


**(1.OA) Represent and solve problems involving addition and subtraction.**

1. Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.

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 with a symbol for the unknown number to represent the problem.

				Standard
1.OA.1	<ul style="list-style-type: none"> <li>• Adding to</li> <li>• Taking from</li> </ul>	<ul style="list-style-type: none"> <li>• Adding to</li> <li>• Taking from</li> <li>• Putting together</li> <li>• Taking apart</li> </ul>	<ul style="list-style-type: none"> <li>• Adding to</li> <li>• Taking from</li> <li>• Putting together</li> <li>• Taking apart</li> <li>• Comparing <i>(complements measurement/data)</i></li> </ul>	Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.
1.OA.1	<ul style="list-style-type: none"> <li>• Result unknown</li> </ul>	<ul style="list-style-type: none"> <li>• Result unknown</li> <li>• Change unknown</li> </ul>	<ul style="list-style-type: none"> <li>• Result unknown</li> <li>• Change unknown</li> </ul>	
1.OA.2	<ul style="list-style-type: none"> <li>• Three addends to 20 (introduce)</li> <li>• Using objects</li> </ul>	<ul style="list-style-type: none"> <li>• Three addends to 20 (introduce)</li> <li>• Using objects and drawings</li> </ul>	<ul style="list-style-type: none"> <li>• Three addends to 20 (introduce)</li> <li>• Using objects, drawings, and equations</li> </ul>	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 with a symbol for the unknown number to represent the problem.


**(1.OA) Understand and apply properties of operations and the relationship between addition and subtraction.**

3. Apply properties of operations as strategies to add and subtract.3 Examples: 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.)

**(1.OA) Add and subtract within 20.**

5. Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).


6. Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g.,  $8 + 6 = 8 + 2 + 4 = 10 + 4 = 14$ ); decomposing a number leading to a ten (e.g.,  $13 - 4 = 13 - 3 - 1 = 10 - 1 = 9$ ); using the relationship between addition and subtraction (e.g., knowing that  $8 + 4 = 12$ , one knows  $12 - 8 = 4$ ); and creating equivalent but easier or known sums (e.g., adding  $6 + 7$  by creating the known equivalent  $6 + 6 + 1 = 12 + 1 = 13$ ).

				Standard
1.OA.5	Relate counting to addition and subtraction. (1.OA.5) <ul style="list-style-type: none"> <li>Counting on starting with either addend</li> <li>Counting back</li> </ul>	Relate counting to addition and subtraction. (1.OA.5) <ul style="list-style-type: none"> <li>Counting on starting with larger addend</li> <li>Counting back</li> </ul>	Relate counting to addition and subtraction. (1.OA.5) <ul style="list-style-type: none"> <li>Count on as/when appropriate</li> <li>Counting back as/when appropriate</li> </ul>	Relate counting to addition and subtraction.  (Count on/back by multiples of 10, linked to 1.NBT.4-6)
1.OA.3	Apply properties of operations as strategies to add and subtract. <ul style="list-style-type: none"> <li>Commutative</li> </ul>	Apply properties of operations as strategies to add and subtract. <ul style="list-style-type: none"> <li>Commutative</li> <li>Associative</li> </ul>		Apply properties of operations as strategies to add and subtract
1.OA.6 (Strategies to 20)	Add and subtract within 20 using strategies: <ul style="list-style-type: none"> <li>Make ten (introduce)</li> <li>Doubles (introduce)**</li> <li>Relating + and -</li> </ul>	Add and subtract within 20 using strategies: <ul style="list-style-type: none"> <li>Make ten (continue)</li> <li>Doubles (continue)**</li> <li>Decomposing a number leading to a ten (bridging/using ten)(introduce)</li> <li>Relating + and -</li> </ul>	Add and subtract within 20 using strategies: <ul style="list-style-type: none"> <li>Using Known Sums (introduction)</li> <li>Relating + and -</li> </ul>	Use strategies such as counting on; making ten ; decomposing a number leading to a ten; using the relationship between addition and subtraction); and creating equivalent but easier or known sums
1.OA.6 (Fluency to 10)				Add and subtract within 20, demonstrating fluency for addition and subtraction within 10.

**(1.OA) Work with addition and subtraction equations.**


7. Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false?  $6 = 6$ ,  $7 = 8 - 1$ ,  $5 + 2 = 2 + 5$ ,  $4 + 1 = 5 + 2$ . *Note: Be able to compare without doing computation ( $4 + 1 \neq 5 + 2$  because  $4 + 1 = 5$ ...)*

8. Determine the unknown whole number in an addition or subtraction equation relating to three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations  $8 + ? = 11$ ,  $5 = ? - 3$ ,  $6 + 6 = ?$

			Standard	
1.OA.7	<ul style="list-style-type: none"> <li>• <math>a + b = c</math></li> <li>• <math>a - b = c</math></li> </ul>	<ul style="list-style-type: none"> <li>• <math>c = a + b</math></li> <li>• <math>c = a - b</math></li> </ul>	<p>Any expressions for example (but not limited to):</p> <ul style="list-style-type: none"> <li>• <math>a + b = c + d</math></li> <li>• <math>a - b = c - d</math></li> <li>• <math>a + b = c - d</math></li> </ul>	<p>Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false.</p> <ul style="list-style-type: none"> <li>• <math>a + b = c + d</math></li> <li>• <math>a - b = c - d</math></li> <li>• <math>a + b = c - d</math></li> </ul>
1.OA.8	<p>Determine the unknown when</p> <ul style="list-style-type: none"> <li>• counting on, back</li> <li>• using the commutative property</li> <li>• making ten</li> <li>• using doubles</li> <li>• relating + and -</li> </ul>	<p>Determine the unknown when</p> <ul style="list-style-type: none"> <li>• counting on, back</li> <li>• using the commutative property</li> <li>• making ten</li> <li>• using doubles</li> <li>• Decomposing a number leading to a ten</li> <li>• relating + and -</li> </ul>	<p>Determine the unknown when</p> <ul style="list-style-type: none"> <li>• counting on, back</li> <li>• using the commutative property</li> <li>• making ten</li> <li>• using doubles</li> <li>• Using Known Sums (introduction)</li> <li>• Relating + and -</li> <li>• relating + and -</li> </ul>	<p>Determine the unknown whole number in an addition or subtraction equation relating to three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations <math>8 + ? = 11</math>, <math>5 = ? - 3</math>, <math>6 + 6 = ?</math></p>


**(1.NBT.1) Extend the counting sequence.**

1. Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.

				Standard
1.NBT.1	Rote to 50 • Backwards (connected to 1.OA.5)	Rote to 100 • Backwards (connected to 1.OA.5)	Rote to 100 (K) • Start with any number • Backwards (connected to 1.OA.5)	Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.
1.NBT.1	Count objects to 20 (K) • Organizing by groups • Represent objects with numerals	Count objects to 50 • Organizing by 10s • Represent objects with numerals	Count objects to 100 • Organizing by 10s • Represent objects with numerals	
1.NBT.1	Read/write to 20 (K)	Read/write 50	Read/write 100	


**(1.NBT) Understand place value.**

2. Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases:
- 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)
3. Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols  $>$ ,  $=$ , and  $<$ . (Complements 1.NBT.1 trajectory)

				Standard
1.NBT.2a	10 can be thought of as a bundle of ten ones — called a “ten.”	10 can be thought of as a bundle of ten ones — called a “ten.” • decades beyond 20		10 can be thought of as a bundle of ten ones — called a “ten.”
1.NBT.2b	The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.	The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones. • relate the pattern of counting to decades beyond 20		The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.
1.NBT.2c				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.NBT.3	Compare numbers to 20	Compare numbers to 50 Introduce relational symbols	Compare numbers to 100 with or without symbols	Compare numbers to 100 with or without symbols

**(1.NBT) Use place value understanding and properties of operations to add and subtract.**

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

				Standard
1.NBT.4 (Representations and Strategies)	<ul style="list-style-type: none"> <li>Concrete models (any) and drawings</li> <li>Number lines</li> <li>Identify strategies</li> </ul>	<ul style="list-style-type: none"> <li>Concrete models (any) and drawings</li> <li>Number lines and 100 charts</li> <li>Identify strategies</li> </ul>	<ul style="list-style-type: none"> <li>Concrete models (base ten) and drawings</li> <li>Number lines and 100 charts</li> <li>Identify strategies</li> </ul>	Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.
1.NBT.4 (Addends and sums)	<ul style="list-style-type: none"> <li>Add within 20 (through 1.OA.1)</li> </ul>	<ul style="list-style-type: none"> <li>Add within 50</li> <li>Add a two-digit and a one-digit</li> </ul>	<ul style="list-style-type: none"> <li>Add within 100</li> <li>Add a two-digit and a one-digit</li> <li>Add a two-digit and a multiple of ten</li> </ul>	

**(1.NBT) Use place value understanding and properties of operations to add and subtract. (con't)**


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

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

1.NBT.5	Find 1 more and 1 less (K)	Find 10 more and 10 less than a number using models/charts	Find 10 more and 10 less than a number using models/charts and mentally	Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.
1.NBT.6	Subtract multiples of 10 using concrete models.		Subtract multiples of 10 using concrete models and drawings	Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.


**(1.MD) Measure lengths indirectly and by iterating length units.**

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

				Standard
1.MD.1	Directly compare the length of 2 objects (K)	Compare the lengths of two objects indirectly by using a third object		Order three objects by length; compare the lengths of two objects indirectly by using a third object
1.NBT.2	Measure the length of an object as a whole number of length units	Measure with non-standard units		Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.

**(1.MD) Tell and write time.**


3. Tell and write time in hours and half-hours using analog and digital clocks.

				Standard
1.MD.3	Tell time in hours using digital and analog clocks.			Tell and write time in hours and half-hours using analog and digital clocks.



**(1.MD) Represent and interpret data.**

4. Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.


			Standard
1.MD.3	Classify and sort objects by categories and count the number of objects in each category  Represent data in 3 categories	Represent data in 3 categories	Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.

## (1.G.) Reason with shapes and their attributes.

1. Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes.

2. Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape.

3. Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.

			Standard
1.G.1	<p>Identify the difference between defining and non-defining attributes</p> <p>Identify 2D shapes by their attributes (K)</p>	<p>Build and draw shapes to possess defining attributes</p>	<p>Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes.</p>
1.G.2		<p>Identify attributes of 3D shapes</p> <p>Identify 3D shapes by their attributes</p>	<p>Compose two-dimensional and three-dimensional shapes to create a composite shape</p> <p>Compose new shapes from the composite shape.</p>
1.G.3	<p>Partition circles and rectangles into two and four equal shares using words (halves, fourths, and quarters)</p>		<p>Partition circles and rectangles into two and four equal shares using words (halves, fourths, and quarters) Describe the whole as two of or four of the shares. Understand that more equal shares creates smaller shares.</p>