Unit 2

Family Letter

Reveal MATH

Dear Family,

In this Unit, Use Place Value to Fluently Add and Subtract with 1,000, your child will learn how to represent 3-digit numbers. Your child will also learn strategies to add and subtract 3-digit numbers.

STEM Career Kid for this Unit

Hi, I'm Saffron.

I want to be a chef. I will use math in my job when I adjust measurements in recipes. I'll show students how I will use addition and subtraction in my work.

What math terms will your child use?

Term	Student Understanding
compatible numbers	numbers that are easy to work with, such as numbers that end in 0 or 5
bar diagram	a visual representation of the components of an addition or subtraction problem
partial sums	the sums you get in each step of an addition equation $\begin{array}{r} 423 \\ +\ 256 \\ \hline 600 \\ 70 \\ +\ \ \ 9 \\ \hline 679 \end{array}$

Math @ Home Activity

What can your child do at home?

Help your child develop fluency in adding and subtracting 3-digit numbers. Write a different 3-digit number on each of ten index cards. Have your child draw two or three cards and find the sum or difference of the numbers.

What Will Students Learn in This Unit?

Representing Greater Numbers

Your child will learn how to represent 4-digit numbers using expanded form, word form, and standard form.

4,562	4,000 + 500 + 60 + 2	four thousand, five hundred sixty-two
standard form	expanded form	word form

Properties of Addition

Your child will learn that the order of addends does not affect the sum. For example, when finding the sum of 193 + 409 + 207, you can add 193 and 207 first to get 400, which can easily be added to 409. This strategy helps students begin to recognize the benefit of using compatible number in addition problems.

Strategies for Adding and Subtracting 3-digit Numbers

Your child will learn how to add and subtract 3-digit numbers using decomposition, adjusting numbers, and using related addition and subtraction equations. Your child will also learn to use letters for the unknown number in an equation.

For example, the number 678 can be decomposed using place value as 600 + 70 + 8. This is often easier to work with since several of the values are compatible numbers. The number 678 can also be decomposed as 675 + 3, as 650 + 28, or in many other ways.

Examples:

Adjusting Numbers to Add

513 + 172 = ?
−3 +3

510 + 175 = 685

Subtract from one addend and add that amount to the other addend.

Related Addition and Subtraction Equations

$745 - 269 = a$ $745 - a = 269$

$269 + a = 745$ $a + 296 = 745$

A subtraction equation can be written as an addition equation using the same numbers.

Adjust Numbers to Subtract

369 − 125 = ?
−4 −4

365 − 121 = 244

Subtract the same number from or add the same amount to both numbers.

Decomposing Numbers

Numbers can be decomposed into compatible numbers that are easier to add or subtract.

678

600 + 70 + 8 or 675 + 3 or 650 + 28