# Math 3 – *Counting Money*: Parent/Teacher Guide

**Outcome(s):**

**Strand**: Number

1. Say the number sequence 0 to 1000 forward and backward by:
   - 5s, 10s or 100s, using any starting point
   - 3s, using starting points that are multiples of 3
   - 4s, using starting points that are multiples of 4
   - 25s, using starting points that are multiples of 25.
   [C, CN, ME]

5. Illustrate, concretely and pictorially, the meaning of place value for numerals to 1000.
[C, CN, R, V]

NOTE:  In this activity, students will learn to recognize the value of coins and bills and to represent values using money notations, which is not part of the Grade 3 Program of Studies.   The now outdated "penny" is also used in this activity.

**What students should be able to do:**

- Recognize the values of coins and bills up to $100.

- Read and write using both money notations, (e.g. 89¢ and $0.89), know that they represent the same amount of money, and be able to convert from one to the other. This includes reading number words (e.g. eighty-nine cents).

- Represent a given value of money in many different ways. They should be aware that there could be many different combinations of coins that have the same value (e.g. one loonie is equal to ten dimes or four quarters, etc.).

- Count collections of money (coins and bills) up to $10.

**Typical errors made by students and areas of difficulty:**

- Students may have difficulty counting beyond $1 (adding 10¢ to 99¢).
- Explain that $0.70 will appear as 0.7 on a calculator.
- Mistakes may be made when recording values with $ notation, such as forgetting the 0 (instead of $0.89, they write $.89; instead of $2.05, they write $2.5).  When recording values, they may write $2.05¢ or omit the decimal altogether.

- Students may have difficulty counting different combinations of coins. They are able to count a homogeneous group of coins, but unable to count mixed groups.
- Students may not be able to recognize that amounts past $1 can be converted to ¢ notation and vice versa (e.g. 386¢ is the same amount as $3.86).
- <u>Note to parents of French Immersion students</u>: Your child will be used to writing values of money with the money notation following the number (e.g. instead of $2.68, they will write: 2,68$).

**Ideas for more practice/extension:**

- Sort and count loose change from piggy banks, money jars, or change purses.
- Exchange coins for the least amount of coins possible (e.g. exchange one hundred pennies for 1 loonie).
- Draw pictures of coin collections; count and record their value.
- Handle money in "real life" situations (e.g. allowance for chores, paying for items at the store, using vending machines etc.).
- Discuss physical properties of coins through coin rubbings.
- Collect flyers for students to look through (for prices) and to add values up to a maximum of $10 (outcome 18).
- Visit the Royal Canadian Mint website.
- For a community service project, collect coins to donate to a charity.

**Related resources:**

- Hoban, Lillian. *Arthur's Funny Money*
- Silverstein, Shel. *"Smart", Where the Sidewalk Ends*
- Viorst, Judith. *Alexander, Who Used to be Rich Last Sunday*
- Royal Canadian Mint website: http://www.mint.ca/

**Assessment ideas:**

- In an interview situation, students are given a set of coins containing quarters, dimes, and nickels, but no pennies. There should be enough to make 40¢ a variety of ways (e.g. 4 dimes, 8 nickels, etc.).
- Count collections of money and create collections of money from a given value. Collections can be modeled, drawn, and written numerically or literally.
- Convert money notation from cent notation (¢) to dollar notation ($) and back again.