



Dear Parents,

There are an endless number of games that reinforce math skills that can be played with a deck of cards and/or dice. I'm including a list of some games along with directions for playing them. If you search the Internet, you will be able to find many more ideas for card and/or dice games. Remember, when you make math practice fun, your child is more likely to want to keep practicing and retain the skills that are practiced.

I'm also including a list of suggested math summer reading titles. These books can be found on RAZ Kids or EPIC. On the list, you will see I noted the site on which you and your child can find these books. These books do a great job of reinforcing math skills through literature. Some directly teach the concepts in an engaging way and others incorporate the concepts in fictional stories.

This summer, look for math everywhere. Find opportunities to identify numbers, count, add, subtract, multiply and divide! We use math throughout our daily lives and taking the time to point out the math and involving your child in this math will help build your child's mathematical literacy.

Have a wonderful summer!

Mrs. Curley

Math Specialist

Games to Play with a Deck of Cards and/or Dice

Practicing Addition Math Facts with Go Fish! (Grades K, 1st, 2nd, 3rd & 4th):

This new twist on the old classic Go Fish! helps kids to learn addition by mentally working out simple math problems. Each round played practices math facts for a specific number, making it easy to stick with one set of facts for as long as needed to solidify them in the players' mind. It is best enjoyed with 2-4 players.

Supplies needed: deck of cards (if playing with a traditional deck: face cards are worth 10 and aces are 1,)

Instructions:

1. Choose a feature number. This is your target sum for the game. Sort through the deck to remove all cards that are higher than that featured number for the math game. For example, if the goal is to learn addition facts for the number seven, the game will be played with ones (aces) through sevens.
2. Deal out five cards to each player and place the remaining cards in a draw pile.
3. Have each player look through his or her hand of cards to find any pairs that add up to the featured number and place them face up in front of him/her. For example, if learning addition facts for the number seven, appropriate pairs would be $6+1$, $5+2$ or $4+3$.
4. The person to the left of the dealer may now ask any other player for a card that will help create the sum required. If the person asked has the card in his/her hand, he/she must give it up to the player that made the request. A player can keep asking for cards until no further matches are able to be made, at which point he is told to Go Fish! from the draw pile and the next player takes a turn trying to make a match.
5. If a player runs out of cards, he can choose five more cards from the draw pile to stay in the game.
6. Continue playing until all the cards in the deck have been matched into pairs. The player with the highest number of pairs at the end of the game is the winner

Practicing Addition Facts by Playing Memory (Grades K, 1st, 2nd, 3rd, & 4th):

The card game Memory or Concentration, is another great game that can be modified to teach addition facts to kids. As with the instructions for Go Fish! each game focuses on math facts for a specific number.

Supplies needed: deck of cards (if playing with a traditional deck: face cards are worth 10 and aces are 1,)

Instructions:

1. Sort through the deck to remove all cards that are higher than that featured number for the math game. For example, if the goal is to learn addition facts for the number six, the game will be played with ones (aces if playing with a traditional deck) through sixes.
2. Shuffle the deck and turn all the cards face down in a grid pattern.
3. Taking turns, have each player flip two cards to look for a matching pair. For example, if learning addition facts for the number six, appropriate pairs would be $5+1$, $4+2$ or $3+3$.
4. Continue playing until all the cards in the deck have been matched into pairs. The player with the highest number of pairs at the end of the game is the winner.

Quick Stop: An Addition (or Multiplication or Subtraction) Card Game (Grades K, 1st, 2nd, 3rd, 4th, & 5th):

This card game is a fun way to practice addition. Check the variations out to see how to use it to practice subtraction or multiplication. Compete for the highest score as you flip over cards. Add up your cards until you reach 100 points. The first one there wins

Supplies Needed: Deck of cards, pencil and paper (to add up scores)

Instructions:

1. Place a well shuffled deck of cards, face down, in the center of the playing area.
2. Each player begins by drawing one card and placing it face up in front of themselves. Players write the value of this card down at the top of their papers. (Aces are worth 1, and face cards are all 10.)

3. When all players are ready, everyone draws a second card. They add the value of these cards to their totals.

4. Keep playing until one player reaches 100.

Variations:

- Play until the deck runs out. The player closest to 100, without going over, wins.
- Add jokers into the deck. If a player draws a joker, their score drops back to zero.
- Start with 100 points, and subtract your way to the finish.
- Need a challenge? Use multiplication to reach 1000.

Top-it (Grades 3rd, 4th, & 5th; variations for grades 1st & 2nd):

Supplies needed: deck of cards (if playing with a traditional deck: face cards are worth 10 and aces are 1,)

Instructions:

Shuffle cards. Put deck of cards face down in center of players. Each player chooses two cards off of the top of the deck. Each player then multiplies the numbers on the cards. The player with the greatest product wins the round and collects all of the played cards. If two or more players have the same product, a tie breaker is played. Put all played cards to the side and the players with the same product each choose two more cards. Now compare products again. The player with the greatest product wins all of the currently played cards and all of the cards from the round where there was a tie.

Variations: For younger students, use addition instead of multiplication.

Top-it Addition Game Using Dice (Grades K, 1st, & 2nd; variations for grades 3rd, 4th, & 5th)

Supplies needed: 2 dice for each player, counters (beads, sticks, rocks, pennies, etc.) and/or paper and pen for scoring

Instructions:

Have each player roll one die. The player with the highest number goes first. Each player rolls his/her two dice. The numbers on both dice are added together to come up with an individual player's score. The player with the highest scoring combination wins the round. If both players have the same sum, they re-roll and the player with the greater sum gets 2 points, one for the tying round and one for the tie breaker round. Winning rounds can be noted on a pad of paper with a tally mark under the winning player's name, or with counters such as beads, rocks, or pennies. Play a number of rounds and have players add up their counter or tally marks at the end to come up with a game champion

Variations:

- Play with one die for younger children to practice less than/greater. You can choose to have the player with the greater number win the round or the player with the lesser number.
- Practice subtraction skills by having players subtract the lower die from the higher die to come up with a number for each round. The player with the largest difference wins the round.
- Practice place value skills by having players create a double-digit number from the rolled dice. For example, rolling a two and a five becomes either 25 or 52. The player with the greater two-digit number wins the round
- Practice multiplication skills by multiplying the numbers on the two dice to determine the winning score. The player with the greater product wins the round.

Here are math summer reading books that can be found on RAZ Kids and EPIC:

EPIC

How Long or How Wide?: A Measuring Guide
On the Scale, a Weighty Tale
Windows, Rings and Grapes- a Look at Different Shapes
The Mission Addition
The Action Subtraction
A-B-A-B-A- a Book of Pattern Play
Dream Jobs in Math
Let's Estimate: A Book about Estimating and Rounding Numbers
Fraction Fun
Money Math: Addition and Subtraction
Sir Cumference and the Dragon of Pi
Sir Cumference and the Isle of Immeter
Sir Cumference and the Viking's Map
Sir Cumference and the Off-the-Charts Dessert
Sir Cumference and the Fraction Faire
Millions, Billions & Trillions
Circles
Polygons
Measure
Patterning
Money
Multiplication
Division
Length Word Problems
Math It! Measure It!
Math It! Guess It!
Measuring Length
Patterns
Triangles
Lines, Segments, Rays and Angles
Shapes in Nature
Fair is Fair!
Tally Charts
Bar Graphs
Pictographs
Graphing
A Fraction's Goal: Parts of a Whole
All About Math Symbols
The Clock Struck One
What's a Fraction?
Let's Go Snow!
A Thousand Theos

RAZ Kids

Messy Martha
Number Twelve
How Much is a Trillion?

How Many Teeth?