

# Eureka Math Parent Guide

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

**GRADE 3**  
**MODULE 2**

## GRADE FOCUS

Third Grade mathematics is about (1) developing understanding of multiplication and division and strategies for multiplication and division within 100; (2) developing understanding of fractions, especially unit fractions (fractions with numerator 1); (3) developing understanding of the structure of rectangular arrays and of area; and (4) describing and analyzing two-dimensional shapes.

- Module 1: Properties of Multiplication and Division and Solving Problems with Units of 2—5 and 10
- » **Module 2: Place Value and Problem Solving with Units of Measure**
- Module 3: Multiplication and Division with Units of 0, 1, 6–9, and Multiples of 10
- Module 4: Multiplication and Area
- Module 5: Fractions as Numbers on the Number Line
- Module 6: Collecting and Displaying Data
- Module 7: Geometry and Measurement Word Problems

## LET'S CHECK IT OUT!

## MODULE 2 FOCUS

This module will tie our place value learning to some real-world work with measurement using the metric system. Students will also work on telling time and solving problems relating to elapsed time.

### MORE SPECIFICALLY, CHILDREN WILL LEARN HOW TO:

- Round numbers to the nearest 10 or 100
- Fluently add and subtract within 1000
- Measure and estimate liquid volume and mass of objects

## 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: Time Measurement and Problem Solving
- Topic B: Measuring Weight and Liquid Volume in Metric Units
- Topic C: Rounding to the Nearest Ten and Hundred
- Topic D: Two- and Three-Digit Measurement Addition Using the Standard Algorithm
- Topic E: Two- and Three-Digit Measurement Subtraction Using the Standard Algorithm

## WORDS TO KNOW

- Important Metric Words:
  - » **Gram** (g)
  - » **Kilogram** (kg)
  - » **Liter** (L)
  - » **Milliliter** (mL)
  - » **Centimeter** (cm)
  - » **Meter** (m)
- Other math terms:
  - » **Analog clock:** a clock that is not digital
  - » **Capacity:** the amount that a container can hold
  - » **Compose:** change 10 smaller units for 1 of the next unit on the place value chart
  - » **Interval:** time passed, or a segment on the number line
  - » **Plot:** locate and label a point on the number line
  - » **Point:** a specific location on the number line
  - » **Round:** estimate a number to the nearest 10 or 100 using place value

# SAMPLE PROBLEMS

## SAMPLE 1

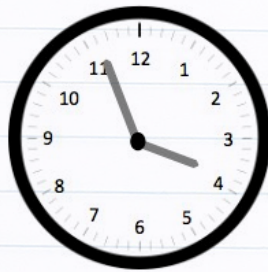
The number line is a powerful, flexible model that students can use in many ways. In this particular module, students make frequent use of both vertical and horizontal number lines, learning to find endpoints and mark exactly halfway in between them, finding elapsed time, and using them on measuring containers.

As students move through the grades, number lines can be used to examine the relationships between numbers in ever more detailed ways, including decimals, fractions, and eventually positive and negative numbers. See how many number lines you and your student can spot around you at home!

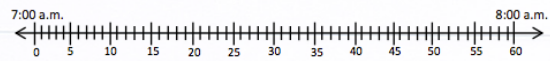
Vertical number line



The clock: a circular number line!

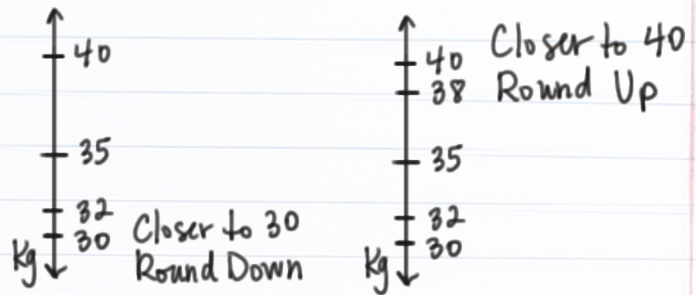


A time number line



## SAMPLE 2

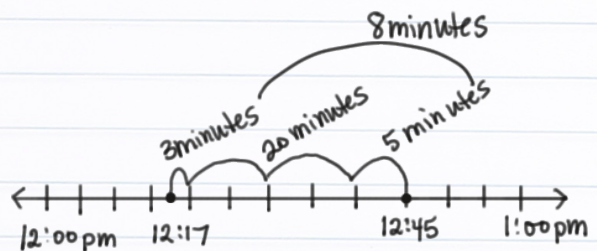
Vertical number lines are drawn up and down. A vertical number line is helpful when representing numbers that needed to be rounded. When plotting a number on a vertical number line the student can visually see which ten or hundred the number is closer to and also reminds the student to round UP or round DOWN.



## SAMPLE 3

Here is a sample elapsed time problem that can be solved with a number line:

The school ballet recital begins at 12:17 p.m. and ends at 12:45 p.m. How many minutes long is the ballet recital?



# HOW YOU CAN HELP AT HOME

- Ask your student to help with all kinds of measurement around the house.
- Continue to practice telling time, and begin to ask questions about elapsed time, e.g., "How many minutes have passed since we got home from school?"