Math Mania Games

Dice Games

Dice Game (addition)

You will need 2, 3, or 4 dice and one score sheet. Tally to so many rolls or to a preset score such as 50 or 100 points.
Vary it by adding the sums of the dice together, and the greatest or least score wins!
Vary it again by rolling 3 colored dice and 1 white die. Subtract the number on the white die from the sum of the colored dice, and the greatest sum wins.

Pig (addition)

Players take turns rolling two dice. A player may roll the dice as many times as he/she wants, mentally keeping a total of the sums that come up. When the player stops rolling, he/she records the total, and adds it to the scores from previous rounds. BUT if a one is rolled, the player scores a 0 for that round, and it's the next player's turn.

Race for $1.00 (money addition)

You need 30 pennies, 10 nickels, 20 dimes, 1 quarter, a dollar, 2 dice, and a partner. Take turns. On your turn, roll the dice. The sum tells how many pennies to take. When you have 5 pennies, trade for a nickel. When you have 2 nickels, trade for a dime. When you have 2 dimes and one nickel, trade for a quarter. The first player to reach $1.00 is the winner.

Subtraction Pig (subtraction)

Two or more players start out with 100 points each. Players in turn roll two dice and subtract that number from their points. A player on a turn continues rolling the dice and subtracting the resulting number from his remaining points until a 1 appears on any dice rolled. That player's turn ends, and the next player takes a turn. When a player has lost all of his points, he is out of the game. The last player in the game, is the winner.

High Rollers (place value)

You will need 1, 2, or 3 dice (depending on the level of difficultly you would like) and one "High Rollers" score sheet per person (found at the back of the packet). Roll the dice and place the numbers in the columns to for the largest number possible. Take turns with your opponent, Draw a star by the numbers you win. After your sheet is full, count the number of stars you have. The person with the most stars wins.
Vary it by making the smallest number.

Speed (addition, multiplication)

Materials: 2 dice, paper and pencil to keep score

1. Each player rolls a die at the same time.
2. The first player to correctly add the two dice together gets a point

Keep playing until time is up. The person with the most points wins.
Vary it by multiplying the numbers instead of adding.

Odds and Evens (odd and even numbers)

Materials: 1 die to share

1. Each player takes 5 counters and puts the rest in a pile between them.
2. Player 1 predicts whether he will roll ODD or EVEN and then rolls the die.
3. If he is correct, he takes that many counters from the middle. If he is not correct, he has to pay that many counter.

Example: I predict odd, roll a 5, and then collect that many counters.

Play until time is up. The player with the most counters wins.

Playing Card Games

Take 2 for 10 (building the number 10)
It can be played individually or with a partner. It is sort of like sollitaire. First, mix up your cards. Make 10 piles of cards face up (2 rows of 5) until all cards are used up. It's okay if face cards are in there, or you can take them out. Kids just find 2 cards that equal 10, pick them up, and find another match of 2 cards that equal 10. If they can't get any more, simply move one card to the back of one of the stacks and keep playing!

Concentration (add, sub, multiplication, division)
The object of the game is to find pairs of matching cards among an array of face down cards. Help your child write addition, subtraction, multiplication, or division facts on one set of index cards, and the answers on another set. Shuffle the cards and lay them out face down. The first player turns over two cards. If they match, the player keeps the two cards and takes another turn. The next player continues by trying to find two matching cards. When all cards have been collected, the player with the most pairs wins.

War (addition, multiplication)
Divide the deck of cards evenly. Each player will put out two cards and add them together. Whoever has the highest total will take all cards. The object is to take the whole deck.
Vary it by multiplying the numbers instead of adding.

Go Fish (addition to 10)
Prepare flash cards from 0-10 (3 sets of each number). Play "Go Fish" to add numbers up to 10. (Ex: Sally has the number 4, so she asks her mother for the number 6 because 4+6=10.)

Number Family Rummy (fact families)
Use a deck of 40 cards: Four suits of ace through ten. The goal is to make families of three cards that are related by addition or subtraction. For example: 5, 5, and 10 are a family because 5+5=10, and 10-5=5. 6, 3, and 9 are a family because 6+3=9, 9-6=3, and 9-3=6.
Shuffle the deck and deal 6 cards to each player. Place the remaining cards face down in a pile. If you have any families of cards, place them aside. If you don't have any families, you may draw one from the pile and discard one of your own. You may also discard the one that you picked up, if you don't want it. The first player to get rid of all 6 cards (2 fact families) is the winner. Remember that the ace equals one.

Roll and Tally (counting by 5's, tally marks)

Materials: 1 die to share, 1 pencil and piece of paper for each player

1. Players take turns rolling the dice and recording the number they rolled using tally marks.

Play until time is up. Skip count by 5's to see how many tallies each player has. The player with the most tallies wins.

Top It (comparing numbers)

Materials: 1 deck of cards (Ace=1) or one deck of double digit number cards

1. Each player gets half of the deck of cards.
2. Each player calls out, "One, two, three, top it!" and then flips over the top card.
3. The player who flipped over the HIGHEST card wins both cards. If there is a tie, 2 more cards are flipped over and compared. The winner takes all 4 cards.

Play until time is up. The person with the most cards wins.

Addition Battle (addition, multiplication)

Materials: 1 deck of cards (Ace=1)

1. Each player gets half of the deck of cards.
2. Each player calls out, "Ready, set, battle!" and then flips over the top card.
3. The first person to ADD up the total of both cards wins the cards. If there is a tie, 2 more cards are flipped over and compared. The winner takes all 4 cards.

Play until time is up. The person with the most cards wins.
Vary it by multiplying instead of adding.

Subtraction Battle (subtraction facts)

Materials: 1 deck of cards (A=1)

1. Each player gets half of the deck of cards.
2. Each player calls out, "Ready, set, battle!" and then flips over the top card.
3. The first person to SUBTRACT the smaller card from the bigger number wins the cards. If there is a tie, 2 more cards are flipped over and compared. The winner takes all 4 cards.

Play until time is up. The person with the most cards wins.

2 Digit Big Man (comparing numbers)

Materials: One deck of cards (ace=1), hundreds chart (at the back of the packet)

1. Each player gets half of the deck of cards.
2. Each player flips over his or her TWO top cards and tries to make the BIGGEST number possible.

   Example: If you get a 5 and a 9, you could make 59 or 95. You would want to make 95 because it is the bigger number.

3. The player who makes the BIGGEST two-digit number keeps his cards and the other player's cards. Use the hundreds chart to check if you are not sure whose number is bigger.

Play until time is up. The person with the most cards wins.

2 Digit Little Man (comparing numbers)

Materials: One deck of cards (ace=1), hundreds chart (at the back of the packet)

1. Each player gets half of the deck of cards.
2. Each player flips over his or her TWO top cards and tries to make the SMALLEST number possible.

   Example: If you get a 4 and a 7, you could make 47 or 74. You would want to make 47 because it is the smaller number.

3. The player who makes the SMALLEST two-digit number keeps his cards and the other player's cards. Use the hundreds chart to check if you are not sure whose number is smaller.

Play until time is up. The person with the most cards wins.

Round It (rounding numbers to the nearest 10)

Materials: one deck of cards with only numbers 1-9, hundreds chart

1. Each player draws 2 cards from the deck and makes a 2 digit number.
2. Each player then has to round the other player's number to the nearest 10.

Example: If you make 34, the other player must say, "34 rounds down to 30". If the other player makes 58, you must say, "58 rounds up to 60".

3. For each correct answer, the player gets a point. If you are not sure if an answer is right, use the hundreds chart to check.

Keep playing until time is up. The person with the most cards wins.

Sandwiches (place value 1 – 10)

Materials: deck of cards with 1 – 10 only (Ace =1)

Each player takes two cards and arranges them smallest to largest. The idea is to get as large a spread as possible between the two numbers. After the players have arranges their numbers one more card is turned over. Players score a point if this number is between the two that they already have.

Example	Player 1:	3	Player 2:	2
		8		6

Card turned over: 7

Player number one scores a point, as seven falls between three and eight. Player two does not score a point as seven is not between two and six.

Players select two new cards and arrange them smallest/largest. Again a third card is turned over for comparison. Play continues to a set number of points.

Dice and Playing Card Games

The 1 to 10 Game (addition)

You need: 2 dice, 1 deck of cards, and a partner

Use only the ace, 2, 3, 4, 5, 6, 7, 8, 9, and 10 cards.

One of you takes the red cards, one of you takes the black cards. Take turns. On your turn, roll the dice and figure out the sum. Remove enough cards from your hand to add up to that sum. For example, if you roll a 5 and a 3, you can make 8 in many ways (5+3, 4+4, 4+2+2, 8, etc...). If you can't make the sum with the cards in your hand, roll again. If you can't make a sum after three rolls, you lose the game. You win if your partner can't make a number in three rolls or if you use up all of your cards

Domino Games

Concentration (addition/multiplication)

You need: set of dominos. Can be played with a partner or alone.

Turn all the dominos upside down so you can not see the dots. The first player turns over a domino. They must add the numbers to find the sum. The same player will then turn over one more tile and add the numbers. If the dominos have the same sum, the player keeps them and takes another turn. The next player continues by trying to find two matching dominos. When all dominos have been collected, the player with the most pairs wins. *A player may not have more than 2 turns in a row.

To work on multiplication, multiply the numbers instead of adding.

War (addition, subtraction, multiplication)

You need: set of dominos, partner

1. Divide the dominos into 2 equal piles. Give one to each player.
2. On the count of 3, each player will turn over a domino. Each player must either add, subtract, or multiply the two numbers on the domino (depending on which version you are playing). The player with the biggest number after adding, subtracting, or multiplying wins the dominos.
3. Keep playing until one person has all the dominos.

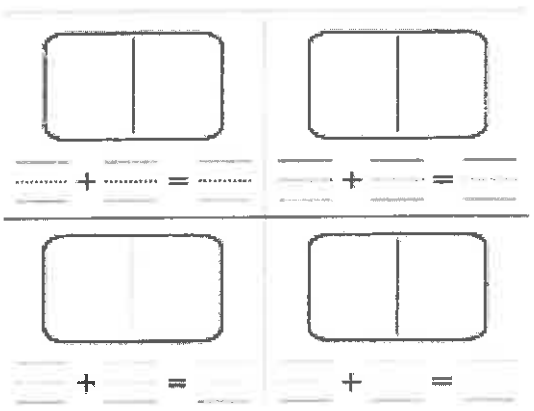
Domino Addition (addition)

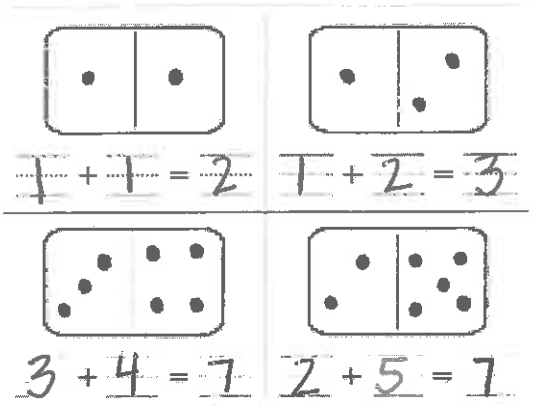
You need: dominos, paper, pencil

If your child is just starting addition, you will want to select the dominos with the smaller numbers (1, 2, 3) to start.

1. Place the dominos face down and mix.
2. Select one domino and turn it over.
3. On the sheet of paper, write the number sentence for the domino, making sure to include the addition (+) and equal (=) sign. If needed, have your child draw the dots from the domino next to their numbers.
4. Have the child correctly read their addition sentence: **one plus one equals two.**

This game can be modified for subtraction and multiplication.





Try For $1,000,000

Concepts and Skills

- use mental addition strategies
- read and write dollar amounts

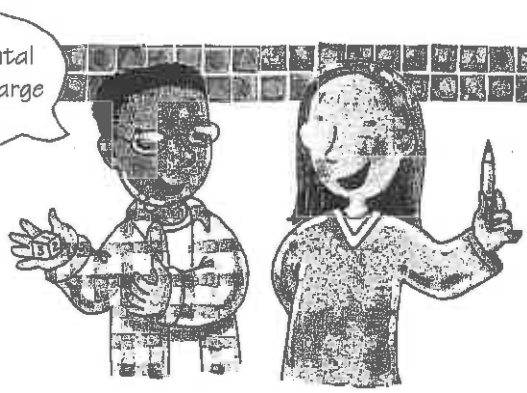
Vocabulary

- million—one thousand thousands

Dice Game

- Instructions on back
- Record sheet included

GAME 11



Try For $1,000,000

Materials

- 1 Place Value Recording Sheet (TR12)
- one 1–6 number cube

Directions

1. The object of the game is to come as close as possible to $1,000,000 without going over. You must toss the number cube exactly 6 times to do it.
2. Take turns tossing the number cube. Decide whether you will take that number as hundred thousands, ten thousands, or thousands of dollars.
3. Record each toss and use mental math to find the running sum.
4. Before each toss, **state the total** you have collected so far. **(I now have two hundred fifty thousand dollars.)**
5. After six tosses, the amount closer to, but still less than, $1,000,000 wins.

Place Value

Name Caleb

	Hundred Thousands	Ten Thousands	Thousands	Total
Round 1	2	0	0	200,000
Round 2		5	0	250,000
Round 3				

Place Value

Name Chris

	Hundred Thousands	Ten Thousands	Thousands	Total
Round 1	4	0	0	400,000
Round 2				
Round 3				

Step 4: *"I have 400 thousand dollars. I rolled a 6. I'm going to add it to the thousands. My new total will be $406,000."*

More Games

A. Set $10,000 as the goal and use only tens, hundreds, and thousands.

B. Use a 4–9 number cube. Before each toss, tell how much more is needed to reach $1 million.

C. Each player must take a total of 7 tosses of the number cube.

TR12 Place Value Recording Sheet

Place Value

Name _____

	Hundred Thousands	Ten Thousands	Thousands	Total
Round 1				
Round 2				
Round 3				
Round 4				
Round 5				
Round 6				

Place Value

Name _____

	Hundred Thousands	Ten Thousands	Thousands	Total
Round 1				
Round 2				
Round 3				
Round 4				
Round 5				
Round 6				

Roll For A Whole

Concepts and Skills

- read and write decimal numbers
- regroup tenths and hundredths
- use mental addition strategies

Vocabulary

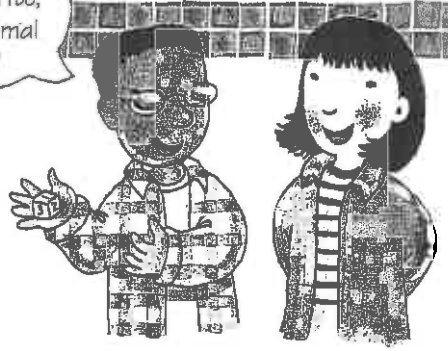
- regroup—use place value to think of a number in a different way to make arithmetic easier
- tenth—one of 10 equal parts
- hundredth—one of 1 hundred equal parts
- decimal number—a number containing a decimal point

Dice game

- Instructions on back
- Record sheets included

GAME 15

Can I read, write, and add decimal numbers?



Roll For A Whole

Materials

- 2 Roll For A Whole Grids or TR18
- 1 Roll For A Whole Recording Sheet (TR19)
- one 1–6 number cube

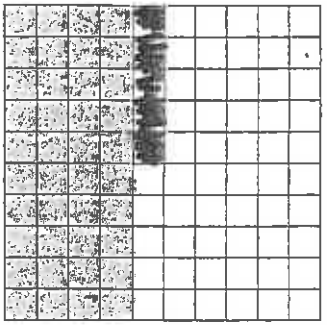
Directions

1. Take turns tossing the number cube. **State your thinking** about whether you will take that number in hundredths or tenths. **(My board is pretty empty, so I'll take tenths.)**
2. Your goal is to have a total as close as possible to 1.0 after 6 turns without going over.
3. Record each toss on your game board by shading in the correct amount. Record the toss and new total in decimal form on your recording sheet.
4. Before each toss, **state the total** you have collected so far and how much more you need to get to a whole. **(I have thirty-five hundredths. I need sixty-five hundredths.)**
5. After 6 rounds, the player closer to one whole (without going over) wins.

Player A

Roll For A Whole

Name Jared



Roll For A Whole

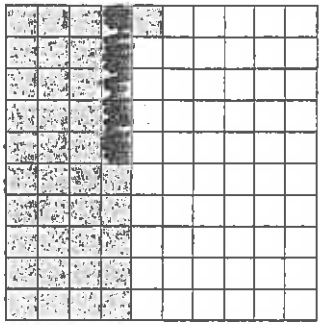
Name Jared

	Tenths	Hundredths	Total
Round 1	4		0.40
Round 2		5	0.45
Round 3			___

Player B

Roll For A Whole

Name Janeece



Roll For A Whole

Name Janeece

	Tenths	Hundredths	Total
Round 1	3		0.30
Round 2		5	0.35
Round 3		6	0.41

2.3

Step 1: *"I have thirty-five hundredths. I can't take 6 tenths because that will put me too close to one whole. So I'll take 6 hundredths. My total is forty-one hundredths."*

More Games

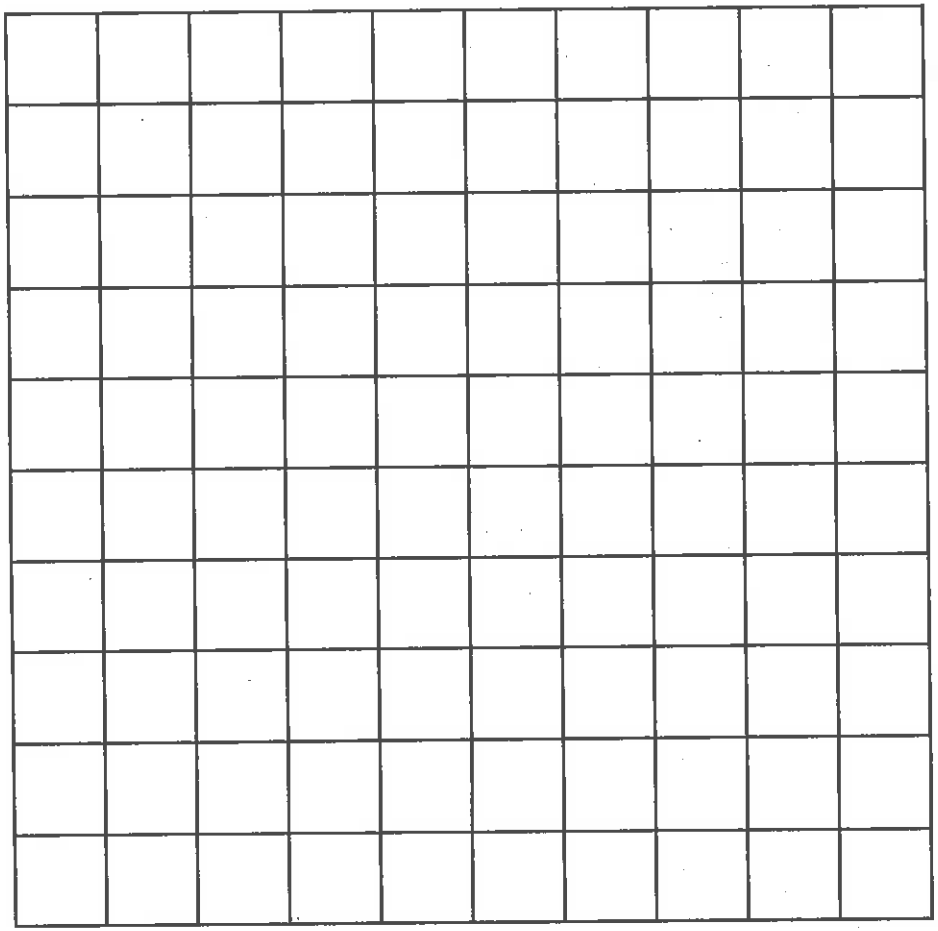
A. Use base ten blocks to represent the amount collected.

B. Use a 4–9 number cube and be the first to fill 2 wholes.

C. Start with a whole and subtract the number on the cube in tenths or hundredths. Be the first player to reach zero.

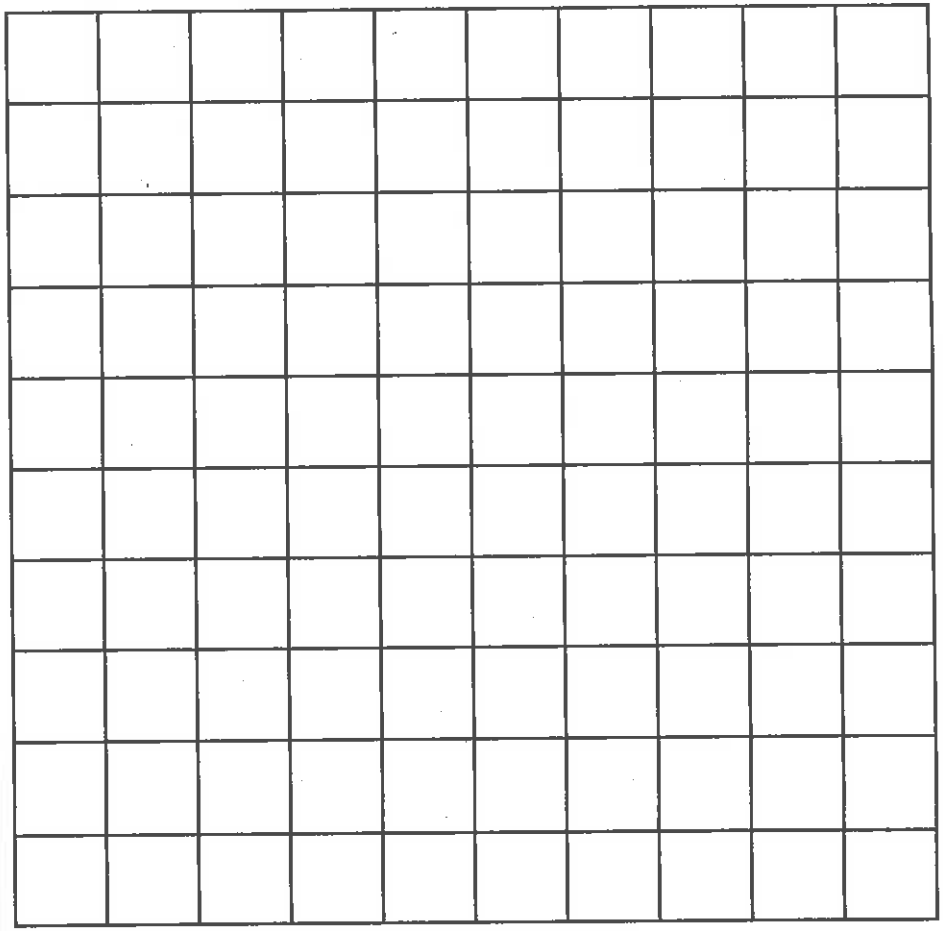
Roll For a Whole

Name _____



Roll For a Whole

Name _____



Roll For a Whole

Name _____

	Tenths	Hundredths	Total
Round 1			___ . ___ ___
Round 2			___ . ___ ___
Round 3			___ . ___ ___
Round 4			___ . ___ ___
Round 5			___ . ___ ___
Round 6			___ . ___ ___

Roll For a Whole

Name _____

	Tenths	Hundredths	Total
Round 1			___ . ___ ___
Round 2			___ . ___ ___
Round 3			___ . ___ ___
Round 4			___ . ___ ___
Round 5			___ . ___ ___
Round 6			___ . ___ ___

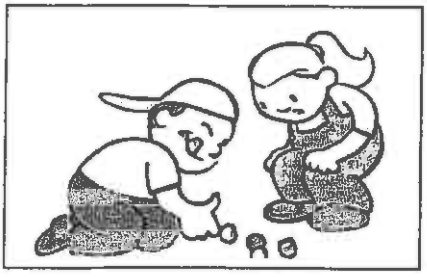
Games You Can Play At Home

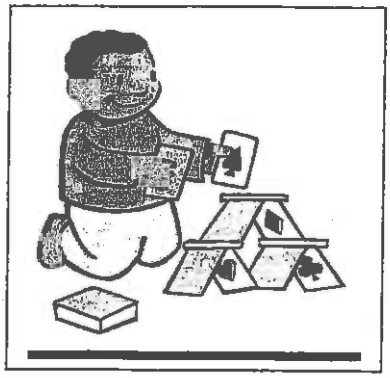
- Bowling (6 water bottles and a tennis ball~ count as they knock down~ how many knocked down? Left?)
- Ring Toss
- Hi-ho Cherri-o
- Connect 4
- Dominoes (matching or the real game)
- Go Fish
- Battleship
- Monopoly
- "Store" ~ buy things using fake money and get change!
- Checkers ~ Chinese Checkers
- Chess
- Jacks
- Hopscotch
- _____
- _____
- _____

Any other games that make them think hard or have to do with numbers!!! ☺

Have Fun!!!!!

Make a family game night!!!





Everyday Things To Do With Your Child To Help Them In Math

*Help you cook! Cooking requires a lot of measuring and use of fractions, as well as adding and subtracting!!

*Grocery shop!! Let your child help you weigh your produce or mention how much you have to pay a pound and how many pounds you have. Count how many oranges or apples you buy.

*Time management! Ask your child at the beginning of a task what time it is, tell them how long it will take, and ask them what time you will stop. OR time how long tasks take you!

*Money!! Collect spare change and let your child count it! When buying an item, ask your child about how much change you should expect back!

*Let them count anything and everything!! Encourage them to count by other numbers like 2, 4, 5, or 10's!!

*Ask your child math questions!

*Play games that include math!!!!! Have fun with it!!

Math Websites

http://www.abcya.com/

http://www.funbrain.com/numbers.html

http://funschool.kaboose.com/

http://www.ixl.com/

http://www.mathmovesu.com/

http://nrich.maths.org/public/search.php?search=All%20Games

http://www.pbs.org/parents/earlymath/

http://www.playkidsgames.com/mathGames.htm

http://www.starfall.com/n/holiday/calendar/play.htm?f

http://www.supermathsworld.com/

http://www.thewiseowlfactory.com/

http://www.tutpup.com/

www.coolmath4kids.com

www.mathcats.com