Topic A

Place Value of Multi-Digit Whole Numbers

**4.NBT.1**, **4.NBT.2**, 4.OA.1

|  |  |  |
| --- | --- | --- |
| Focus Standard: | 4.NBT.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.* |
| 4.NBT.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. |
| Instructional Days: | 4 |  |
| Coherence -Links from: | G3–M2 | Place Value and Problem Solving with Units of Measure |
| -Links to: | G5–M1 | Place Value and Decimal Fractions |

In Topic A, students build the place value chart to 1 million and learn the relationship between each place value as *10 times* the value of the place to the right. Students manipulate numbers to see this relationship, such as 30 hundreds composed as 3 thousands. They decompose numbers to see that 7 thousands is the same as 70 hundreds. As students build the place value chart into thousands and up to 1 million, the sequence of three digits is emphasized. They become familiar with the base thousand unit names up to 1 billion. Students fluently write numbers in multiple formats: as digits, in unit form, as words, and in expanded form up to 1 million.

|  |
| --- |
| A Teaching Sequence Towards Mastery of Place Value of Multi-Digit Whole Numbers |
| Objective 1: Interpret a multiplication equation as a comparison. (Lesson 1) |
| Objective 2: Recognize a digit represents 10 times the value of what it represents in the place to its right.  (Lesson 2) |
| Objective 3: Name numbers within 1 million by building understanding of the place value chart and placement of commas for naming base thousand units. (Lesson 3) |
| Objective 4: Read and write multi-digit numbers using base ten numerals, number names, and expanded form.  (Lesson 4) |