

### LEARNING AT HOME!

- Ask your child to set the table for you, but give them the wrong number of plates or cups and have them write out the problem in a number sentence. For example, you gave them 3 plates, but there are 6 in the family or  $6-3 = 3$ .
- Point out license plates on a car when in traffic. Use the individual numbers on the plate to make the largest three-digit number possible and write it down. For example, if the plate is 53- 854, the largest three digit number that can be made is 855. The game can be changed by making the smallest three-digit number. Or have them add or subtract the first two and last two digits on a license plate.
- As you are putting away groceries, look at all the shapes in the boxes and cans as you unload them. Point out the top of the box is a flat rectangle, but the whole box is a rectangle solid.
- Point out different kinds of measurements – a gallon of milk, a cup of flour. Have your child help to measure for a yard or home project. Point out the temperatures – using an oven, looking at an outside thermometer.
- Practice one number fact-family a day ( $6+7=13$ ,  $7+6=13$ ,  $13-6=7$ ,  $13-7=6$ ).
- Count coins and write the amounts using a cent or dollar sign.
- How many ways can we make a number? For example “How many ways can we make 32?” ( $11+21=32$ ,

$31+1=32$ ,  $4+28=32$ , etc)

- Talk to your child about how you use math when you cook, look at the temperature, use money, measure for home improvement projects.
- Talk with your child about how you add mentally and what strategies you use to help you solve math problems.
- Make up a game as you empty bags from the grocery store. Ask your child to group things that are alike, such as – put all the cans together or put all of the foods that are eaten for breakfast on the table.
- Show your child a grocery store coupon for a product that he likes to eat and have him count out coins to show how much money the coupon saves on the product. For example, if the coupon is for 30 cents off a jar of peanut butter, give your child nickels and dimes and tell him to count out three dimes or six nickels.
- Give your child a grocery receipt with 2 items circled (items under a dollar). Have them add or subtract these figures. They can see how much 2 cans of soup or 2 boxes of macaroni and cheese cost.

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and the  
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ON THE WEB  
<http://www.nsd.org>

Click on Elementary Information on the left-hand side.  
 Look for Family Curriculum Guides under the Curriculum tab

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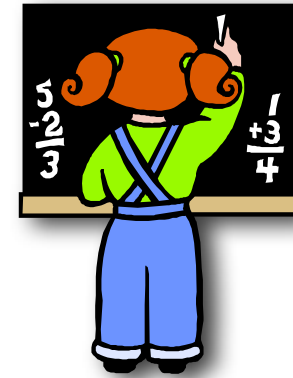
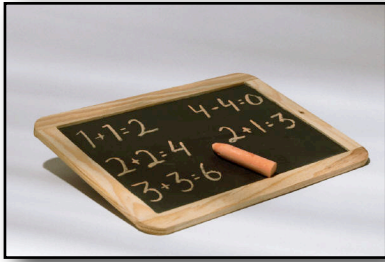
For additional information on Washington State's revised math standards:

<http://www.utdanacenter.org/wamathrevision/>

# A PARENT'S GUIDE TO SECOND GRADE MATH



**BRIARCREST  
 ELEMENTARY SCHOOL  
 AND PARENTS WORKING  
 TOGETHER FOR STUDENT  
 ACHIEVEMENT**



## BUILDING BLOCKS FOR MATH LEARNING

*By the end of Second Grade children will understand and apply the concepts and procedures of...*

### **Number Sense**

- Count by tens or hundreds forward and backward from 1 to 1,000, starting at any number.
- Shows numbers to at least 1,000 in different ways using written words, numerals, and models.
- Identify the ones, tens, and hundreds places in a number and the digits occupying them.
- Describe a number up to 1,000 in terms of how many ones, how many tens, or how many hundreds it includes.
- Compare and order numbers from 0 to at least 1,000 using the words equal to, greater than, less than, greatest, or least when appropriate.
- Count forward by tens out loud starting at 32.
- Understand the value of numbers.
- Examples: 4 is located in what place in the number 834? What digit is in the hundreds place in 245?  
Examples:  $573 = 500 + 70 + 3$ ;  $600 + 30 + 7 = 637$
- Students should become fluent in naming and renaming numbers based on number sense and their understanding of place value. Examples: In the number 647, there are 6 hundreds, there are 64 tens, and there are 647 ones. There are 20 tens in 200 and 10 hundreds in 1,000. There are 23 tens in 230.

### **Addition and Subtraction**

- Quickly recall basic addition facts and related subtraction facts for sums through 20.
- Solve a variety of addition and subtraction problems and explain the solutions.
- Since doubles are reliable memory points for most students, one possible strategy for remembering  $7 + 8 = 15$  is that it is one more than  $7 + 7$ . These types of strategies become useful when addition and subtrac-

tion facts extend to larger numbers, such as those greater than 20. Other strategies for addition include counting on, making 10, commutativity, etc. Subtraction strategies include counting back, relating the problem to addition, etc.

- Add and subtract two-digit numbers efficiently and accurately using a procedure that can be generalized (an algorithm) and explain why the procedure works.
  - Add and subtract two-digit numbers mentally and explain the strategies used.
  - Determine whether a sum or difference is reasonable.
  - Extend and create patterns that can be generated by addition, including growing patterns, and explain the rules used to generate the patterns.
  - Name the standard United States coins and their values and equivalents and write their values using the \$ sign and the ¢ sign.
  - Determine the value of a collection of coins totaling less than \$1.00.
  - Children should be able to use these strategies: Combining tens and ones:  $68 + 37 = 90 + 15 = 105$ ; Compensating:  $68 + 37 = 65 + 40 = 105$ ; Incremental:  $68 + 37 = 68 + 30 + 7 = 105$   
Examples:  $2 + 3 = 5$ ;  $20 + 30 = 50$ ;  $200 + 300 = 500$ ; 2, 5, 8, 11, 14, 17, . . .
- addition and subtraction. Flexible use of equivalence and missing numbers sets the stage for later work when
- ### **Measurement**

- Estimate and measure length using metric and customary units. Standard tools may include rulers, yardsticks, meter sticks, or centimeter/inch measuring tapes. Students should measure some objects that are longer than the measurement tool being used.

- Describe the relationship among standard units of time: minutes, hours, days, weeks, months, and years. Students should be able to describe relationships such as, "Since a minute is less than an hour, there are more minutes than hours in one day."
- Use both analog and digital clocks to tell time to the minute.

**Core Processes:** Reasoning,, problem solving and communication

- Identify the question(s) asked in a problem and any other questions that need to be answered in order to solve the problem.
- Select from a variety of problem-solving strategies and use one or more strategies to solve a problem.
- Identify the answer(s) to the question(s) in a problem.
- Describe how a problem was solved.
- Determine whether a solution to a problem is reasonable.