



## Race for 20—A Counting Game for All Ages by Marilyn Burns

*Race for 20* is a game that works for all ages, from young children who can count to 20 to adults who haven't yet thought about the game.

**Young children** benefit from the game because it gives them experience with practicing counting, taking turns when playing a game, learning how to win (or lose) gracefully, and enjoying the interaction with a sibling or parent. All good.

**Older kids** can engage with the challenge of figuring out a winning strategy for *Race for 20* and playing variations on the game. (See below.)

**Adults** have the opportunity to engage with a mathematical subject that has often been relegated to graduate mathematics.

Here are the rules.

### RACE FOR 20 How to Play

1. Decide who goes first. Then take turns.
2. When it's your turn, count 1 or 2 numbers. (The first player says, "1" or "1, 2." The second player continues the count with the next 1 or 2 numbers.)
3. The winner is the player who says 20.

**Need a Version That's Easier?** Try *Race for 10*. Same rules, you count 1 or 2 numbers on your turn, but you have to land on 10 to win. (It's not really easier, but it's a shorter game with less to keep track of.)

**When a Child is Shaky at Counting**  
Some young children get stuck from time to time when counting, especially with numbers in the teens. For these children, it helps to write the numbers from 1 to 20 on a piece of paper to help keep track. Better

yet, ask the kids to write the numbers. Then players point to the numbers as they count.

**Making the Game More Concrete** Use 20 counters. I like using 19 pennies and 1 nickel. Players take turns taking 1 or 2 pennies. (That's the same as counting 1 or 2 numbers.) Important: Players can't take the nickel unless it's the last coin remaining. (For a little extra math, first have them figure that 19 pennies and 1 nickel add up to 24¢. Then, after a game, count how much money you each have and check that you have 24¢ together.)

**Can Three People Play?** Yes, three people can play, but it changes the challenge of figuring out a winning strategy. I've found it better for two to play at a time, with the third playing the winner. Players can keep track of how many games they win.

**Need a New Version of the Game?** Ah, there are so many ways to vary the game. Here are some, but kids can think of others.

**Race for 21** Same rules with one tweak: The winner lands on 21. This is perfect for kids who have cracked the strategy for winning *Race for 20*.

**Race for 20, Count 3** For this version, instead of being allowed to count 1 or 2 numbers, you can count 1, 2, or 3 numbers. So, the first player can say, "1" or "1, 2" or "1, 2, 3." Then the next player continues by counting the next 1, 2, or 3 numbers.

**Race for Whatever, Count Any Number** Have kids decide the rules. Here's a prompt where they can enter a number for the landing number and for how many to count on each turn: *Race for* \_\_\_\_, *Count* \_\_\_\_ *Numbers*.

### Finally, Some Tips

1. Don't force the game. I've had kids for whom the game is just too risky. That's when I might try a shorter version, like *Race to 10*. Or I might provide counters for playing, like 19 pennies and 1 nickel.
2. Don't insist on kids playing variations. I've had some kids who will play *Race for 20* over and over, but resist changing the rules. Or they've just had enough with the original game. That's fine. I'm all for giving children as much agency as possible in their learning.
3. Don't reveal a winning strategy, even if you've figured it out. Once you have the strategy, the game no longer has any challenge. Besides, knowing the winning strategy is only as valuable as being able to apply that information to a new but related challenge.