



Grade 2, Module 5, Topic D

## 2nd Grade Math

Module 5: Addition and Subtraction within 1,000 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 5 of Eureka Math (Engage New York) covers strategies for adding and subtracting within 1,000 with word problems to 100. This newsletter will discuss Module 5, Topic D.

#### Focus Area Topic D:

Student Explanations for Choice of Solution Methods

#### Words to Know:

**Algorithm** – a step-by-step strategy to solving a problem in which the number are lined up. (For example: add the ones, add the tens, add the hundreds, etc...)

**Arrow notation (the arrow way)** – a strategy in which you add or subtract multiples of 1, 10, or 100 and draw arrows to point to what the number becomes after you change it.

**Number Bond** – a simple addition sum; they are simply the pairs of numbers that make up a given number.

**Compensation** – Adding or subtracting the same number to both parts of the problem in order to find a friendly number (multiple of ten), making it easier to solve the given problem.

## OBJECTIVES OF TOPIC D

Choose and explain solution strategies and record with a written addition or subtraction method.



# Focus Area- Topic D

This topic focuses on applying the tools and concepts used in Topics A through C.

Students will determine which strategy to apply to a variety of addition and subtraction problems, including number bond problems and problems with the unknown in all positions.

(Example:  $200 + \_\_ = 342 \text{ or } \_ -53 = 400$ )

Then, students will solve and explain their chosen methods.

## **Possible Solution Strategies:**

#### Strategy: Number Bond

499 + 166 = \_\_\_\_\_ 499 + 166 / \ 1 165

500+165 = 665

Possible Explanation: <u>1 used a number bond</u> <u>sínce 499 ís so close to</u> <u>500. I took 1 from</u> <u>166 and added ít to</u> <u>499 to get 500; then I</u> <u>added on the rest to</u> <u>get 665.</u>

#### Strategy: Number Bond with Algorithm



Possible Explanation: 1 drew a number bond to show the missing part, and then 1 used related subtraction to solve. 1 thought drawing a number bond was a good idea. because it helped me know where to start to find the answer.



#### Strategy: Chip Model

180 + 440 = \_\_\_\_\_



## **Possible Explanation:**

<u>I chose the chip model.</u> <u>The chip model took</u> <u>longer, but I was able</u> <u>to check my work</u> <u>easily with the</u> <u>drawing.</u>



546 - 297 = \_\_\_\_\_



549-300=249

#### Strategy: Algorithm

546 - 297 = \_\_\_\_



#### Possible Explanation:



#### Possible Explanation:

