## Topic C

# Three-Digit Numbers in Unit, Standard, Expanded, and Word Forms 

2.NBT.3, 2.NBT.1, 2.NBT. 2

| Focus Standard: | 2.NBT.3 | Read and write numbers to 1000 using base-ten numerals, number names, and <br> expanded form. |
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| Instructional Days: | 2 |  |
| Coherence -Links from: | G1-M6 | Place Value, Comparison, Addition and Subtraction to 100 |
| -Links to: | G2-M4 | Addition and Subtraction Within 200 with Word Problems to 100 |
|  | G2-M7 | Problem Solving with Length, Money, and Data |

In Topic C , the teaching sequence opens with students counting on the place value chart by ones from 0 to 124, bundling larger units as possible (2.NBT.1a). Next, they represent various counts in numerals, also known as standard form, designating and analyzing benchmark numbers (e.g., multiples of 10) and numbers they bundled to count by a larger unit (2.NBT.2).
Next, students work with base ten numerals representing modeled numbers with place value cards, also known as Hide Zero cards, that reveal or hide the value of each place. They represent three-digit numbers as number bonds and gain fluency in expressing numbers in unit form (3 hundreds 4 tens 3 ones), in word form, and on the place value chart. Students then count up by hundreds, tens, and ones, leading them to represent numbers in expanded form (2.NBT.3). The commutative property or "switch around rule" allows them to change the order of the units. They practice moving fluidly between word form, unit form, standard form, and expanded form (2.NBT.3).

Students are held accountable for naming the unit they are talking about, manipulating, or counting. Without this precision, they run the risk of thinking of numbers as simply the compilation of numerals $0-9$, keeping their number sense underdeveloped.

The final Application Problem involves a found briefcase full of money: 23 ten dollar bills, 2 hundred dollar bills, and 4 one dollar bills. Students use both counting strategies and place value knowledge to find the total value of the money.

A Teaching Sequence Towards Mastery of Three-Digit Numbers in Unit, Standard, Expanded, and Word Forms

Objective 1: Count up to 1,000 on the place value chart.
(Lesson 4)
Objective 2: Write base ten three-digit numbers in unit form; show the value of each digit.
(Lesson 5)
Objective 3: Write base ten numbers in expanded form.
(Lesson 6)
Objective 4: Write, read, and relate base ten numbers in all forms.
(Lesson 7)

