

Dept. of Education and
Early Development



ALASKA MATHEMATICS STANDARDS WITH LEARNING TARGETS GRADE 1

Adapted with permission from the Kentucky Department of Education, Frankfort, Kentucky 40601.

Alaska Mathematics Standards Grade 1

Grade Level/Course	1
Domain	Counting and Cardinality
Cluster	Know ordinal names and counting flexibility.
Standard	1.CC.1.
	Skip count by 2's and 5's.

Standards of Mathematical Practice							
Make sense of problems and persevere to solve them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.

Learning Targets			
Knowledge	Reasoning	Skill	Products
Facts and concepts we want students to know.	Use what they know to reason or solve problems.	Use knowledge and reasoning to act skillfully.	Use knowledge, reasoning, and skills to create a concrete product.
Count (verbal sequence only) by 2's.			
Count (verbal sequence only) by 5's.			

Alaska Mathematics Standards Grade 1

Grade Level/Course	1
Domain	Counting and Cardinality
Cluster	Know ordinal names and counting flexibility.
Standard	1.CC.2.
	Use ordinal numbers correctly when identifying object position (e.g., first, second, third, etc.).

Standards of Mathematical Practice							
Make sense of problems and persevere to solve them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.

Learning Targets			
Knowledge	Reasoning	Skill	Products
Facts and concepts we want students to know.	Use what they know to reason or solve problems.	Use knowledge and reasoning to act skillfully.	Use knowledge, reasoning, and skills to create a concrete product.
Using ordinal numbers identify the position of objects in a row.	Place objects in the correct sequence when given the ordinal number.		

Alaska Mathematics Standards Grade 1

Grade Level/Course	1
Domain	Counting and Cardinality
Cluster	Know ordinal names and counting flexibility.
Standard	1.CC.3. Order numbers from 1-100. Demonstrate ability in counting forward and backward.

Standards of Mathematical Practice							
Make sense of problems and persevere to solve them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.

Learning Targets			
Knowledge	Reasoning	Skill	Products
Facts and concepts we want students to know.	Use what they know to reason or solve problems.	Use knowledge and reasoning to act skillfully.	Use knowledge, reasoning, and skills to create a concrete product.
Count forward (verbal sequence) by 1's.	When given a number, identify the number that comes before it.	Given a group of numbers, place them in order from smallest to largest.	
Count backward (verbal sequence) by 1's.	When given a number, identify the number that comes next.	Given a group of numbers, place them in order from largest to smallest.	

Alaska Mathematics Standards Grade 1

Grade Level/Course	1
Domain	Counting and Cardinality
Cluster	Count to tell the number of objects.
Standard	1.CC.4.
	Count a large quantity of objects by grouping into 10's and counting by 10's and 1's to find the quantity.

Standards of Mathematical Practice

Make sense of problems and persevere to solve them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.
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Learning Targets

Knowledge	Reasoning	Skill	Products
Facts and concepts we want students to know.	Use what they know to reason or solve problems.	Use knowledge and reasoning to act skillfully.	Use knowledge, reasoning, and skills to create a concrete product.
<p>Group objects into groups of ten.</p> <p>Understand that when grouping into groups of ten, the objects can then be counted by 10's (tens place).</p> <p>Understand that after grouping objects into groups of ten, the left over objects are counted as 1's (ones place).</p>	Count a large group of objects by organizing into groups of ten (count by tens and then count the rest by ones) to find the quantity.		

Alaska Mathematics Standards Grade 1

Grade Level/Course	1
Domain	Counting and Cardinality
Cluster	Compare numbers.
Standard	1.CC.5. Use the symbols for greater than, less than or equal to when comparing two numbers or groups of objects.

Standards of Mathematical Practice							
Make sense of problems and persevere to solve them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.

Learning Targets			
Knowledge	Reasoning	Skill	Products
Facts and concepts we want students to know.	Use what they know to reason or solve problems.	Use knowledge and reasoning to act skillfully.	Use knowledge, reasoning, and skills to create a concrete product.
Know the symbols for greater than, less than, and equal to (<, >, =). Compare two numbers and determine which is larger (or smaller). Use the appropriate symbol (<, >, =) to compare two numbers.			

Alaska Mathematics Standards Grade 1

Grade Level/Course	1
Domain	Counting and Cardinality
Cluster	Compare numbers.
Standard	1.CC.6.
	Estimate how many and how much in a given set to 20 and then verify estimate by counting.

Standards of Mathematical Practice							
Make sense of problems and persevere to solve them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.

Learning Targets			
Knowledge	Reasoning	Skill	Products
Facts and concepts we want students to know.	Use what they know to reason or solve problems.	Use knowledge and reasoning to act skillfully.	Use knowledge, reasoning, and skills to create a concrete product.
Know what it means to estimate. Estimate the number of objects (up to 20) and then count to verify.			

Alaska Mathematics Standards Grade 1

Grade Level/Course	1
Domain	Operations and Algebraic Thinking
Cluster	Represent and solve problems involving addition and subtraction.
Standard	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.

Standards of Mathematical Practice

Make sense of problems and persevere to solve them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.
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Learning Targets

Knowledge	Reasoning	Skill	Products
Facts and concepts we want students to know.	Use what they know to reason or solve problems.	Use knowledge and reasoning to act skillfully.	Use knowledge, reasoning, and skills to create a concrete product.
Use a symbol for an unknown number in an addition or subtraction problem within 20.	<p>Solve word problems using addition and subtraction within 20.</p> <p>Interpret situations to solve word problems with unknowns in all positions within 20 using addition and subtraction.</p> <p>Determine appropriate representations for solving word problems involving different situations using addition and subtraction.</p>		

Alaska Mathematics Standards Grade 1

Grade Level/Course	1
Domain	Operations and Algebraic Thinking
Cluster	Represent and solve problems involving addition and subtraction.
Standard	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.

Standards of Mathematical Practice							
Make sense of problems and persevere to solve them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.

Learning Targets			
Knowledge	Reasoning	Skill	Products
Facts and concepts we want students to know.	Use what they know to reason or solve problems.	Use knowledge and reasoning to act skillfully.	Use knowledge, reasoning, and skills to create a concrete product.
Know how to add three whole numbers whose sum is less than or equal to 20.	Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20.		

Alaska Mathematics Standards Grade 1

Grade Level/Course	1
Domain	Operations and Algebraic Thinking
Cluster	Understand and apply properties of operations and the relationship between addition and subtraction.
Standard	<p>1.OA.3.</p> <p>Apply properties of operations as strategies to add and subtract; (Students need not know the name of the property.)</p> <p><i>For example: If $8 + 3 = 11$ is known, then $3 + 8 = 11$ is also known (commutative property of addition). To add $2 + 6 + 4$, the second two numbers can be added to make a ten, so $2 + 6 + 4 = 2 + 10 = 12$ (associative property of addition). Demonstrate that when adding zero to any number, the quantity does not change (identity property of addition).</i></p>

Standards of Mathematical Practice

Make sense of problems and persevere to solve them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.
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Learning Targets

Knowledge	Reasoning	Skill	Products
Facts and concepts we want students to know.	Use what they know to reason or solve problems.	Use knowledge and reasoning to act skillfully.	Use knowledge, reasoning, and skills to create a concrete product.
Explain how properties of operation strategies work.	Apply strategies using properties of operations to solve addition and subtraction problems.		

Alaska Mathematics Standards Grade 1

Grade Level/Course	1
Domain	Operations and Algebraic Thinking
Cluster	Understand and apply properties of operations and the relationship between addition and subtraction.
Standard	1.OA.4.
	Understand subtraction as an unknown-addend problem. <i>For example, subtract 10 - 8 by finding the number that makes 10 when added to 8.</i>

Standards of Mathematical Practice							
Make sense of problems and persevere to solve them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.

Learning Targets			
Knowledge	Reasoning	Skill	Products
Facts and concepts we want students to know.	Use what they know to reason or solve problems.	Use knowledge and reasoning to act skillfully.	Use knowledge, reasoning, and skills to create a concrete product.
Identify the unknown in a subtraction problem.	Solve subtraction problems to find the missing addend. Explain the relationship of addition and subtraction.		

Alaska Mathematics Standards Grade 1

Grade Level/Course	1
Domain	Operations and Algebraic Thinking
Cluster	Add and subtract using numbers up to 20.
Standard	1.OA.5.
	Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).

Standards of Mathematical Practice							
Make sense of problems and persevere to solve them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.

Learning Targets			
Knowledge	Reasoning	Skill	Products
Facts and concepts we want students to know.	Use what they know to reason or solve problems.	Use knowledge and reasoning to act skillfully.	Use knowledge, reasoning, and skills to create a concrete product.
Know how to count on and count back.	Explain how counting on and counting back relate to addition and subtraction.		

Alaska Mathematics Standards Grade 1

Grade Level/Course	1
Domain	Operations and Algebraic Thinking
Cluster	Add and subtract using numbers up to 20.
Standard	<p>1.OA.6.</p> <p>Add and subtract using numbers up to 20, demonstrating fluency for addition and subtraction up to 10. Use strategies such as:</p> <ul style="list-style-type: none"> • 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, ($8 + 4 = 12$ and $12 - 8 = 4$); • creating equivalent but easier or known sums (e.g., adding $6 + 7$ by creating the known equivalent $6 + 6 + 1 = 12 + 1 = 13$).

Standards of Mathematical Practice

Make sense of problems and persevere to solve them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.
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Learning Targets

Knowledge	Reasoning	Skill	Products
Facts and concepts we want students to know.	Use what they know to reason or solve problems.	Use knowledge and reasoning to act skillfully.	Use knowledge, reasoning, and skills to create a concrete product.
Add fluently within 10.	Apply strategies to add and subtract within 20.		
Subtract fluently within 10.			

Alaska Mathematics Standards Grade 1

Grade Level/Course	1
Domain	Operations and Algebraic Thinking
Cluster	Work with addition and subtraction equations.
Standard	<p>1.OA.7.</p> <p>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.</p> <p><i>For example, which of the following equations are true and which are false? $6 = 6$, $7 = 8 - 1$, $5 + 2 = 2 + 5$, $4 + 1 = 5 + 2$.</i></p>

Standards of Mathematical Practice

Make sense of problems and persevere to solve them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.
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Learning Targets

Knowledge	Reasoning	Skill	Products
Facts and concepts we want students to know.	Use what they know to reason or solve problems.	Use knowledge and reasoning to act skillfully.	Use knowledge, reasoning, and skills to create a concrete product.
Explain the meaning of an equal sign (the quantity on each side of the equality symbol is the same).	<p>Compare the values on each side of an equal sign.</p> <p>Determine if the equation is true or false.</p>		

Alaska Mathematics Standards Grade 1

Grade Level/Course	1
Domain	Operations and Algebraic Thinking
Cluster	Work with addition and subtraction equations.
Standard	1.OA.8. Determine the unknown whole number in an addition or subtraction equation. <i>For example, determine the unknown number that makes the equation true in each of the equations $8 + ? = 11$, $6 + 6 = ?$, $5 = ? - 3$.</i>

Standards of Mathematical Practice							
Make sense of problems and persevere to solve them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.

Learning Targets			
Knowledge	Reasoning	Skill	Products
Facts and concepts we want students to know.	Use what they know to reason or solve problems.	Use knowledge and reasoning to act skillfully.	Use knowledge, reasoning, and skills to create a concrete product.
Recognize part-part-whole relationships of three whole numbers Example: $\square + 5 = 8$ $5 = \square - 3$ In each instance the 3 and 5 represent the parts and the 8 would be representative of the whole.	Determine the missing value in an addition or subtraction equation by using a variety of strategies.		

Alaska Mathematics Standards Grade 1

Grade Level/Course	1
Domain	Operations and Algebraic Thinking
Cluster	Identify and continue patterns.
Standard	1.OA.9. Identify, continue and label patterns (e.g., aabb, abab). Create patterns using number, shape, size, rhythm or color.

Standards of Mathematical Practice							
Make sense of problems and persevere to solve them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.

Learning Targets			
Knowledge	Reasoning	Skill	Products
Facts and concepts we want students to know.	Use what they know to reason or solve problems.	Use knowledge and reasoning to act skillfully.	Use knowledge, reasoning, and skills to create a concrete product.
Identify, continue and label patterns (letter, number, shape, size, rhythm, or color).	Create patterns using letter, number, shape, size, rhythm, or color.		

Alaska Mathematics Standards Grade 1

Grade Level/Course	1
Domain	Number and Operations in Base Ten
Cluster	Extend the counting sequence.
Standard	1.NBT.1. Count to 120. In this range, read, write and order numerals and represent a number of objects with a written numeral.

Standards of Mathematical Practice							
Make sense of problems and persevere to solve them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.

Learning Targets			
Knowledge	Reasoning	Skill	Products
Facts and concepts we want students to know.	Use what they know to reason or solve problems.	Use knowledge and reasoning to act skillfully.	Use knowledge, reasoning, and skills to create a concrete product.
Write numerals up to 120.	Represent a number of objects up to 120 with a written numeral.	Count (saying the number sequence) to 120, starting at any number less than 120 Read the numerals up to 120.	

Alaska Mathematics Standards Grade 1

Grade Level/Course	1
Domain	Number and Operations in Base Ten
Cluster	Understand place value.
Standard	<p>1.NBT.2.</p> <p>Model and identify place value positions of two digit numbers. Include:</p> <ul style="list-style-type: none"> a. 10 can be thought of as a bundle of ten ones, called a "ten"; b. The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight or nine ones; 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).

Standards of Mathematical Practice

Make sense of problems and persevere to solve them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.
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Learning Targets

Knowledge	Reasoning	Skill	Products
Facts and concepts we want students to know.	Use what they know to reason or solve problems.	Use knowledge and reasoning to act skillfully.	Use knowledge, reasoning, and skills to create a concrete product.
<p>Explain what each digit of a two-digit number represents.</p> <p>Identify a bundle of 10 ones as a "ten".</p>	<p>Represent numbers 11 to 19 as composed of a ten and correct number of ones.</p> <p>Represent the numbers 20, 30, 40, 50, 60, 70, 80, and 90 as composed of the correct number of tens.</p>		

Alaska Mathematics Standards Grade 1

Grade Level/Course	1
Domain	Number and Operations in Base Ten
Cluster	Understand place value.
Standard	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 $>$, $=$, $<$.

Standards of Mathematical Practice							
Make sense of problems and persevere to solve them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.

Learning Targets			
Knowledge	Reasoning	Skill	Products
Facts and concepts we want students to know.	Use what they know to reason or solve problems.	Use knowledge and reasoning to act skillfully.	Use knowledge, reasoning, and skills to create a concrete product.
Identify the value of each digit represented in the two-digit number. Know what each symbol represents $>$, $<$, and $=$.	Compare two two-digit numbers based on meanings of the tens and ones digits. Use $>$, $=$, and $<$ symbols to record the results of comparisons.		

Alaska Mathematics Standards Grade 1

Grade Level/Course	1
Domain	Number and Operations in Base Ten
Cluster	Understand place value.
Standard	<p>1.NBT.4.</p> <p>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.</p> <p>Use:</p> <ul style="list-style-type: none"> • concrete models or drawings and strategies based on place value; • properties of operations; • and/or relationship between addition and subtraction; <p>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.</p>

Standards of Mathematical Practice

Make sense of problems and persevere to solve them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.
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Learning Targets

Knowledge	Reasoning	Skill	Products
Facts and concepts we want students to know.	Use what they know to reason or solve problems.	Use knowledge and reasoning to act skillfully.	Use knowledge, reasoning, and skills to create a concrete product.
Identify the value of each digit of a number within 100. Decompose any number within one hundred into ten(s) and one(s).	Choose an appropriate strategy for solving an addition or subtraction problem within 100. Relate the chosen strategy (using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction) to a written method (equation) and explain the reasoning used.		

	Use composition and decomposition of tens, when necessary, to add and subtract within 100.		
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Alaska Mathematics Standards Grade 1

Grade Level/Course	1
Domain	Number and Operations in Base Ten
Cluster	Understand place value.
Standard	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.

Standards of Mathematical Practice							
Make sense of problems and persevere to solve them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.

Learning Targets			
Knowledge	Reasoning	Skill	Products
Facts and concepts we want students to know.	Use what they know to reason or solve problems.	Use knowledge and reasoning to act skillfully.	Use knowledge, reasoning, and skills to create a concrete product.
Identify the value of each digit in a number within 100.	Apply knowledge of place value to mentally add or subtract 10 to/from a given two digit number. Explain how to mentally find 10 more or 10 less than the given two-digit number.		

Alaska Mathematics Standards Grade 1

Grade Level/Course	1
Domain	Number and Operations in Base Ten
Cluster	Understand place value.
Standard	<p>1.NBT.6.</p> <p>Subtract multiples of 10 up to 100; Use:</p> <ul style="list-style-type: none"> • concrete models or drawings; • strategies based on place value; • properties of operations; and/or the relationship between addition and subtraction; <p>Relate the strategy to a written method and explain the reasoning used.</p>

Standards of Mathematical Practice

Make sense of problems and persevere to solve them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.
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Learning Targets

Knowledge	Reasoning	Skill	Products
Facts and concepts we want students to know.	Use what they know to reason or solve problems.	Use knowledge and reasoning to act skillfully.	Use knowledge, reasoning, and skills to create a concrete product.
Identify the value of each digit of a number within 100.	<p>Subtract multiples of 10 in the range of 10-90 from multiples of 10 in the range of 10-90 (positive or zero differences).</p> <p>Choose appropriate strategy (concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction) for solving</p>		

	subtraction problems with multiples of 10. Relate the chosen strategy to a written method (equation) and explain the reasoning used.		
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Alaska Mathematics Standards Grade 1

Grade Level/Course	1
Domain	Measurement and Data
Cluster	Measure lengths indirectly and by iterating length units.
Standard	1.MD.1. Measure and compare three objects using standard or non-standard units.

Standards of Mathematical Practice							
Make sense of problems and persevere to solve them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.

Learning Targets			
Knowledge	Reasoning	Skill	Products
Facts and concepts we want students to know.	Use what they know to reason or solve problems.	Use knowledge and reasoning to act skillfully.	Use knowledge, reasoning, and skills to create a concrete product.
Identify the measurement known as the length of an object Directly compare the length of three objects.	Order three objects by length. Compare the lengths of two objects indirectly by using a third object to compare them (e.g., if the length of object A is greater than the length of object B, and the length of object B is greater than the length of object C, then the length of object A is greater than the length of object C.)		

Alaska Mathematics Standards Grade 1

Grade Level/Course	1
Domain	Measurement and Data
Cluster	Measure lengths indirectly and by iterating length units.
Standard	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.

Standards of Mathematical Practice							
Make sense of problems and persevere to solve them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.

Learning Targets			
Knowledge	Reasoning	Skill	Products
Facts and concepts we want students to know.	Use what they know to reason or solve problems.	Use knowledge and reasoning to act skillfully.	Use knowledge, reasoning, and skills to create a concrete product.
Knows to use the same size non-standard objects as iterated (repeating) units. Know that length can be measured with various units.	Compare a smaller unit of measurement to a larger object. Determine the length of the measured object to be the number of smaller iterated (repeated) objects that equal its length.	Demonstrate the measurement of an object using non-standard units (e.g. paper clips, Unifix cubes, etc.) by laying the units of measurement end to end with no gaps or overlaps.	

Alaska Mathematics Standards Grade 1

Grade Level/Course	1
Domain	Measurement and Data
Cluster	Work with time and money.
Standard	1.MD.3.
	Tell and write time in half hours using both analog and digital clocks.

Standards of Mathematical Practice							
Make sense of problems and persevere to solve them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.

Learning Targets			
Knowledge	Reasoning	Skill	Products
Facts and concepts we want students to know.	Use what they know to reason or solve problems.	Use knowledge and reasoning to act skillfully.	Use knowledge, reasoning, and skills to create a concrete product.
Recognize that analog and digital clocks are objects that measure time. Know the hour hand and minute hand and distinguish between the two.	Determine where the minute hand must be when the time is to the hour (o'clock). Determine where the minute hand must be when the time is to the half hour (thirty).	Tell/write the time to the hour and half hour correctly using analog and digital clocks – for instance when it is 3:30 the hour hand is between the 3 and the 4; the minute hand is on the 6.	

Alaska Mathematics Standards Grade 1

Grade Level/Course	1
Domain	Measurement and Data
Cluster	Work with time and money.
Standard	1.MD.4.
	Read a calendar distinguishing yesterday, today and tomorrow. Read and write a date.

Standards of Mathematical Practice							
Make sense of problems and persevere to solve them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.

Learning Targets			
Knowledge	Reasoning	Skill	Products
Facts and concepts we want students to know.	Use what they know to reason or solve problems.	Use knowledge and reasoning to act skillfully.	Use knowledge, reasoning, and skills to create a concrete product.
Find the current date on a calendar. Distinguish between today, yesterday and tomorrow. Read and write a date.			

Alaska Mathematics Standards Grade 1

Grade Level/Course	1
Domain	Measurement and Data
Cluster	Work with time and money.
Standard	1.MD.5.
	Recognize and read money symbols including \$ and ¢.

Standards of Mathematical Practice							
Make sense of problems and persevere to solve them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.

Learning Targets			
Knowledge	Reasoning	Skill	Products
Facts and concepts we want students to know.	Use what they know to reason or solve problems.	Use knowledge and reasoning to act skillfully.	Use knowledge, reasoning, and skills to create a concrete product.
Identify money symbols (\$, ¢).			
Read money values.			

Alaska Mathematics Standards Grade 1

Grade Level/Course	1
Domain	Measurement and Data
Cluster	Work with time and money.
Standard	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).

Standards of Mathematical Practice							
Make sense of problems and persevere to solve them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.

Learning Targets			
Knowledge	Reasoning	Skill	Products
Facts and concepts we want students to know.	Use what they know to reason or solve problems.	Use knowledge and reasoning to act skillfully.	Use knowledge, reasoning, and skills to create a concrete product.
Identify coins (penny, nickel, dime, quarter). Identify the value of penny, nickel, dime and quarter.	Given a money amount, use combinations of coins to form an equivalent value.		

Alaska Mathematics Standards Grade 1

Grade Level/Course	1
Domain	Measurement and Data
Cluster	Represent and interpret data.
Standard	1.MD.7 Organize, represent and interpret data with up to three categories. Ask and answer comparison and quantity questions about the data.

Standards of Mathematical Practice							
Make sense of problems and persevere to solve them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.

Learning Targets			
Knowledge	Reasoning	Skill	Products
Facts and concepts we want students to know.	Use what they know to reason or solve problems.	Use knowledge and reasoning to act skillfully.	Use knowledge, reasoning, and skills to create a concrete product.
Recognize different methods to organize data. Recognize different methods to represent data.	Organize data with up to three categories. Represent data with up to three categories. Interpret data representation by asking and answering questions about the data.		

Alaska Mathematics Standards Grade 1

Grade Level/Course	1
Domain	Geometry
Cluster	Reason with shapes and their attributes.
Standard	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.

Standards of Mathematical Practice							
Make sense of problems and persevere to solve them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.

Learning Targets			
Knowledge	Reasoning	Skill	Products
Facts and concepts we want students to know.	Use what they know to reason or solve problems.	Use knowledge and reasoning to act skillfully.	Use knowledge, reasoning, and skills to create a concrete product.
Identify defining attributes of shapes. Identify non-defining attributes of shapes.	Distinguish between (compare/contrast) defining and non-defining attributes of shapes.		Build shapes to show defining attributes. Draw shapes to show defining attributes.

Alaska Mathematics Standards Grade 1

Grade Level/Course	1
Domain	Geometry
Cluster	Reason with shapes and their attributes.
Standard	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.

Standards of Mathematical Practice							
Make sense of problems and persevere to solve them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.

Learning Targets			
Knowledge	Reasoning	Skill	Products
Facts and concepts we want students to know.	Use what they know to reason or solve problems.	Use knowledge and reasoning to act skillfully.	Use knowledge, reasoning, and skills to create a concrete product.
Know that shapes can be composed and decomposed to make new shapes. Describe properties of original and composite shapes.	Determine how the original and created composite shapes are alike and different.		Create composite shapes. Compose new shapes from a composite shape.

Alaska Mathematics Standards Grade 1

Grade Level/Course	1
Domain	Geometry
Cluster	Reason with shapes and their attributes.
Standard	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.

Standards of Mathematical Practice							
Make sense of problems and persevere to solve them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.

Learning Targets			
Knowledge	Reasoning	Skill	Products
Facts and concepts we want students to know.	Use what they know to reason or solve problems.	Use knowledge and reasoning to act skillfully.	Use knowledge, reasoning, and skills to create a concrete product.
Identify when shares are equal. Identify two and four equal shares Describe equal shares using vocabulary: halves, fourths and quarters, half of, fourth of, and quarter of. Describe the whole as two of two or four of four equal shares.	Justify why dividing, (decomposing) a circle or rectangle into more equal shares creates smaller pieces.		