

Change the Change



Strands:

Number & Quantity	X
Algebra	
Functions	
Geometry	
Statistics & Probability	

Make exchanges for other coins then use what you earn to purchase novelty items, fruit, veggies, or privileges from a play store a leader provides.

Materials Needed:

- *Change the Change* Playing Mats 1, 2, 3, and 4, one per player
- Play or real coins of the denominations listed on each Playing Mat, 25 of each lower denomination, 5 of highest denomination
- “Bank” to keep coins separated by denomination
- 3 dice
- Novelty items to include in a “store” that players may purchase with money they win in the games.

Set-Up:

- Separate the coins by denomination. Store them in a “bank” so that the denominations stay separated (an egg carton could work).
- The store: Gather small items from a dollar store or create certificates of special favors players can buy. Suggested items: Pencils, erasers, little notebooks, decorative paperclips, stickers, decks of cards to play *Old Maid* or other children’s games, small toys to be assembled by purchasers, etc. Favors might include allowing a player 5 extra minutes of reading or screen time, staying up an extra 10 minutes, a day off from sorting socks or washing dishes, etc. Pre-mark prices on the items. Suggested prices in cents: 5, 10, 15, 25, 40, 50, and 60 cents.
- Give each player a copy of the *Change the Change* Playing Mat 1.

Objectives: Recognize each denomination of currency and the relationships among them. Develop an appreciation for the value of money when making small purchases. Solve problems involving money using addition and subtraction.

Pre-game activity before first use of each Playing Mat:

Make sure each player can do the following:

- Identify each coin and its monetary value.
- Determine how many pennies equal one nickel, one dime; how many nickels equal one quarter, etc., as appropriate for the Playing Mat in use for the game.

Playing Mat 1. On Your Turn:

1. Roll one die. The number you roll is the number of pennies you earn.
2. Place the pennies in the penny column on the board.
3. If you have enough pennies to exchange for a nickel, complete the exchange and place the nickel in the nickels column.
4. Your turn ends. Play moves to the left.
5. When you have enough nickels to exchange for a quarter, you have completed the game and do not continue to roll. The game is over when ALL players have earned a quarter.
6. When the game is over, all players keep a quarter for the store.

Making purchases from the store:

1. With the money earned from the playing *Change the Change* with playing mats 1-4, players take turns making purchases from a “store.”
2. Players get to keep items if they can count out the change they need correctly and they can make change if they don’t have the correct denominations. For example, if a player has a quarter and wants to purchase an item for 15 cents, the player must indicate that the quarter is 10 cents too much so the player needs 10 cents in change.

Think About It:

1. What items would you like to buy?
2. How much will they cost altogether? How do you know?
3. Can you afford them?
4. How much will you have left? Explain how you know.

Where:

Outside	
Inside	X
On-line	
On-site	



Variations:

Playing Mat 2: Play as above using pennies, nickels, dimes, and 1 die.
Replace “quarter” with “dime” in rule 5. Play until each player has earned \$0.20 to save for the store.

Playing Mat 3: Play as above using pennies, dimes, dollars, and 3 die.
Replace “nickel” with “dime” in rules 3 and 5. Replace “quarter” with “dollar” in rule 5. Play until each player has earned \$1.00 to save for the store.

Playing Mat 3: Play as above using pennies, dimes, dollars, and 3 die.
Replace the word “quarter” in rule 5 with the word “dollar.” Play until each player has earned \$1.00 to save for the store.

Helpful Hints:

- If this is a player’s first experience with exchanging coins, start with Playing Mat 1 (5 pennies = 1 nickel, 5 nickels = 1 quarter) then Playing Mat 3 (10 pennies = 1 dime, 10 dimes = 1 dollar). Both of these playing mats use the same number of exchanges to go from one denomination to the next on the same board.
- Playing Mat 4 is intended for use by players who have some familiarity with the values of coins. Players can gain such familiarity through Playing Mats 1, 2, and 3 if they do not already have it.
- Allowing players to use the money they earn from playing *Change the Change* further deepens their familiarity of the relationships among the coins while also encouraging problem solving. Players must decide what they can afford of the several things offered in the store. Most players prefer to use all of their earnings, so they need to use addition or subtraction to determine combinations of items in order to spend all of their money.

