

Creatively Using a Deck of Cards

to Promote Math Learning

A regular deck of cards can be a great tool for early math learning:

- Can be used to play many types of games,
- Grows with your child,
- Decks are small and easy to carry around,
- Incorporates both numbers and symbols.

Ways to incorporate math into games you already play:

Encourage your child to make predictions and investigate if they were correct

Ask questions about the quantity of the cards

“Who do you think won the game?” then compare the size of win piles.

“Do you think the next card you draw will be more or less than the card you just drew?”

“If we added the value from both of these cards how many would it be?”

“Who has more cards in their hand?”



Math Card Games

Using a typical deck of cards

A regular deck of cards can be used to play all types of math games.

Here are a few games that you could try with your kid(s) if you have a deck of cards handy!

Memory

Age: 3-5

Number of
Players: Any!

Game set up: The players get a set of cards with any number of pairs. For example, if they are playing with 10 cards total, you would use 2 of each 1-5 card from any of the suits, diamond, heart, spade, or club. Set all cards face down in a grid orientation.

Gameplay:
Each player
flips over 2
cards a turn.

Objective: The aim is to make a match with the cards. When a child makes a match, they get to keep those two cards as a part of their win pile. The child with the biggest win pile at the end of the game wins.

Facilitation: Ask the kids how many cards they want to play with, (ie., pairs of 1-5 or 1-10). Prompt kids to set the cards down in the grid themselves. Have the kids determine who has the biggest win pile at the end.



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Find it!

Age: 5-8

Number of
Players: 2-3

Game set up: Each player gets a set of cards 1-6, a mixture of all suits, diamond, heart, spade, or club. Each player must keep their hand of cards in a designated spot away from the table.

Gameplay: Each player takes a turn each round rolling a dice for a number 1-6. The number the dice lands on is the number that each player must retrieve from their own hand.

Objective: The first player to grab the correct card and bring it back to the table wins the round. The person who wins the round gets to keep all of the player cards in their win pile. The child with the biggest win pile at the end of the game wins.

Facilitation: If the dice lands on a number already used, use your remaining cards to make a math problem equal to that number.



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Pattern Match

Age: 8+

Game set up: Create a 3x3 grid of 9 cards face down to make the reference grid. Then, the players will use the remaining cards for the game.

Number of Players: 2-3

Objective: The players win when all players perfectly replicated the smaller 3x3 grid.

Gameplay: During each turn the players will get to flip over one of the cards from the 3x3 reference grid, then run back to their deck and begin to build their own replica. They can continue taking turns flipping over one card from the reference grid at a time until each player is confident that they have replicated it.

Facilitation: Encourage the players to work together, communicate and strategize. Can make it more challenging by doing a silent round where players can't talk. Only allow players to skip or crab walk back and forth from their big cards to the small version.

