



# MATH NEWS



Grade 3, Module 1, Topic D

## 3<sup>rd</sup> Grade Math

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

### Math Parent Letter

This document gives parents and students a better understanding of the Eureka Math concepts that are taught in the classroom. Module 1 of Eureka Math covers Properties of Multiplication and Division and Solving Problems with Units of 2-5 and 10. This newsletter will discuss Module 1, Topic D.

Topic D Division Using Units of 2 and 3

### Vocabulary Words

- Equation
- Quotients
- Tape Diagram

Students will begin to use **tape diagrams** to solve word problems. A tape diagram is a model that students draw in order to help visualize the relationships between quantities. The first lesson on Topic D will compare an array to a tape diagram.

### Things to Remember!!!

An equation is a statement that says two expressions are equal.

$$4 \times 3 = 12 \quad \text{or} \quad 12 \div 4 = 3$$

The quotient is the results of a division problem

$$12 \div 4 = 3 \quad \text{3 is the quotient.}$$

## OBJECTIVE OF TOPIC D

- 1 Model division as the unknown factor in multiplication using arrays and tape diagrams.
- 2 Interpret the quotient as the number of groups or the number of objects in each group using units of 2.
- 3 Interpret the quotient as the number of groups or the number of objects in each group using units of 3.

## Focus Area– Topic D

Division Using Units of 2 and 3

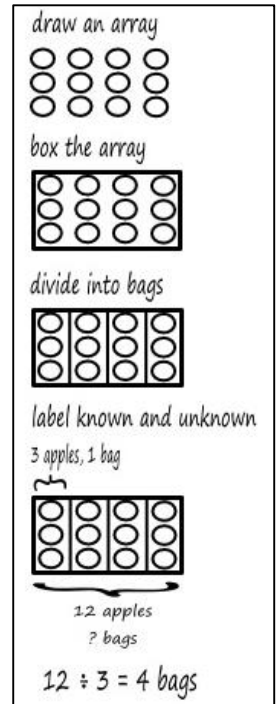
Ms. Cara has 12 apples. She puts 3 apples in each bag. How many bags does she have?

In previous lessons, students solved word problems with an array.

Now they will relate an array to a tape diagram. Students will draw the array and place a box around it.

Ms. Cara puts 3 apples in each bag. Students will separate the array to show 3 apples in each bag.

The next step is to label the known and unknown parts of the word problem. The word problem states there are 12 apples. The entire tape diagram is equal to 12 apples. The diagram is labeled 12 apples. For every 1 bag there are 3 apples. The first rectangle represents 3 apples or 1 bag of apples. The information that is unknown is the number of bags Ms. Cara has, which is labeled with a question mark.



Ms Rose has 12 boxes of crayons. Each class gets 4 boxes. How many classes get boxes of crayons?

The word problem states each class will get 4 boxes of crayons. Start by drawing and labeling the 4 boxes.

Next estimate what 12 boxes would look like and draw a dotted line to represent the total.

Label the total and the unknown. There are 12 boxes but we do not know how many classrooms. (?)

Skip-count and solve. We have to count by 4's until we have 12. 4, 8, 12. We counted 3 times to get 12. So we know 3 classrooms will get 4 boxes of crayons.

