



## 2nd Grade Math

*Module 2: Addition and Subtraction of length Units.*

### 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 2 of Eureka Math (Engage New York) covers strategies for adding and subtracting using length units. This newsletter will discuss Module 2, Topic A.

*Topic A: Understand Concepts About the Ruler*

#### Words to Know:

**Ruler**

**Centimeter** (cm, unit of length measure)

**Length**

**Length unit**

**Compare**

**Combine**

**Overlap** (extend over, or cover partly)

**Longest**

**Shortest**

**End point** (where something ends,  
where measurement begins)

**Hash mark** the marks on a ruler or other measurement tool.

#### Meter strip



## OBJECTIVES OF TOPIC A

1. Connect measurement with physical units by using multiple copies of the same physical unit to measure.
2. Use iteration with one physical unit to measure.
3. Apply concepts to create unit rulers and measure lengths using unit rulers.

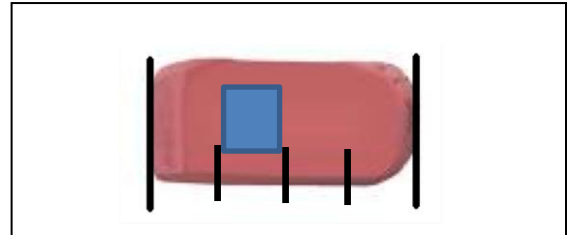
## Focus Area– Topic A

*Measure to compare and combine*

Students will measure using first physical centimeter units, understanding in order to get accurate measurement, there must not be any gaps or overlaps between consecutive length units.

They will use the mark and advance technique. It also helps them realize that the distance between 0 and 1 on the ruler indicates the amount of space already covered. They will create their ruler. Topic A ends with students using their unit rulers to measure lengths, thereby connecting measurement with a ruler.

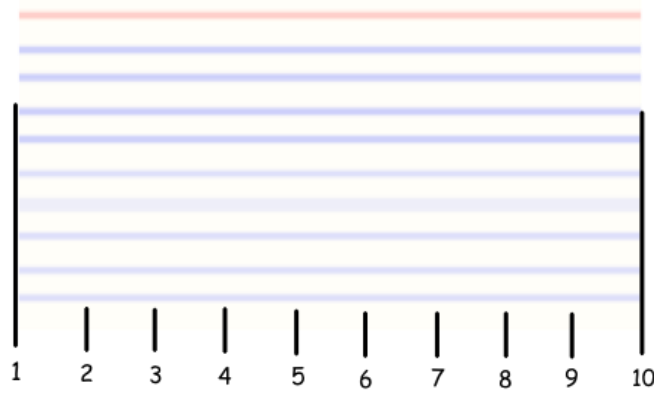
Examples of the  
End and mark



*Students use the centimeter cube placed at the start point and mark the end point, and continue **with no overlaps**. This helps students create a mental benchmark for the centimeter. It also helps them realize that the distance between 0 and 1 on the ruler indicates the amount of space already covered. Hence 0, not 1, marks the beginning of the total length.*



Error not start with 0

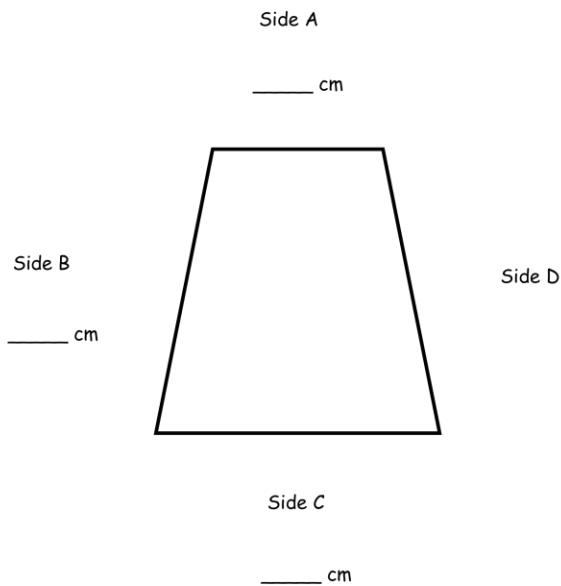


Students will analyze the error in the work showed by the understanding of the start point needs to be the 0 .



Students will use their ruler and addition or subtraction strategies to combine length and identify how much shorter or longer a length is compared to other.

1. Measure the lengths of sides A, B, and C. Write their length on the line.



a. Which side is the longest?      Side A      Side B      Side C

*Students use the ruler to measure*

b. How much longer is Side B than Side A? \_\_\_\_\_ cm longer.

*Students use addition or subtractions strategies to compare*

c. How much shorter is Side A than Side C? \_\_\_\_\_ cm shorter.

*Students use addition or subtractions strategies to compare or a number bond*

d. Sides B and D are the same length. What is the length of Sides B and D together?

*Students use addition or subtractions strategies to compare*

e. What is the total length of all four sides of this figure? \_\_\_\_\_ cm.

*Students use addition with all sides, it could be by multiple additions.*