PERFORMANCE TASK: What I Have and What I Need

Approximately 1-2 Days

STANDARDS FOR MATHEMATICAL CONTENT

MCC2.NBT.9 Explain why addition and subtraction strategies work, using place value and the properties of operations.

MCC.2.MD.8 Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using $ and ¢ symbols appropriately. *Example: If you have 2 dimes and 3 pennies, how many cents do you have?*

STANDARDS FOR MATHEMATICAL PRACTICE

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning**.**

*****Mathematical Practices 1 and 6 should be evident in EVERY lesson. *****

BACKGROUND KNOWLEDGE

In this task, students will continue to develop their understanding of and facility with money by counting with pennies, nickels, dimes, and quarters. They will need to be able to represent a money amount with words or digits and the cent sign.

ESSENTIAL QUESTIONS

- Why is it important to be able to count amounts of money?
- What are the different ways we can represent an amount of money?
- How can I keep track of an amount?
- How do we know if we have enough money to buy something?

MATERIALS

- Suggested poem: "Smart" by Shel Silverstein
- Coins
- Coin mats

- "What I Have and What I Need" recording chart

GROUPING

Individual

TASK DESCRIPTION, DEVELOPMENT AND DISCUSSION

Part I
Begin by reading the poem "Smart" by Shel Silverstein.
Discuss what happens to the amount of money as it is exchanged.

Part II
Give each student a copy of the chart. "What I Have and What I Need". Have students complete the chart individually. Coins and coin mats should be available to assist students in making these decisions. After they find a coin combination for each problem, have students compare their combination with a partner. After the partners have shared, allow the class to discuss the different combinations of coins that were used, whether they are correct, and how many different combinations there were. Encourage students to think of a way of recording the combinations so that you can be sure that you discovered them all.

FORMATIVE ASSESSMENT QUESTIONS

- How do you count the different amounts of money?
- What are some different ways we represented the same amount of money?
- How did you keep track of how much more money we needed?
- How did you know if you have enough money to buy something?
- What strategy did you use to figure out how much more you needed to buy the item?

DIFFERENTIATION

Extension
- Have students write some story problems involving buying something and having to count out the right change.

Intervention
- Have students make amounts using only pennies and dimes and relate this to place value.

"Smart" by Shel Silverstein

My dad gave me one dollar bill
'Cause I'm his smartest son,
And I swapped it for two shiny quarters
'Cause two is more than one!

And then I took the quarters
And traded them to Lou
For three dimes, I guess he don't know
that three is more than two!

Just them, along came old blind Bates
And just 'cause he can't see
He gave me four nickels for my three dimes,
And four is more than three!

And I took the nickels to Hiram Coombs
Down at the seed-feed store,
and the fool gave me five pennies for them,
And five is more than four!

And then I went and showed my dad,
and he got red in the cheeks
And closed his eyes and shook his head-
Too proud of me to speak!

Name: _____




What I Have and What I Need

What I have	What I need				To Make a Total of…
	Penny	Nickel	Dime	Quarter	
23 cents					45 cents
58 cents					93 cents
15 cents					87 cents
6 cents					60 cents
50 cents					75 cents