Fifth Grade
Summer Sizzlers
Think Summer, Fun, and Math!

Math Tools You'll Need:

Math Journal or notebook	Regular deck of playing cards	
Pencil, crayons	Shopping flyers	Calculator
Recipes or cookbooks	Ruler	graph paper

DIRECTIONS:

Do your best to complete as many of these summer math activities as you can! Record your work in your math journal each week. In September return your Math Journal to your 6th grade teacher and earn a reward for your hard work.

Each journal entry should:

- have the date of the entry
- have a clear and complete answer that explains your thinking
- be neat and organized

Here's an example of a "GREAT" journal entry:
July 31

Today I wrote an equation that equaled 75. The equation was: $8(20 + 5) \div 2 - 25 = 75$. I began by doing the work in the parentheses and that equaled 25. Next, I multiplied 25 by 8 and got 200. Then, I divided 200 by 2 and the quotient was 100. Finally, I subtracted 25 from 100 and ended up with a total of 75. I will continue to write a different equation totaling 75 each night this week.

Awesome Websites to Check Out:

www.mathcafe.com www.funbrain.com
www.multiplication.com www.aaamath.com
www.aplusmath.com

Try to play a board game or card game at least one day each week. Write about the game in your journal.

Suggested Games to Play

Monopoly, Stratego, Othello, Connect Four, Chess, War, Battleship, Risk, Mancala, Pente, Simon Yahtzee and Mastermind.

Math games from school (You will need a deck of cards.)

1. **Close to 1000 (Aces =1, 10's = 0, take out face cards)**

Deal 8 cards to each player. Use any 6 of your cards to make two 3-digit numbers. Try to get a sum that is close to or equal to 1000. Write these 2 numbers in your journal. Your score is the difference between your number and 1000.

Example: You turn over the following 8 cards:

1, 5, 4, 3, 1, 8, 3, 8

You can combine 148 + 853 = 1001. Your score is 1 since the difference between 1001 and 1000 is 1. Put the 6 cards you used in a discard pile and pick 6 new cards to use with the 2 you have left. Play 5 rounds. Record each round in your journal. Whoever has the lowest total score after 5 rounds wins the game.

2. **Close to Zero**

This game is played just like close to 1000 except you make two 3-digit numbers that when subtracted will give you a difference that is close to or equal to zero.

Example: If you have the same numbers as above you could write: 318 – 318 = 0. Your score for that round would be zero.

Math Books to Read:

Counting On Frank by Rod Clement
A Grain of Rice by Helena Clare Pittman
The Hundred Penny Box by Sharon Bell Mathis
Sideways Arithmetic from Wayside School by Louis Sachar

Summer Math 2010 – Grade 5

<table>
<tr><td>Week of:</td><td>The following is a list of age appropriate games that work on developing math skills and strategies. Try to play at least one game each week. Monopoly, Stratego, Othello, Connect Four, Chess, War, Battleship, Risk, Mancala, Pente, Simon, Yahtzee and Mastermind.
Record the results, tables, work, etc. for all activities and games in your journal!</td></tr>
<tr><td>June 27 – July 1</td><td>Go shopping with a family member. Bring your journal to record the estimated cost of each item by rounding to the nearest dollar. Before getting to the register, total your estimates. How close were you to the estimated cost? How many items did you buy? What was the mean (average) cost per item?</td></tr>
<tr><td>July 4-10</td><td>Measure the perimeter of a room in your house. List the pieces of furniture in that room. What is the area that each piece of furniture takes up? How much space is not taken up by furniture? Don’t forget to label the area and perimeter with the unit of measure you used! On a piece of graph paper draw the room. Include each piece of furniture and label it with the area it takes up. Label the length and width of each side of the room. Find the area of the room.</td></tr>
<tr><td>July 11-17</td><td>Decide on a recipe you would like to cook or bake with an adult. How many servings does the recipe make? Re-write the recipe tripling it. How many people does the recipe serve now? Choose a fraction and rewrite the original recipe for that fraction.</td></tr>
<tr><td>July 18-24</td><td>Use M&M’s to determine the likelihood of picking out a certain color from the bag: Count and list the different colors, then list the probability of picking out each specific color if they were all put back in the bag together. Write the probability as a fraction and then use a calculator to write as a percent.</td></tr>
<tr><td>Only 4 weeks to go!
July 25-31</td><td>Write a different equation each day that equals 100, using all four operations (addition, subtraction, multiplication, and division) in each equation. For a bonus add parentheses to your equation. Don’t forget about order of operation. (Do all work in parentheses first, then working from left to right do any multiplication or division and then any addition or subtraction.) Ex. (5+10) x 2 + 40 – 10 + 80 ÷ 2 = 100</td></tr>
<tr><td>Aug. 1-7</td><td>Measure the height of each member of your family using both metric and the U.S. standard units of measure. Record the height of each person in inches, feet, centimeters, and meters. List their names from shortest to tallest.</td></tr>
<tr><td>Aug. 8-14</td><td>Look through a grocery store flyer. Find the cost of at least 3 different items that are sold by weight (fruit, vegetables, deli meats). Decide with a parent how much of each item you need for your family. How much will each item cost? What will be the total cost of all 3 items?</td></tr>
<tr><td>Aug. 15-21
  </td><td>Create a 2-step input/output table for each day. Explain your rule using words, then as an algebraic expression, for example: (N x 3) + 1
EXAMPLE OF AN INPUT/OUTPUT TABLE
<table>
<tr><th>Input</th><th>1st step: multiply by 3</th><th>2nd step: add 1</th><th>Output</th></tr>
<tr><td>3</td><td>3 x 3 = 9</td><td>9 + 1 = 10</td><td>10</td></tr>
<tr><td>5</td><td>5 x 3 = 15</td><td>15 + 1 = 16</td><td>16</td></tr>
<tr><td>N</td><td>N x 3</td><td>(N x 3) + 1</td><td>(N x 3) + 1</td></tr>
</table></td></tr>
<tr><td>Aug. 22-28</td><td>Congratulations! You have done all the work. Remember to bring your journal to your grade 6 teacher when school starts in September. Enjoy the last week of vacation!</td></tr>
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