

Eureka Math Parent Guide

A GUIDE TO SUPPORT PARENTS AS THEY WORK WITH THEIR STUDENTS IN MATH.

GRADE 2
MODULE 2

GRADE FOCUS

Second Grade mathematics is about (1) extending students' understanding of base-ten notation; (2) building fluency with addition and subtraction; (3) using standard units of measure; and (4) describing and analyzing shapes.

- Module 1: Sums and Differences to 20

» Module 2: Addition and Subtraction of Length Units

- Module 3: Place Value, Counting, and Comparison of Numbers to 1000
- Module 4: Addition and Subtraction Within 200 with Word Problems to 100
- Module 5: Addition and Subtraction Within 1000 with Word Problems to 100
- Module 6: Foundations of Multiplication and Division
- Module 7: Problem Solving with Length, Money, and Data Module 8: Time, Shapes, and Fractions as Equal Parts of Shapes

LET'S CHECK IT OUT!

MODULE 2 FOCUS

In Module 2, students engage in activities designed to deepen their conceptual understanding of measurement and to relate addition and subtraction to length. We will be exploring the ruler, estimating and measuring lengths using various tools and units, and finally, relating addition and subtraction to length. Their work in Module 2 is exclusively with metric units in order to support place value concepts.

MORE SPECIFICALLY, CHILDREN WILL LEARN HOW TO:

- Relate addition and subtraction to length. Examples:
 - » Line A is 4 cm long, and Line B is 7 cm long. Together, Lines A and B measure ___ cm.
 - » In the example above, how much shorter is Line A than Line B?
- Measure and estimate lengths in standard and non-standard units. Examples:
 - » How many centimeter cubes long is my pencil?
 - » How many Lego-pieces long is this bracelet?

TOPIC OVERVIEW

Topics are the lessons within a module that help children master the skills above. Here are the lessons that will guide your child through Module 2:

- Topic A: Understand Concepts About the Ruler
- Topic B: Measure and Estimate Length Using Different Measurement Tools
- Topic C: Measure and Compare Lengths Using Different Length Units
- Topic D: Relate Addition and Subtraction to Length

WORDS TO KNOW

- **Endpoint:** Where something ends, where measurement begins
- **Hash mark:** The marks on a ruler or other measurement tool
- **Number Line:** A line marked at evenly spaced intervals
- **Estimate:** An approximation of the value of a quantity or number
- **Length**
- **Combine**
- **Difference**
- **Meter**
- **Height**
- **Compare**
- **Centimeter**

hash mark



SAMPLE PROBLEMS

SAMPLE 1



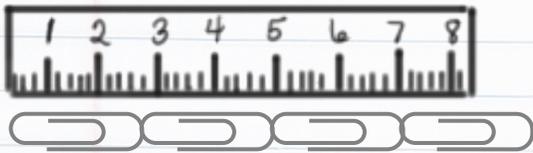
Centimeter Ruler



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.

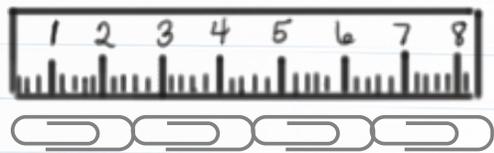
SAMPLE 2: MEASURING WITH STANDARD AND NON-STANDARD UNITS

Line L



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

Line M



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.

HOW YOU CAN HELP AT HOME

- Estimate the lengths of various objects around the house, such as a table, a book, a toothbrush, etc. Next, Measure the same objects using a ruler with inches and centimeters to compare the estimate to the actual length.
- Measure the four sides of a square or rectangular table using inches, and then add the four sides together to find out how long the table is around.
- Measure two different book lengths using centimeters. Compare the two lengths and determine how much longer one book is than the other.