

Sail into Summer with Math!



For Students Completing Third Grade

Name _____

4th grade Teacher _____

Summer 2011

Summer Mathematics Packet

Dear Parents,

In this booklet you will find math activities that will help to review and maintain math skills learned in third grade and prepare your child for fourth grade. These activities are varied and meant to show how much fun and relevant math can be in everyday life. If an activity has an asterisk *, it indicates a more challenging problem.

Some of the activities do not involve any written work, some can be completed right in this booklet, and others need to be done on separate paper. You may staple sheets of paper together or use a notebook (an old one is fine).

All work should be returned to your child's second grade teacher. Have a great time "sailing into summer with math!"

Mrs. Santini
Math Focus Teacher



Week 1

1. Use this little rhyme to help remember the rules for rounding:

*Zero, one, two, three, four, Round down to the ten/hundred before,
Five, six, seven, eight, nine, Round up to the next in line.*

Round each number to the nearest ten

78 _____

42 _____

38 _____

55 _____

63 _____

21 _____

95 _____

14 _____

87 _____

66 _____

Round each number to the nearest hundred. (*Hint – If the tens digit is 0-4, the hundreds digit remains the same. If the tens digit is 5-9, the hundreds digit is increased by one.*)

432 _____

538 _____

724 _____

426 _____

250 _____

673 _____

768 _____

335 _____

3. Use **mental math** to solve. Write answers only.

$300 + 200 = \underline{\quad}$ $900 - 500 = \underline{\quad}$ $1300 - 400 = \underline{\quad}$

$1400 - 800 = \underline{\quad}$ $800 + 700 = \underline{\quad}$ $500 + 900 = \underline{\quad}$

$1200 - 200 = \underline{\quad}$ $700 + 200 = \underline{\quad}$ $1100 - 700 = \underline{\quad}$

$800 + 900 = \underline{\quad}$ $600 + 700 = \underline{\quad}$ $1500 - 700 = \underline{\quad}$

$1800 - 900 = \underline{\quad}$ $400 + 800 = \underline{\quad}$ $1200 - 900 = \underline{\quad}$

Week 2

1. Round each number to the nearest ten.

429 _____ 632 _____ 708 _____ 523 _____

838 _____ 352 _____ 578 _____ 191 _____

214 _____ 974 _____ 347 _____ 618 _____

503 _____ 442 _____

Now try these!

4,812 _____ 7,947 _____ 3,669 _____ 2,582 _____

6,735 _____ 1,457 _____ 3,443 _____ 8,328 _____

5,293 _____ 5,997 _____

2. The ice cream truck has just arrived. Ashley has \$0.90 in her swim bag. An ice cream sandwich costs \$0.65. How much change will she get back?
Draw and label the coins.

3. Write addition/subtraction **fact families** for 17 and 15.

A fact family look like this: $4 + 7 = 11$ $11 - 4 = 7$
 $7 + 4 = 11$ $11 - 7 = 4$

a. $\underline{\quad\quad} + \underline{\quad\quad} = \underline{17}$

$\underline{\quad\quad} + \underline{\quad\quad} = \underline{17}$

$\underline{\quad\quad} - \underline{\quad\quad} = \underline{\quad\quad}$

$\underline{\quad\quad} - \underline{\quad\quad} = \underline{\quad\quad}$

b. $\underline{\quad\quad} + \underline{\quad\quad} = \underline{15}$

$\underline{\quad\quad} + \underline{\quad\quad} = \underline{15}$

$\underline{\quad\quad} - \underline{\quad\quad} = \underline{\quad\quad}$

$\underline{\quad\quad} - \underline{\quad\quad} = \underline{\quad\quad}$

6. Write multiplication/division **fact families** for 24 and 15.

a. _____ = _____

_____ = _____

_____ = _____

_____ = _____

b. _____ = _____

_____ = _____

_____ = _____

_____ = _____

Make up your own fact family.

Week 3

1. What unit of measurement would be used to measure the following objects (use units in the **customary system** – inch, foot, yard)?

The length of the swimming pool

Unit of Measure_____ Measurement_____

The width of the sandbox

Unit of Measure_____ Measurement_____

The height of the slide at the playground

Unit of Measure_____ Measurement_____

2. Total the following groups of coins and/or bills. Use the **dollar sign and decimal point** to record your answer.

2 quarters, 1 dime, 1 nickel

1 quarter, 2 dimes, 3 nickels, 4 pennies

3 quarters, 3 nickels, 3 pennies

2 half dollars, 2 quarters, 3 dimes, 5 pennies

4 one-dollar bills, 3 quarters, 4 nickels, 3 pennies

3. Mary has 3 friends coming over for lunch. Mary orders a large pizza which is cut in 12 pieces. All of the girls eat the same amount. Draw a picture to show how much pizza each girl ate. Now write a **fraction** to show how much pizza each girl ate. Can you write an equivalent fraction for the amount that each girl ate (*Hint: equivalent fractions are fractions that name the same number of amount. Example: $\frac{1}{2}$ and $\frac{2}{4}$ are equivalent fractions*).

For dessert, Mary has a large chocolate bar. The bar is divided into 8 pieces. Draw a picture to show how much of the candy bar each girl will get. Now write a **fraction** to show how much each girl will get. Can you write an equivalent fraction for the amount that each girl will get?

Week 4

1. Solve each problem. Use the **dollar sign and decimal point** in your answer.

$$\begin{array}{r} \$8.25 \\ + 3.75 \\ \hline \end{array}$$

$$\begin{array}{r} \$6.25 \\ - 3.77 \\ \hline \end{array}$$

$$\begin{array}{r} \$5.47 \\ + 3.59 \\ \hline \end{array}$$

$$\begin{array}{r} \$9.85 \\ + 6.79 \\ \hline \end{array}$$

$$\begin{array}{r} \$4.05 \\ - .99 \\ \hline \end{array}$$

2. **Estimate** which product will be the greatest. Circle that problem. Then solve **all problems** to find the **actual products**.

$$\begin{array}{r} 23 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 54 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 42 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 63 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 423 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 456 \\ \times 1 \\ \hline \end{array}$$

$$\begin{array}{r} 923 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 813 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 504 \\ \times 2 \\ \hline \end{array}$$

3. Use a **clock** to help you solve these problems.

The movie is two hours long. It starts at 2:15 p.m. What time will the movie end?

You were one hour late for the party. You arrived at 3:00 p.m. What time did the party start?

Your piano lesson is usually scheduled for 11:30 a.m. Your teacher would like you to come 2 hours earlier this week. What time will he expect you?

Dad said you could spend $2\frac{1}{2}$ hours at the pool this afternoon. You arrive there at 1:15 p.m. What time will it be when you leave?

Week 5

1. **Estimate** which product will be the greatest. Circle the problem. Then find the **actual products** for each problem.

204	306	585	398	406	942	492	590	459
<u>x 4</u>	<u>x 3</u>	<u>x 4</u>	<u>x 3</u>	<u>x 4</u>	<u>x 9</u>	<u>x 8</u>	<u>x 7</u>	<u>x 3</u>

2. Draw pictures to show the following **fractions**. Label each picture with the correct fraction.

$$\frac{1}{2}$$

$$\frac{2}{4}$$

$$\frac{1}{4}$$

$$\frac{3}{10}$$

$$\frac{1}{10}$$

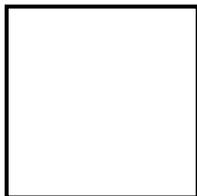
3. For her birthday, Megan received a \$10.00 gift certificate to the Clown Store. Name **four different combinations** of items that she could buy. Show how much each set would cost.

The Clown Store		
Funny Nose - \$2.00	White Make-up - \$3.62	Rubber Chicken - \$4.99
Goofy Teeth - \$1.50	Juggling Balls - \$7.00	Squirting Flower - \$2.75

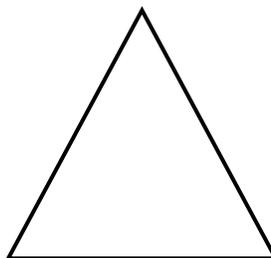
4. Use a centimeter ruler to measure the **perimeter** of each shape. *Reminder – perimeter is the distance around any figure.*



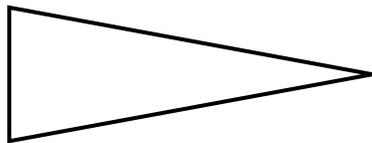
Perimeter=_____



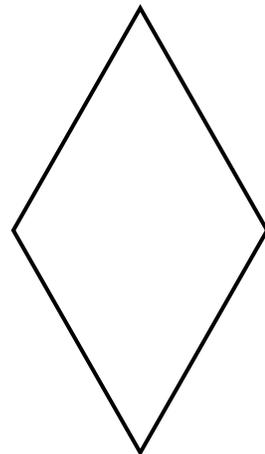
Perimeter=_____



Perimeter=_____



Perimeter=_____



P=_____

Week 6

1. Enjoy a **fraction** treat. You will need 12 edible items (for example, m&m's, crackers, raisins, pieces of cereal). Arrange your 12 edible items into thirds. Draw a picture to show how you did this. Use your picture to answer these questions. What is $\frac{1}{3}$ of 12? What is $\frac{3}{3}$ of 12? What is $\frac{2}{3}$ of 12?

Next arrange our 12 edibles into fourths. Draw a picture to show how you did this. What is $\frac{1}{4}$ of 12? What is $\frac{2}{4}$ of twelve? What is $\frac{3}{4}$ of 12?

2. Find the **quotient**. When you solve these problems write them in working form and show all steps.

Example: $22 \div 2$

$$\begin{array}{r} 11 \\ 2 \overline{)22} \\ \underline{-2} \\ 02 \\ \underline{-2} \\ 0 \end{array}$$

Note: Some problems may have remainders.

$46 \div 2 =$

$80 \div 2 =$

$58 \div 2 =$

$72 \div 2 =$

$31 \div 2 =$

$75 \div 5 =$

$65 \div 5 =$

$42 \div 5 =$

3. What's for lunch? Here are 4 breads and 3 sandwich fillings. How many **different** kinds of 1-bread and 1-filling sandwiches can you make? Choose a way to find all the combinations.

<i>bagel</i>	<i>wheat bread</i>	<i>pita bread</i>	<i>tortilla</i>
<i>cheese</i>	<i>turkey</i>	<i>ham</i>	

4. **Estimate.** If the sum or difference is **greater than 500**, circle the problem, then solve **all problems** to find the **actual answers**.

$$\begin{array}{r} 841 \\ - 357 \\ \hline \end{array}$$

$$\begin{array}{r} 486 \\ + 315 \\ \hline \end{array}$$

$$\begin{array}{r} 268 \\ + 714 \\ \hline \end{array}$$

$$\begin{array}{r} 851 \\ - 590 \\ \hline \end{array}$$

Week 7

1. Use the digits 3, 7, 4, and 9 to write four different **multiplication** problems (1 digit times 3 digit) as you can using only these four digits. Solve each of your problems.

Bonus! Which of your problems have the greatest **product**? Explain why.

2. Find the **pattern** and write the next three numbers.

36, 33, 30, 27, _____, _____, _____. 9, 14, 19, 24, _____, _____, _____.

Rule:_____

Rule:_____

5, 6, 8, 11, 15, _____, _____, _____. 1, 1, 2, 2, 4, 4, 8, _____, _____, _____.

Rule:_____

Rule:_____

8, 18, 28, 38, _____, _____, _____. 2, 6, 10, _____, _____, _____.

Rule:_____

Rule:_____

Week 8

1. Out of each group, choose the numbers that when **added** together will equal 1,000.

293, 690, 445, 707, 803

467, 523, 129, 404, 489

620, 597, 182, 403, 712

170, 186, 814, 840, 79

81, 91, 360, 844, 919

417, 318, 308, 417, 275

218, 675, 170, 159, 623

135, 334, 765, 666, 225

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222, 199, 316, 721, 684

53, 186, 714, 827, 814

2. Write a **division** problem to find out how many each friend will get (there may be some left over). Write the division problem in working form and show all of the steps.

9 muffins for 4 friends

8 apples for 3 friends

30 tickets for 5 friends

10 hats for 5 friends

19 stickers for 9 friends

24 pencils for 10 friends

11 balls for 11 friends

15 balloons for 6 friends

35 bananas for 6 friends

21 marbles for 6 friends

27 oranges for 8 friends

43 shells for 7 friends

3. Solve these **multistep** problems.

Sam, Mark, Bob, and Mitchell were playing darts. Sam, Mark, and Bob each scored 85 points in the game. The total score was 328 points. How many points did Mitchell score?

Pete and his dad wanted to take a 45 mile bike trip to Harper's Ferry. They rode for four hours. They rode eight miles each hour. How many more miles do they need to ride to get to Harper's Ferry?

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Mrs. Jones gave Tom, Ed, Lisa, and Patty a bag of 64 Jolly Ranchers to share equally. Ed ate 3 of his Jolly Ranchers. He took the rest of them home. How many Jolly Ranchers did Ed take home?

Connie works 25 hours each week at her mom's store. So far this week, she has worked six hours each day for three days. How many more hours does Connie have to work this week?

Brian had 63 nails. He used seven of them. He wanted to build toy planes with the nails he had left. He needed eight nails for each plane. How many planes could Brian make?

4. Draw **clocks** to show these times.

1. 6:30

2. 12:55

3. 4:15

4. 9:40

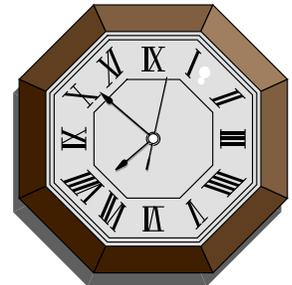
5. 1:35

6. 3:05

7. 2:20

8. 11:10

9. 5:45



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