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| **Common Core Strand** | **Cluster** | **Standard** | **Learning Targets**  4th Grade Math Curriculum Map – 1st Quarter | **Resources** | **Vocabulary** | **Essential Questions** |
| **Numbers and Operations in Base Ten** | **Generalize place value understanding for multi-digit whole numbers.** | 4.NBT.1 **Generalize place value understanding for multi-digit whole numbers.** 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. For example, recognize that 700 ÷ 70 = 10 by applying concepts of place value and division. | 1. I can explain the value of each digit in a multi-digit number as ten times the digit to the right. | TOPIC 1 1-1, 1-2, 12-1, 1-3A | Place value Base ten system | 1. How does a digit's position affect its value? 2. How do place values relate to each other? 3. How do place values increase and decrease by powers of ten?  4. How can I recognize place value patterns? 5. How are place value patterns repeated in numbers?  How are patterns of tens a structure of our numbers system? |
| 4.NBT.2 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 >, =, and < symbols to record the results of comparisons. | 1. I can read and write a multi-digit number in word form, base-ten numerals, and expanded form. (K) 2. I can compare two multi-digit number using place value and record the comparison using symbols <, >, or =. (S) | Topic 1 &12 1-1, 1-2, 1-3, 12-1, 12-2 | Standard Word Expanded | 1. What are the different ways I can represent numbers?  2. How does place value help to compare numbers? |
| 4.NBT.3 3. Use place value understanding to round multi-digit whole numbers to any place. | 1. I can explain how to use the place value and what digits to look for in order to round a multi-digit number. (K) 2. I can use the value of the digit to the right of the place to be rounded to determine whether to round up or down. (S) 3. I can write a multi-digit number rounded to any given place. (S) | Topic 1 & 5 1-4, 5-3 | Round Estimate | 1. What are the steps to rounding numbers?  2. How do I know when a result is reasonable?  3. Is estimation more appropriate than finding an exact answer? |
| **Numbers and Operations in Base Ten** | **Use place value understanding and properties of operations to perform multi-digit arithmetic.** | 4.NBT.4 4. Fluently add and subtract multi-digit whole numbers using the standard algorithm. | 1. I can add multi-digit whole numbers with ease by using the standard algorithm (e.g., add one column of numbers at a time starting with the ones digits, then the tens digits.) (S) 2. I can subtract multi-digit whole numbers with ease by using the standard algorithm (e.g., subtract one column of numbers at a time starting with the ones digits, then the tens digits). (S) | Topic 2 | Standard Algorithm | 1. What is the process for adding and subtracting multi-digit numbers?  2. How does understanding place value help you solve multi digit addition and subtraction problems? |
| **Operations and Algebraic Thinking** | **Gain familiarity with factors and multiples.** | 4.OA.4 4. Find all factor pairs for a whole number in the range 1–100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1–100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1–100 is prime or composite. | 1. I can define factors and multiples. (K) 2. I can list all of the factor pairs for any whole number in the range 1-100. (K) 3. I can determine multiples of a given whole number (1-100). (S) 4. I can define prime and composite. (K) 5. I can determine if a number is prime or composite. (R) | Topic 8 (8-8, 8-9) | Factors Factor Pairs Multiples Prime Composite | 1. How can I create a list of factor pairs for a given number?  2. How can I determine multiples of numbers? 3. How can multiples be used to solve problems? 4. How can I determine whether a number is prime or composite? |
| **Operations and Algebraic Thinking** | **Generate and analyze patterns.** | 4.OA.5 **Generate and analyze patterns.** 5. Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. For example, given the rule “Add 3” and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way. | 1. I can generate a pattern that follows a given rule. (S) 2. I can identify and explain additional patterns or special behaviors in a pattern that go beyond the given rule. ® | Topic 3 & 6 (3-2,6-2, 6-3) | Pattern Rule | 1. How can I determine a pattern based on a rule? 2. How do I generate a rule based on a pattern? |