Dear Parents,

During Unit 3, your child will build critical knowledge in the understanding of the base-ten numeration system and place-value concepts. This includes ideas of counting in units of fives, tens and multiples of hundreds, tens and ones as well as a grasp of number relationships, which they will demonstrate in a variety of ways, including comparing and ordering numbers. They will work to understand multi-digit numbers in terms of place-value recognizing that place-value notation is shorthand for representing amounts of hundreds, tens and ones.

OPERATIONS AND ALGEBRAIC THINKING

Students need to:

- Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:
  
  100 can be thought of as a bundle of ten tens — called a “hundred.”
  
  The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).

- Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.

- Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons.

- Count within 1000; skip-count by 5s, 10s, and 100s.

- Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using $ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have?

- Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.

- Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.

- Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.

- Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers.
Comparing Word Problems:
http://video.carrollk12.org/view/BARMODELSCOMPARISONS

Addition:
http://video.carrollk12.org/view/MILLSADDING3DIGITSWITHOPENNUMBERLINE
http://video.carrollk12.org/view/MILLSADDING3DIGITSWITHREGROUPING
http://video.carrollk12.org/view/READERADDINGUSINGDRAWINGS
http://video.carrollk12.org/view/MILLSCOMBINING3DIGITNUMBERS

Subtraction:
http://video.carrollk12.org/view/HEIM3DIGITSUBTOPENNUMBERLINE
http://video.carrollk12.org/view/MILLSSUBTRACTING3DIGITSUSINGANOPENNUMBERLINE
http://video.carrollk12.org/view/MILLSSUBTWITHREGROUPING

WAYS PARENTS CAN HELP

Help your child to make real world connections with money, addition and subtraction.

For example:
- provide opportunities for your child to count dollar bills and coins (for example, money in a wallet, money to pay for something at the store, change received from a purchase)
- help your child use addition or subtraction to solve real world problems (e.g. adding a bill, calculating change from a purchase...) and have them explain why the addition or subtraction strategy they used worked