



Summer Math Learning Packet

Students Entering Grade 3

Get ready to help your child discover how ***Math is All Around Us*** 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 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 third grade teacher with his/her journal.

Parent's signature

Date



Grade 3 Summer Math Ideas

Math Tools You'll Need:

| | |
|-------------------------------|--------------|
| 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. In September share your Math Journal with your third grade teacher.

Each journal entry should:

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

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

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

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

1. Compare- Addition and Subtraction

Pass out all the cards to players. Each player flips over two cards. Add or subtract the two numbers showing. 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.

5 4 3 A 8 3

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

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

Fun Websites to Explore:

www.funbrain.com

www.setgame.com

www.aplusmath.com

www.multiplication.com

www.pbskids.org

www.mathplayground.com

www.illuminations.nctm.org

Click on **ACTIVITIES**.

Click on **K-2** and press **SEARCH**.

July 2017 Entering Third Grade Mathematics Calendar

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--------|---|--|---|--|--|----------|
| 2 | 3 100 is the answer, what could the question possibly be? Challenge yourself to think of more questions. | 4 Write all the numbers from 1-100 by 3's. What patterns do you see? | 5 Holiday | 6 Explore one of the recommended website What math did you learn? | 7 Play <u>Hidden Picture Addition</u> www.aplusmath.com | 8 |
| 9 | 10 Ask an adult to teach you a card trick. Practice the trick and try it out on a friend. | 11 Plant a seed. Will it grow to be about 12 inches or 12 feet? How do you know? | 12 Play a strategy game <u>Othello</u> or <u>Checkers</u> Did your strategy work? Will you try a different strategy the next time you play? | 13 Practice counting forward and backwards by 2's, 5's and 10's from any number. Can you do it jumping on one foot? | 14 List the months of the year in order starting with the first month of the year | 15 |
| 16 | 17 Put away the leftovers from dinner, how do you make decisions about the containers you will use? | 18 Find a flower with an odd number of petals. Do all flowers have the same number of petals? | 19 Read <u>Measuring Penny</u> by Loreen Leedy. Find an animal real or stuffed to measure with standard and non-standard measurement. | 20 Make a rectangular prism using toothpicks and marshmallows. What other 3-D shapes can you make? | 21 Add the ages of all the people who live in your house. What is the sum? | 22 |
| 23 | 24 Keep track of the temperature everyday for the week. Predict what will be the high and low temperatures for the week. | 25 Using sidewalk chalk write as many number facts you know in one minute. | 26 Take a bath or shower. Find a way to measure how much water you use. Is it more or less than 5 gallons? | 27 Find at least 3 different ways to make \$1.00 using nickels, dimes, and quarters. | 28 You have 4 lollipops. 1 is grape flavored. What fraction is grape flavored? How do you know? | 29 |
| 30 | 31 Read <u>Amanda Bean's Amazing Dream</u> by Cindy Neuschwander Count all of the books in your house. | | | | | |

August 2017 Entering Third Grade Mathematics Calendar

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--------|--|---|---|--|---|----------|
| | | 1 How long will it be to your birthday in days? Use a calendar to keep track. | 2 Find 20 coins in your house. What do they add up to? Is it more or less than \$3.00 | 3 Write the numbers below in expanded form for. (Ex. $583 = 500 + 80 + 3$) 729 846 295 | 4 Write down the years people who live with you were born. Put them in order from least to greatest. | 5 |
| 6 | 7 Read, <i><u>Math for All Seasons</u></i> by Greg Tang. Make up your own math riddle. | 8 Palindromes are numbers that are the same forward and backwards (example 121) Find a palindrome in real life. | 9 Play <u>Hidden Picture Subtraction</u> www.aplusmath.com | 10 Flip a coin 10 times and record your results. Flip the coin another 10 times. Compare the results What do you notice? | 11 $15 + 6 = 13 + \underline{\quad}$ Copy this problem in your journal and fill in the blank. Explain how you got the answer. | 12 |
| 13 | 14 A can has the shape of a cylinder. Find and write down things in your house having the shape of a cylinder. | 15 Use a grocery store flyer to plan a breakfast. List all the items you need and record the price of each item. How much will breakfast cost? | 16 If you start playing a game at 8 a.m. and play for 1 and a half hours, what time is it when you're done? How do you know? | 17 Read, <i><u>The Greedy Triangle</u></i> by Marilyn Burns. Follow along using toothpicks to make the polygons. | 18 Create a survey for favorite day of the week. Ask at least 20 people. Make a chart of the results. | 19 |
| 20 | 21 Do a Sudoku puzzle in the newspaper. | 22 What are three ways you can estimate what time it is other than using a clock? Use one way and estimate the time, how close are you? | 23 Play <u>Guess My Rule</u> www.mathplayground.com Did you learn new math vocabulary? | 24 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 with a friend. | 25 Set the table for supper. Find the total number of plates, glasses, forks, knives, and spoons. Draw a picture of the table. | 26 |
| 27 | 28 Play <u>Building Blocks</u> www.mathplayground.com Describe how you see the shapes fitting together. | 29 Find something that is symmetrical. Draw all the lines of symmetry. | 30 Visit www.gregtangmath.com Which game did you play? Record what you did. | 31 YOU DID IT! Please bring your journal to your third grade teacher on the first day of school. | | |

Create Your Own Summer Math Calendar!

Grade _____

If the activities suggested don't seem to "fit your child" or you have your own websites/literature/math practice you would like to do you can create your own math calendar. Feel free to substitute your own activities that better suit your needs or learning style. All we ask is that you document your created activities below. Remember: the goal is to complete 15 activities each month. You can certainly use this sheet to record more!

| # | Date Completed | Description of Math Activity |
|---|----------------|------------------------------|
| 1 | | |
| 2 | | |
| 3 | | |
| 4 | | |
| 5 | | |
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| 7 | | |

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| 8 | | |
| 9 | | |
| 10 | | |
| 11 | | |
| 12 | | |
| 13 | | |
| 14 | | |
| 15 | | |

Students' name: _____

Parent's Signature: _____