



## 2<sup>nd</sup> Grade Math

### Module 6: Foundations of Multiplication and Division

#### 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 6 of Eureka Math (Engage New York) covers foundations of multiplication. This newsletter will discuss Module 6, Topic A.

#### Topic A: Formation of Equal Groups

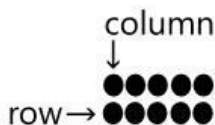
##### Words to Know:

**Mental Math:** skip-count by 2s, 3s, 5s, 10s.

**Array:** arrangement of objects in rows and columns

**Columns:** the *vertical* groups in a rectangular array

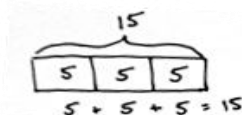
**Rows:** the *horizontal* groups in a rectangular array



Drawing groups  
3 groups of 5



Tape diagram



Repeated addition number sentence  
 $3 + 3 + 3 + 3 = 12$

## OBJECTIVES OF TOPIC A

Use math drawings to represent equal groups, and relate to repeated addition.

Represent equal groups with tape diagrams, and relate to repeated addition.

Represent equal groups with tape diagrams, and relate to repeated addition.

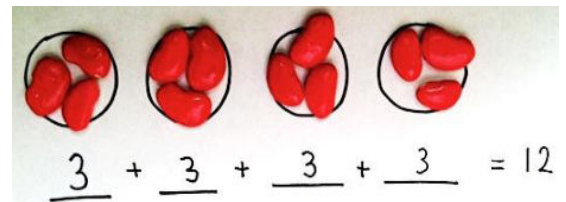
## Focus Area– Topic A

*Add equal groups step by step or by pairs*

Students start making equal groups using concrete materials, progress to pictorial representations and relate it to the repeated addition number sentence. Finally students find the repeated addition sum by adding previous addends step by step, or by grouping addends into pair and adding. This is the bridge between Grades 2 and 3

### Examples of Adding a Repeated Addition Number Sentence

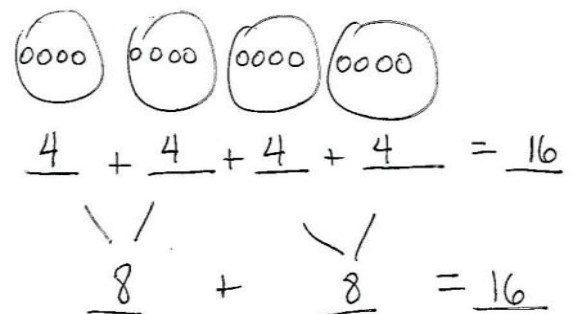
#### Four Groups of Three



$$\underline{3} + \underline{3} + \underline{3} + \underline{3} = 12$$



#### Adding by Grouping Addends Into Pairs



$$\underline{4} + \underline{4} + \underline{4} + \underline{4} = \underline{16}$$

$$\begin{array}{r} \diagdown \diagup \\ \underline{8} \end{array} + \begin{array}{r} \diagdown \diagup \\ \underline{8} \end{array} = \underline{16}$$