

Grade 4- Module 1 - Place Value Concepts for Addition and Subtraction

Massachusetts Learning Standards Taught in this Unit

- **3.OA.A.1** Interpret products of whole numbers, e.g., interpret 5×7 as the total number of objects in five groups of seven objects each.
For example, describe a context in which a total number of objects can be expressed as 5×7 .
- **4.OA.A.1** Interpret a multiplication equation as a comparison, e.g., interpret $35 = 5 \times 7$ as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.
- **4.OA.A.2** Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.
- **4.OA.A.3** Solve multi-step word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.
 - **4.OA.A.3.a** Know multiplication facts and related division facts through 12×12 .
- **2.NBT.A.1** 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:
 - **2.NBT.A.1.b** The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).
- **4.NBT.A.1** Recognize that in a multi-digit whole number, a digit in any place represents 10 times as much as it represents in the place to its right.
For example, recognize that $700 \div 70 = 10$ by applying concepts of place value and division.
- **4.NBT.A.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.
- **4.NBT.A.3** Use place value understanding to round multi-digit whole numbers to any place.
- **2.NBT.A.3** Read and write numbers to 1,000 using base-ten numerals, number names, and expanded form.
- **2.NBT.A.4** Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$, $=$, and $<$ symbols to record the results of comparisons.
- **4.NBT.B.4** Fluently add and subtract multi-digit whole numbers using the standard algorithm.
- **3.NBT.A.1** Use place value understanding to round whole numbers to the nearest 10 or 100.
- **3.NBT.A.2** Fluently add and subtract within 1,000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.
- **4.MD.A.1** Know relative sizes of measurement units within one system of units, including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express

measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table.

For example, know that 1 ft. is 12 times as long as 1 in. Express the length of a 4 ft. snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ...