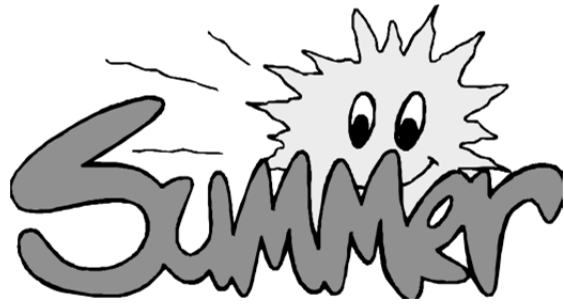


Fairfield Public Schools



Mathematics Packet

for

Students entering Third Grade



Dear Parent or Guardian and Second Grade Student,

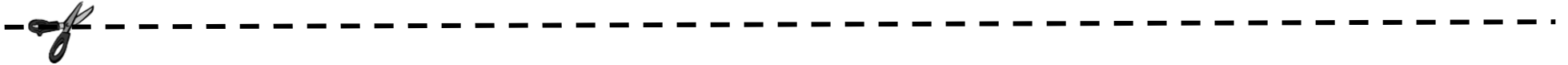
Congratulations on successfully completing second grade! In order to help you maintain all the great strategies, skills and concepts you learned this year and to be ready for third grade, we hope you complete the attached summer packet. The packet consists of 2 calendar pages, one for July and one for August, as well as two pages of Optional Weekly Activities. It also includes directions for math games to be played at home, cool math books we recommend, and a link to the Fairfield Public Schools K-5 Wikispace (<http://fairfieldpublicschools5math.wikispaces.com>) for more game ideas, websites and apps.

We'd like you to try to spend at least 10 minutes a day, 4 – 5 days a week this summer working on the attached problems. Just a few minutes each day spent “thinking and talking math” will help reinforce the math that you have learned and begin to prepare you for all the new concepts you will learn in third grade. The goal of this packet is to keep you fresh while still having fun, and working collaboratively to communicate your mathematical thinking. Remember to discuss how you approached a problem, what strategies you used and why, and how you know your solution makes sense.

The math practice in this summer packet address the new Connecticut Core Standards for Mathematics which incorporates the Common Core Standards addressing these 4 critical areas in grade 2:

- (1) extending understanding of base-ten notation
- (2) building fluency with addition and subtraction
- (3) using standard units of measure
- (4) describing and analyzing shapes.

When you have completed the packet, please sign the contract below and return to your new teacher in the fall. Most importantly, have a safe and happy vacation!



DATE

I, _____, completed at least 200 minutes of math practice this summer.

STUDENT SIGNATURE

PARENT/GUARDIAN SIGNATURE

Grade 3 Math Ideas

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

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.

3. The following games may be found on the Fairfield K-5 Math Wikispace website (<http://fairfieldpublicschools5math.wikispaces.com>):

Fill the Chute, Salute the General, Race to Zero, Cover the Counters, and Shake and Make the Sum. On the Wikispace, go to Grade 2 Skills Practice, and open the Math Fluency Game Packet.

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

July Entering Third Grade Mathematics Calendar

Monday	Tuesday	Wednesday	Thursday	Friday
<p>100 is the answer, what could the question possibly be? Challenge yourself to think of more questions.</p>	<p>Walter was having a party. He put 10 stickers in each party bag. He made 12 bags with ten stickers in each one. How many stickers total were in his 12 bags?</p>	<p>You have \$1.50 in your pocket. Make a list of 10 different combinations of coins you could have in your pocket.</p>	<p>Play Hidden Picture Addition</p> <p>www.aplusmath.com</p>	<p>Family Math Activity:</p> <p>Play a strategy game like Othello or Checkers. Did your strategy work? Will you try a different strategy the next time you play?</p>
<p>Cut out a picture from a magazine or newspaper. Glue it to a piece of paper. Write a story problem to go along with the picture. Challenge a friend to solve it!</p>	<p>Read Measuring Penny by Loreen Leedy or another book about measurement. Then find an animal (real or stuffed) to measure with inches and centimeters.</p>	<p>You won first place at a contest! You have two choices for the prize. You can take \$20 home with you today OR \$2 a day for the next 15 days. Which option earns more money? How much more?</p>	<p>Solve the following riddle. Use the clues to figure out the 2-digit mystery number:</p> <ul style="list-style-type: none"> • My favorite number is between 41 and 50. • It is an odd number. • The digit in the ones place is greater than 5. 	<p>Family Math Activity:</p> <p>Play Place It Right 100 (see directions)</p> <p>How does it help you to get better at addition?</p>
<p>Add the ages of all the people who live in your house. What is the sum? Is it greater than or less than 100? By how much?</p>	<p>Keep track of the temperature every day for the week. Draw a bar graph. Compare the difference in temperatures.</p>	<p>Use all the digits 5, 7, and 2 to create different 3-digit numbers. What is the greatest number? What is the smallest number? How do you know?</p>	<p>Find as many different ways to make \$1.00 using pennies, nickels, dimes, and quarters.</p>	<p>Family Math Activity:</p> <p>Play COMPARE with family member.</p> <p>How does this help you to practice your facts?</p>
<p>How many times can you hop on your left foot in a minute? Your right foot? Compare the number of hops using the symbols $<$, $>$ or $=$. What is the difference?</p>	<p>Go on a shape hunt for quadrilaterals (4-sided figures). How many can you find? How are their attributes the same or different?</p>	<p>Solve the following riddle. Use the clues to figure out the 3-digit mystery number:</p> <ul style="list-style-type: none"> • It is less than 500. • All of the digits are even. • All of the digits are different numbers. • The tens digit is four times the ones digit. <p>What is the mystery number?</p>	<p>What is today's date? What was the date two weeks ago? What will the date be ten days from now?</p>	<p>Family Math Activity:</p> <p>Play Fill the Chute together. Did you use a particular strategy to help you fill the chute?</p>

August Entering Third Grade Mathematics Calendar

Monday	Tuesday	Wednesday	Thursday	Friday
<p>Play Building Blocks www.mathplayground.com</p> <p>Describe how you see the shapes fitting together.</p>	<p>Stand and jump as far as you can, measure using a yardstick or meter stick. Jump 3 times and compare your measurements.</p>	<p>Write down the years people who live with you were born. Put them in order from least to greatest.</p>	<p>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.</p>	<p>Family Math Activity: Play Salute the General. You can play using addition or subtraction.</p>
<p>Go on a Treasure Hunt in your house to find different 3-dimensional shapes. Group them by attributes. Which shape is used the most?</p>	<p>Find a graph in the newspaper or magazine and talk to an adult about what the numbers mean.</p>	<p>Play Hidden Picture Subtraction www.aplusmath.com</p>	<p>Solve the following riddle. Use the clues to figure out the 3-digit mystery number:</p> <ul style="list-style-type: none"> • It is less than 600. • The hundreds digit is five times the ones digit. • The tens digit is between 1 and 4. • The sum of the digits is 8. 	<p>Family Math Activity: Play Race to Zero. Record the number sentences that you used as you raced to zero.</p>
<p>Play Guess My Rule www.mathplayground.com</p> <p>Did you learn new math vocabulary?</p>	<p>Read, <i>The Greedy Triangle</i> by Marilyn Burns.</p> <p>Follow along using toothpicks to make the polygons.</p>	<p>How many ten-dollar bills equal a hundred-dollar bill? Jen had 20 ten-dollar bills. How many hundred-dollar bills can she trade them for?</p>	<p>Starting with 101, skip count by 100 until you get to 1,001. What pattern do you notice? Try different numbers to start with. Does the pattern change?</p>	<p>Family Math Activity: Play Cover the Counters. How many rounds did you go to cover all the counters? Which was your shortest round and why?</p>
<p>Delia, Tanya and Suzie decorated 24 cupcakes for the party. Tanya decorated 3 more cupcakes than Delia. Delia and Suzie decorated the same number of cupcakes. How many cupcakes did each girl decorate?</p>	<p>Read, <i>Math for All Seasons</i> by Greg Tang.</p> <p>Make up your own math riddle.</p>	<p>One bag holds 6 donuts. How many donuts are in three bags? How many bags do you need to hold twelve donuts? Which is fewer: 5 bags of donuts or 24 donuts?</p>	<p>Aisha bought a necklace at Fanny's Flea Market for 55 cents. She used 9 coins to pay for the necklace. Aisha used the same number of quarters as nickels. What coins did she use?</p>	<p>Family Math Activity: Play Shake and Make the Sum. List all the facts that you used to make the sums.</p>

Optional Weekly Activities

Activity One: A Family Outing

Your parents have asked you to research and compare the cost of different family outings so that you can recommend one that will be fun, but doesn't cost too much. Research the costs involved in all the members of your immediate family visiting the following places on a Saturday afternoon: an ice-skating rink, a museum, an amusement park, the zoo, or a movie theater. You may use the newspaper or the Internet to get your information. Then present your recommendation to your parents. Make sure you include a breakdown of the entrance costs for your family for each of the places you researched, and be sure to explain why this outing would make the best choice!

Activity Two: Feeding a Family

Research how much you would need to spend to feed a family of four for one day. Plan three meals for that day, using healthy food choices. You may choose to use Internet grocery stores to find the cost of individual food items, visit a supermarket, or use grocery store fliers. Make sure to create a menu for that day. Show all of your work, including the costs of individual items.

Activity Three: Create A Family Pet

Find three-dimensional shaped objects in your home. For example, milk carton, oatmeal container, straws, etc. Decide what animal you would like to have for a pet. Then, glue, color and create your own pet using the three-dimensional objects you found. Make sure you can explain to your parents which shapes you used in your creation. Challenge yourself to list the attributes of each shape.

Activity Four: Make Your Own Map with POLYGONS

Using your street as a reference, draw a map of the street with each of the houses included. The houses must be made of polygons (squares, rectangles, triangles, trapezoids, rhombus, hexagon, pentagon, octagon). Color your map and label each polygon. Then count how many of each type of polygon you used. Present the information to your family and WOW them with your knowledge of geometry!

Optional Weekly Activities

Activity Five: Feeding Your Dog

Your job this summer is to take care of your pet dog. You need to feed the dog every day. He is an average-sized dog who eats two cups of dog food a day. How many cups would you need for a week? How many would you need for a month (30 days)? How many cups would you need for a year (365 days)? Would your answers change if it was a really small dog or a really big dog? Share your thinking with a member in your family. **CHALLENGE:** How many bags of dog food would you need to buy each week/month/year if each bag holds 60 cups?

Activity Six: Planning a Birthday Party

Your mom and dad said that you can help plan your birthday party! YAY! You are to pick the theme of the party and make a list of all the items that you will need: tablecloth, goody bags, goody bag items, cups, plates, forks, balloons, and of course, the cake. You may use the Internet for your research or look at fliers or catalogs. You might even want to visit Party City or other places to find out how much it would cost to have a party if you invited ten friends. Share the list and the expenses with your parents.

Activity Seven: Packing Your Books to Move

Your mother has just told you that you are moving, and you need to pack all of your books into cartons. You have 120 books and 7 cartons. Plan how many books will go in each box. Make sure that each box won't be too heavy by distributing the books as evenly as possible in the 7 cartons. Then explain to your mom how you would pack the books, and how you came up with your answer.

Activity Eight: Visiting the Maritime Aquarium

You are planning a trip to the Maritime Aquarium in Norwalk. The hours of the Aquarium are 10AM to 5 PM. You want to make sure that you see everything there is to see. Research the Maritime website to help plan your day. You should include IMAX movie, special exhibits and eating lunch. Make a schedule of your day and the time that you will be going to each event and calculate the amount of minutes spent on each activity. Share your schedule with a member of your family.