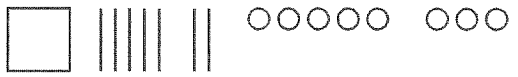
Family Letter

Dear Family,

Your child is currently participating in math activities that help him or her to understand place value, rounding, and addition and subtraction of 3-digit numbers.

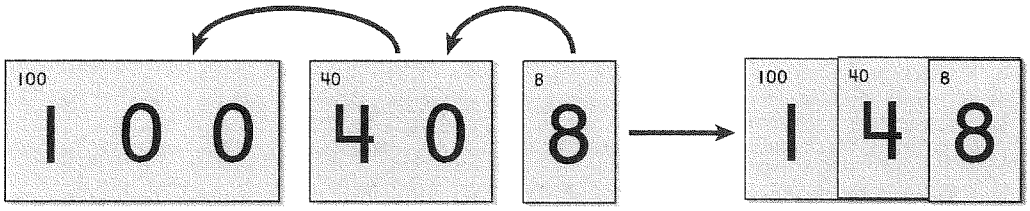
- **Place Value Drawings:** Students learn to represent numbers with drawings that show how many hundreds, tens, and ones are in the numbers. Hundreds are represented by boxes. Tens are represented by vertical line segments, called ten sticks. Ones are represented by small circles. The drawings are also used to help students understand regrouping in addition and subtraction. Here is a place value drawing for the number 178.



1 hundred 7 tens 8 ones

The 7 ten sticks and 8 circles are grouped in 5s so students can see the quantities easily and avoid errors.

- **Secret Code Cards:** Secret Code Cards are a set of cards for hundreds, tens, and ones. Students learn about place value by assembling the cards to show two- and three-digit numbers. Here is how the number 148 would be assembled.



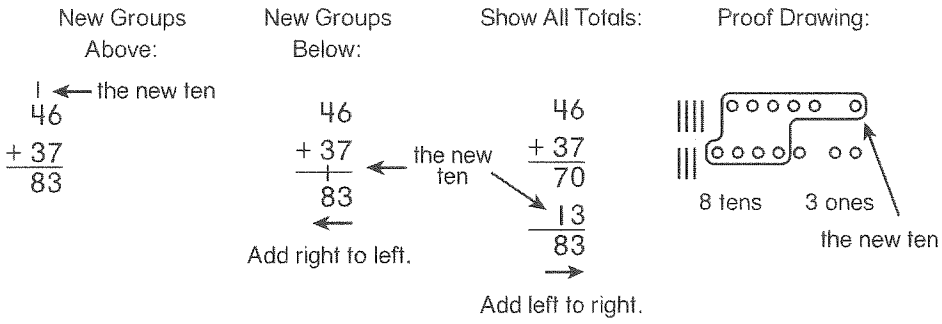
Estimate Sums and Differences: Students learn to estimate sums and differences by rounding numbers. They also use estimates to check that their actual answers are reasonable.

	Rounded to the nearest hundred	Rounded to the nearest ten
493	500	490
129	100	130
+ 369	+ 400	+ 370
991	Estimate: 1,000	Estimate: 990

Family Letter

Addition Methods: Students may use the common U.S. method, referred to as the New Groups Above Method, as well as two alternative methods. In the New Groups Below Method, students add from right to left and write the new ten and new hundred on the line. In the Show All Totals method, students add in either direction, write partial sums and then add the partial sums to get the total. Students also use proof drawings to demonstrate grouping 10 ones to make a new ten and grouping 10 tens to make a new hundred.

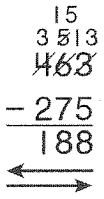
The New Groups Below Method shows the teen number 13 better than does the New Groups Above Method, where the 1 and 3 are separated. Also, addition is easier in New Groups Below, where you add the two numbers you see and just add 1.

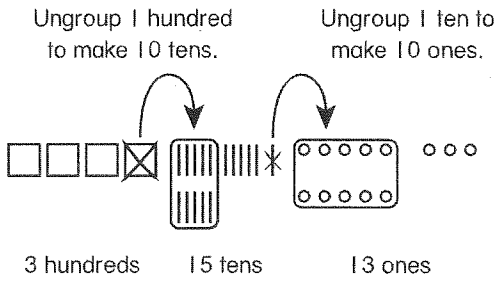


Subtraction Methods: Students may use the common U.S. method in which the subtraction is done right to left, with the ungrouping done before each column is subtracted. They also learn an alternative method in which all the ungrouping is done *before* the subtracting. If they do all the ungrouping first, students can subtract either from left to right or from right to left.

The Ungroup First Method helps students avoid the common error of subtracting a smaller top number from a larger bottom number.

1. Ungroup first
2. Subtract (from left to right or from right to left).





Please call if you have any questions or comments.

Thank you.

Sincerely,
Your child's teacher

COMMON CORE

This unit includes the Common Core Standards for Mathematical Content for Operations and Algebraic Thinking, 3.OA.8; Number and Operation in Base Ten, 3.NBT.1 and 3.NBT.2 and all Mathematical Practices.