

Example Unit Preview Letter

Dear Families,

We are excited to start Unit 3 on Multiplication. This is the first time your child will see multiplication. We will build on what they learned in second grade about **repeated addition** to understand making **equal groups** arranged in **arrays**. We will write multiplication equations that represent those arrays.



[List vocabulary from the unit and define each term.]

In this unit, we will use the following math terms:



- **Array:** the arrangement of objects in rows and columns
- **Commutative Property of Multiplication:** a property of numbers that states we can switch the order of the factors when multiplying and our answers will be the same

(e.g., $3 \times 4 = 4 \times 3$)

- **Distributive Property:** a property of numbers that states we can multiply a number by a group of numbers added together and get the same answer as doing each multiplication separately

(e.g., $4 \times 3 = 4 \times 2 + 4 \times 1$)

- **Equal Groups:** the same number of objects in each set



- **Factor:** a number that gets multiplied

$$\begin{array}{c} 2 \times 3 = 6 \\ \uparrow \quad \uparrow \end{array}$$

- **Product:** the result of multiplying two or more factors

$$\begin{array}{c} 2 \times 3 = 6 \\ \uparrow \end{array}$$

- **Repeated Addition:** adding equal groups together

$$2 + 2 + 2 + 2 + = 8$$

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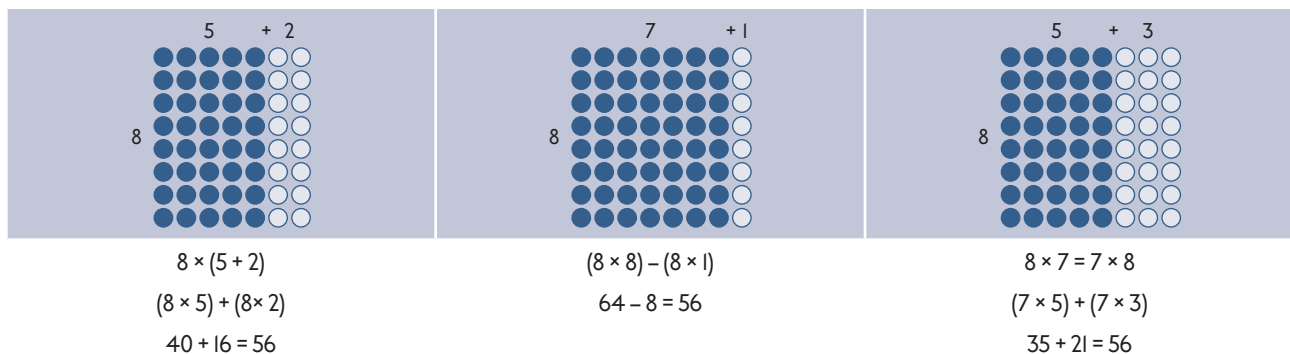
[Tell parents what to expect and provide them language.]

You will notice that we will be writing multiplication equations horizontally.

Like This	Not Like This
$4 \times 3 = 12$	$\begin{array}{r} 4 \\ \times 3 \\ \hline 12 \end{array}$

In fourth grade, students will start writing the equations vertically. In third grade, we write equations horizontally so students think flexibly and find multiple strategies to solve them. Please do your best to reinforce writing the equations this way so students focus on understanding before they learn shortcuts and procedures.

We will also be learning three specific strategies to solve multiplication problems. At first students will use colored tiles to build equal groups and arrays, then they will draw those pictures and use numbers, and finally they will write expressions and equations. Below are three different ways students might think about solving 8×7 by the end of the unit.



Whichever method students choose, they always notice there are 56 total dots.

In a later unit, we will multiply greater numbers, such as 12×8 . The more students are able to solve the current tasks using multiple strategies, the more success they will have later.



[List activities parents can do at home with their kids to support the learning in this particular unit.]

Here are some activities you can try at home:

- Notice multiplication in real-world contexts.
 - If you are purchasing more than one of the same item at a store, ask your child to round the cost to the nearest dollar and estimate how much you will spend on those items.
 - Find arrays and ask your child to identify how many objects are in each array by using multiplication (e.g., windows on buildings, floor tiles).

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- Build your child's fact fluency using games we learn during this unit.
 - Play Factor Bingo (students will learn this game and bring home materials to play in Week 2).
 - Play Multiplication War using a deck of cards (students will learn this game and bring home instructions in Week 1).
- Have your child make their own flashcards.
- Make one side an array and the other side a multiplication equation that matches (e.g., $4 \times 5 = 20$ would have four rows of five dots).

If you have any questions, please reach out!

Sincerely,

[Signed Teacher or Grade 3 Teachers]