## $3^{\text {rd }}$ Grade Math

Module 1: Properties of Multiplication and Division and Solving Problems with Units of 2-5 and 10

## Math Parent Letter

This document is created to give parents and students a better understanding of the math concepts found in Eureka Math (© 2013 Common Core, Inc.) that is also posted as the Engage New York material which is taught in the classroom. Module 1 of Eureka Math (Engage New York) covers Properties of Multiplication and Division and Solving Problems with Units of 2-5 and 10. This newsletter will discuss Module 1, Topic E.

Topic E Multiplication and Division Using Units of 4

## Vocabulary Words

- Array
- Tape Diagram


## Things to Remember!!!

A number bond


## Objective of Topic E

1 Skip-count objects in models to build fluency with multiplication facts using units of 4 .

Relate arrays to tape diagrams to model the commutative property of multiplication.

3
Use the distributive property as a strategy to find related multiplication facts.

4 Model the relationship between multiplication and division.

## Focus Area- Topic E

Multiplication and Division Using Units of 4
Find the number of sides on 6 squares.


We know there are 4 sides on a square and we have 6 squares. The tape diagram is labeled with all of the information given in the word problem. We are looking for the total number of sides in 6 squares, so we will multiply to find the answer.

Students will also begin to explore the use of smaller facts to solve a larger fact by using arrays.

This array shows how dividing the problem into two smaller factors can make it easier to solve.
Students already know $5 \times 4$ and $2 \times 4$. So they know $7 \times 4$.

$7 \times 4$ is $(5 \times 4)+(2 \times 4)$ or $20+8$.

Craig arranges 24 baseball cards into 4 equal rows. How many cards are in each row?


$$
\begin{aligned}
& 4 \times 6=24 \\
& 24 \div 4=6
\end{aligned}
$$

There are 6 baseball cards in each row.

I can find the unknown by skip-counting by 4's.
$4,8,12,16,20,24$ - there are 6 groups of 4

