

Making Cents

Purpose

Students will identify numbers up to 100 in various combinations of tens and ones by using dimes and pennies.

Materials

For the teacher: chalk, chalkboard

For each student: 10 dimes and 100 pennies (plastic coins or cardboard punch-outs may be substituted), copy of Black Line Master (BLM)

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Activity

A. Individual Activity

1. Distribute pennies and dimes to each student.
2. Instruct students to show 35 cents using the dimes and pennies in as many different combinations as they can find.
3. Have students represent their various combinations on pieces of paper.
4. Show the various findings of the students on the chalkboard in a variety of ways (e.g., drawing circles with "10" and "1" in them, writing 3 dimes and 5 pennies, etc.).

B. Partner Activity

1. Divide the class into groups of two.
2. Give each pair of students a new amount to represent.
3. Have students work individually but compare answers with partners to determine if any combinations were missed.

C. Homework

Hand out the BLM *Making Cents* for the students to complete at home and return the next day.

EXTENDING
THE



ACTIVITY

Include nickels in the coins that the students are given. Allow students to create their own number and coin combinations.

INCORPORATING



TECHNOLOGY

Create a simple table on the computer with "Pennies," "Dimes," and "Total" as the headings of the columns. Have students represent their combinations of coins by filling in the table with the appropriate amounts.


Standards Links
2.1.12, 2.5.12

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. Ask similar questions as you review the BLM *Making Cents*.

 Did you find all the combinations to make 35 cents?

 Were you able to find a combination with three dimes? With two dimes? With one dime? With no dimes?

 Show me a penny. Show me a dime.

 How many pennies does it take to equal 10 cents?

 How many dimes does it take to equal 10 cents?

 Explain your representation to me.

Name: _____

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1. How many different ways can you make 52 cents using only pennies and dimes? Show all of them.

2. How many different ways can you make 89 cents using only pennies and dimes? Show all of them.

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Teacher Directions

Give the BLM *Making Cents* to students to complete for homework.

Answer Key

1. 5 dimes, 2 pennies
4 dimes, 12 pennies
3 dimes, 22 pennies
2 dimes, 32 pennies
1 dime, 42 pennies
52 pennies

2. 8 dimes, 9 pennies
7 dimes, 19 pennies
6 dimes, 29 pennies
5 dimes, 39 pennies
4 dimes, 49 pennies
3 dimes, 59 pennies
2 dimes, 69 pennies
1 dime, 79 pennies
89 pennies