December 2013

## $1^{\text {st }}$ Grade Math

Ordering and Comparing Length Measurements as Numbers

## Math Parent Letter

This document is created to give parents and students a better understanding of the math concepts found in the Engage New York material taught in the classroom. Module 3 of the Engage New York material covers Ordering and Comparing Length Measurement as Numbers. This newsletter will discuss Module 3, Topic A.

Topic A. Indirect Comparison in Length Measurement

## Words to know

- Longer Than
- Shorter Than
- Equal In Length
- Endpoint

Direct Comparison is when both objects can be placed side by side and the student can look at each item to compare the two. For example, a pencil and a crayon side by side.

Indirect Comparison is when objects are compared using a consistent item. For example, if the crayon is shorter than the string and the pencil is longer than the string, we can saw that the crayon is shorter than the pencil.

To help your child, find various things and let them compare at home. Examples: forks, spoons, toys, chair, sofa, table, towel, tools, cars, etc.


## Objective of Topic A

Compare length directly and consider importance of aligning endpoints.
Compare length using indirect comparison by finding
2 objects longer than, shorter than, and equal in length to that of a string.

3 Order three lengths using indirect comparison.

## Focus Area- Topic A

Indirect Comparison in Length Measurement

## In Lesson 1

Students explore and compare the length of two objects paying close attention to the endpoints of each object.


Pencil a is longer than Pencil b Pencil b is shorter than Pencil a

## In Lesson 2

Students will be given a string or a piece of construction paper that has been cut to a certain length and used to compare the length of objects. Students will see how some objects are shorter than, some objects are longer than, and some objects are equal in length to the string or construction paper.

The toy truck is shorter than the line.


The book is longer than the line.

The truck is shorter than the book; the book is longer than the truck.

## In Lesson 3

Students extend the use of indirect comparison to compare the distances between objects that cannot be moved next to each other for direct comparison. For example students will explore different routes and figure out which path is the shortest path to school.


- Cindy's path to the school was 14 blocks.
- Troy's path to school was 9 blocks.
- Tommy's path is shorter than Troy's. Draw Tommy's path.
- Order the paths from shortest to longest.
- Who took the shortest path to school?

