

Money Counts

Reporting Category Measurement

Topic Counting bills and coins, comparing values, and making change

Primary SOL 3.8 The student will determine, by counting, the value of a collection of bills and coins whose total value is \$5.00 or less, compare the value of the bills and coins, and make change.

Related SOL 3.4

Materials

- Play money—coins and dollar bills
- Paper bags labeled with letters, A, B, C,...
- Money Counts Recording Sheet (attached)
- Monthly book club flyer listing multiple books for purchase

Vocabulary

money, coin, bill, value, change, skip counting, collection

Student/Teacher Actions (what students and teachers should be doing to facilitate learning)

1. Tell students to imagine that the class has been given a special present—a gift certificate to purchase \$125.00 worth of books from a book club. Prior to selecting and purchasing the books, students will need to practice their money-counting skills, using bags of money.
2. Display a combination of coins and bills that equals \$5.00 (e.g., 3 one-dollar bills, 4 quarters, 5 dimes, 9 nickels, and 5 pennies). Demonstrate how to count the value of the money starting with the largest denomination of bill or coin. Continue to count, working toward the coins of lesser and lesser value until all the money has been counted. Repeat the demonstration with a different amount of money. Remind the students that they can use their skip-counting skills for counting the coins.
3. Distribute copies of the Money Counts Recording Sheet to students. Group students into pairs, and give each pair a bag of play money. Explain that each bag contains a different amount of money worth \$5.00 or less. Direct one student in each pair to count the value of the money and write it down. Then, have the other student in each pair recount it to verify the amount. If the two totals agree, have pairs record the letter of the bag and the amount of money in the bag in the first chart on their recording sheets. If the totals do not agree, have the pairs recount the money slowly and carefully together.
4. Have partners put the money back in the bags, exchange bags with other partners, and repeat the counting and recording process. Have students continue exchanging bags until they have practiced counting at least five collections of coins and bills.
5. For the second part of the lesson, ask students to suggest a combination of coins and bills that equals \$5.00. Model recording the suggested combination on a chart similar to the one on the recording sheet. Then, have students work in pairs to create and record nine different combinations of coins and bills that equal \$5.00.

6. For the last part of the activity, demonstrate the process of making change for a five-dollar bill, using two different skills:
 - **Counting on**—i.e., starting with the amount to be paid (the purchase price), counting forward by cents to the next dollar, and then counting forward by dollars to reach the amount from which you are making change (\$5.00)
 - **Mentally calculating the difference** between the amount from which to make change (\$5.00) and the amount to be paid (purchase price)
7. Explain to students that they will receive the book club flyers from which to choose the book they wish to purchase. The only criterion for the purchase is that it must cost \$5.00 or less. Distribute copies of the flyer listing the books available and their costs. Have each student select a book that costs no more than \$5.00 and figure out the change to be received after purchasing the selected book with a five-dollar bill. Direct each student to record the book's title and cost and the change amount on his/her recording sheet. The student then uses the bag of money to count out a combination of coins and bills equal to the cost. Have each student write a number sentence about the value of his or her coins and bills in comparison to his/her partner's coins and bills.

Assessment

- **Questions**
 - What is the fewest number of coins that you could use to equal 37¢?
 - What factors did you have to think about when selecting your book?
- **Journal/Writing Prompts**
 - Explain in your own words how to figure out the amount of change you should receive when you use a five-dollar bill to buy an item that costs less than \$5.00.
 - Discuss why it is important for you to know how much change you should receive when you pay for an item at a store.
- **Other**
 - Circulate during the counting of the coins and bills to verify that students are using the correct strategies, e.g., counting on, skip-counting. Note who is having difficulty identifying the coins and bills, skip counting, counting on, writing the values, and/or comparing amounts, and give help as needed.
 - Use the completed recording sheet for assessment purposes.

Extensions and Connections (for all students)

- Repeat the exercise, using advertisements from stores such as toy stores, grocery stores, and clothing stores.
- Discuss which human resources need to know how to calculate money and make change. List types of capital and natural resources they may choose to spend their money on.

Strategies for Differentiation

- Allow students to use calculators.
- Allow students to use grid paper to line up numbers vertically when showing their work.
- Have students work with larger amounts when making change.

Money Counts Recording Sheet

Name: _____ Date: _____

Part I: Money Bags

Bag letter	Total value of coins and bills

Part II: Combinations of Coins and Bills Worth \$5.00

Example	Number of one-dollar bills	Number of half-dollars	Number of quarters	Number of dimes	Number of nickels	Number of pennies
1						
2						
3						
4						
5						
6						
7						
8						
9						

Part III: Buying Books

The title of my book is _____.

The cost of my book is _____.

The change that I would get back after buying my book with a five-dollar bill is _____.

The coins and bills that equal the cost of my book are the following:

Total value	Number of one-dollar bills	Number of half-dollars	Number of quarters	Number of dimes	Number of nickels	Number of pennies

The coins and bills that equal the cost of my partner's book are the following:

Total value	Number of one-dollar bills	Number of half-dollars	Number of quarters	Number of dimes	Number of nickels	Number of pennies

Whose book costs more, yours or your partner's? _____

Write a sentence that compares the two amounts of money, using the terms *greater than*, *less than*, or *equal to*.
