



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. You will find that your child can read some of these books independently, but there are some where your child will need you to read with them. Also, some of the books have the audio option for your child to have the book read to them.

This summer, look for math everywhere. Find opportunities to identify numbers, count, add and subtract! 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

Number Recognition (Grades K & 1st):

Supplies needed: deck of cards

Instructions:

This game is played like concentration. It can be played with one player or multiple players. Place all cards face down in a grid pattern (rows and columns). The first player turns over one card and identifies the number. Then, player 1 will turn over another card to look for the same number. If player 1 has a match, he/she keeps the cards. If there is not a match, the cards get turned over and it is the next player's turn. Remind players to pay attention to the location of the cards before the cards are turned back over. The player with the most matches is the winner.

Counting On (Grades K, 1st & 2nd):

Supplies needed: dice (1 or 2); deck of cards

Instructions:

Shuffle and place the cards face down on the table. Player one flips over the top card.

Next, the first player will throw the dice. Player one's challenge is to start counting from the number shown on the card and count on the number of times shown on the dice.

Take turns flipping over a card and counting.

There is no winner or loser in this game. It's just simply a turn-taking game.

Counting and Sequencing (Grades K, 1st & 2nd):

Supplies needed: deck of cards

Instructions:

Put all of the "7" cards out in a line. Shuffle the remaining cards and deal out all cards to players. The object of the game is to be the first player to get rid of all of his/her cards. To begin, players take turns putting down one or more cards 1-above or 1-below a seven, in sequence. In other words, the players

will put down 6's or 8's. In the next round, the players will put down numbers 1-more or 1-less than the previous numbers played (i.e. 5's or 9's). If a player has no cards to put down, he/she loses his/her turn. Continue moving through rounds until there are no players who can play a card or someone uses all of his/her cards. If there are no players who can play a card, the winner is the person with the least cards. If a player plays all of his/her cards, he/she is the winner.

Variation: Choose a starting number besides "7."

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.

RAZ Kids

One

Two

Greater Than

Less Than

Maria Counts Pumpkins

We Count

Bedtime Counting

How Many Legs?

How Many?

Carlos Counts Kittens

Numbers

How Many Wheels?

Messy Martha

How Many Teeth?

Shapes in Tide Pools

Shapes in Nature

Shapes Around Us

EPIC

The Wing Wing Brothers Math Spectacular

Help Me Learn Numbers 0-20

The Mission Addition

The Action of Subtraction

A-B-A-B-A- a Book of Pattern Play

The Action Subtraction

Money Math: Addition and Subtraction

How Long or How Wide?: A Measuring Guide

On the Scale, a Weighty Tale

Windows, Rings and Grapes- a Look at Different Shapes

Measure

Patterning

Money

What Comes in Sets?

Graphs

Math Words and Symbols

Shapes in Nature

Jenny Found a Penny

Numbers in Nature

All About Geometry

All About Math Symbols

Sequence It!

The Clock Struck One

Let's Make a Picture Graph

Let's Make a Bar Graph

Let's Make a Tally Chart

