ones.	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 M6 Topic F: Extending Addition to 100

Alaska Mathematics Standards	Aligned Components of *Eureka Math²*
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 M5 Lesson 6: Add 10 or take 10 from a two-digit number.
1.NBT.6 Subtract multiples of 10 up to 100. Use: • concrete models or drawings, • 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.

Alaska Mathematics Standards	Aligned Components of *Eureka Math²*
1.MD.1 Measure and compare three objects using standard or non-standard units.	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.

Alaska Mathematics Standards	Aligned Components of *Eureka Math²*
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.	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
Work with time and money.

Alaska Mathematics Standards	Aligned Components of *Eureka Math²*
1.MD.3 Tell and write time in half hours using both 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.
1.MD.4 Read a calendar distinguishing yesterday, today and tomorrow. Read and write a date.	*Supplemental material is necessary to address this standard.*
1.MD.5 Recognize and read money symbols including $ and ¢.	*Supplemental material is necessary to address this standard.*

Alaska Mathematics Standards	Aligned Components of *Eureka Math²*
1.MD.6 Identify values of coins (e.g., nickel = 5 cents, quarter = 25 cents). Identify equivalent values of coins up to $1 (e.g., 5 pennies = 1 nickel, 5 nickels = 1 quarter).	*Supplemental material is necessary to address this standard.*

Measurement and Data
Represent and interpret data.

Alaska Mathematics Standards	Aligned Components of *Eureka Math²*
1.MD.7 Organize, represent and interpret data with up to three categories. Ask and answer comparison and quantity questions about the data.	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.

Alaska Mathematics Standards	Aligned Components of *Eureka Math²*
1.G.1 Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes. Identify shapes that have non-defining attributes (e.g., color, orientation, overall size). Build and draw shapes given specified attributes.	1 M6 Topic A: Attributes of Shapes
1.G.2 Compose (put together) two-dimensional or three-dimensional shapes to create a larger, composite shape, and compose new shapes from the composite shape.	1 M6 Topic B: Composition of Shapes
1.G.3 Partition circles and rectangles into two and four equal shares. Describe the shares using the words, halves, fourths, and quarters and phrases half of, fourth of and quarter of. Describe the whole as two of or four of the shares. Understand for these examples that decomposing (break apart) 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.