

**Topics**: Addition to 100, multiplication by 5 and 10, money, estimation **Materials**: One 6-sided dice, pencil & paper, pennies, nickels and dimes (optional) **Players:** two or more **Recommended Grades:** 2-8

Common Core: MP1, MP6, MP7

Roll the die 7 times. For every roll, you get to take that many pennies, nickels, or dimes. Whoever gets closest to \$1 without going over wins the game.

## Why We Love Penny Nickel Dime

This coin themed game of strategy and chance is a hit with students, and also helps give a concrete meaning to place value by linking it to both money, addition, estimation, and multiplying by fives and tens. It takes very little time, so it can be used as a fun way to take a quick break in your day. While kids may break the bank their first few games, they'll inevitably start estimating and choosing good strategies for themselves.

### How to Play

Each player records his/her own score on a piece of paper or T-chart. Players take turns rolling the die. For whatever number is rolled, the player can choose to take that many pennies, that many nickels, or that many dimes. More practiced players can just record the numbers in a T-chart like the one below. Repeat for seven total rolls for each player, each time choosing whether each number goes in the dimes, nickels or pennies column as you go.

The winner is the person whose sum comes as close as possible to reaching \$1 without going over.

#### **Prompts and Questions**

- Is it best to start with pennies, nickels or dimes?
- What number do you hope gets rolled next?
- What strategy are you using?

### Variations

- 1. Add Quarters: Play the same game using pennies, nickels, dimes and quarters. How does this change the game? Should you go for a goal other than \$1.00?
- 2. Place Value: Instead of choosing coins for each roll, choose 1s, 10s or 100s. The person closest to 1000 without going over after 7 total rolls is the winner.
- 3. For younger children, play with only pennies and dimes.

### About this Game

Adapted from <u>www.MathforLove</u>

# Penny, Nickel, Dime

Dimes	Nickels	Pennies