

The Coin Game

Math Concepts: logic, strategy, thinking ahead

Materials: Game board, 12 coins: 2 quarters, 2 dimes, 2 nickels, 6 pennies

Players: two

Recommended Grades: 2-8

Time: 3-5 minutes per game

Common Core Standards: MP1, MP3, MP6, MP8



Why We Love The Coin Game

The Coin Game is a simple game of taking turns picking up a coin until each person has 6 coins. However, this simple game is packed with strategy even before it begins. Because it only takes a few minutes to play, players can play multiple games in one sitting and quickly explore and develop their own strategies. Players will want to play again and again.

How to Play

1. Randomly place the 12 coins on the game board to make a chain of coins.
2. Players decide who will go first. (*The winner of the previous game should ask the other player if they would like to go first or second.*)
3. Players take turns removing a coin from either end of the chain of coins.
4. When all of the coins have been removed, the game is over.
5. The player with the coins of the greater total value is the winner.



Questions

- Is it better to go first or second? Why?
- Is it possible to end in a tie?
- Is there a strategy that can help you win every time?

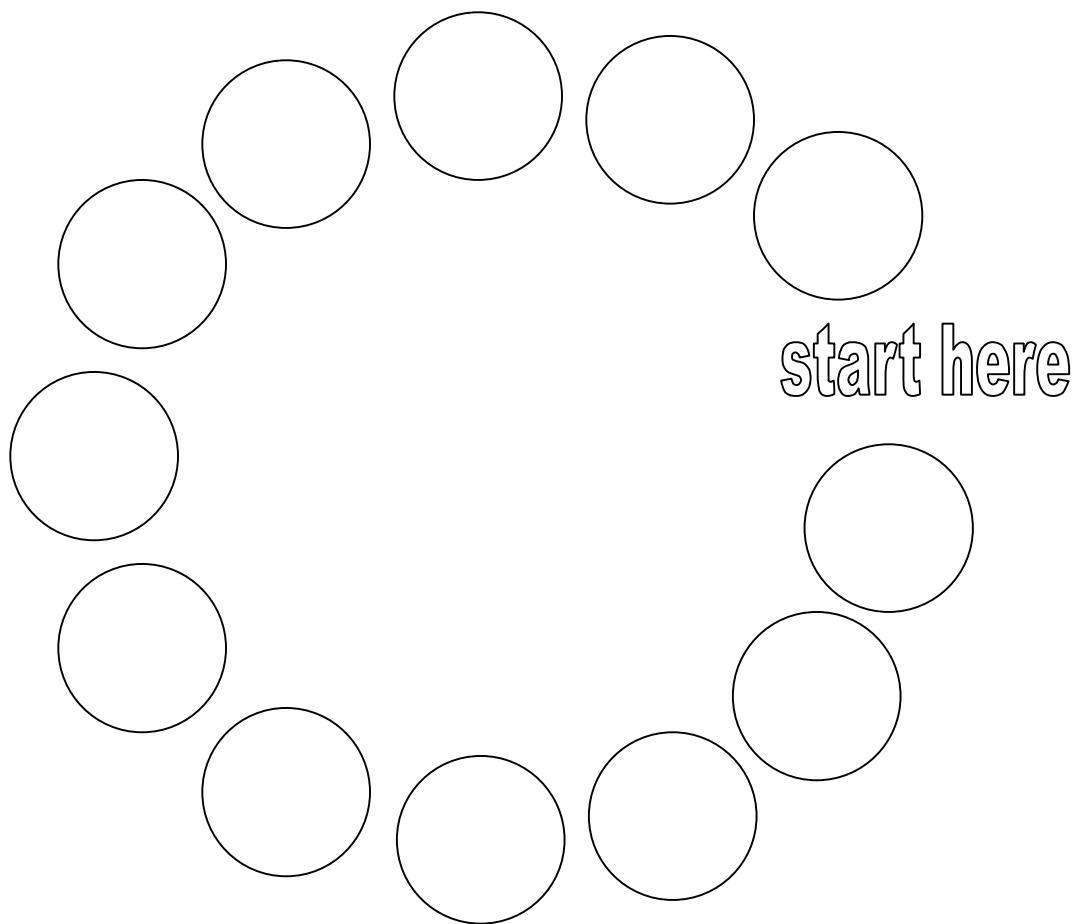
Variations

1. Play with other amounts of quarters, dimes, nickels and pennies.
2. Play with more than 12 coins. Play with fewer than 12 coins.
** Explore how these changes affect the game.*



The Coin Game

This is a **two-player game** played with 12 coins randomly placed on the game-board below, to make a chain of coins with two “open” ends. After deciding who will go first, players alternate turns removing an end coin from either end of the chain, making a new coin available for removal on the next move. When all the coins have been removed, the game ends, and the players count the value of their coins. The player with the greater amount wins.



Materials: game board, 2 quarters, 2 dimes, 2 nickels, and 6 pennies

Note: After each game, the winner of the previous game should ask the other player if they would like to go first or second in the next game.)