**Learning Progression for Numbers and Operations in Base-Ten**

|  |  |
| --- | --- |
| **Grades K-2** | **Grades 3-5** |
| **Kindergarten**  **K.NBT.1 –** Work with numbers 11-19 to gain foundations for place value.  **Grade 1**  **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.  **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.  **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.  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.  **Grade 2**  **2.NBT.2 –** Count within 1000; skip-count by 5s, 10s, and 100s.  **2.NBT.9 –** Explain why addition and subtraction strategies work, using place value and the properties of operations. | **Grade 3**  *Ensure solid K-2 understanding of NBT standards.*  **Grade 4**  **4.NBT.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.  **4.NBT.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.  **Grade 5**  **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.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. |

Christinson, J., Wiggs, M.D., Lassiter, C.J., & Cook, L. (2012). *Navigating the mathematics Common Core State Standards*. Englewood, CO: Leadership and Learning Center.