

John P. Freeman Optional School

Zone 6

2023 Summer 3rd 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 3rd grade. Students enrolled in 3rd grade Math for the 2023-2024 school year are expected to submit a completed packet during the first week of school (August 7-11). The packet is **DUE FRIDAY AUGUST 11, 2023**.

3rd 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 if 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.

WEEK	MATH TOPIC	MY RATING		
1	Addition and Subtraction with Regrouping			
2	Using Grouping to Multiply			
3	Using Arrays to Multiply			
4	Represent Multiplication as Repeated Addition			
5	Understanding Division			

6	Mixed Review			
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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. The packet is **DUE FRIDAY AUGUST 11, 2023**.

We are excited about working with all of the students entering 3rd grade in 2023-2024. We want all students to feel prepared, confident, and successful for all of the important new concepts they will learn next year.



Rising 3rd Grade RESOURCES

WEEK	MATH TOPIC	VIDEO & TUTORIAL LINKS
View the assigned tutorial videos and complete the quizzes as needed.		
1	Addition and Subtraction with Regrouping	Support Link 1 Support Link 2 Game
2	Using Grouping to Multiply	Support Link 1 Support Link 2 Game
3	Using Arrays to Multiply	Support Link 1 Support Link 2 Game
4	Represent Multiplication as Repeated Addition	Support Link 1 Support Link 2 Game
5	Understanding Division	Support Link 1 Support Link 2 Game
6	Mixed Review	Use previous links to help support you on the mixed review questions.

Week 1: _____

Calculate each difference.

$$\begin{array}{r} 105 \\ - 63 \\ \hline \end{array}$$

$$\begin{array}{r} 548 \\ - 97 \\ \hline \end{array}$$

$$\begin{array}{r} 731 \\ - 65 \\ \hline \end{array}$$

$$\begin{array}{r} 275 \\ - 83 \\ \hline \end{array}$$

$$\begin{array}{r} 829 \\ - 16 \\ \hline \end{array}$$

$$\begin{array}{r} 684 \\ - 97 \\ \hline \end{array}$$

$$\begin{array}{r} 447 \\ - 73 \\ \hline \end{array}$$

$$\begin{array}{r} 879 \\ - 28 \\ \hline \end{array}$$

$$\begin{array}{r} 577 \\ - 87 \\ \hline \end{array}$$

$$\begin{array}{r} 382 \\ - 13 \\ \hline \end{array}$$

$$\begin{array}{r} 793 \\ - 42 \\ \hline \end{array}$$

$$\begin{array}{r} 739 \\ - 65 \\ \hline \end{array}$$

$$\begin{array}{r} 963 \\ - 27 \\ \hline \end{array}$$

$$\begin{array}{r} 729 \\ - 64 \\ \hline \end{array}$$

$$\begin{array}{r} 611 \\ - 12 \\ \hline \end{array}$$

Calculate each sum.

$$\begin{array}{r} 95 \\ + 13 \\ \hline \end{array}$$

$$\begin{array}{r} 28 \\ + 99 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ + 59 \\ \hline \end{array}$$

$$\begin{array}{r} 45 \\ + 32 \\ \hline \end{array}$$

$$\begin{array}{r} 25 \\ + 30 \\ \hline \end{array}$$

$$\begin{array}{r} 33 \\ + 53 \\ \hline \end{array}$$

$$\begin{array}{r} 53 \\ + 62 \\ \hline \end{array}$$

$$\begin{array}{r} 24 \\ + 46 \\ \hline \end{array}$$

$$\begin{array}{r} 51 \\ + 79 \\ \hline \end{array}$$

$$\begin{array}{r} 49 \\ + 77 \\ \hline \end{array}$$

$$\begin{array}{r} 56 \\ + 96 \\ \hline \end{array}$$

$$\begin{array}{r} 22 \\ + 29 \\ \hline \end{array}$$

$$\begin{array}{r} 59 \\ + 77 \\ \hline \end{array}$$

$$\begin{array}{r} 43 \\ + 97 \\ \hline \end{array}$$

$$\begin{array}{r} 63 \\ + 30 \\ \hline \end{array}$$

Multiplying by 0 (A)

Name: _____

Date: _____

Score: _____

Calculate each product.

$5 \times 0 = \square$

$4 \times 0 = \square$

$10 \times 0 = \square$

$9 \times 0 = \square$

$3 \times 0 = \square$

$6 \times 0 = \square$

$8 \times 0 = \square$

$2 \times 0 = \square$

$1 \times 0 = \square$

$7 \times 0 = \square$

$12 \times 0 = \square$

$11 \times 0 = \square$

$0 \times 0 = \square$

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$7 \times 0 = \square$

$3 \times 0 = \square$

$1 \times 0 = \square$

$12 \times 0 = \square$

$2 \times 0 = \square$

Name: _____

Date: _____

Multiplication: Make Equal Groups

3.OA.1

Example: 5×7 can be read as "5 groups of 7". We can draw this by making equal groups.

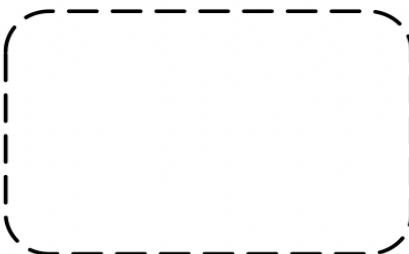


Directions: Draw **equal groups** to model each multiplication sentence. Then count how many in all to find the product (answer).

1. $5 \times 3 =$ _____

2. $4 \times 6 =$ _____

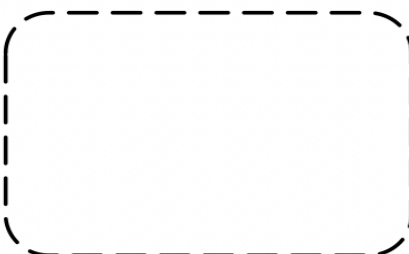
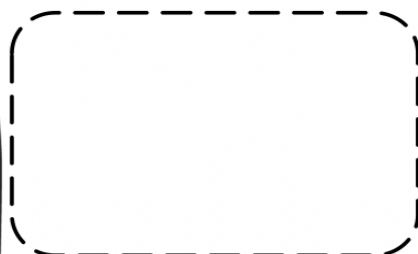
3. $7 \times 3 =$ _____



4. $2 \times 8 =$ _____

5. $5 \times 5 =$ _____


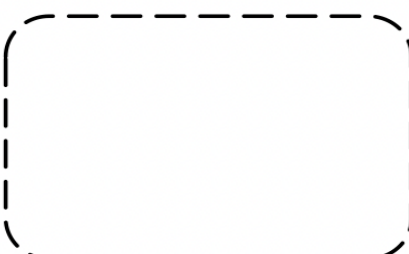
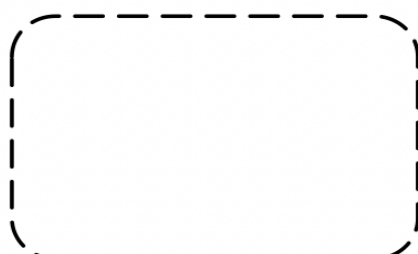
6. $4 \times 8 =$ _____



7. $3 \times 9 =$ _____

8. $5 \times 1 =$ _____

9. $4 \times 5 =$ _____



Multiplying by 1

$1 \times 1 =$

$1 \times 1 =$

$1 \times 1 =$

$1 \times 1 =$

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$1 \times 11 =$

$1 \times 12 =$

$1 \times 12 =$

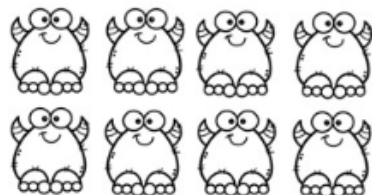
$1 \times 12 =$

$1 \times 12 =$

Extra Space

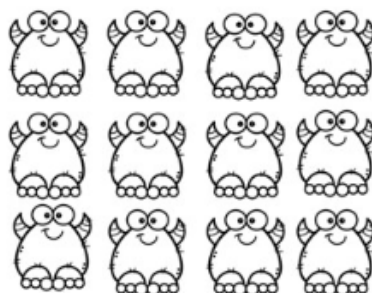
Directions: Write a multiplication sentence to match each array.

1.



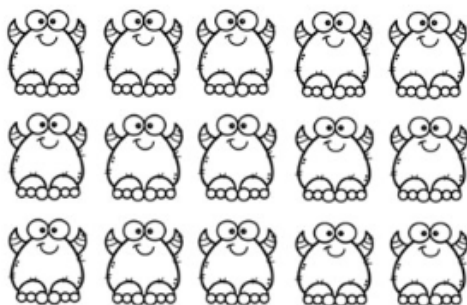
$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$

2.



$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$

3.



$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$

4.



$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$

5.



$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$

6.



$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$

Multiplying by 2

$2 \times 1 =$

$2 \times 1 =$

$2 \times 1 =$

$2 \times 1 =$

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Extra Space

Multiplying by 5

$5 \times 1 =$

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Extra Space

Week 5: _____

Use grouping to divide the objects and find the quotient.

1. Divide 12 strawberries into 2 groups.



$$12 \div 2 = \underline{\quad}$$

2. Divide 8 basketballs into 4 groups.



$$8 \div 4 = \underline{\quad}$$

3. Divide 10 frogs into 5 groups.



$$10 \div 5 = \underline{\quad}$$

4. Divide 12 ice-cream cones into 3 groups.



$$12 \div 3 = \underline{\quad}$$

5. Divide 9 trucks into 3 groups.



$$9 \div 3 = \underline{\quad}$$

Multiplying by 10

$10 \times 1 =$

$10 \times 1 =$

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Extra Space

Week 6: _____

Add the problems below. Write your answers below the lines. (DOK 1)

1.
$$\begin{array}{r} 259 \\ + 170 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 705 \\ + 67 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 840 \\ + 88 \\ \hline \end{array}$$

Subtract the problems below. Write your answers below the lines. (DOK 1)

4.
$$\begin{array}{r} 622 \\ - 457 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 928 \\ - 364 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 217 \\ - 109 \\ \hline \end{array}$$

Factors	Repeated Addition	Groups	Arrays	Product
3×5				
2×6				
4×3				
5×4				
6×4				

Multiplication problems

1. $2 \times 5 = \underline{\quad}$

2. $5 \times 10 = \underline{\quad}$

3. $8 \times 0 = \underline{\quad}$

4. $6 \times 1 = \underline{\quad}$

5. $9 \times 2 = \underline{\quad}$

6. $4 \times 0 = \underline{\quad}$

7. $10 \times 10 = \underline{\quad}$

8. $7 \times 1 = \underline{\quad}$

9. $3 \times 2 = \underline{\quad}$

10. $11 \times 5 = \underline{\quad}$

11. $12 \times 10 = \underline{\quad}$

12. $1 \times 5 = \underline{\quad}$

13. $2 \times 0 = \underline{\quad}$

14. $9 \times 1 = \underline{\quad}$

15. $10 \times 2 = \underline{\quad}$

16. $1 \times 2 = \underline{\quad}$

17. $6 \times 5 = \underline{\quad}$

18. $5 \times 10 = \underline{\quad}$

19. $7 \times 0 = \underline{\quad}$

20. $4 \times 1 = \underline{\quad}$

21. $8 \times 2 = \underline{\quad}$

22. $11 \times 5 = \underline{\quad}$

23. $3 \times 0 = \underline{\quad}$

24. $12 \times 1 = \underline{\quad}$

25. $9 \times 10 = \underline{\quad}$

26. $10 \times 5 = \underline{\quad}$

27. $4 \times 10 = \underline{\quad}$

28. $2 \times 2 = \underline{\quad}$

29. $5 \times 0 = \underline{\quad}$

30. $1 \times 1 = \underline{\quad}$

31. $11 \times 5 = \underline{\quad}$

32. $3 \times 10 = \underline{\quad}$

33. $12 \times 0 = \underline{\quad}$

34. $6 \times 1 = \underline{\quad}$

35. $7 \times 2 = \underline{\quad}$

36. $8 \times 5 = \underline{\quad}$

37. $10 \times 1 = \underline{\quad}$

38. $2 \times 10 = \underline{\quad}$

39. $1 \times 0 = \underline{\quad}$

40. $7 \times 2 = \underline{\quad}$

41. $3 \times 5 = \underline{\quad}$

42. $4 \times 2 = \underline{\quad}$

43. $12 \times 10 = \underline{\quad}$

44. $5 \times 1 = \underline{\quad}$

45. $6 \times 0 = \underline{\quad}$

46. $8 \times 2 = \underline{\quad}$

47. $9 \times 5 = \underline{\quad}$

48. $11 \times 10 = \underline{\quad}$

49. $9 \times 1 = \underline{\quad}$

50. $6 \times 0 = \underline{\quad}$