CONSTRUCTING TASK: Sale Flyer Shopping

Approximately 1 Day

STANDARDS FOR MATHEMATICAL CONTENT

MCC.2.OA.1 Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.

MCC.2.OA.2 Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers.

MCC.2.NBT.5 Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.

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 MATHMATICAL PRACTICE

1. Make sense of problems and persevere 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

(Information quoted from Van de Walle and Lovin, Teaching Student-Centered Mathematics: Grades K-3, pages 152)

Students should have had prior experiences and/or instruction with addition and subtraction of two-digit numbers with and without regrouping (but not requiring the traditional computational algorithm of trading). Students should also have had experience working with money amounts.

“Remember that working with coins requires not only adding up the values but also first mentally giving each coin value and then ordering the coins. Be sure to value any approach that works. However, pay special attention to those students who begin with the larger values and

those who put nice combinations together utilizing thinking with tens. There is no reason to require students to add in any particular order, not with this activity or with coins."

The purpose of this task is to further develop students' understanding of the concept of addition while making the connection to money using only coin amounts.

ESSENTIAL QUESTIONS

- How can we solve addition problems with and without regrouping?

MATERIALS

- "Shopping Flyer" student sheet
- "Shopping Flyer" student task sheet

GROUPING

Individual

TASK DESCRIPTION, DEVELOPMENT, AND DISCUSSION

Task Directions
Show students a sale flyer with various toys. Explain to the students that they are to choose two items that they would like to buy. They have to determine the total cost of the two items.

Give each student a shopping recording sheet. Have students choose two items with their prices from the sale flyers for each shopping page. Have them glue these on the page. Instruct students to find the total price of the two items by modeling each amount and finding the total. Students should use the "¢"symbol to represent the prices and total. Once students finish solving the problem, encourage them to write a word problem for each page of their shopping book.

After students have created several pages for their shopping books, allow a few students to share their problems and strategies with the class. Allow other students to make questions and comments about the work.

Variation to task:
You could create a class book and designate certain totals for different chapters. See how many different combinations the class can come up with for generating the given amount. You can also vary the amounts on the toys to increase/decrease particular totals that you want the students to generate.

FORMATIVE ASSESSMENT QUESTIONS

- How is adding money amounts like adding amounts that aren't represented as money?
- What strategies did you use for combining the money amounts?
- What did you do to check your work?

- Did anyone else create the same amount you did but use different toys? Why did this happen?

DIFFERENTIATION

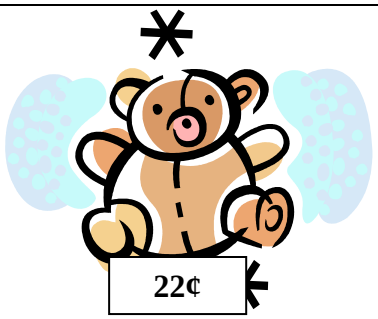
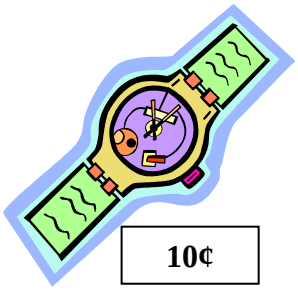
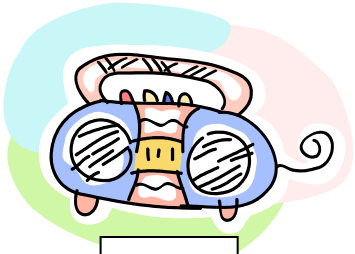
Extension

- Have students purchase more than two items and find the total.
- You may also allow students to attempt to total the sum of all pages in their shopping book to see how much they have spent altogether.

Intervention

- Provide plastic coins or coin photocopies for students to use to find the total of their purchase.
  For students having difficulty with adding the two items, encourage them to use a 99's chart or money number line.

_____'s Cool Stuff
Store Shopping Flyer for the Week of
_____

 45¢	 25¢	 12¢
 19¢	 30¢	 15¢
 22¢	 10¢	 42¢
 38¢	 8¢	 41¢

Name _____ Date _____

Items I Bought: (glue pictures and prices here)
Picture Model of my Addition:
Addition Problem: _____ ¢ + _____¢ = _____¢