

Math Games for Home

What books are to reading, games are to math.

These simple, low-tech games keep you and your kids playing and thinking mathematically .

1-2 Nim

Materials: About 10 pennies, or any other object.

This game is extremely simple to learn, but has more strategy than you might think. Place a small pile of pennies between two players. Players take turns removing one or two pennies from the pile. You must take at least one penny on your turn, but you may not take more than two. Whoever takes the last penny is the winner.

You can play 1-2 Nim with anything: pennies, beans, socks, lines on a piece of paper, etc. You can also try 1-2-3 Nim, where you can take 1, 2, or 3 pennies on your turn.

Make It Ten

Materials: Just your hands!

This is a super-quick, cooperative game for two people. One person puts forward some number of fingers. The second person puts forward the number of fingers required to “Make It Ten.” When there are ten fingers forward, the two players give each other a “high ten.”

Example. I put forward 3 fingers. My partner puts forward 7 fingers. That makes 10, so we give each other a “high ten” and play again.

Guess My Number

Materials: None (Pencil and paper optional)

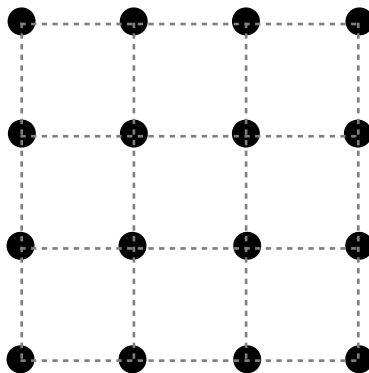
This is a great game you can play anywhere. One person thinks of a number between 1 and 10 (or 20, or higher), and the other players try to guess the number. After each guess, the person with the number says whether their number is greater or less than the guess. Guessers try to get the number in the fewest number of guesses possible.

Dots and Boxes

Materials: pencil and paper

Dots and Boxes is a classic game for two players, played on a small grid of dots. On your turn, add a vertical or horizontal edge between neighboring dots. If you complete a square, get one point and go again. Keep track of the score by coloring in your square, or writing your initial inside it.

Try drawing bigger or smaller grids for longer or shorter games.



Pig

Materials: dice, pencil and paper.

Pig is a game for 2 or more players. Players take turns rolling the die as many times as they like. If a roll is a 2, 3, 4, 5, or 6, the player adds that many points to their score for the turn. A player may choose to end their turn at any time and “bank” their points. If a player rolls a 1, they lose all their unbanked points and their turn is over. Play to 50.

Big Pig

This variation is played with two dice. It is like Pig: on your turn you can roll or hold. As long as you don't roll a 1, you can add your roll for the turn and keep rolling until you bank your points. If you roll a 1, you lose your points for that turn and your turn ends. However, you roll a pair of 1s, add 25 to your turn total. If other doubles are rolled, the player adds twice the value of the dice to the turn total. Play to 150.

Odd Pig Out

Roll two dice and multiply them. You can keep rolling as long as the product is even. If the product is odd, you lose all unbanked points for that turn, and pass the dice. Play to 500.

Resources for Home

Favorite Math Books

- [*Family Math*](#) by Stenmark, Thompson, and Cossey.
A phenomenal resource for math activities.
- [*The Man Who Counted*](#), by Malba Tahan.
An absolutely wonderful book for upper elementary kids.
- [*Let's Play Math*](#) by Denise Gaskins
More games for a play-based approach to math at home.

Favorite Math Blocks

- Pattern blocks
- Cuisenaire rods
- Tangrams
- Square Tiles

Favorite Math Games and Puzzles

- SET
- 24
- [**Prime Climb**](#)
- Chocolate Fix
- [**Tiny Polka Dot**](#)
- Math Dice/Math Dice Jr.

Check out companies like ThinkFun, Gigamic, Blue Orange, and Simply Fun for more games.

Favorite Web Resources

- livingmath.net
- naturalmath.com
- zenomath.org/toolbox
- mathforlove.com/lesson-plan