Dear parents,

Your child spent the entire week exploring multiplication! We continued to look at multiplication as an array. The arrays model is an excellent way to introduce multiplication. Arrays give the student a visual representation of repeated addition and multiplication.

Then, your child compared addition with multiplication. It is important that your child sees the difference between the addition sign, + , and the multiplication sign, $\times$. It is also important for them to understand how the different operations will produce a different answer. For example, $5+2$ will equal 7 while $5 \times 2$ will equal 10. We spent some time evaluating and comparing addition and multiplication equations while using the abacus to create a mental image.

Your child also learned how to write multiplication equations. They quickly realized how multiplication equations are easier to write than addition equations. For example, $1 \times 6=6$ is much easier to write than $1+1+1+1+1+1=6$

We also spent time working on the multiples of 1 through 5 . Your child entered them on the abacus and wrote them as equations. Learning multiples is necessary for fractions and algebra. However, many times children are taught a song for each multiple, or they are required to memorize the multiples in order through skip counting. Unfortunately, this can hinder the child's understanding of multiplication and create a delay in the retrieval of a math fact. For example, if the child is given $8 \times 7$, the child must recite or skip count the 8 s all the way to $56(8,16,24,32,40,48,56)$, which slows down their response.

This is why we are using the Cotter Abacus, arrays, and other strategies to learn the multiplication math facts. If you do not yet have the Cotter Abacus, you may want to consider purchasing one. It will be used all year.

## Fun activities at home:

- Using square LEGOS or paper cut into squares, have your child build a 6 by 4 array, write one addition equation and one multiplication equation ( $6+6+6+6$ and $6 \times 4$ ) and tell you the total (24)
- Ask your child basic multiplication math facts through 5
(Suggestions: $5 \times 2$ answer is $10,3 \times 6$ answer is $18,4 \times 1$ answer is $4,2 \times 10$ answer is 20 )


## Games we played/to play at home:

- Sum Rummy game (P3)
- Multiples Memory game (P2)

Next week, your child will learn about area and perimeter. They will also prepare for the first assessment of the year.

Have a lovely day!
Teacher $\mathcal{N}$ ame
2 Grade (Level C) Lessons 33-36

