

Amazing Math Games V

Estimate and count popcorn, determine the secret rule, become champion of the “factor factory”... these games are sure to build your youngster’s math skills. And they’re so much fun that he’ll want to play them again and again.



Multiplication bump

Bump your opponent’s tokens to claim the most squares. As you play, your child will practice multiplication.



You’ll need: paper, pencil, a different set of 10 tokens for each player (buttons, plastic chips), 2 dice

1. Your youngster can create a game board by drawing a grid with 3 rows and 6 columns. He should write these numbers randomly in the 18 squares: 1, 2, 3, 4, 5, 6, 8, 9, 10, 12, 15, 16, 18, 20, 24, 25, 30, and 36.
2. On each turn, roll the dice and multiply the numbers rolled (for example, $3 \times 2 = 6$). Locate the product (6) on the board, and put a token on it.
3. If another player is on your spot, bump his token and replace it with one of your own. But if you already have a token on the square, add a second one. Now your tokens are safe and can’t be bumped off. (If 2 tokens are already on the square, your turn ends.)
4. Play until someone has placed all 10 of his tokens on the board—he’s the winner.

Popcorn estimation

Give your youngster’s estimation skills a boost with this challenge.

You’ll need: large bowl of popcorn, small containers in different shapes and sizes (coffee mug, teacup, ramekin), small bowl for each player, paper and pencil

1. Have each person select a container and think about how many pieces of popcorn will fit inside. *Hint:* Suggest that your youngster put a layer in the bottom and count the pieces (say, 6). She should estimate the number of layers that will fit (6) and multiply ($6 \times 6 = 36$). Have each person announce your estimates.
2. Now fill your containers with popcorn. Your score is the difference between your estimate and the actual number. (So if 42 pieces fit in your youngster’s container, she gets 12 points, since $42 - 30 = 12$.)
3. Now fill your containers with popcorn. Your score is the difference between your estimate and the actual number. (So if 42 pieces fit in your youngster’s container, she gets 12 points, since $42 - 30 = 12$.)
4. Dump the popcorn into your bowl. The person with the lowest score wins—and everyone gets to eat their bowl of popcorn!

Division roll

Here’s a simple dice game that lets your child work on division.

You’ll need: 6 dice, paper, pencil

1. Roll all 6 dice at once, and add the numbers together. *Example:* Roll 3, 1, 5, 3, 2, and 4 for a total of 18.
2. Take turns rolling and dividing. On each turn, roll 1 die, and divide your total by that number. So if you roll a 3, you score 6 ($18 \div 3 = 6$). *Note:* If the total doesn’t divide evenly, use fractions ($19 \div 3 = 6\frac{1}{3}$).
3. Take turns rolling and dividing. After 5 rounds, the player with the highest score wins.

