



FUN FAMILY MATH GAMES!

Tips for supporting your children with math games at home:

- Let the kids do the work! Avoid explaining how to solve a puzzle or what the right move in a game might be. Only give hints if needed to keep kids engaged longer. Giving away the answer ruins the game!
- Play along and remember the goal of FUN FIRST! Show your kids that you're having as much fun as they are! They will follow your lead. If you or your kids are not having fun, take a break.

Math Games to Play with your Child at Home

1. Basic Facts Battle: (Grades K-6)

Material needed: Deck of cards (Remove the Jacks, Queens, Kings for younger players or leave them in for a challenge - Jacks=11, Queens=12, Kings=13)

This is a 2-player game.

The object of the game is to accumulate the most cards.

Instructions/How to play:

- Split the cards between the two players.
- For younger players, turn over the top card in your hand, whoever has the higher card wins the round and takes both cards to add to their pile.
- For older players, turn over the top two cards in your hand – you can choose to either add, subtract, or multiply the two cards – highest number wins each round, and the winner takes the cards to add to their pile.

2. Close Call: 2-Digit Addition Card Game (Grades K-6)

Material needed: Deck of cards (Remove the Jacks, Queens, Kings and all number 10s)

This is a 2-4 player game.

The object of this game is to accumulate the highest score by coming closer to the goal than your opponent.

Instructions/How to play:

- Start with a deck of cards Ace = 1, Joker = 0 included (all 10s, Jacks, Queens, Kings removed) Shuffle the deck and deal each player 6 cards.
- Players select 4 of their cards to create two 2-digit numbers. The object is to create two numbers that, when added together, come as close to 100 as possible, without going over.

For example, a player could select the cards 2,3,4, and 5 from their hand to create the numbers 53 and 42, which when added together total 95.

- The player with the sum closest to 100 wins the round and receives 1 point. In the event of a tie, each player receives 1 point. After playing 5 rounds, the player with the most points wins.

Variations of this Game:

- With younger players, deal 4 cards to each and select 2 cards to get as close to ten as possible, without going over.
- To practice subtraction instead, change the rules to subtract 2 numbers to get as close to zero as possible.
- For a greater challenge with older players, practice with integer operations. Make black cards positive and red cards negative, and again, challenge students to combine numbers to get as close to zero as possible.

3. I Spy with My Little Eye (Grades K-6)

Material needed: Deck of cards (Remove the Jacks, Queens, Kings)

This is a 2-player game.

The object of the game is to accumulate the most cards

Instructions/How to play:

- Display the cards FACE UP in an array, either a 6 x 4 or 8 x 5 array.
- Player ONE challenges player TWO to find two cards next to each other that add up to make a particular number by saying, “I spy with my little eye two cards that add up to make _____.”
- Player TWO looks for 2 cards that add to make that number.
 - The two cards must be next to each other either horizontally or vertically.
- Once found, player TWO picks up the two cards and adds them to their pile. They find as many pairs as they can to complete their turn.
 - If player TWO misses any pairs during their turn, then player ONE may claim them to complete the round.
- Play continues with players taking turns saying, “I spy with my little eye two cards that add up to make _____.” Until all the cards are gone.
 - As gaps between cards appear in the array, move the cards closer together to close the gaps.

Here is a video for more clarification -

<https://www.youtube.com/watch?v=Sa4NaAXndjU>

4. Five - Sum - Memory (Grades K-2)

Materials needed: Deck of cards containing only 4 ones or Aces, 4 twos, 4 threes, and 4 fours.

This is a 2-4 player game

The object of the game is to accumulate the most pairs

Instructions/How to play:

- Lay the cards FACE DOWN in an array
- Players take turns turning two cards face up.
- If a player's pair has a sum of 5, the player puts that pair of cards into their pile and plays again.
- If the pair does not have a sum of 5, the player turns the cards back face down and the next player moves.
- The game ends when all cards are claimed. Whoever has the most cards wins.

5. Fast Facts (Grades 3-6)

Materials needed: Deck of cards (Remove the Jacks, Queens, Kings) In this game Aces = 1.

This is a 2-player game.

The object of the game is to accumulate the most cards

Instructions/How to play:

- Deal half the cards, face down, to each player
- Both players take the card from the top of their pile and lay it face up in the middle.
- The first player to multiply the cards and call out the product wins both cards.

- If both players call out at the same time, the cards are left on the table and 2 more cards are turned over. Whichever player calls out the product first, picks up all of the cards in the middle.

Variations of this game:

- Use addition or subtraction for younger players

6. Target (Grades 4-6)

Materials needed: Deck of cards with Aces and face cards removed (leave 2 Joker cards in) a pencil, and a piece of paper for each player

This is a 2-4 player game

The object of the game is to collect points. Scoring - Players earn 3 points for a correct equation. Players earn 3 bonus points for using all five cards. If a player has an incorrect equation they lose 2 points.

Instructions/How to play:

- Shuffle the deck and place the top five cards FACE UP in a row between the players.
- Place the rest of the deck FACE DOWN in a pile.
- Turn over the top card of the pile and place this card FACE UP next to the last card in the row. This is the **target number**
- Players will try to reach the **target number** by using the five cards and the order of operations.
- Each player will then use their pencil and scratch paper to try to come up with an equation that equals the **target number**.
 - Players must use at least two of the numbers from the original five cards
 - Each card can only be used once

- After a specified amount of time, each player will reveal if they were able to reach the **target number** and if successful. Players check each other's' math to ensure accuracy.
- All players who come up with a correct equation to reach the **target number** receive 3 points for that round. If they were able to use all 5 numbers in their equation they get 3 bonus points.
- If nobody identified an equation, pick up the five cards and the target number and put them off to the side in a discard pile. Lay out five new cards from the deck and turn over a new target number. Repeat the process as before with each player trying to create an equation that equals the target number.

7. Twenty Sum Addition (Grades 2-6)

Materials needed: Deck of cards

This is a 2-4 player game

Instructions/How to Play:

- Shuffle the deck and deal five cards to each player. Each player's hand is placed face up in front of them. Set the remaining deck FACE DOWN in the middle of the table
- Players take turns. Let the dealer go first.
- On each turn, players look in their hand for two or more cards that add up to a sum of 20
- After playing their hand (for example a 10, 5, 3, & 2) they place these cards aside and pick up 4 cards from the face down pile to replace the number of cards they played.
 - If a player does not find two or more cards that add to a sum of 20, they draw one more card from the face down deck and place it face up next to their other face up cards. Their turn is over until the next round.
- Players take turns in the same way.

- The game ends when all the cards in the face down pile are used up and players cannot find two or more cards in their hand that add to a sum of 20.
 - To determine a winner, each player counts the number of cards that are in their 20-sum pile, then subtracts the number of cards they still have in their face up row.

Variations of this game:

- Use different sums other than 20

8. Pyramid (Grades 1-6)

Materials needed: Deck of cards with Jokers, Jacks, Queens, Kings removed.

This is a 1-2 player game

Instructions/How to Play:

- Arrange your cards face up into a 6 row Pyramid shape with each row slightly overlapping the previous row.
- Place remaining cards face down and off to the side.
- The goal is to remove cards in the pyramid two cards at a time “making ten” (Or removing a ten card, as it is already equal to ten).
- You can only remove cards that are completely uncovered. Therefore, at the start of the game, you can only use the bottom row of the pyramid to make ten
- Continue to form pairs that equal ten, removing those cards and continuing to play.
- If you cannot form 10 with two cards on your pyramid, you can flip on card from the deck to see if that helps.
- Once the deck is finished and both players are stuck and can no longer form anymore pairs of ten, add up the remaining cards in your pyramid to determine your score. The person with the lowest number wins!

Here is a video for more clarification -

<https://www.youtube.com/watch?v=W2tescgVM70>

9. More Card Games to Play

Easy card games videos that you can watch and play at home with your child-

- Various addition games <https://www.youtube.com/watch?v=p05wPqg0k5c>
- Garbage <https://www.youtube.com/watch?v=AaDUJele9LM>
- Go fish https://www.youtube.com/watch?v=q968_7-Pg38
- Memory card game - <https://www.youtube.com/watch?v=rrVHpx747KU>
- Card Game PIG - <https://www.youtube.com/watch?v=ofO8CpcKxqM>
- Divide and conquer - https://www.youtube.com/watch?v=tCoW3fr7t_A
- Operation - <https://www.youtube.com/watch?v=WI5ag0rlx2I>
- Target - <https://www.youtube.com/watch?v=sby2Bvs0MEA>

10. Pencil and Paper Games

- [1-2 Nim](#)— A perfect first game for kids. You can play with any object, or even your fingers. See mathforlove.com/lesson/1-2-nim for rules.
- [Dots and Boxes](#) — Kids of all ages can play this game endlessly. There's beautiful strategy, basic counting and geometry for young kids, and exposure to arrays and multiplication.
- [Box the Numbers](#) is an excellent extension.

11. Dice Games

- [Pig](#) is an absolute classic. Check out Big Pig or Odd Pig Out for older kids. <https://mathforlove.com/lesson...>

- [Blockout](https://mathforlove.com/lesson/blockout) is a wonderful game, perfect for practicing multiplication.
mathforlove.com/lesson/blockout

12. Strategy Games for Purchase

- **Prime Climb** - The board is color-coded to give a completely different insight into how multiplication and division work, and it supports a much deeper understanding and flexibility of arithmetic. Great for 1-4 players (ages 10+)
- **Skip Bo** – A sequencing card game for 2-6 players (ages 7+)
- **Blokus and Blokus 3D** – An abstract strategy game with transparent, Tetris-shaped, coloured pieces. The game comes in 2D and 3D versions and can be played with 2-4 players (ages 6+)
- **Mancala** – Versions of this game date back to the 3rd century! It is a 2 player turn taking strategy game that is great for ages 6+. It was originally played with small stones, beans, or seeds and rows of holes or pits in the earth, on a board, or on another commercially purchased playing surface. The objective is to capture all of some of the opponent's pieces.
- **So Many Others** - Many common games like Chess, Go, Backgammon, Checkers, Yahtzee, Pente, Connect-4, Sorry, Othello, Poker, Battleship, and Mastermind involve mathematical thinking so don't forget to include those in your family game night too!