



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 relating addition and subtraction to length. This newsletter will discuss Module 4, Topic C.

Topic C: Measure and Compare Lengths Using Different Length Units

Words to Know:

Compare- how something is similar to or different from something else.

Standard Unit- Commonly used units of measurement: inches, feet, yards, centimeters, meters, etc.

Non-standard Unit- A unit of measure that is not part of a consistent system; paperclips, shoes, coins, etc.



OBJECTIVES OF TOPIC C

1. Measure and compare lengths using centimeters and meters.
2. Measure and compare lengths using standard metric length units and nonstandard length units; relate measurement to unit size.

Focus Area– Topic C

Measure, Compare

Students measure and compare to determine how much longer one object is than another. They also measure objects twice using different length units, both standard and nonstandard, thereby developing their understanding of how the total measurement relates to the size of the length unit. Repeated experience and explicit comparisons will help students recognize that the smaller the length unit, the larger the number of units, and the larger the length unit, the smaller the number of units.

Examples of
Measure and Compare using
Standard Units

Line E



Line F



Line G



Line E measured about 3 cm.

Line F measured about 6 cm.

Line G measured about 5 cm.

(continued on page 2)

Lines E, F, and G are about 14 cm combined. ($3\text{cm} + 6\text{cm} + 5\text{cm} = 14\text{cm}$)

E is about 2 cm shorter than Line G. ($5\text{cm} - 3\text{cm} = 2\text{cm}$)

Line F is about 1 cm longer than Line G. ($6\text{cm} - 5\text{cm} = 1\text{cm}$)

Line F doubled is about 7 cm longer than Line G.

($6\text{cm} + 6\text{cm} = 12\text{cm}$, $12\text{cm} - 5\text{cm} = 7\text{cm}$)

Line E is about 3 cm shorter than Line F. ($6\text{cm} - 3\text{cm} = 3\text{cm}$)



Carol's ribbon is 76 centimeters long. Alice's ribbon is 1 meter long. How much longer is Alice's ribbon than Carol's?

1 meter = 100cm

$$100\text{cm} - 76\text{cm} = \underline{24\text{cm}}$$

70+6

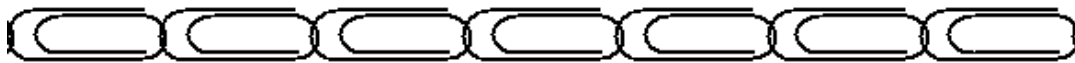
$$100 - 70 = 30$$

$$30 - 6 = 24$$

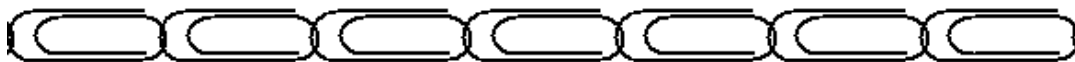


Examples of
Measure and Compare using
Non-standard Units

Line L



Line M



Line L is 3 paper clips. Line L is 7 cm long.

Line M is 2 paper clips. Line M is 4 cm long.

Line L is 2 paper clips longer than Line M. ($3 - 1 = 2$)

Line M doubled is 1 cm longer than Line L.

($4\text{cm} + 4\text{cm} = 8\text{cm}$, $8\text{cm} - 7\text{cm} = 1\text{cm}$)