



# MATH NEWS



Grade 2, Module 4, Topic C

January 2014

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

Module 4: Addition and Subtraction within 200 with Word Problems to 100

### 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 4 of Eureka Math (Engage New York) covers Addition and Subtraction within 200 with Word Problems to 100. This newsletter will discuss Module 4, Topic C.

Topic C. Strategies for Decomposing a Ten

### Words to know:

- Algorithm
- Minuend
- Subtrahend
- Decompose
- Difference

$$\begin{array}{r} 26 \\ -13 \\ \hline 13 \end{array}$$

### Things to Remember!

When writing the vertical algorithm to subtract, take care to line up your numbers correctly.

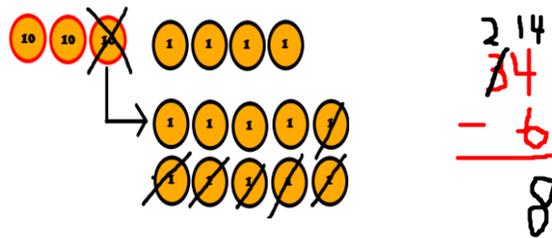
### Objectives of Topic C

- 1: Represent subtraction with and without the decomposition of 1 ten into 10 ones with manipulatives.
- 2: Relate manipulative representations to written method.
- 3: Represent subtraction with and without the decomposition when there is a three-digit minuend.
- 4: Use math drawings to represent subtraction with and without decompositions and relate drawings to a written method.
- 5: Solve one- and two-step word problems within 100 using strategies based on place value.

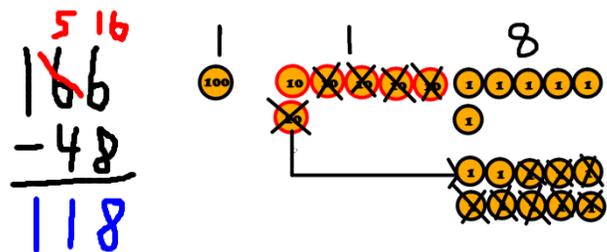
## Focus Area of Topic C

Apply understanding of place value strategies to subtraction algorithm

Students use number disks on a place value chart to subtract like units. They practice modeling the standard subtraction algorithm within 100 without decompositions, and then progress to problems that require exchanging 1 ten for 10 ones. (decomposing/regrouping) The use of manipulatives allows students to physically experience the renaming and understand the *why* behind recomposing a quantity. Students will do this work with number disks, then transfer their understanding to a drawing.



Students move to the more abstract dot drawings on their place value charts and follow the same procedure for decomposing a ten and relating it to the written method. In this module, the students will subtract two-digit subtrahends from three-digit minuends.



The end of the module will have the students solving one- and two-step word problems. Students apply their place value reasoning, mental strategies, and understanding of compositions and decompositions to negotiate different problem types with unknowns in various positions.