Dear Parent, Guardians, and Students,

It's time to get ready for an exciting year of fourth grade math. All incoming fourth grade students will be required to complete a summer math packet prior to the start of fourth grade. The primary focus of the packet is to review and maintain skills that were developed in the third grade. No concept in this packet should be new to your third grader.

Here is some information to help you and your child get started on the math packet:
--Try to work on a few of the math problems each week (about thirty minutes), and your child should be able to complete this math packet by the start of the school year.
-- We ask students to use pencil and show all of the work they did in solving any word problems. Please help your child if they find any of the problems too difficult.
--This packet will be collected at the end of the second week of school and counted as a quiz grade. A baseline test will also be given at that time to see what skills your child needs to review.
--There is a great list of math websites on the *Varnum Brook* website. Go to www.nmiddlesex.mec.edu. At the bottom of the page, select *Varnum Brook*. Next, click on *Student Links*, and then click on the word *Math*. You will find several sites that provide practice games and activities on a variety of math topics
--The "appendix" at the back of the packet can be cut into cards and/or used to help with the packet.

Also, we feel you should be aware of the math skills your student should have mastered by the end of third grade. By now, your child should be:

1. Fluent in **basic math facts** addition, subtraction, and multiplication (multiplication of facts up to 10 x10). Many children need to move beyond the finger counting stage to memorize their math facts! Flashcard and homemade practice sheets are excellent ways to practice. An automatic recall of the basic facts will allow students to concentrate on solving more difficult math problems and concepts in fourth grade.
2. Able to use **simple measurement** tools to determine length (rulers and meter sticks) and tell **time (digital and analog)**. Students will need these skills to determine elapsed time and do simple conversion of units (inches to feet, etc.).
3. Able to understand **place value** of numbers up to 1,000 and be able to represent these in standard and expanded form (1,359= 1,000+300+50+9)
4. Able to understand that a **fraction** is an equal part of a whole, and write a fraction. Math vocabulary includes the words *numerator* and *denominator* for a third grader! Students also need be able to order fractions from largest to smallest.
5. Have an understanding of many concepts in **geometry**. Topics and vocabulary introduced this year included: names of 2 and 3- dimensional shapes. Students also learned the concepts of *right angle, area, perimeter, perpendicular, and parallel.*
6. Apply all of their math skills to solve one step **word problems**. A guide for problem solving steps is a part of this review packet.

We thank you very much for your help and support in making the start of the fourth grade year a success. We hope you enjoy your summer vacation, and we look forward to working with your child in the fall.

Sincerely,
Third Grade Teachers

Grade Three
Summer Math Packet

Student Name:

_____

Directions:

1. Do all your work in the boxes. If you do any work on an additional sheet, please attach it to the back of the packet and number the problems, so they are easy to find.

2. Record your answers on the lines that you see on the right-hand side of the page. Be sure to write your answer next to the number that corresponds with the number in the box.

1. 23,458 - 2,564	**2**. What is the rule for the pattern… 4,8,16,32,_____	**3.** What is the greatest number? 632,971 963,320 936,701 963,410	1._____ 2._____ 3._____
4. Write in expanded form. 4,756	**5**. 9,040 + 1,798	**6**. What do all ODD numbers end in?	4._____ 5._____ 6._____
7. Continue the pattern. 119, 122, 125, 128, _____	**8.** Which group is in order from least to greatest? A. 934, 954, 964 B. 567, 562, 560 C. 299, 285, 277 D. 482, 467, 479	**9**. 127,569 - 43,584	7._____ 8. _____ 9._____
10. 458 592 + 241	**11**. What is the value of the 2? 52,658	**12**. Write the expanded form. 502	10._____ 11._____ 12._____ _____

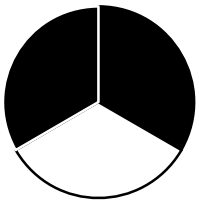
13. Sue baked 48 cookies and 5 cakes for a bake sale. She also made 61 cupcakes. How many more cupcakes that cookies did she make?			13._____
14. Write in standard form. **Two hundred ninety-nine thousand, six hundred thirty**	**15.** 1,478 - 549	**16.** Is the number 584 odd or even?	14._____ 15._____ 16._____
17. 187 +783	**18.** What is the RULE for the pattern… 18, 14, 10, _____	**19.** Round the following number to the nearest 10… 764	17._____ 18._____ 19._____
20. 338 93 + 776	**21.** Write in standard form. **Fifty-four thousand, two hundred seven**	**22.** 612 - 399	20._____ 21._____ 22._____
23. **Round the following number to the nearest 100…** **857**	**24.** **Is the number 1,487 odd or even?**	**25.** **What is the value of the 7?** **47,648**	23._____ 24._____ 25._____

26. An iceberg stood 78 ft. above water and 543 ft. under water. How tall was the entire iceberg?

26._____

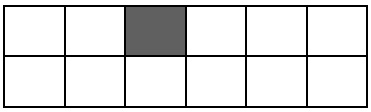
Write the fraction of each shaded part of the figure.

27.



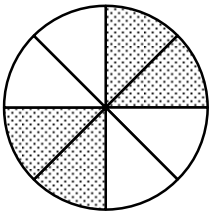
27._____

28.



28._____

29.



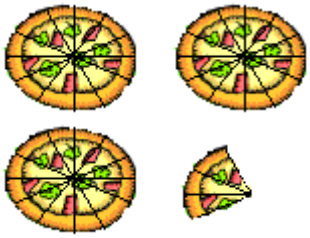
29._____

Write a mixed number for each picture.

30._____

30.

31.



31._____

32.

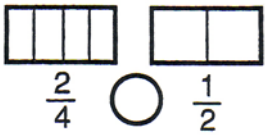
$$\frac{1}{8}+\frac{4}{8}=$$

32._____

Color the candy bars in each pair to show the fraction. Then compare the fractions.

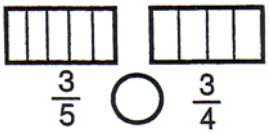
Write >, <, or = in each circle.

33.



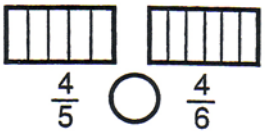
33._____

34.



34._____

35.



35._____

Arrange the numbers in ORDER, beginning with the smallest.

36.

$$\frac{1}{5},\ \frac{4}{5},\ \frac{2}{5}$$

36._____

37.

$$\frac{4}{10},\ \frac{9}{10},\ \frac{7}{10}$$

37._____

38.

$$\frac{5}{12},\ 1,\ \frac{3}{12}$$

38._____

39. Trevor divided his candy into 5 equal parts. He ate 3/5 of his candy. How much did he have left?

39._____

40. **8 x 4 =**	**41.** **7 x 3 =**	**42.** **8 x 6 =**
43. **5 x 9 =**	**44.** $9\overline{)81}$	**45.** $5\overline{)30}$
46. **43** **x 5**	**47.** **86** **x 4**	**48.** **93** **x 4**

40._____

41._____

42._____

43._____

44._____

45._____

46._____

47._____

48._____

49. I bought 4 bags of oranges. There were 8 oranges in each bag. How many oranges did I buy?

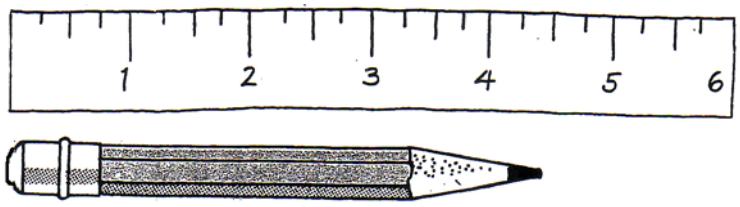
49._____

50. Six people share 30 markers. How many markers does each person get?

50._____

51. Measure the object to the nearest ½ inch.

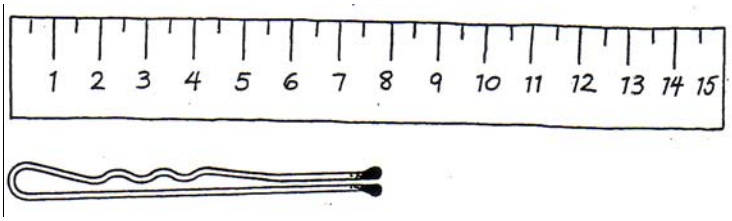
INCHES



51._____

52. Measure the object to the nearest centimeter.

CENTIMETER



52._____

What time is it?

53.

53._____

54

54._____

55.

55._____

56.

Melissa started painting a picture at 2:15p.m.
She completed the picture at 6:05p.m.

She took _____h _____min to paint the picture.

56._____h

_____min

57. Identify the 2 D shape.

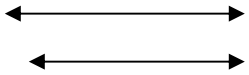
57._____

58. Identify the 2 D shape.

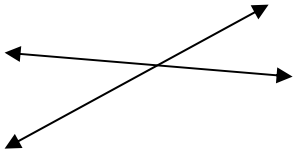
58._____

Identify if the lines are
INTERSECTING, PARALLEL OR PERPENDICULAR.

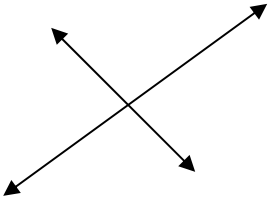
59.



60.



61.



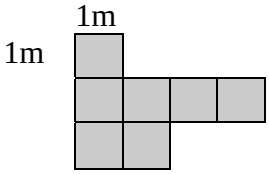
62.
Find the perimeter.

20 ft

12 ft 12 ft

20 ft

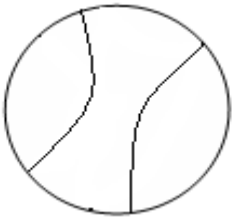
63.
Find the area.



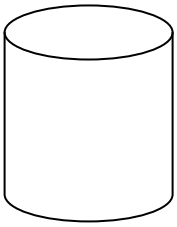
64.
Is this an acute, right or obtuse angle?

Write cube, sphere, cylinder, cone, pyramid or rectangular prism for the objects below.

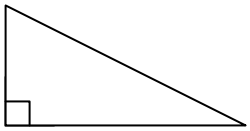
65.



66.

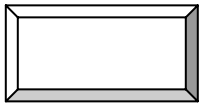


67.

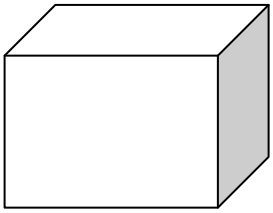


Find the number of Faces, Edges, and Corners

68.



69.



70. **Decode**

remmus nuf
a evah

59._____

60._____

61._____

62._____

63._____

64._____

65._____

66._____

67._____

68.Faces_____
Edges _____
Corners_____

69.Faces_____
Edges _____
Corners_____

70._____

CHALLENGE PROBLEMS
(OPTIONAL)

1. Matthew bought 6 bags of beads. Each bag contained 100 beads. He repacked them into packages of 8 beads each. How many packages did he get?	2. $\begin{array}{r} 386 \\ \times \quad 20 \\ \hline \end{array}$	1._____ 2._____
3. Miss Meyer saves $105 per month. How much does she save in 9 months?	4. $6\overline{)3600}$	3._____ 4._____
5. Bill has $2.75. His father gives him $13.50 more. Bill then uses his money to buy a dictionary, which costs $14.30. How much money does Bill have after buying the dictionary?	6. $2\frac{1}{2} + 1\frac{1}{2} =$	5._____ 6._____
7. Sally has two piggy banks. The first piggy bank contains $20.07 and the second one contains $30.15. Sally takes $3.19 from the first piggy bank. How much more money does the second piggy bank now contain than the first one?	8. Put the fraction in simplest form. $\frac{5}{15}$	7._____ 8. _____

CHALLENGE PROBLEMS
(OPTIONAL)

9. There are 15 science books on the bookshelf. There are 10 more English books than science books. How many books are there altogether?	**10.** Put the following fractions in order. $\frac{2}{3}$ $\frac{3}{4}$ $\frac{1}{2}$	9._____ 10._____
11. There are 20 cats. If ¾ of the cats play with the yarn, how many cats like to play with yarn?	**12.** How many centimeters are in a meter?	11._____ 12._____
13. A snake begins shedding its skin at 6:15p.m. It takes 1 hour and 55 minutes to completely crawl out of its skin. When is it done?	**14.** Name 3 multiples of 6.	13._____ 14._____
15. Sara played basketball for 50 minutes. Then she played soccer for 1 hour and 20 minutes. Finally, she swam for 30 minutes. How long did Sara play sports for?	**16.** 34 + 14 = 6 x ___	15._____ 16. _____

INTERESTING MATH FACTS & INFORMATION