## Core Content

**Cluster Title:** Work with time and money.

**Standard 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?*

### MASTERY Patterns of Reasoning:

**Conceptual:**
- Students will recognize the different coins and their names.
- Students will understand the values of each of the coins and bills.
- Students will understand that coins represent a part of a dollar.
- Students will understand that only one money symbol should be used ($ for dollars, ¢ for cents only).
  
  (Since students haven't been exposed to decimals, use problems with either only dollars or only cents.)

**Procedural:**
- Students can introduce each of the coins individually, stating its name and value.
- Students can introduce money symbols ($ for dollars, ¢ for cents only).
- Students can practice counting money, starting with the larger values and adding on the smaller ones.
- Students can write monetary amounts using the correct notations (e.g., 57¢ or $1).

**Representational:**
- Students can represent money by writing amounts (e.g., 25¢ + 30¢ = 55¢).
## Supports for Teachers

### Critical Background Knowledge

**Procedural:**
Students can skip-count by ones, fives, and tens.

**Note:** Since money is not addressed in other grades’ Core Curricula, background knowledge must not be assumed. The basics, including recognition, value, and counting, must be included to successfully teach this standard.

### Academic Vocabulary and Notation

- bill, coin, value, penny, nickel, dime, quarter, dollar, $, ¢.

### Instructional Strategies Used

- Introduce one coin at a time (starting with the smallest). Teach its name, value, and correct symbol (penny, ¢, 1¢ or dime, ¢, 10¢).
- Have students make sets of coins equivalent to other values up to $1 (two nickels in one dime, five nickels in one quarter, four quarters in $1).
- Use money to solve problems with real-life context.

### Resources Used

- [http://illuminations.nctm.org/](http://illuminations.nctm.org/) (search “money”)
- [http://www.ixl.com/math/grade-2](http://www.ixl.com/math/grade-2)

### Assessment Tasks Used

<table>
<thead>
<tr>
<th>Skill-Based Task</th>
<th>Problem Task</th>
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<tbody>
<tr>
<td>Ashley has 1 quarter, 4 dimes, and 2 nickels in her piggy bank. How much money does Ashley have?</td>
<td>Parker has 6 dimes and 7 pennies. He bought a pack of gum for 25¢. How much money does Parker have left?</td>
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