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 to 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.

Suggested Math Tools

Notebook for math journal   Coins   Pencil   Dice   Crayons
Regular deck of playing cards

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 looked at the weather section of the newspaper and recorded the predicted and actual high temperature for the next 30 days on a scatter plot. I that temperatures with predictions of over 90 degrees were closest to the actual temperature.

Cool Math Books to Read:

Counting on Frank by Rod Clement
A Grain of Rice by Helena Clare Pittman
Sideways Arithmetic from Wayside School by Louis Sachar
Divide and Ride by Stuart Murphy
Lemonade for Sale by Stuart Murphy

Games To Play   (You will need a deck of cards, with all the face cards removed. Treat the ace as the number 1.)

1. Multiplication Compare
Remove all the face cards from a deck of cards. The ace will equal 1. Deal out the cards equally between 2 to 3 players. Each player turns over 2 cards and multiplies the numbers together. The person with the highest product wins all the cards.

Challenge:
Each person gets 4 cards and multiplies a 2-digit number by a 2-digit number.

2. Close to 1000
Deal 8 cards to each player. Use any 6 cards to make two 3-digit numbers. Try to make the sum close to or exactly 1000.
For example
You combine 148 and 853 to make 1001. Your score is 1 because the difference between 1001 and 1000 is 1.
The lowest score after five rounds wins!

Other Games to Play:
Monopoly, Othello, Battleship, Connect Four, Mastermind, Mancala, Legos, K'Nex, Simon, Yahtzee, Rummikub, Stratego, Check out the PDF: <u>Making Math More Fun Board Games</u> that contains a variety of board games for different grade levels.

Fun Websites to Explore:
http://www.math-play.com/Factors-Millionaire/Factors-Millionaire.html

http://www.funbrain.com
http://www.setgame.com
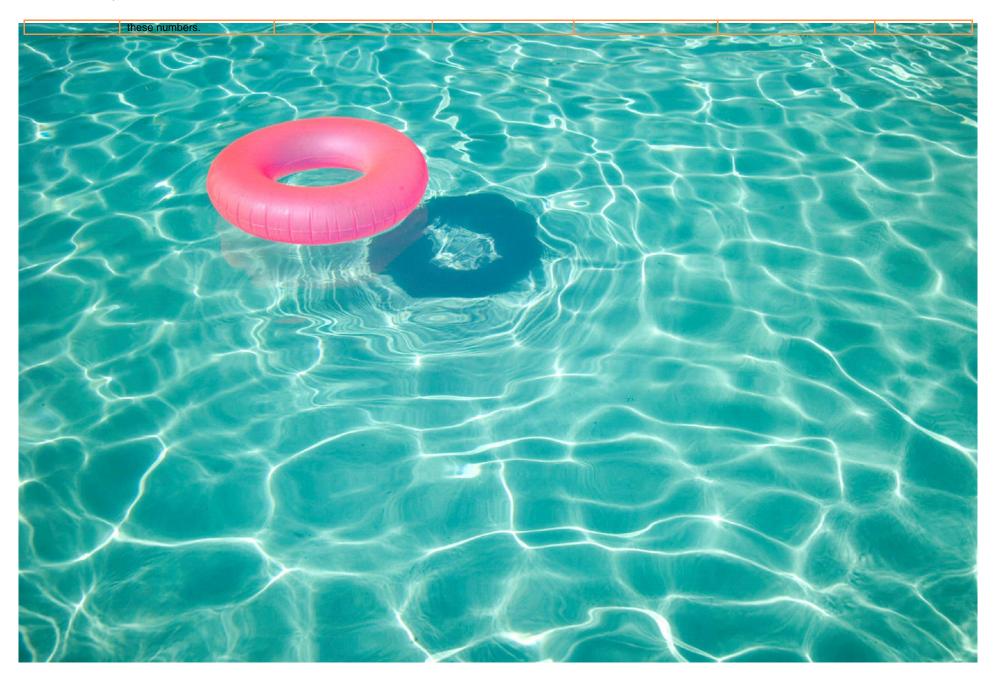http://www.aplusmath.com
http://www.multiplication.com
http://www.coolmath4kids.com
http://www.mathplayground.com
http://www.illuminations.nctm.org Click on **ACTIVITIES**.
Click on **3-5** and press **SEARCH.**

June 2014 Entering Fifth Grade Mathematics Calendar

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6 Visit the website www.multiplication.com Choose some activities to have fun practicing multiplication. Record your choices.	7
8	9 Read **Lemonade for Sale** By Stuart Murphy. With a friend, select an event that changes over time then create a graph to record the changes for 1 month. At the end of the month discuss what factors were responsible for the changes.	10 Play the game **Close to 1000.** (see directions)	11 Make a set of flash cards for multiplication facts. Practice your facts with a friend over the summer. How quickly can you complete the set of flash cards?	12 Record the daily high and low temperature for 2 cities across the nation for a month. What is the daily, weekly difference between the temperatures?	13 Play the **Product Game** at **www.illuminations.nctm.org** Record the strategy that you used.	14
15	16 Measure the perimeter of your house in meters. How many centimeters is the perimeter of your house? How many millimeters is the perimeter of your house?	17 Write down the names and prices of 5 games including shipping you found online. Order the prices from least to greatest. Round the prices to the nearest thousand dollar.	18 Using 8 straight lines, how can you make 4 triangles and 2 squares?	19 Go to the website www.setgame.com Play and enter to win a prize!	20 Read **Divide and Ride** by Stuart Murphy. How can 13 children be arranged on a park ride that seats 2, 3, 4, 5? How many kids are left waiting?	21
22	23 Play **Multiplication Compare.** (see directions)	24 Play a strategy game. What strategy did you use? Would you use it again? .	25 Make a paper airplane and fly it. Measure how far it travels in inches, feet and yards. Try flying the plane a few times. Record the distances in your journal.	26 PLAY BASEBALL at **www.funbrain.com** Challenge	27 Find the area of your bedroom floor in meters. What room in your house could have twice the area of your bedroom? Half the area of your room? How do you know your answer is reasonable?	28
29	30 Write down the numbers you see on 2 license plates. Create 4 math problems with		.		.	

these numbers.

July 2014 Entering Fifth Grade Mathematics Calendar

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Gloria Cuellar-Kyle	**1** Use a newspaper or weather.com and record the forecasted high temperatures for the next 5 days. What is the median for your data?	**1** Play a game. What strategy did you use? Would you use that strategy again?	**2** Would you rather have your height be made of a stack of nickels or quarters, lined up end to end? What strategy did you use to calculate the value? How much would you be worth?	**3** Visit the website www.mathplayground.com and play the logic games.	**4** As of today, record the Wins and Losses of the Astros this season. Estimate the Wins and Losses at the end of the season. Explain your thinking to an adult.	**5**
6	**7** Estimate the following in inches and feet: your height; length of your foot; distance from your elbow to the tip of your little finger. Measure to see how close you are to your estimate.	**8** Find a graph in the newspaper or on the computer. Cut and paste it into your journal. Write 3 generalizations about the graph.	**9** **Play Close to 1000**. (see directions)	**10** Play **Concentration** at www.illuminations.nctm.org Choose: **fractions, face down.** Draw pictures that represent the fractions.	**11** Vowels are worth $50 each, consonants are worth $40. Can you make a word worth exactly $200? $600?	**12**
13	**14** Place a plastic bowl on the floor and stand 20 steps away. Toss a coin in the bowl and record how many times it lands inside the bowl. Express this as a fraction. How many time will you have to repeat the activity to get the fractions generated in the first round of coin tosses?	**15** Play **Fraction Game** at www.illuminations.nctm.org How many moves did it take to get all the red markers to the right side? Can you beat your score?	**16** Measure the perimeter of two different windows in your home in feet. Find the difference of the perimeters in inches.	**17** Flip a coin 25 times. Make a tally chart for how many times it lands on heads or tails. Write a fraction for your heads and tails data. Try it again. Were the results the same?	**18** Write a word problem whose answer is 15.4. Have someone solve the problem.	**19**
20	**21** List some capital letters (E, F…) that have one pair of parallel lines. Are there any that have two pair of parallel lines? Write a sentence filled with letters that have parallel lines?	**22** Make the largest and smallest numbers you can find using the digits 4, 1, 7, 8, and 2. Find their difference and sum.	**23** Try a new activity at www.coolmath4kids.com Challenge yourself.	**24** Survey 10 friends or relatives to find out their favorite outdoor activity. Graph the results.	**25** Go on a 3-D scavenger hunt. How many cylinders, pyramids, cubes, rectangular prisms and cones can you find today? Organize your data.	**26**
27	**28** Play the **Product Game** at www.illuminations.nctm.org Record the strategy that you used.	**29** Have a scavenger hunt for real-world examples of parallel lines (ex. Railroad tracks)	**30** Challenge yourself to find all the factors by playing factor Millionaire http://www.math-play.com/Factors-Millionaire/Factors-Millionaire.html	**31** Read **A Grain of Rice** by Helena Pittman. Calculate how many grains of rice will she receive on day 18. How many grains of rice will she have altogether?		