John P. Freeman
Optional School
Zone 12
2023 Summer
4th Grade Packet

Student Name ________________

(Please be sure to write your initials on the line at the bottom of each page.)

This packet contains math concepts that may or may not have been taught in your previous classes but are important for 4th grade. Students enrolled in 4th grade Math for the 2023-2024 school year are expected to submit a completed packet during the first week of school (August 7-11). Exact due dates/procedures will be discussed on August 7th.
4th Grade Summer Math Packet Instructions

Student Name ______________________________________________________________

1. This packet has 6 sections, and it is recommended that students work on one section each week during the summer. It is **NOT** recommended to complete this packet immediately following school dismissal **nor** the night before the packet is due. Student learning is most effective if the packet is worked on throughout the summer at a steady pace.

2. You should complete the problems without a calculator, and you should **SHOW ALL YOUR WORK**. Use additional paper is needed. No credit will be provided if your work is not shown.

3. After completing a section, rate your understanding of each week’s topic by circling the image in the chart below.

   - **Smiley face** – You understand ALL the concepts for that week and would be able to teach it to another student.
   - **Neutral face** – You understand the concepts for the most part
   - **Confused face** – You do not understand these concepts and need help reviewing.

<table>
<thead>
<tr>
<th>WEEK</th>
<th>MATH TOPIC</th>
<th>MY RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Calculating each Difference</td>
<td><img src="smiley.png" alt="" /> <img src="neutral.png" alt="" /> <img src="confused.png" alt="" /></td>
</tr>
<tr>
<td>2</td>
<td>Multiplying and Dividing</td>
<td><img src="smiley.png" alt="" /> <img src="neutral.png" alt="" /> <img src="confused.png" alt="" /></td>
</tr>
<tr>
<td>3</td>
<td>Fraction Representation</td>
<td><img src="smiley.png" alt="" /> <img src="neutral.png" alt="" /> <img src="confused.png" alt="" /></td>
</tr>
<tr>
<td>4</td>
<td>Writing Numbers</td>
<td><img src="smiley.png" alt="" /> <img src="neutral.png" alt="" /> <img src="confused.png" alt="" /></td>
</tr>
<tr>
<td>5</td>
<td>Calculate the Product</td>
<td><img src="smiley.png" alt="" /> <img src="neutral.png" alt="" /> <img src="confused.png" alt="" /></td>
</tr>
<tr>
<td>6</td>
<td>Solving for the Variable</td>
<td><img src="smiley.png" alt="" /> <img src="neutral.png" alt="" /> <img src="confused.png" alt="" /></td>
</tr>
</tbody>
</table>
What do I do if I don’t understand something?

- Use your resources (online help sites, iReady, videos, parents, siblings, etc.)
- You may use the reference links in this packet to help you.
- Make a note of the topic/question on the rating chart and ask your teacher to review it during the first week of school.

What happens next?

- Concepts will be reviewed and discussed during the first week of school.
- Students will receive both a participation grade and an assessment grade, based on the packet completion. (Your teacher will discuss this with you August 11, 2023.)

We are excited about working with all the students entering 4th grade in 2023-2024. We want all students to feel prepared, confident, and successful for all the important new concepts they will learn next year.
<table>
<thead>
<tr>
<th>WEEK</th>
<th>MATH TOPIC</th>
<th>VIDEO &amp; TUTORIAL LINKS</th>
</tr>
</thead>
</table>
| 1    | Calculating each Difference    | Standard: 4.OA.A.1  
- https://youtu.be/wwO6DjL_wFw
- (108) Adding & Subtracting! | Mini Math Movies | Scratch Garden - YouTube                                                      |
| 2    | Multiplying and dividing       | Standard: 4.OA.A.1  
- (108) 4th Grade - Math - Multiplication and Division Facts - Topic Overview - YouTube  
- Relating division to multiplication (video) | Khan Academy                                                                                             |
| 3    | Fraction Representation        | Standard: 4.NF.A.1, 4.NF.A.2, 4.NF.B.3, & 4.NF.B.4  
- https://youtu.be/jgWqSjgMAtw                                                                 |
| 4    | Writing Numbers                | Standard: 4.NBT.A.1, 4.NBT.A.2, 4.NBT.A.3, 4.NBT.A.4, 4.NBT.A.5  
- https://youtu.be/jgWqSjgMAtw                                                                 |
| 5    | Calculate the Product          | Standard: 4.OA.A.1  
- https://youtu.be/jgWqSjgMAtw                                                                 |
<p>| 6    | Solving for the Variable       |                                                                       | <a href="https://youtu.be/jgWqSjgMAtw">https://youtu.be/jgWqSjgMAtw</a>                                                                 |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>705</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>-136</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>795</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>-184</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>725</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>-371</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>249</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>-118</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Week 2: Multiplying and Dividing

1. \[ \begin{array}{c}
44 \\
\times 4 \\
\hline
\end{array} \]

2. \[ \begin{array}{c}
35 \\
\times 8 \\
\hline
\end{array} \]

3. \[ \begin{array}{c}
91 \\
\times 2 \\
\hline
\end{array} \]

4. \[ \begin{array}{c}
19 \\
\times 8 \\
\hline
\end{array} \]

5. \[ \begin{array}{c}
77 \\
\times 2 \\
\hline
\end{array} \]

6. \[ \begin{array}{c}
33 \\
\times 4 \\
\hline
\end{array} \]

7. \[ \begin{array}{c}
34 \\
\times 4 \\
\hline
\end{array} \]

8. \[ \begin{array}{c}
98 \\
\times 5 \\
\hline
\end{array} \]

9. \[ \begin{array}{c}
50 \\
\times 7 \\
\hline
\end{array} \]

10. \[ \begin{array}{c}
17 \\
\times 7 \\
\hline
\end{array} \]

11. \[ \begin{array}{c}
52 \\
\times 1 \\
\hline
\end{array} \]

12. \[ \begin{array}{c}
63 \\
\times 8 \\
\hline
\end{array} \]

13. \[ \begin{array}{c}
18 \\
\times 6 \\
\hline
\end{array} \]

14. \[ \begin{array}{c}
28 \\
\times 5 \\
\hline
\end{array} \]

15. \[ \begin{array}{c}
51 \\
\times 3 \\
\hline
\end{array} \]
1. 10 ÷ 1 = _______  
2. 22 ÷ 11 = _______  
3. 20 ÷ 4 = _______  

4. 96 ÷ 12 = _______  
5. 48 ÷ 12 = _______  
6. 60 ÷ 6 = _______  

7. 110 ÷ 11 = _______  
8. 30 ÷ 3 = _______  
9. 18 ÷ 3 = _______  

10. 54 ÷ 6 = _______  
11. 36 ÷ 6 = _______  
12. 50 ÷ 10 = _______  

13. 56 ÷ 8 = _______  
14. 30 ÷ 10 = _______  
15. 2 ÷ 2 = _______  

16. 70 ÷ 7 = _______  
17. 27 ÷ 3 = _______  
18. 80 ÷ 10 = _______  

19. 108 ÷ 12 = _______  
20. 60 ÷ 12 = _______  
21. 28 ÷ 4 = _______  

22. 3 ÷ 3 = _______  
23. 5 ÷ 5 = _______  
24. 28 ÷ 7 = _______  

25. 35 ÷ 7 = _______  
26. 10 ÷ 10 = _______  
27. 20 ÷ 2 = _______
Week 3: Fraction Representation

Color in the second fraction so it is equivalent to the first fraction, then write in the numerators and denominators of both fractions.

1) \( \frac{6}{8} = \frac{3}{4} \)

3) \( \quad = \quad \)

5) \( \quad = \quad \)

7) \( \quad = \quad \)

2) \( \quad = \quad \)

4) \( \quad = \quad \)

6) \( \quad = \quad \)

8) \( \quad = \quad \)
Color in the second fraction so it is equivalent to the first fraction, then write in the numerators and denominators of both fractions.

1) 

\[ \underline{\quad} = \underline{\quad} \]

2) 

\[ \underline{\quad} = \underline{\quad} \]

3) 

\[ \underline{\quad} = \underline{\quad} \]

4) 

\[ \underline{\quad} = \underline{\quad} \]

5) 

\[ \underline{\quad} = \underline{\quad} \]

6) 

\[ \underline{\quad} = \underline{\quad} \]

7) 

\[ \underline{\quad} = \underline{\quad} \]

8) 

\[ \underline{\quad} = \underline{\quad} \]
Write in the missing fraction and color in the pie charts.

1) \( \frac{2}{8} = \) ___

2) \( \frac{4}{6} = \) ___

3) \( \frac{1}{4} = \) ___

4) \( \frac{1}{8} = \) ___

5) \( \frac{2}{6} = \) ___

6) \( \frac{5}{8} = \) ___

7) \( \frac{2}{16} = \) ___

8) \( \frac{4}{8} = \) ___
Week #4 Writing Numbers

Write in expanded form.

1) 657

2) 873

3) 75

4) 64

5) 326

6) 31

7) 749

Write in standard form.

1) 500 + 80 + 4

2) 900 + 70 + 5

3) 20 + 3

4) 400 + 30 + 9

5) 100 + 5

6) 90 + 6

7) 80 + 2
<table>
<thead>
<tr>
<th>Expression</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>twenty-five</td>
<td>25</td>
</tr>
<tr>
<td>forty-one</td>
<td></td>
</tr>
<tr>
<td>fifty-six</td>
<td></td>
</tr>
<tr>
<td>twenty</td>
<td></td>
</tr>
<tr>
<td>seventy-five</td>
<td></td>
</tr>
<tr>
<td>seventy</td>
<td></td>
</tr>
<tr>
<td>thirty-nine</td>
<td></td>
</tr>
<tr>
<td>eighty-two</td>
<td></td>
</tr>
</tbody>
</table>
Week #5

Find the product.

1. \[36 \times 15\]

2. \[36 \times 55\]

3. \[80 \times 71\]

4. \[94 \times 37\]

5. \[78 \times 95\]

6. \[71 \times 26\]

7. \[49 \times 97\]

8. \[78 \times 87\]

9. \[71 \times 81\]
Find the product.

1. \[
\begin{array}{c}
28 \\
\times 23 \\
\hline
\end{array}
\]

2. \[
\begin{array}{c}
22 \\
\times 82 \\
\hline
\end{array}
\]

3. \[
\begin{array}{c}
49 \\
\times 63 \\
\hline
\end{array}
\]

4. \[
\begin{array}{c}
92 \\
\times 35 \\
\hline
\end{array}
\]

5. \[
\begin{array}{c}
18 \\
\times 18 \\
\hline
\end{array}
\]

6. \[
\begin{array}{c}
75 \\
\times 23 \\
\hline
\end{array}
\]

7. \[
\begin{array}{c}
51 \\
\times 73 \\
\hline
\end{array}
\]

8. \[
\begin{array}{c}
71 \\
\times 23 \\
\hline
\end{array}
\]

9. \[
\begin{array}{c}
70 \\
\times 39 \\
\hline
\end{array}
\]
Solve each equation.

1) \( 10 = z + 6 \)  
2) \( 8y = 48 \)

3) \( q - 12 = 1 \)  
4) \( 18 = \frac{a}{2} \)

5) \( \frac{r}{3} = 7 \)  
6) \( 11 = m - 4 \)

7) \( t - 19 = 2 \)  
8) \( 1 + s = 3 \)

9) \( 24 = 4c \)  
10) \( \frac{v}{5} = 9 \)