MATH NEWS

2nd Grade Math

Unit 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 the Common Core. Unit 4 of the Engage New York covers strategies for adding and subtracting within 200. This newsletter will discuss Unit 4, TopicC.

Topic C. Strategies for Decomposing a Ten

Words to know:
- **Algorithm**
- **Minuend**
- **Subtrahend**
- **Decompos**e
- **Difference**

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 transefer their understanding to a drawing.
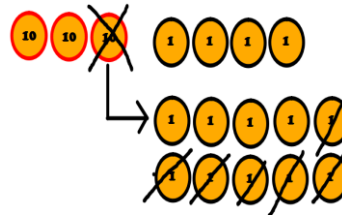
$$34 - 6$$

$$30 + 4 = 20 + 14$$

or

$$30 - 4 - 2$$

Students will use place value, relationship, and thinking strategies to solve addition and subtraction problems.

$$166 - 48$$

$$166 - 40 = 126$$
$$126 - 6 - 2 = 118$$

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.