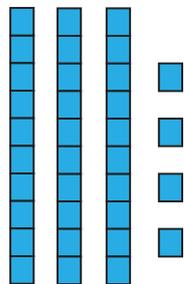
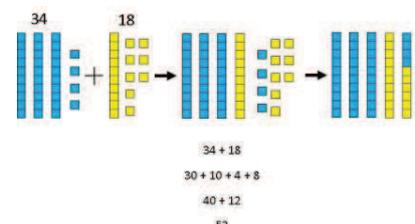


Common Core State Standards for Mathematics	This means that the student can...
	<p>problem), and most importantly, picking and using strategies that efficiently lead to the sum.</p> <p>For example, when subtracting $15 - 7$, the students might:</p> <ul style="list-style-type: none"> ○ Think of $15 - 7$ as $15 - 5 - 2$ or $10 - 2$. ○ Think of $15 - 7$ as $17 - 7 - 2$. ○ Already know that $7 + 8 = 15$, and relate this to $15 - 7 = 8$ (fact family). <p>NOTE: The ability to quickly add or subtract should NOT result from flash cards and memorization as the primary learning strategies.</p>
Work with addition and subtraction equations.	
<p>1.OA.7: Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. <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>	<ul style="list-style-type: none"> • Say whether an equation is true or false based on the values on both sides of the equal sign being equal. <p>For example, the student is able to identify the following as true equations:</p> <ul style="list-style-type: none"> ○ $6 = 6$ ○ $6 = 5 + 1$ ○ $1 + 5 = 4 + 2$ (NOTE: A student who thinks this equation is false is probably thinking that the number after the equal sign should be 6 instead of 4.)
<p>1.OA.8: Determine the unknown whole number in an addition or subtraction equation relating to three whole numbers. <i>For example, determine the unknown number that makes the equation true in each of the equations $8 + ? = 11$, $5 = ? - 3$, $6 + 6 = ?$.</i></p>	<ul style="list-style-type: none"> • Determine the unknown number in an addition equation, in the form $a + b = c$, in which two of the values are given and the missing value is what needs to be found. • Determine the unknown number in a subtraction equation, in the form $a - b = c$, in which two of the values are given and the missing value is what needs to be found.
Domain: Number and Operations in Base Ten	
Extend the counting sequence.	
<p>1.NBT.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.</p>	<ul style="list-style-type: none"> • Say the number names to 120 in sequence beginning from any number, especially the numbers after 99. • Write the numerals to match the name of number (up to 120) that is said aloud. • Read and say the numerals to 120. • Write the numeral to match the number of objects in a given set.
Understand place value.	
<p>1.NBT.2: Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases:</p> <ol 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). 	<ul style="list-style-type: none"> • Represent two-digit numbers with manipulatives or drawings that consist of tens (such as ten-strips) and ones, and more importantly, the student automatically knows that the tens digit indicates how many ten-strips (or other units of ten) are needed and the ones digit indicate the remaining units that are needed. For example, these base-10 tiles represent 34. • Verbalize the number of tens and ones that represent two-digit numbers (e.g., for 34, the student says, “Thirty-four is composed of three tens and four ones.”). 

Common Core State Standards for Mathematics	This means that the student can...
<p>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 $>$, $=$, and $<$.</p>	<ul style="list-style-type: none"> • Say which of two two-digit numbers is greater (or less) than the other by first looking at their tens digit: <ul style="list-style-type: none"> ○ If the tens digits are different, the student says which is greater (or less) without having to look at the ones digit. ○ If the tens digits are the same, the student compares the ones digits to make the decision. • Write an equation or an inequality (with the $<$ or $>$ sign) to report the results of the comparison.
<p>Use place value understanding and properties of operations to add and subtract.</p>	
<p>1.NBT.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.</p>	<ul style="list-style-type: none"> • Add a two-digit number and a one-digit number. • Add a two-digit number and a multiple of 10. • Add a two-digit number and a two-digit number. • Represent the addition by using concrete models, especially base-10 manipulatives (for example, ten-strips and ones units)... <ul style="list-style-type: none"> ○ to group together all the ten-strips to show the adding of the tens of one number with the tens of the other number; ○ to group together all the ones units to show the adding of the ones digit of one number with the ones digit of the other number; and ○ when necessary, compose ten ones into a ten-strip; • Represent the addition by using drawings, especially drawings that depict base-10 manipulatives. • Use numbers/symbols and/or a written explanation to explain the reasoning behind the strategy that is used. <p>For example, when adding $34 + 18$, the student might first model the adding with base-10 manipulatives, and then write addition expressions that match what was modeled.</p>  <p style="text-align: center;"> $34 + 18$ $30 + 10 + 4 + 8$ $40 + 12$ 52 </p>
<p>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.</p>	<p>When given a two-digit number:</p> <ul style="list-style-type: none"> • Tell you what number is 10 more or 10 less, through a quick mental calculation (i.e., by adding or subtracting one from the tens digit).
<p>1.NBT.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.</p>	<ul style="list-style-type: none"> • Subtract a two-digit multiple of 10 from a two-digit multiple of 10; • Represent the subtraction by using concrete models (e.g., ten-strips) with a taking away strategy (e.g., if the problem is $90 - 30$, the student starts with 9 ten-strips and then takes away 3 of them and reports that 60 (or 6 ten-strips) remain); • Represent the subtraction with pictures that depict ten-strips (e.g., if the problem is $90 - 30$, the student draws 9 ten-strips and then crosses off 3 of them); and • Use numbers/symbols and/or a written explanation to explain the reasoning behind the strategy that is used. <p>For example, when subtracting $80 - 30$, the student might first model the adding with base-10 manipulatives, and draw a picture of it, and explain in words that he started with 8 ten-strips and took away 3 ten-strips to be left with 5 ten-strips which is 50.</p>