

Unit 2

Family Letter

Reveal
MATH[®]

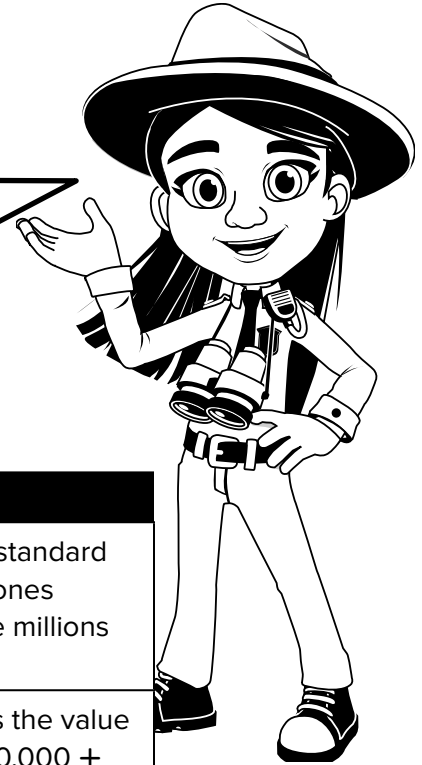
Dear Family,

In this unit, *Generalize Place-Value Structure*, your child will learn about place value and how to use place value to compare and round multi-digit numbers.

STEM Career Kid for this Unit

Hi, I'm Poppy.

I want to be a park ranger. I will use math in my job when I study the number of people that visit different parks each month. I will show students how I will use place value in my work.



What math terms will your child use?

Term	Student Understanding
period	a group of three digits within a number written in standard form; The millions period, thousands period, and ones period are all found within a number written to the millions place.
expanded form	a representation of a number as a sum that shows the value of each digit; 19,834 written in expanded form is $10,000 + 9,000 + 800 + 30 + 4$.
standard form	the usual way of writing a number that shows only its digits, no words
round	to decide whether a number is to the left or to the right of the halfway point; For example, 12,873 rounded to the nearest thousand is 13,000.



What can your child do at home?

Help your child develop fluency with place value. Create a place-value chart on a chalkboard or dry-erase board. When a multi-digit number arises in your home, ask your child to write the number in the chart. Ask him or her to identify the digit in each place and the value of each digit.

What Will Students Learn in This Unit?

Place Value to One Million

The position of a digit in a number determines its value. Your child will learn how to use a place-value chart to determine the value of each digit in a multi-digit number. The number 4,695,132 is written in the place-value chart below.

Millions Period			Thousands Period			Ones Period		
hundreds	tens	ones	hundreds	tens	ones	hundreds	tens	ones
		4	6	9	5	1	3	2

The digit 4 is in the millions place. It has a value of 4,000,000.

The digit 6 is in the hundred thousands place. It has a value of 600,000.

The digit 9 is in the ten thousands place. It has a value of 90,000.

The digit 5 is in the thousands place. It has a value of 5,000.

The digit 1 is in the hundreds place. It has a value of 100.

The digit 3 is in the tens place. It has a value of 30.

The digit 2 is in the ones place. It has a value of 2.

Writing Numbers in Different Ways

Your child will also learn how to read and write multi-digit numbers in standard form, expanded form, and word form. The number 7,283,549 is written in each form below.

Standard form: 7,283,549

Expanded form: $7,000,000 + 200,000 + 80,000 + 3,000 + 500 + 40 + 9$

Word form: seven million, two hundred eighty-three thousand, five hundred forty-nine

Comparing Multi-Digit Numbers

Your child will use place value to compare two multi-digit numbers. Students will learn to compare two multi-digit numbers by comparing the digits in each place value, starting with the greatest place value, until the digits are different. When comparing 465,193 and 465,293, the digits in each place value are the same until the hundreds place. Since 2 is greater than 1, 465,293 is greater than 465,193.

Rounding Multi-Digit Numbers

Your child will also learn how to round large numbers to any place value. At first, students use a number line to round numbers and then learn how to round numbers without a number line. It is important that students are fluent with place value in order to round correctly. Students will learn to carefully consider a situation that requires rounding a number so they can determine the place value to which it makes the most sense to round.