### TEAMBCPS Office of Mathematics PreK-12

## Unit 9: Measurement

## About this Unit

In this unit, students investigate measurement in terms of length and distance. Second graders will use units of measurement such as inches, feet, yards, centimeters, and meters to measure distances. While using different tools to measure, students examine how using different tools will yield different units, and explain why one tool might be used over another. Additionally, students continue to expand their understanding of time as an ongoing and measurable process. Students revisit the concept of representing measurement data on a line plot.

The PreK-12 Mathematics curriculum focuses on problem solving, communication, and critical thinking in order to provide a foundation where every student reaches their potential to become a globally competitive, mathematically literate citizen.

# Understanding Length

Students develop their understanding of the concept of length and how length is measured. Students use direct measurement by placing two objects side by side and comparing lengths. Students may also use a third object, such as a piece of string or cube train to indirectly measure and compare two objects.





Students gain experience with length by using units such as popsicle sticks or cubes that can be joined to match the length of an object. Students then count the number of units. These methods show students that length is countable using units.

# Using Units to Measure Length

In Grade 1, students measured using a variety of non-standard units such as paper clips, tiles, and cubes. Grade 2 students deepen their understanding of length and units of measure by comparing lengths of real world objects and investigating lengths using standard measuring tools. Building off of the foundation of countable units of measure, students create a more efficient strategy for measuring objects and lengths by using standard measurement units and tools.



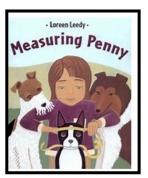
Students create their own measuring tools. This helps them to develop an understanding of an inch as the space between any two consecutive numbers.

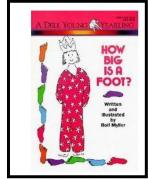


Students learn to use different measuring tools in different situations. For example, students learn that using a yardstick or tape measure is more efficient than using a ruler when measuring large or tall objects.

## Helping your child at home

- Practice using the clock to tell time and duration of activities.
- Compare the sizes of different objects.
- Provide different measurement tools such as rulers, yard sticks, measuring tape, etc. for your child to measure household objects.
- Read books about measurement.











### Visit These Websites for Interactive Math Activities.

- <u>Investigations</u> http://investigations.terc.edu/library/Games\_23.cfm Students can explore a variety of games leveled for K-1 students focusing on time.
- <u>Measure It!</u> http://www.funbrain.com/measure/ Students practice using a ruler to measure bars of different lengths.
- <u>Measurement Games</u> http://www.softschools.com/measurement/games/ This website contains games for various measurement skills, including comparing the length of objects and measuring objects using inches and centimeters. It also includes quizzes for different measurement topics
- Roboclock http://www.primarygames.com/math/roboclock3/
  Students determine how much time has passed using hours and minutes.

