

**Topics:** Money, Coins, Equivalents, Addition

#### **Materials List**

- ✓ Cardstock circles marked as coins (25¢, 10¢, 5¢, 1¢) or other coin models
- ✓ 10 blank cards
- ✓ 1 blank die
- ✓ Matte board "barrier" (1/player)
- ✓ Permanent marker

This activity can be used to teach:

- Solve problems using coins & bills (Common Core Math Standards: Grade 2, Measurement and Data, 8)
- Problem Solving and Reasoning (Common Core Math Standards: Mathematical Practices Grades K-3)
- Number sense of quantity and counting & number sense of mathematical operations: (Early Education: DRDP-R, Mathematical Development, 32, 33)



# Cents & Sensibility

A Game of Monetary Equivalents







There are many different combinations of coins that add up to any particular amount. This game illustrates this concept of coin equivalents in a fun game challenge.

## **Assembly**

- 1. Label each card with a different amount under \$1.00 (e.g.  $28\phi$ ,  $47\phi$ ,  $83\phi$ ,  $50\phi$ )
- 2. Label the blank die with the following: (s)ame, (s)ame, (d)ifferent, (d)ifferent, (l)owest, (l)owest.

## Playing the Game (for 4 - 6 players)

- 1. Each player begins with a few of each type of coin. Extra coins should be available in a central location if students need them.
- 2. A card is turned over. Working behind a matte board "barrier", each player uses available coins to create the amount shown on the card. For example, if the card shows 28¢, players could choose "1 quarter and 3 pennies" or "2 dimes, 1 nickel, and 3 pennies" or any other combination.
- 3. When all students have finished, combinations are shared and checked.
- 4. Some students will have matching combinations ("same" as other players), some students will have unique combinations ("different" from all other players); and the combinations will use varying numbers of coins.
- 5. To determine which students get the point(s) for the round, a student rolls the die. If the die shows "same", then all players that have matching combinations earn a point. If the die shows "different", then all players having a unique combination earn a point. If the die shows "lowest", then all players having a combination with the lowest number of coins earn a point. Rounds may end with all players earning a point or with no players earning a point.
- 6. The player with the most points after 5 rounds wins the game.

### The Content Behind the Activity

*Cents & Sensibility* provides students the opportunity to practice addition while reinforcing the concepts of coin value and monetary equivalents. As with any concept, repetition is key to internalization and true understanding.

Money is basically an agreement between people, that a certain item (a coin or paper note) has an agreed upon value. Around the world and throughout history, people have used many items for commercial exchange, including cocoa beans, feathers, beads, shells, salt, and coins minted from a variety of metals. The first coins were used in ancient China starting in around 1500 b.c. The United States was the first country to use the decimal system for money (i.e. – 1 dollar = 100 cents).

**Web Resources** (Visit www.raft.net/raft-idea?isid=31 for more resources!)

- For information from the U.S. Mint, visit: www.usmint.gov
- The International Monetary Fund has an on-line game that shares money concepts throughout history, available at: www.imf.org/external/np/exr/center/students/money/index.htm