

Fourth 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
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 5th 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:
August 17

Today I went outside to play at 9:35 a.m. and came in at 12:05 p.m. I was outside for a total of 90 minutes. This can also be written as 1 hour and 30 minutes, or as 1 ½ hours. My aunt said she would play Battleship with me tonight.

Awesome Websites to Check Out:

www.mathcafe.com	www.funbrain.com
www.multiplication.com	www.aaamath.com
www.aplusmath.com	www.coolmath4kids.com
www.mathplayground.com	www.kidpoint.com
www.usmint.gov/kids	www.flashcardmath.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. Multiplication War

Remove all face cards from a regular deck of cards. Treat the ace as a one. Deal out all the cards equally between 2 or 3 players. Each player turns over 2 cards and multiplies the numbers together. The person with the higher product wins the pile of cards. If you have the same product you have a war.


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 4



Week of:	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!												
June 27 – July 3	Select ten items from a grocery flyer and find the total cost of the items. Calculate how much change you would receive from a one hundred dollar bill. Do this each day with a different flyer or a different list of items. Show your work in your journal. (Challenge: Spend the remaining change to buy one additional item from each food group.)												
July 4-10	Identify 20 different examples of geometric shapes and solids in the community. Find at least 10 two-dimensional shapes and 5 three-dimensional solids. Make a table in your journal recording each shape, number of faces, number of vertices (corners) and number of edges. (Challenge: Design a building using at least 5 shapes/solids. Illustrate it and label your shapes/solids.)												
July 11-17	Record the high and low temperatures for one week (use a thermometer, newspaper, internet, television, or radio news broadcast). Make one graph of EITHER the high OR the low temperatures for the week (bar or line graph). (Challenge: Create one graph that shows BOTH high and low temperatures for the week (double bar or line graph.)												
July 18-24	Find the area of the floor and the perimeter of a room in your home. Record your data in BOTH inches and in feet. Use graph paper to draw a diagram of the room you chose. Do a different room each day. (Challenge: Figure out the area that each piece of furniture takes up in the room.)												
Only 4 weeks left!  July 25- 31	Create one input/output table for each day and record in your journal. Write your rule in algebraic form using a variable (ex: $N+1$.) ALSO, create a pattern for each day, using numbers, letters, shapes, and symbols (ex. AABCAABC.) <p style="text-align: center;">EXAMPLE OF AN INPUT/OUTPUT TABLE</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Input</th> <th>Output</th> <th>Rule</th> </tr> </thead> <tbody> <tr> <td>3</td> <td>9</td> <td>Multiply by 3</td> </tr> <tr> <td>5</td> <td>15</td> <td>Multiply by 3</td> </tr> <tr> <td>N</td> <td>$N \times 3$</td> <td>Multiply by 3</td> </tr> </tbody> </table> (Challenge: Create several patterns and ask a partner to find the rule; trade patterns and find each other's rule)	Input	Output	Rule	3	9	Multiply by 3	5	15	Multiply by 3	N	$N \times 3$	Multiply by 3
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Aug. 1-7	Find a recipe you'd like to make with a family member. Re-write the recipe and double the ingredients. How many people does your recipe serve? (Challenge: Cut your original recipe in half. How many people will it serve? Try changing the recipe for a harder fraction!)												
Aug. 8-14	Choose one activity for each day and record the start and stop time. Calculate the elapsed time for each activity. Day 1: time you wake up and go to sleep. Day 2: time you start and stop eating a meal. Day 3: time you turned the TV on and off. Day 4: time you go out to play and come in (Challenge: convert all of your times into minutes or hours)												
Aug. 15-21	Create a survey (ex: What is your favorite food?) with 5 answer choices. Ask 20 people your question. (Can be asked by telephone.) Record your results as you collect the data (ex. Tally chart.) Illustrate your results in a pictograph where the symbol does not equal just one person. (Make sure to include your key.) (Challenge: Analyze your data using mathematical vocabulary.)												
Aug. 22-28	Congratulations! You have done all the work. Remember to bring your journal to your grade 5 teacher when school starts in September. Enjoy the last week of vacation!												