

5th Grade Math Unit 1

Content Area	Math
Unit Title/Topic	Number and Operations in Base Ten
Course/Grade Level	5 th Grade
Unit Summary	Students focus on understanding the place value system; performing operations with multi-digit whole numbers and with decimals to hundredths.
Time Frame	<i>weeks</i>

Desired Results

Priority Standards:

- 5.NBT.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 10.
- 5.NBT.3 Read, write, and compare decimals to thousandths.
 - a. Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., $347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (1/10) + 9 \times (1/100) + 2 \times (1/1000)$.
 - b. Read, write, and compare decimals to thousandths. Compare two decimals to thousandths based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.
- 5.NBT.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.
- 5.NBT.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.

Supporting Standards:

- 5.NBT.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 $\frac{1}{10}$ of what it represents in the place to its left.
- 5.NBT.4 Use place value understanding to round decimals to any place.
- 5.NBT.5 Fluently multiply multi-digit whole numbers using the standard algorithm.

Continuous Foundational Standards:

Nebraska State Standard

MA 5.1.1.e Classify a number as prime or composite.
MA 5.1.1.f Identify factors and multiples of any whole number.
MA 5.1.1.g Round whole numbers and decimals to any given place.
(assessed locally)
MA 5.1.3.a Add and subtract positive rational numbers
MA 5.1.3.b Select, apply, and explain the appropriate method of
computation when problem solving
MA 5.1.4.a Estimate the sums and differences of
positive rational numbers to check the reasonableness of
such results