

	K	1	2	3	4	5
Standard 4: Number and Operations in Base 10						
Benchmark 1	Work with numbers 11-19 to gain foundations for place value.	Understand place value.	Understand place value.	Understand place value.	Generalize place value understanding for multi-digit whole numbers.	Understand the place value system.
	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 (such as $18 = 10 + 8$); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.	Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases:	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 as special cases:	Understand that the five digits of a five-digit number represent amounts of ten-thousands, thousands, hundreds, tens, and ones.		
		Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>$, $=$, and $<$.	Count within 1000; skip-count by 5s, 10s, and 100s.	Read and write multi-digit whole numbers using base-10 numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place using $>$, $=$, and $<$ symbols to record the results of comparisons.	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 $>$, $=$, and $<$ symbols to record the results of comparisons.	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 10.
			Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.		Use place value understanding to round multi-digit whole numbers to any place.	Read, write, and compare decimals to thousandths.
			Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$, $=$, and $<$ symbols to record the results of comparisons.			Use place value understanding to round decimals to any place.

Benchmark 2		Use place value understanding and properties of operations to add and subtract.	Use place value understanding and properties of operations to add and subtract.	Use place value understanding and properties of operations to perform multi-digit arithmetic	Use place value understanding and properties of operations to perform multi-digit arithmetic.	Perform operations with multi-digit whole numbers and with decimals to hundredths.
		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.		Use place value understanding to round whole numbers to the nearest 10 or 100.		
		Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.	Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.	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.	Fluently add and subtract multi-digit whole numbers using the standard algorithm.	Fluently multiply multi-digit whole numbers using the standard algorithm.

		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.	Add up to four two-digit numbers using strategies based on place value and properties of operations.	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.	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.	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.
			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. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.		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.	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.
			Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.			
			Explain why addition and subtraction strategies work, using place value and the properties of operations. ¹			