



MATH NEWS



LAFAYETTE
PARISH SCHOOL SYSTEM
Fall 2014

Grade 2, Module 1, Topic B

2nd Grade Math

Module 1: Sums and Differences to 20

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 Sums and Differences to 20. This newsletter will discuss Module 1, Topic B.

Topic B. Mental Strategies for Addition and Subtraction Within 20

Words to know

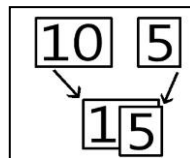
- Make 10
- Hide Zero Cards
- Number Bond
- Ten Frame

Things to remember!!!

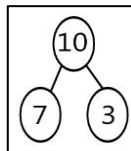
The **make 10** strategy involves memorizing the number combinations that add to 10.

$$\begin{array}{r}
 8 + 4 \\
 \quad \wedge \\
 \quad 2 \quad 2 \\
 8 + 2 = 10 \\
 10 + 2 = 12
 \end{array}$$

Hide zero cards are single digit and double digit number cards used to create a new number. Place the single digit card on top of the zero (hide the zero) to create a new double digit number.



Number bonds are used to create different pairs of numbers which make up the same number. Number bond uses a part-whole-part concept to present the relation between the 3 numbers.



A **ten frame** has 10 places to hold dots. This card only has 6 dots and we need 4 more to *make 10*. $6 + 4 = 10$



OBJECTIVE OF TOPIC B

- 1 Make a ten to add within 20.
- 2 Make a ten to add and subtract within 20.
- 3 Decompose to subtract from a ten when subtracting within 20 and apply to one-step word problems.

Focus Area of Topic B

Mental Strategies for Addition and Subtraction within 20

Cara has 9 crayons at school and 5 at home. Charlie has 7 crayons at school and 8 at home. How many markers does Cara have? Cara has 14 crayons.

$$\begin{array}{r}
 9 + 5 \\
 \quad \wedge \\
 \quad 1 \quad 4 \\
 9 + 1 = 10 \\
 10 + 4 = 14
 \end{array}$$

How many crayons does Charlie have? Charlie has 15 crayons.

$$\begin{array}{r}
 8 + 7 \\
 \quad \wedge \\
 \quad 2 \quad 5 \\
 10 + 5 = 15
 \end{array}$$

Fill in the blank to make the sentence true.

$$\begin{array}{l}
 5 + \underline{10} = 15 \\
 \underline{14} - 4 = 10 \\
 11 - 7 = 1 + \underline{3} \\
 16 - 9 = 1 + \underline{6}
 \end{array}$$

Karen bought 12 eggs from the store at noon. Her daughter bought 6 more after school. They used 9 eggs for supper. How many eggs do they have left?

This is a two step problem.

First find the total they bought: $12 + 6 = 18$

We know they used 9 eggs for supper: next subtract the number of eggs used from the total.

$$18 - 9 = 9$$

$$\begin{array}{r}
 12 + 6 = ? \\
 \quad \wedge \\
 10 \quad 2 \\
 10 + 6 = 16 \\
 16 + 2 = 18 \\
 18 - 9 = ? \\
 \quad \wedge \\
 10 \quad 8 \\
 -9 \quad 1 \\
 \hline
 1 \quad 8 = 9
 \end{array}$$