



SECOND GRADE MATHEMATICS – Unit 3

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.

KEY VOCABULARY

Digit
Dime
Dollar
Equal To
Expanded Form
Greater Than
Half Dollar
Hundreds
Less Than
Money
Nickel
Number Line
Ones
Penny
Quarter
Standard Form
Skip Count
Tens
Value

See page 2
for
background
parent
information
and ways
you can help
at home

BACKGROUND INFORMATION AND EXAMPLES FOR PARENTS

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