Summer Math Packet
For Students Entering Grade 4

Student's Name ________________

Grade 4 Class ____________________

June 2013

Review and Practice of
Fairfield Math Objectives
and CMT Objectives

Summer 2013 Math Packet
For Students Entering Grade 4
1. **Place Value**

A Solve problems involving 1 or 10 more or less

1. On Monday, the doughnut shop sold 54 cups of coffee before noon and 10 more cups of coffee after noon. How many cups of coffee did the doughnut shop sell on Monday?

   a. 44  
   b. 54  
   c. 64  
   d. 59

2. There were 47 people at last night's concert. We expect 10 less people to come tonight. How many people do we expect to come tonight?

   a. 47  
   b. 37  
   c. 57  
   d. 27

1 Place Value

B Identify alternative forms of expressing whole numbers using expanded notation

3. Which means the same as 400 + 20 + 3?

   a. 40,203  
   b. 400,203  
   c. 4,023  
   d. 423

4. Which means the same as 525?

   a. 500 + 200 + 50  
   b. 500+20+5  
   c. 50+20+5  
   d. 500+20+50

1 Place Value

C Identify alternative forms of expressing whole numbers using regrouping

5. Which means the same as 4 tens 14 ones?

   a. 44  
   b. 414  
   c. 54  
   d. 4014
6. Which means the same as 6 hundreds 7 tens 13 ones
   a. 673
   b. 671
   c. 683
   d. 613

Place Value
Use place value concepts to interpret the meaning of numbers

7. In which number does the 4 have the GREATEST value?
   a. 5364
   b. 4635
   c. 6435
   d. 3645

8. In which number does the 6 have the LEAST value?
   a. 9628
   b. 2986
   c. 8962
   d. 6289

2. Pictorial Representations of Numbers
A. Relate pictorial representations using base ten blocks to whole numbers and vice versa

9. 
   a. 334
   b. 443
   c. 1,343
   d. 343
10. a. 514
   b. 541
   c. 5,514
   d. 414

2. Pictorial Representations of Numbers
   B Identify, label or shade fractional parts of regions and sets

11. What fraction of the group is shaded?

   a. 1/2
   b. 2/3
   c. 3/2
   d. 2/5

12. Shade 1/4 of the circle

13. Which list shows the numbers in order from LEAST to GREATEST?

   a. 53, 63, 54, 62
   b. 54, 53, 62, 63
   c. 53, 54, 62, 63
   d. 53, 63, 54, 62
14. Which group of numbers is in order from LEAST to GREATEST?

a. 71, 17, 45, 21
b. 35, 52, 71, 18
c. 29, 36, 72, 81
d. 41, 14, 54, 65

15. Tammy has $.3.00 to spend for lunch. Which item costs more than she wants to spend?

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cheese</td>
<td>$3.00</td>
</tr>
<tr>
<td>Tuna</td>
<td>$3.75</td>
</tr>
<tr>
<td>Sandwich</td>
<td>$.75</td>
</tr>
<tr>
<td>Milk</td>
<td>$.80</td>
</tr>
</tbody>
</table>

a. $3.00  b. $3.75  c. $.75  d. $.80

16. Mark wants to buy a new telephone for his office. He does not want to spend more than $55. Which phone costs MORE than he wants to spend?

<table>
<thead>
<tr>
<th>Phone</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>$79</td>
</tr>
<tr>
<td>b.</td>
<td>$25</td>
</tr>
<tr>
<td>c.</td>
<td>$47</td>
</tr>
<tr>
<td>d.</td>
<td>$36</td>
</tr>
</tbody>
</table>

17. Beth read 18 books last summer. This number is CLOSEST to

a. 10  
b. 15  
c. 20  
d. 25

18. Cleo and Roger rented video tapes for $19 and spent $28 to buy cassette tapes. ABOUT how much did they spend?

a. $30  
b. $40  
c. $50  
d. $60
4. Order, Magnitude and Rounding of Numbers
D Identify points representing whole numbers on a number line and vice versa

19. The number 265 would be CLOSEST to which point marked on the number line?
(a) A
(b) B
(c) C
(d) D

20. Complete a number line:

Draw and label a point on the number line that represents 325.

5 Models for Operations
A Relate multiplication and division facts to rectangular arrays and pictures

21. Which multiplication fact is represented by this array

(a) 2 x 2
(b) 8 x 1
(c) 2 x 4
(d) 4 x 4
22. Which division fact is represented by this picture?

![Picture with 12 leaves in 3 groups of 4]

a. $6 ÷ 3 = 2$

b. $18 ÷ 6 = 3$

c. $6 ÷ 2 = 3$

d. $18 ÷ 3 = 6$

23. Martha had 6 plants in her front yard and 4 plants in her backyard. Which number sentence could be used to find out how many plants Martha had all together?

a. $6 \times 4 = \square$

b. $6 - 4 = \square$

c. $6 + 4 = \square$

d. $6 ÷ 4 = \square$

24. There are 4 plates that each have 5 cookies on them. Which equation will tell you how many cookies there are in all?

a. $4 + 5$

b. $4 ÷ 5$

c. $5 + 4$

d. $4 \times 5$

25. Write a story problem that can be solved using the number sentence $9 + 6 = \square$

26. Write a story problem that can be solved using the number sentence $17 - 9 = \square$
6. Basic Facts
   A  Add and subtract facts to 18

27. 17 – 8 = _______
   a. 9 
   b. 25 
   c. 8 
   d. 11 

28. 5 + 12 = _______
   a. 7 
   b. 60 
   c. 8 
   d. 17 

6 Basic Facts
   B Multiply and divide by 2, 5, or 10

29. 40 ÷ 5 = _______
   a. 20 
   b. 45 
   c. 9 
   d. 8 

30. 10 x 6 = _______
   a. 16 
   b. 61 
   c. 60 
   d. 600 

7 Computation with Whole Numbers and Decimals
   A Add and subtract 1- and 2-digit whole numbers without regrouping

31. 95
    - 62
    _____

   a. 37 
   b. 33 
   c. 35 
   d. 23
32. 

\[
52 \\
+27
\]

a. 69 

b. 25 

c. 79 

d. 80 

9 Computation with Whole Numbers and Decimals 
B Add 1- and 2-digit whole numbers with regrouping 

33. 

\[
54 \\
+27
\]

a. 23 

b. 91 

c. 82 

d. 81 

34. 

\[
87 \\
+5
\]

a. 91 

b. 92 

c. 82 

d. 95 

9 Solve Word Problems 
A Solve simple story problems involving addition or subtraction 

35. The Davidson's went on a 300-mile boat trip. On the first day they traveled 65 miles. On the second day of their trip they went 35 miles. How many miles did they travel on these 2 days? 

a. 30 

b. 35 

c. 100 

d. 400 

36. A paint store ordered an extra 125 cans of paint for a sale. On Monday they sold 31 cans of paint. On Tuesday, 53 cans of paint were sold. How many more cans of paint were sold on Tuesday than on Monday? 

a. 93 

b. 22 

c. 84 

d. 24
37. Emily scored 413 points on a video game. Mallory's score was 118 and Laura's score was 215. Show how to find the difference between Laura's score and Emily's score.

a. \(413 + 215\)

b. \(118 + 215\)

c. \(413 + 118\)

d. \(413 - 215\)

38. At the Osbom Hill School Carnival Amanda won 36 prize tickets. Julie collected 61 and Robin got 44. Show how to find the sum of Amanda's and Julie's tickets.

a. \(61 - 36\)

b. \(36 + 61\)

c. \(36 + 44\)

d. \(97 + 44\)

39. Gregory needs to add 395 to 789. Which of the following would be the BEST for Gregory to use to ESTIMATE the sum?

a. \(400 + 700\)

b. \(400 + 800\)

c. \(300 + 800\)

d. \(300 + 700\)

40. Buzz needs to subtract 446 from 875. Which of the following would be the BEST for Buzz to use to ESTIMATE the difference?

a. \(800 - 400\)

b. \(800 - 500\)

c. \(900 - 400\)

d. \(900 - 500\)
11. Estimating Solutions to Problems
   A  Estimate a reasonable answer to a problem

41. Tarzan and Jane rented video tapes for $9 and spent $17 to buy cassette tapes. ABOUT how much did they spend?
   
   a.  a little less than $20
   b.  a little more than $20
   c.  a little less than $30
   d.  a little more than $30

42. Dr. Judy had $80 before she spent $39.75 for a necklace. ABOUT how much money did she have left?

   a.  a little less than $30
   b.  a little more than $30
   c.  a little less than $40
   d.  a little more than $40

---

43. When Jo looked at her watch it showed the time below. What time did it show?

   a.  4:00       b.  4:25
   c.  4:30       d.  4:45

44. June went to the beach at half past 3. Which clock shows this time?

   a.  
   b.  
   c.  
   d.  
45. **July**

<table>
<thead>
<tr>
<th>Sun</th>
<th>Mon</th>
<th>Tues</th>
<th>Wed</th>
<th>Thur</th>
<th>Fri</th>
<th>Sat</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>18</td>
<td>19</td>
<td>20</td>
<td>21</td>
<td>22</td>
<td>23</td>
<td>24</td>
</tr>
<tr>
<td>25</td>
<td>26</td>
<td>27</td>
<td>28</td>
<td>29</td>
<td>30</td>
<td></td>
</tr>
</tbody>
</table>

Justine got her allowance on the 4th day of this month. What day was that?

a. Monday  
b. Wednesday  
c. Saturday  
d. Sunday

46. The clock says 9:15. What time will it be in a half hour?

a. 9:45  
b. 9:30  
c. 10:15  
d. 10:00

15 Approximating Measures
A Estimate lengths and areas

47.

ABOUT how many footstools would be the same height as the chair?

a. 1  
b. 3  
c. 4  
d. 5
48. 

ABOUT how many paperclips would be the same length as the pencil?

a. 1  
b. 2  
c. 3  
d. 4

49. 

Use your ruler to measure the length of the wagon in this picture to the NEAREST centimeter.

a. 5 centimeters  
b. 8 centimeters  
c. 12 centimeters  
d. 15 centimeters

50. 

Use your ruler to measure the length of the fish in this picture to the NEAREST centimeter.

a. 2 centimeters  
b. 3 centimeters  
c. 4 centimeters  
d. 6 centimeters
16 Customary and Metric Measure
B Identify appropriate customary or metric units of measure for a given situation

51. ABOUT how long is a new pencil?
   a. 7 inches
   b. 7 feet
   c. 7 years
   d. 7 miles

52. ABOUT how wide is your finger?
   a. 1 gram
   b. 1 centimeter
   c. 1 meter
   d. 1 kilometer

17 Geometric Shapes and Properties
A Identify geometric shapes and figures including number of angles and sides of polygons

53. How many angles does this shape have?
   a. 4
   b. 5
   c. 6
   d. 7

54. What is the name of a geometric figure with 5 sides?
   a. pentagon
   b. square
   c. quadrilateral
   d. hexagon

17 Geometric Shapes and Properties
B Draw geometric shapes and figures

55. Draw a trapezoid
56. Draw a rectangle

19 Tables, Graphs, and Charts
A Identify correct information from tables, graphs, and charts

57. The graph below shows how many tropical fish are in Dan, Jesse, Tamara, Neil and Maria's aquarium.

If Neil gets 1 more tropical fish, how many fish will be in his aquarium?

a. 2 b. 4 c. 14 d. 12

58. Altogether, how many points do Cyl, Josh, and Ted have?

a. 4 b. 8 c. 12 d. 14
The table shows places students went over a summer vacation.

<table>
<thead>
<tr>
<th>Places</th>
<th>Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>summer camp</td>
<td>5</td>
</tr>
<tr>
<td>Beach</td>
<td>13</td>
</tr>
<tr>
<td>Pool</td>
<td>15</td>
</tr>
<tr>
<td>summer school</td>
<td>4</td>
</tr>
</tbody>
</table>

Complete the BAR graph to show the same information.
60. Draw a bar graph using the following information.

<table>
<thead>
<tr>
<th>Name</th>
<th>Amount of Money</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan</td>
<td>$12</td>
</tr>
<tr>
<td>Ginny</td>
<td>$6</td>
</tr>
<tr>
<td>June</td>
<td>$8</td>
</tr>
<tr>
<td>Nan</td>
<td>$14</td>
</tr>
<tr>
<td>Carole</td>
<td>$6</td>
</tr>
</tbody>
</table>

22. Patterns
Extend or complete patterns involving whole numbers and attributes or identify or state rules for given patterns.

61. Draw a figure that goes in the empty space. Write a sentence to explain your answer.

   [Blank] [Blank] [Blank] [Blank] [Blank] [Blank]

62. What is the next number in your pattern? Write the number. Then write a sentence that explains why you wrote that number.

   61, 59, 57, 55, _____
63. If Robin spins this spinner once, on which color is the arrow MOST likely to land?

a. Red  
b. Blue  
c. Green  
d. Yellow

64. There were 12 red, 15 yellow and 7 green candies in a dish. If Johnny chooses one piece without looking, which color candy is LEAST likely to be picked?

a. red  
b. yellow  
c. green  
d. red or yellow

65. Marie bought these lollipops at the fair:

How are the lollipops the SAME?

a. Size  
b. Shape  
c. Color  
d. Color and shape
66.

How are these spiders different?

a. Size  
b. Shape  
c. Color  
d. Shape and Color

24 Classification and Logical Reasoning
B  Sort objects into 2 groups by common attribute

67.

Sort the animals into 2 groups so that each group has something in common. Show how you grouped the animals by writing its name onto the chart. Explain how you decided to group the animals.

68. Sort these figures into 2 groups so that the figures in each group have something in common. Show how you grouped the figures by writing the letter from each figure onto the chart. Then explain how you decided to group the figures.
69. Billy wins a $25.00 shopping spree

1. Decide what Billy could buy. Write about your choices.
2. Make a receipt that shows how many items of each price he bought
3. Show the total he spent and credit he has left, if any.
4. Repeat for another way Billy could spend the money.

<table>
<thead>
<tr>
<th>Science Museum Store Price List</th>
</tr>
</thead>
<tbody>
<tr>
<td>$3.00</td>
</tr>
<tr>
<td>2. Crystal and gem</td>
</tr>
</tbody>
</table>

70. Breakfast Choices

Samantha has the following types of food:

6 donuts that cost 20¢ each
3 bagels that cost 30¢ each
7 pastries that cost 40¢ each
4 granola bars that cost 50¢ each

To make breakfast bags for 5 groups of students, Samantha needs to sort ALL 20 of the food items into 5 bags.

- Each bag must contain the same total number of items.
- Each bag must contain at least three different types of items.
- No two bags can be filled exactly like another bag.

Show how Samantha can put the items into each bag and then find the total cost of each bag.
71. Jenny is selling muffins at a stand. She sells the muffins in packs of 2 and 4. This chart shows how she planned to sell each of them:

<table>
<thead>
<tr>
<th>Muffins</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-pack</td>
<td>$1.50</td>
</tr>
<tr>
<td>4-pack</td>
<td>$2.50</td>
</tr>
</tbody>
</table>

Jenny sorted the 60 muffins into the two types of packs. When she was done, she found that she had the same number of 2-packs as 4-packs. Show the number and types of muffin packs Jenny sold at the stand. Show how you got your answer.

72. **Outfits**

Debbie is going to visit her cousins for the weekend. She packs a pair of purple pants, a pair of jeans, and a pair of blue shorts. For shirts she takes a blue tee-shirt, a white tank top, a yellow blouse, and a green shirt. How many different outfits can she make?

A picture or table will help you to organize the information.

Write a description of how you figured out your answer.