Montville Math News

Grade 1, Module 4, Topic E *Adapted with permission from the Lafayette Parish School System* Spring

1st Grade Math

Module 4: Place Value, Comparison, Addition & Subtraction to 40

Math Parent Letter

This document is created to give parents and students a better understanding of the math concepts found in Eureka Math which is taught in the classroom.

This newsletter will discuss Module 4, Topic E.

Topic E. Varied Problem Types Within 20

Words to know

- Tape Diagram
- Addition Sentence

In this topic students will begin to see addition and subtraction word problems. They will learn how to solve problems using a **tape diagram.** A tape diagram is a model to help students visualize the addition or subtraction problem they are trying to solve. Students will learn how to draw and label a tape diagram. They will also have to write an addition sentence explaining the tape diagram, and create their own word problem by looking at a tape diagram. This newsletter will explain different types of word problems; however, the students will be learning to solve a variety of word problems throughout Topic E.

Helpful Hint: In the images on this page notice there are two different circles drawn on the tape diagram. The first ten circles are one color and then the color changes. This is done so students can visually see the groups of ten. If the answer is larger than 20 after the second group of ten the color changes again.

Objective of Topic E

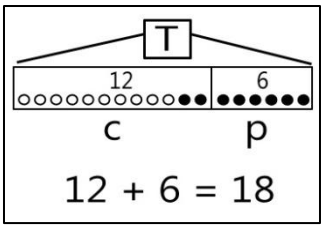
1. Use tape diagrams as representations to solve put together/take apart with total unknown and add to with result unknown word problems.
2. Recognize and make use of part–whole relationships within tape diagrams when solving a variety of problem types.
3. Write word problems of varied types.

Focus Area– Topic E

Varied Problem Types Within 20

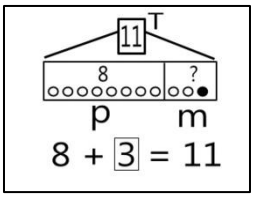
Tammy saw 12 carrots and 6 pumpkins growing in her garden. How many vegetables did she see growing in her garden?

Begin by drawing the tape diagram. There are 12 carrots and 6 pumpkins and the total of both is what is needed to solve the problem. Draw a rectangle divided into two sections. In one section draw 12 circles, and in the second section draw 6 more circles. Above the circles write the number of circles in each section. Below each section label them with letters. (in the image the "c" represents the carrots and the "p" represents the pumpkins) The lines above the tape diagram represents that the numbers should be combined to find the total (T). Then students will write an **addition sentence**.



12 + 6 = 18

8 kids were playing at the park. Some more kids came. Then there were 11 kids. How many more kids came to the park?



Notice the "T" at the top of the image. The **total** is always labeled. The "p" shows how many **played**, the "m" shows how many **more**.

There are 12 strawberries in a basket for Kerry and Cindy. Cindy ate 6 strawberries. How many strawberries did Kerry eat?