Second Grade 2020 Unit 4: Measurement and Data

Content Area: **Mathematics**
Course(s):
Time Period: **Marking Period 4**
Length: **April May June**
Status: **Published**

Established Goals/Standards

Please choose the appropriate Goals/Standards from the Standards tab above.

MA.2.NBT.A.2	Count within 1000; skip-count by 5s, 10s, and 100s.
MA.2.NBT.B.5	Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.
MA.2.NBT.B.9	Explain why addition and subtraction strategies work, using place value and the properties of operations.
MA.2.MD.A.1	Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.
MA.2.MD.A.2	Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.
MA.2.MD.A.3	Estimate lengths using units of inches, feet, centimeters, and meters.
MA.2.MD.A.4	Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.
MA.2.MD.B.5	Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.
MA.2.MD.B.6	Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2,..., and represent whole-number sums and differences within 100 on a number line diagram.
MA.2.MD.C.7	Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.
MA.2.MD.C.8	Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using $ and ¢ symbols appropriately.
MA.2.MD.D.9	Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.
MA.2.MD.D.10	Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put together, take-apart, and compare problems using information presented in a bar graph.

Essential Questions

Please add your Essential Questions by clicking on the Lists tab above.

- How can clocks, bar graphs, and pictographs be used to show data and answer questions?
- How can sums and differences be estimated?
- What is the process for measuring length?

- What strategies can be used to countmoney?

Enduring Understanding

Please add your Enduring Understandings by clicking on the Lists tab above.

- Each type of graph is most appropriate for certain kinds of data. Pictographs and bar graphs make it easy to compare data
- Measurement is a process of comparing a unit to the object being measured. The length of any object can be used as a measurement unit for length
- Rounding can be used to estimate sums and differences as can place value and number relationships
- The length of any object can be used as a measurement unit for length, but a standard unit is always the same length
- The length of any object can be used as a measurement unit for length, but a standard unit, such as an inch or centimeter, is always the same length
- The lengths of objects can be organized in different ways. A line plot can be used as a visual representation of the relative lengths of objects
- Time can be given to the nearest five minutes. Time can be expressed using different units that are related to each other. a.m. and p.m. are used to designate certain time periods
- When counting money, it is usually easier to start with the coin or bill with the greatest value

Content

Students will be able to:

- identify the value of a group of half dollars, quarters, dimes, nickels, and pennies
- count collections of coins that include half dollars, quarters, dimes, nickels, and pennies
- show the same amount of money using different sets of coins
- count money amounts greater than one dollar and write the amount with a dollar sign and a decimal point
- make an organized list to find different combinations of coins
- complete and record addition problems using two-digit coin amounts
- subtract using two-digit coin amounts
- estimate the sum and difference of 2 two-digit numbers
- solve problems involving adding and subtracting money by using the try, check, and revise strategy
- measure the lengths of objects using nonstandard units
- estimate and measure items using inches
- estimate and measure length and height using centimeters
- estimate and measure items that are about an inch, foot, and yard
- estimate and measure the lengths and heights of objects in centimeters and meters
- estimate and measure the lengths and heights of objects using different units
- use addition and subtraction to solve measurement problems
- measure to compare length and express the length difference in a standard length unit
- use string and rulers to measure to the nearest inch the length of paths that are not straight
- learn to associate numerals on an analog clock face with increments of five minutes
- read and express time in terms of quarter and half past an hour and before an hour
- represent a set of data in a tally chart and in a bar graph

- use rulers to measure objects and graph the results
- make and use a pictograph to solve problems
- use picture graphs and bar graphs to solve problems

Related Vocabulary:

half-dollar

quarter

dime

nickel

penny

coins

cents

greatest value

least value

dollar bill

dollar coin

dollar sign

decimal point

tally mark

estimate

unit

length

inch (in.)

width

height

nearest inch

centimeters (cm)

nearest centimeter

foot (ft)

yard (yd)

meter (m)

minute hand

minute

hour hand

hour

half hour

a.m. (ante meridiem)

p.m. (post meridiem)

Assessment

Resources

pearsonsuccess.net - Interactive Digital Path

enVision Math Grade 2 manual

manipulatives

visual learning animations

quick checks

practice and reteaching workbook

math centers

daily workmat

common core daily review