



## 2nd Grade Math

*Module 7: Problem Solving with Length, Money, and Data*

### Math Parent Letter

This document is created to give parents and students a better understanding of the math concepts found in Eureka Math (© 2013 Common Core, Inc.) that is also posted as the Engage New York material which is taught in the classroom. Module 7 of Eureka Math (Engage New York) covers strategies for adding and subtracting within 200. This newsletter will discuss Module 7, Topic B.

*Topic D: Strategies for Composing Tens and Hundreds*

### Words to Know:

**Mental Math-** Counting by 5's, 10's, 25's. Making \$1 using decomposition.

**Coins** (e.g., penny 1¢, nickel 5¢, dime 10¢, and quarter 25¢)

**Dollars** (e.g., \$10 or 100¢)

## OBJECTIVES OF TOPIC B

1. Recognize the value of coins and count up to find their total value.
2. Solve word problems involving the total value of a group of coins.
3. Solve word problems involving the total value of a group of bills.
4. Solve word problems involving different combinations of coins with the same total value.
5. Use the fewest number of coins to make a given value.
6. Use different strategies to make \$1 or make change from \$1.
7. Solve word problems involving different ways to make change from \$1.
8. Solve two-step word problems involving dollars or cents with totals within \$100 or \$1.

## Focus Area– Topic B

*Coins and Bills*

Students identify most popular bills and coins and apply their knowledge of coins and bills values, place value strategies, and the properties of operations to solve addition and subtraction word problems to find the total value of a group. Students use decomposition of a dollar (100 ones = 10 tens = 1 hundred) and make change from one dollar using counting on and number bonds. Students will use coins and bills to solve addition and subtraction word problems involving two-digit money amounts. (e.g., \$28 + \$47 or 28¢ + 47¢)



### Counting on strategy to give change

(25) (25) (25) (10)

$$25 + 25 + 25 + 10 = 85¢$$

Tracy has 3 quarters and 1 dime.

$$\begin{array}{r} \vee \\ 50 + 25 + 10 \end{array}$$

$$85 + \underline{\quad} = 100$$

Tracy needs 1

$$85 \xrightarrow{+5} 90 \xrightarrow{+10} 100$$

I spent 85 ¢, I paid with a dollar bill.

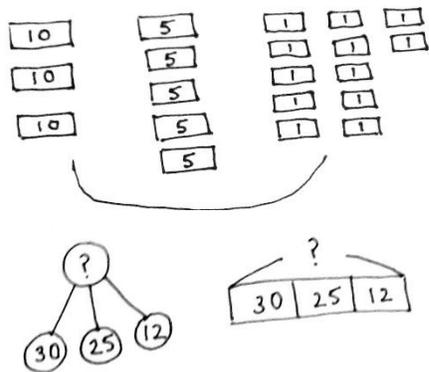
What is my change?

### Decomposition of an amount

50¢	
1 quarter	1 quarter
25¢	25¢
0¢	50¢
40¢	10¢
30¢	20¢
35¢	15¢
4 dimes	1 dime
49 pennies	1 penny
5 nickels	5 nickels

Students identify the value of the coin or bill and use an addition strategy to find the sum or value of the group.

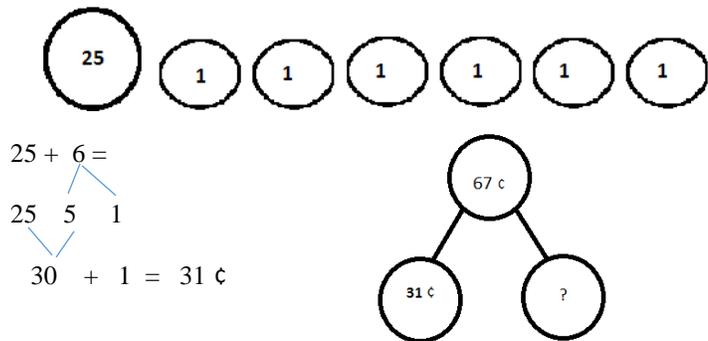
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$25 + 10 + 10 + 10 + 5 + 1$	
$25 + 30 + 5 + 1$	



Students will find another way to express the same amount with fewest coins.

<p>1. 26 cents</p>  <p>2 dimes, 1 nickel, and 1 penny = 26 cents</p>	<p>Another way to make 26 cents: Fewest coins</p> <p>1 quarter and 1 penny</p>
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Ethan had 67 cents. He gave 1 quarter and 6 pennies to his sister. How much money does Ethan have left?



$25 + 6 = 31$   
 $25 = 20 + 5$   
 $6 = 5 + 1$   
 $30 + 1 = 31$

$67 - 31 = 36$   
 or  $31 + 36 = 67$

Josephine has 3 nickels, 4 dimes, and 12 pennies. Her mother gives her 1 coin. Now Josephine has 92 cents. What coin did her mother give her?

