

Eureka Math Parent Guide

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

**GRADE 4
MODULE 1**

GRADE FOCUS

Fourth grade mathematics is about (1) developing understanding and fluency with multi-digit multiplication and division; (2) developing an understanding of fraction equivalence, addition and subtraction of fractions with like denominators, and multiplication of fractions by whole numbers; and (3) understanding that geometric figures can be analyzed and classified based on their properties, such as having parallel sides, perpendicular sides, particular angle measures, and symmetry.

» Module 1: Place Value, Rounding, and Algorithms for Addition and Subtraction

- Module 2: Unit Conversions and Problem Solving with Metric Measurement
- Module 3: Multi-Digit Multiplication and Division
- Module 4: Angle Measure and Plane Figures
- Module 5: Fraction Equivalence, Ordering, and Operations
- Module 6: Decimal Fractions
- Module 7: Exploring Multiplication

LET'S CHECK IT OUT!

MODULE 1 FOCUS

In this first module of Grade 4, students extend their work with whole numbers, first with familiar large units (hundreds and thousands), and then develop their understanding up to 1 million. They practice and further deepen their facility with patterns in the base-10 number system.

MORE SPECIFICALLY, CHILDREN WILL LEARN HOW TO:

- Use addition, subtraction, multiplication and division to solve multistep word problems involving whole numbers and having whole-number answers.
- Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right
- Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form
- Use place value understanding to round multi-digit whole numbers to any place
- Fluently add and subtract multi-digit whole numbers

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 1:

- Topic A: Lines and Angles
- Topic B: Angle Measurement
- Topic C: Problem Solving with the Addition of Angle Measures
- Topic D: Two-Dimensional Figures and Symmetry

WORDS TO KNOW

- **Ten thousands, hundred thousands** (as places on the place value chart)
- **One million, ten millions, hundred millions** (as places on the place value chart)
- **Sum:** answer to an addition problem
- **Difference:** answer to a subtraction problem
- **Rounding:** approximating the value of a given number
- **Place value:** the numerical value that a digit has by virtue of its position in a number
- **Standard form:** a number written in the format: 135
- **Expanded form:** e.g., $100 + 30 + 5 = 135$
- **Word form:** e.g., one hundred thirty-five
- **=, <, >** (equal to, less than, greater than)

SAMPLE PROBLEMS

SAMPLE 1

4th grade students will learn to round large numbers to various place values.

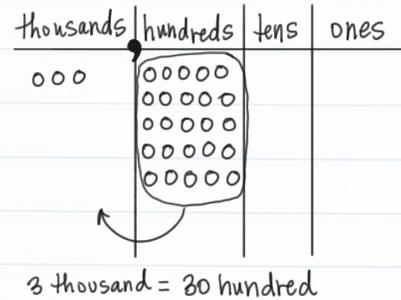
$$935,292 \approx 900,000$$

$$935,292 \approx 940,000$$

$$935,292 \approx 935,000$$

We will also discuss which place value is appropriate to round to in different situations — what degree of accuracy is required?

Place value chart equivalence



SAMPLE 2

Place Value Chart and Place Value Cards: In Module 1, students make extensive use of place value tools, as they have done in earlier grade levels. Now, however, students work with the extended place value chart, which includes place values beyond hundreds, tens, and ones. They may also use place value cards as they have in earlier years to support their learning.

Place Value Chart, to the millions place

millions	hundred thousands	ten thousands	thousands	hundreds	tens	ones

HOW YOU CAN HELP AT HOME

- When given a large, multi-digit number, ask your student what each digit represents. (e.g. "What does the 4 signify in the number 34,500?" Answer: 4,000)
- Help practice writing numbers correctly by saying large numbers and having your student write them down. Students can create their own place value charts to help.