

<p><b>1(4) Number and operations.</b> The student applies mathematical process standards to identify coins, their values, and the relationship among them in order to recognize the need for monetary transactions.</p>	<p><b>1(4)(C)</b> The student is expected to use relationships to count by twos, fives, and tens to determine the value of a collection of pennies, nickels, and/or dimes.</p>
<p><b>Materials</b></p> <ul style="list-style-type: none"> <li>• Coins or pictures of coins</li> </ul>	
<p><b>Procedure:</b> Show the student the following collection of coins, as described below, one at a time.</p> <ul style="list-style-type: none"> <li>• 12 pennies</li> <li>• 6 nickels</li> <li>• 8 dimes</li> </ul> <p><b>What is the value of the set of coins?</b></p>	
<p><b>Check Student’s Responses:</b></p>	<p><b>Check Student’s Strategies:</b></p>
<p>The student correctly identified the value of the following collections:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Pennies</li> <li><input type="checkbox"/> Nickels</li> <li><input type="checkbox"/> Dimes</li> </ul>	<p>The student:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Used counting by _____ to determine the value of the pennies</li> <li><input type="checkbox"/> Used counting by _____ to determine the value of the nickels</li> <li><input type="checkbox"/> Used counting by _____ to determine the value of the dimes</li> </ul>
<p><b>Notes:</b></p>	

**1(4)(C)** The student is expected to use relationships to count by twos, fives, and tens to determine the value of a collection of pennies, nickels, and/or dimes.

**Possible interpretations, issues to follow up on, and implications for teaching**

**What did you observe?**

- The student **correctly determined the value of coins using skip-counting**. This student may be ready to determine the value of mixed coins (pennies, nickels, and dimes) up to a value of 120 cents.
- The student **incorrectly determined the value of the coins**. Consider how he or she determined the value of the coins:
  - The student miscounted using skip-counting
  - The student incorrectly identified the value of the coin(s)

*A teaching strategy might include asking the student to identify each type of coin and its value (penny, nickel, and dime). Next, it may be appropriate to practice rote skipping counting by twos, fives, and tens. Continue practicing by activities such as the following:*

- *Show the students 5 nickels and state, “The value of one nickel is 5 cents.” Prompt the student to use skip-counting by fives to determine the value of the 5 nickels.*
- *Show the students 7 dimes and state, “The value of one dime is 10 cents.” Prompt the student to use skip-counting by tens to determine the value of the 7 dimes.*
- *Show the students 10 pennies and state, “The value of one penny is 1 cent, but how could we group the pennies so that we could use skip-counting by twos or fives to determine the value.” Prompt the student to use skip-counting to determine the value of the 10 pennies.*