Get ready to discover mathematics all around you this summer!

Just like reading, regular practice over the summer with problem solving, computation, and math facts will maintain and strengthen the mathematic gains you have made over the school year.

Enjoy these activities to explore problem solving at home. The goal is for you to have fun thinking and working collaboratively to communicate mathematical ideas.

While you are working ask how the solution was found and why a particular strategy helped you solve the problem.

You will find 2 calendar pages, one for June and one for July, as well as directions for math games to be played at home. Literature and websites are also recommended to explore mathematics in new ways.



Gloria Cuellar-Kyle

# Suggested Math Tools

Notebook for math journal Coins Pencil Dice Chalk toothpicks

Regular deck of playing cards marshmallows

### **DIRECTIONS:**

Do your best to complete as many of these summer math activities as you can! Record your work in your math journal every day.

# Each journal entry should:

- ✓ Have the date of the entry
- ✓ Have a clear and complete answer

## Here is an example of a "Great" journal entry:

July 5th

Today I found 3 different ways to make \$1.00.

First I used 3-quarters, 2-dimes, and 1-nickel to total \$1.00. Next I collected 5-dimes, and 2-quarters and this also totaled \$1.00. Finally, I combined 2-quarters, 2-dimes, and 6-nickels. These are the three different ways I combined coins to make \$1.00

# Cool Math Books to Read:

Amanda Bean's Amazing Dream by Cindy Neuschwander The Greedy Triangle by Marilyn Burns

Measuring Penny by Loreen Leedy

Math for all Seasons by Greg Tang

Gloria Cuellar-Kyle

Games To Play (You will need a deck of cards and a die)

#### 1. Compare- Addition and Subtraction

Pass out all the playing cards to the players. Ace = 1, Face Cards = 10. Before each hand is played roll the die. An even roll means the players will add the numbers for 2 of their cards. An odd roll means the players will subtract the numbers for 2 of their cards. Players compare their values and the person with the higher value wins all four cards.

#### 2. Close to 100

Deal 6 cards to each player. Use any 4 of your cards to make two 2-digit numbers. (Aces = 1; Jacks, Queens, & Kings = WILD cards, stand for any digit 0-9) Try to make a combination that when added is close to or exactly 100.

For example with the cards: 5 4 3 A 8 3

You can create the numbers 48 and 53 to make 101. Your score is 1 since the difference between 101 and 100 is 1.

You can make a recording sheet in your journal like this,

Round 1: 48 + 53 = 101 Score 1

Put the cards you used in the discard pile. Keep the other two for the next round. Pick up four more cards and play 5 rounds. Add the score to each round. The lowest score after 5 rounds wins.

3. Dr. Mike's Math Games – Mathino Great card game involving computation and strategy. Once kids get involved they will come up with 101 variations to the game. <a href="http://www.dr-mikes-math-games-for-kids.com/mathino.html">http://www.dr-mikes-math-games-for-kids.com/mathino.html</a>

#### Other games to play:

Checkers, Memory, Rummikub, jigsaw puzzles, Parcheesi, Fish, Crazy Eights, Candy Land, Blink, Connect Four, Legos, K'Nex, Check out the PDF:

Making Math More Fun Board Games that contains a variety of board games for different grade levels.





June 2014 Entering Third Grade Mathematics Calendar										
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday				
1	2	3	4	5	Play Hidden Picture Addition www.aplusmath.com	7				
8	Ask an adult to teach you a card trick. Practice the trick and try it out on a friend. Try to create a variation on the trick.	Plant a seed. Will it grow to be about 12 inches or 12 feet? How do you know? Record the plant's progress over the summer.	Play a strategy game Othello or Checkers Did your strategy work? Will you try a different strategy the next time you play?	Practice counting forward and backwards by 2's, 5"s, 3's and 10"s from any number. Can you do it jumping on one foot?	Select a baseball statistic. List baseball teams in order based upon the statistic you selected. <a href="http://www.baseball-reference.com/leagues/AL/2013-standard-batting.shtml">http://www.baseball-reference.com/leagues/AL/2013-standard-batting.shtml</a>	14				
15	Put away the leftovers from dinner. How do you make decisions about the containers you will use?	Find a flower with an odd number of petals. Do all flowers have the same number of petals?	Read Measuring Penny by Loreen Leedy. Find an animal real or stuffed to measure with standard and non- standard measurement.	Make a rectangular prism using toothpicks and marshmallows. What other 3-D shapes can you make?	Add the ages of all the people who live in your house. What is the sum? What is the difference between the oldest and youngest people who live in your house? in your family (be sure to include cousins, aunts, uncles, grandparents)?	21				
22	Keep track of the temperature every day for the week. Predict what will be the high and low temperatures for the week. How does this temperature compare to Perth, Australia?	24  107 is the answer, what could the question possibly be? Challenge yourself to think of more questions.	Take a bath or shower. Find a way to measure how much water you use. Is it more or less than 5 gallons?	Find at least 3 different ways to make \$10.00 using nickels, dimes, quarters, and dollar bills.	You have 14 lollipops in a bag. 3 are grape flavored. What other flavors would you like to be in the bag? What fractions identify the various flavors of lollipops in your bag?	28				
		30,05				# £03 200 200 200 200 200 200 200 200 200 2				

Summer Fun Students Entering Grade 3 Gloria Cuellar-Kyle 29 30 Read Amanda Bean's Amazing Dream by Cindy Neuschwander Estimate then count all of the books in your house.

# July 2014 Entering Third Grade Mathematics Calendar

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
- Mari		Write down the years people who live with you were born. Put them in order from least to greatest.	How long will it be until your birthday in days? Use a calendar to keep track.	Find 20 coins in your house. What do they add up to? Is it more or less than #3.00?	Write the numbers below in expanded form. (Ex. 583 = 500 +80 +3) 729 846 1,295	5
6	Read, <b>Math for All Seasons</b> by Greg Tang. Make up your own math Riddle.	Palindromes are numbers that read the same forward and backward (example 121) Find a palindrome in real life.	9 Play Hidden Picture Subtraction www.aplusmath.com	Flip a coin 10 times and record the results. Flip the coin another 10 times. Compare the results. What do you notice?	15 + 6 = 13 + Copy this problem in your journal and fill in the blank. Explain how you got the Answer.	12
13	If you start playing a game at 8 a.m. and play for 1 and a half hours, what time is it when you are finished? How do you know?	Read, The Greedy Triangle by Marilyn Burns. As you read the story create the shapes by using toothpicks to make the polygons.	Play Guess My Rule www.mathplaygound.com What new math Vocabulary d id you learn?	Estimate how long it will take you to do 100 jumping jacks. Did it take more or less than 5 minutes? Record your time and compare your time with a friend	Set the table for supper. Find the total number of plates, glasses, forks, knives, and spoons. Draw a picture of the table. How would the total change if you had to set the table for twice as many people?	19
20	Play Building Blocks www.mathplayground.com  Describe how you the shapes fit together.	Find something that is symmetrical. Draw all the lines of symmetry.	Create a survey for the favorite day of the week. Ask at least 20 people. Make a chart of the results.	A can has the shape of a cylinder. Search for different items in your house that have the shape of a cylinder.	Use a grocery store flyer to plan a breakfast. List all the items you need. Total the price of all of the items.	26
27	Solve a Sudoku puzzle.	What are three ways you can tell what time it is, besides using a clock? Select one way to tell the time then check with an actual clock. How close were you to the actual time?	Play Compare (see directions) How does this help you to practice your facts?			E03



