



# Summer Math Learning Packet

## *Students Entering Grade 2*

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 made over the school year.

Inside you will find creative mathematics activities to explore 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 was chosen.

The packet consists of 2 calendar pages, one for July and one for August, as well as directions for math games and to be played at home.

Literature and websites are also recommended to explore mathematics in new ways. We encourage you to complete at least 15 math days each month. Keep track of your math in a journal.

### **Student Accountability**

The intention is that your child spends at least 10 minutes a day, 4 to 5 times a week, practicing math. Your child should aim to complete at least 200 minutes of math practice over the course of the summer. When your child has completed the math requirements, please sign and return this paper to the second grade teacher with his/her journal.

\_\_\_\_\_  
Parent's signature

\_\_\_\_\_  
Date



## Grade 2 Summer Math Ideas

Math Tools You'll Need:

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. In September share your Math Journal with your second grade teacher.

#### Each journal entry should:

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

Here an example of a "Great" journal entry:

July 5 <sup>th</sup> Today I collected 25 cents. It was easy to count 25 pennies. I know that 5 pennies is the same as 1 nickel so every time I counted five pennies I changed to a nickel, so I needed 5 nickels. $5 + 5 + 5 + 5 + 5 = 25$ cents
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#### Cool Math Books to Read:

*Alexander, Who Used to Rich Last Sunday* by Judith Viorst.

*100 Days of School* by Trudy Harris.

*The Button Box* by Margarette S. Reid

*The Doorbell Rang* by Pat Hutchins

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

#### 1. **Compare**

Remove the face cards from a deck of cards. Remember an Ace is the same as 1. Pass out all cards in the deck among all of the players. Each player flips over two cards at the same time and finds the sum. The one with the larger sum takes the cards. If the sums are the same, turn over 2 more cards. The player with the largest sum keeps all four cards.

#### 2. **Tens Go Fish**

Remove the face cards from a deck of cards. Deal 5 cards to each player. Each player looks for cards that make 10, and they draw new cards from the deck to replace them. Players take turns asking each other for a card that will make 10 with a card from their hand. A player's turn is over when no more pairs can be made. The game is over when there are no more cards. Both players record their combinations of 10.

#### 3. **Close to 20**

Remove the face cards from a deck of cards. Deal 3 cards to each player. Which two cards brings you closest to 10? Which player is closest to 10?

Example: You turn over the cards 5, 4, 3 and your opponent turns over an Ace, 8, and 3. You can make 9 (5 and 4) and your opponent can make 9 (Ace and 8) or 11 (8 and 3). It's a tie since you are both 1 away from 10!

Other games to play: Checkers, Memory, jigsaw puzzles, Parcheesi, Fish, Crazy Eights, Connect Four, Legos, K'Nex.

#### Fun Websites to Explore:

[www.funbrain.com](http://www.funbrain.com)

[www.aplusmath.com](http://www.aplusmath.com)

[www.illuminations.nctm.org](http://www.illuminations.nctm.org) Click on **ACTIVITIES**. Click on **K-2** and press **SEARCH**.

# July 2010 Entering Second Grade Mathematics Calendar

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1 Sit outside and use tally marks to record how many birds you see in ten minutes.	2 Take 7 pennies. Put some in 1 hand and some in the other hand. Show 1 hand and have an adult figure out how many are hiding. Switch.	3
4	5 Read <u><i>100 Days of School</i></u> by Trudy Harris.  Find 5 different ways to reach 100. Record each way.	6 Play <u>Tens Go Fish</u> (See directions)  Add up all the pairs. Who has more? How many more?	7 Go on a Shape Hunt around your home. Look for items shaped like a square, rectangle, and a circle. Draw and label the items.	8 Estimate the number of measuring cups it will take to fill a pitcher. Test it out!	9 Play <u>Close to 20</u> . How does this help you practice your addition?	10
11	12 Roll two dice and practice addition and subtraction by adding or subtracting the two numbers.	13 How many ways can you make 25 cents using pennies, nickels, dimes, and quarters?	14 Play <u>Patch Tool</u> on the website <a href="http://www.illuminations.nctm.org">www.illuminations.nctm.org</a> Choose 2 shapes. Make a pattern. Describe the pattern.	15 Read <u><i>Alexander, Who Used to Rich Last Sunday</i></u> by Judith Viorst. Keep track of how you spend \$1.00	16 Jump rope and count by tens to 100. Try counting backwards.	17
18	19 Read <u><i>The Button Box</i></u> by Margarett Reid. Find a collection at home and sort it. Ask a friend to figure out how you sorted.	20 Play a strategy game like <u>Mancala</u> or <u>Connect Four</u> . Would you use the same strategy the next time you play?	21 Play <u>Bobbi Bear</u> <a href="http://www.illuminations.nctm.org">www.illuminations.nctm.org</a> How many outfits can you make with 2 shirts and 2 pants?	22 Gather a handful of coins with a value less than \$2.00. Calculate the total.	23 Today's number is 12 Make 12 by: -Adding two numbers -Subtracting two numbers -Adding three numbers	24
25	26 Tell the time that you go to bed to the closest hour or half hour. Draw a picture of the clock's hands for that hour.	27 Blow a marble, a bottle cap and a pencil across a table. Measure how far they go. Which goes the farthest? By how much?	28 Make a 3-D shape using mini-marshmallows and toothpicks. How many corners does your shape have? How many edges?	29 Play <u>Color Patterns</u> on the website <a href="http://www.illuminations.nctm.org">www.illuminations.nctm.org</a> .	30 Play <u>Double Compare</u> (see directions)	31

# August 2010 Entering Second Grade Mathematics Calendar

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2 If you save two cents every day in the month of July, how much money will you have saved at the end of the month?	3 Ask 10 people their favorite kind of pizza. Record your data in a table, chart, or graph.	4 Read <u><i>98, 99...Ready or Not, Here I Come!</i></u> By Teddy Slater. Play hide and go seek counting backwards from different numbers to 100.	5 50 is the answer. What could the question possibly be?  Challenge yourself to think of more questions.	6 How many times can you dribble a basketball in 1 minute? 2 minutes? Can you beat your first time?	7
8	9 Hold an ice cube in your hand. Count by 2's until it melts. Did you count to more or less than 100!	10 Using a ruler, find 5 things longer than 12 inches and 5 things shorter than 12 inches.	11 Ask 5 people their phone numbers. Add the digits of each phone number together. Who's phone number has the highest value?	12 Visit the website <a href="http://www.funbrain.com">www.funbrain.com</a> and do some math. Record what you did.	13 Read <u><i>Super Sand Castle Saturday</i></u> by Stuart Murphy. Make a sand castle and describe the 3-D shapes.	14
15	16 Make a calendar for this week. Record the temperature each day. At the end of the week, compare your weather with the weather another state.	17 Go to the park and draw the shapes you see. Do you see more rectangles than triangles?	18 Read <u><i>The Doorbell Rang</i></u> by Pat Hutchins. Make cookies with your family! Can you share them equally? How many are left over?	19 Play a strategy game like <b>Checkers</b> or <b>Connect Four</b> . Would you use the same strategy the next time you play?	20 In one blow, how many bubbles can you make? What are the most bubbles you can blow at one time?	21
22	23 A ball is symmetrical as you can cut it in half and it will be the same on both sides. Find 5 things in your house that are symmetrical.	24 Estimate how long it will take you to read 10 pages. Try it!	25 Play <u><b>Tens Go Fish</b></u> (See directions) Add up all the pairs. Who has more? How many more?	26 Grab a handful of an item; cereal, beans, etc. Estimate how many pieces you grabbed. Now count them. Was your estimate close?	27 Go for a walk in your neighborhood and look for odd and even numbers.	28
29	30 Visit the website <a href="http://www.aplusmath.com">www.aplusmath.com</a> and do some math. Record what you did.	31 <b>YOU DID IT!</b> Please bring your journal to your second grade teacher on the first day of school!				