Topic D

Modeling Base Ten Numbers Within 1,000 with Money

2.NBT.2, 2.NBT.1, 2.NBT.3, 2.MD.8

Focus Standard:		2.NBT.2	Count within 1000; skip-count by 5s, 10s, and 100s.
Instructional Days:		3	
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

Further building their place value understanding, students count by one dollar bills up to $124, repeating the process done in Lesson 4 with bundles. Using bills, however, presents a new option. A set of 10 ten-dollar bills can be traded or changed for 1 hundred-dollar bill, driving home the equivalence of the two amounts, an absolutely essential Grade 2 place value understanding (**2.NBT.1a**).

Next, students see that 10 bills can have a value of $10, $100, or $1,000 but appear identical aside from their printed labels (**2.NBT.1**, **2.NBT.3**). A bill's value is determined by what it represents. Students count by ones, tens, and hundreds (**2.NBT.2**) to figure out the values of different sets of bills.

As students move back and forth from money to numerals, they make connections to place value that help them see the correlations between base ten numerals and corresponding equivalent denominations of one, ten, and hundred-dollar bills.

Word problems can be solved using both counting and place value strategies. For example, "Stacey has $154. She has 14 one-dollar bills. The rest is in $10 bills. How many $10 bills does Stacey have?" (**2.NBT.2**). Lesson 10 is an exploration to uncover the number of $10 bills in a $1,000 bill discovered in grandfather's trunk in the attic. (Note that the 1,000 dollar bill is no longer in circulation.)

A Teaching Sequence Toward Mastery of Modeling Base Ten Numbers Within 1,000 with Money
Objective 1: Count the total value of $1, $10, and $100 bills up to $1,000. (Lesson 8)
Objective 2: Count from $10 to $1,000 on the place value chart and the empty number line. (Lesson 9)
Objective 3: Explore $1,000. How many $10 bills can we change for a thousand dollar bill? (Lesson 10)