

Adding up Pennies and Nickels

Purpose

Students will solve problems, choosing strategies and tools, explaining their reasoning, making calculations, and checking results.

Materials

For each student: play coins or tokens representing pennies and nickels

Activity

A. Introducing the Problem

1. Give each student 5 nickels and 10 pennies.
2. Ask the students to count out 2 nickels and 5 pennies (putting the others aside).
3. Ask them if they can make 6 cents using some of these coins.
4. Call on students to tell the class how they did it.
5. Repeat this process for 9 cents, 4 cents, 12 cents, etc.

B. Solving the Original Problem

1. Divide the class into groups of three or four students, and ask the groups to find the different amounts they can make using 2 nickels and 5 pennies.
2. Ask each group to record its results on paper.
3. Ask groups to look for patterns in their answers.
4. Repeat with different amounts of coins.

C. Solving Related Problems

Give students a specific value and have them find the different ways to make that amount using their coins.

D. Discussion

With the whole class, discuss the ways that students made various amounts and any patterns they found.



**connecting
across the
curriculum**

English/ Language Arts

Have the students write stories about going to the store and purchasing items with a certain amount of money. Have students draw pictures to accompany their stories.



**MEETING
INDIVIDUAL
NEEDS**

Some students may have difficulty dealing with a large number of coins. Provide these students with different sets of coins to model (e.g., 2 nickels and 4 pennies) and ask them to determine the total value (e.g., 14 cents).

**Standards Links
1.2.1, 1.2.4, 1.5.7**

Questions for Review

Basic Concepts and Processes

During the activity, discuss the following questions with your students to gauge their understanding of the Standard Indicators:



Show me a nickel.



How many pennies have the same value as a nickel?



What process did you use to find the different values you can make with the coins?
