

Domain: Numbers and Operations in Base Ten		
Cluster 1		
Kindergarten	Grade 1	Grade 2
Work with numbers 11-19 to gain foundations for place value.	Extend the counting sequence.	Understand place value.
<p>MAFS.K.NBT.1.1 Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation; understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven eight, or nine ones.</p>	<p>MAFS.1.NBT.1.1 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>	<p>MAFS.2.NBT.1.1 Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following special cases.</p> <ul style="list-style-type: none"> a. 100 can be thought of as a bundle of ten tens – call a hundred b. The numbers 100, 200, 300...900 refer to one, two, three...nine hundreds and 0 tens and 0 ones.
		<p>MAFS.2.NBT.1.2 Count within 1000; skip-count by 5s, 10s, and 100s.</p>
		<p>MAFS.2.NBT.1.3 Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.</p>
		<p>MAFS.2.NBT.1.4 Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$, $=$, $<$ symbols to record the results of comparisons.</p>

Domain: Operations and Algebraic Thinking

Cluster 1		
Grade 3	Grade 4	Grade 5
Use place value understanding and properties of operations to perform multi-digit arithmetic.	Generalize place value understanding for multi-digit whole numbers.	Understand the place value system.
MAFS.3.NBT.1.1 Use place value understanding to round whole numbers to the nearest 10 or 100.	MAFS.4.NBT.1.1 Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right.	MAFS.5.NBT.1.1 Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.
MAFS.3.NBT.1.2 Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.	MAFS.4.NBT.1.2 Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using $>$, $=$, $<$ symbols to record the results of comparisons.	MAFS.5.NBT.1.2 Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of ten.
MAFS.3.NBT.1.3 Multiply one-digit whole numbers by multiples of 10 in the range 10-90 (e.g., 9×80 , 5×60) using strategies based on place value and properties of operations.	MAFS.4.NBT.1.3 Use place value understanding to round multi-digit whole numbers to any place.	MAFS.5.NBT.1.3 Read, write, and compare decimals to thousandths. a. Read and write decimals to thousandths using base-ten numerals, number names, and expanded form b. Compare two decimals to thousandths based on meanings of the digits in each place, using $>$, $=$, $<$ symbols to record the results of comparisons.
		MAFS.5.NBT.1.4 Use place value understanding to round decimals to any place.

Domain: Numbers and Operations in Base Ten		
Cluster 2		
Kindergarten	Grade 1	Grade 2
	Understand place value.	Use place value understanding and properties of operations to add and subtract.
	<p>MAFS.1.NBT.2.2 Understand that the two digits of a two-digit number represent amounts of tens and ones.</p> <ul style="list-style-type: none"> a. 10 can be thought of as a bundle of ten ones – called a “ten” b. Then numbers from 11 to 19 are composed of a ten and one, two, three...nine ones c. The numbers 10, 20, 30...90 refer to one, two, three...nine tens and 0 ones. d. Decompose two-digit numbers in multiple ways (64 can be decomposed into 6 tens and 4 ones or 5 tens and 14 ones). 	
	<p>MAFS.1.NBT.2.3 Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>$, $=$, $<$.</p>	
		<p>MAFS.2.NBT.2.5 Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.</p>
		<p>MAFS.2.NBT.2.6 Add up to four two-digit numbers using strategies based on place value and properties of operations.</p>
		<p>MAFS.2.NBT.2.7 Add and subtract within 1000, 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. Understanding that in adding or subtracting three digit numbers, one adds or subtracts hundreds and hundreds, tens and tens and ones and ones.</p>
		<p>MAFS.2.NBT.2.8 Mentally add 10 or 100 to a given number 100-900, and mentally subtract 10 or 100 from a given number 100-900.</p>
		<p>MAFS.NBT.2.9 Explain why addition and subtraction strategies work, using place value and the properties of operations.</p>

Domain: Numbers and Operations in Base Ten**Cluster 2**

Grade 3	Grade 4	Grade 5
	<p>Use place value understanding and properties of operations to perform multi-digit arithmetic.</p> <p>MAFS.4.NBT.2.4 Fluently add and subtract multi-digit whole numbers using the standard algorithm.</p>	<p>Perform operations with multi-digit whole numbers and with decimals to hundredths.</p>
	<p>MAFS.4.NBT.2.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.</p>	<p>MAFS.5.NBT.2.5 Fluently multiply multi-digit whole numbers using the standard algorithm.</p>
	<p>MAFS.4.NBT.2.6 Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.</p>	<p>MAFS.5.NBT.2.6 Find whole-number quotients of whole numbers with up to four-digit dividends and two digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.</p>
		<p>MAFS.5.NBT.2.7 Add, subtract, multiply, and divide decimals to hundredths, 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>

Domain: Numbers and Operations in Base Ten**Cluster 3****Kindergarten****Grade 1****Grade 2**

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

MAFS.1.NBT.3.4

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 reason 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.

MAFS.1.NBT.3.5

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

MAFS.1.NBT.3.6

Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 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.

Domain: Numbers and Operations in Base Ten		
Cluster 3		
Grade 3	Grade 4	Grade 5

Numbers and Operations in Base Ten does not have cluster 3 standards in grades 3, 4 or 5.