

## MATHEMATICS

### Ways Parents Can Help Practice Math In Meaningful Ways

- Pick a number and have your child find different pairs of numbers that can be added or subtracted from the number you picked. “How many ways can we make 9?” (5+4, 7+2, 6+3, 10-1, 12-3, etc.)
- Count forward and backward and write numbers to 100 and read numbers to 1,000.
- Work with your child to draw clocks that show the time to get up, go to school, eat lunch, go to bed, and other household times that can be placed around the house.
- Use the calendar together to discuss upcoming or past events and determine how many days today is from those dates.
- Encourage your child to estimate and measure items in your household using nonstandard units. “How many shoes long is the kitchen floor?”
- Provide opportunities for your child to use real or play money such as creating a make believe store where your child can practice making change and buying items, express value using cent notation.
- Have your child find objects around the house, when driving to the store, or walking around the neighborhood that are shaped like circles, squares, triangles, parallelograms and rectangles.
- Ask your child to estimate (guess) objects or answers. Discuss the reasonableness of answers.
- Regularly read math books with your child such as *Math Curse*, by Jon Scieszka and *One Hundred Monkeys*, by Daniel Solomon Cutler.
- Provide opportunities to play math games with your child, such as dominoes, Monopoly® or Chinese checkers.
- Regularly create story problems to solve, such as, “You have ten cookies and you give three cookies to your brother, and I give you 5 cookies, how many cookies do

you have total? Ask and listen to your child to explain how he/she would go about solving the problem and ask questions like “What do you have to figure out?” “How will you get started?” “What do you already know?”

- Predict events that are more or less likely to occur.
- Encourage use of a variety of strategies to solve problems.
- Find patterns in wall paper, clothing, jewelry, music, or clapping and stamping out a beat.
- Ask your child to help solve a problem. I have 8 glasses, but we only need 4 – how many should I put away? Give them time to figure in their head or write the numbers down. Let them learn to solve problems by doing it.
- Go on a shape scavenger hunt. See how many shapes your child can find in their bedroom. Identify shapes by name as you encounter them: our table is a circle, the door is a rectangle, etc.
- Play a game with your child by saying – I have 7 cents and 3 coins in my pocket. What coins do I have?(1 nickel and 2 pennies)
- Cooking is a great way to work on fractions! (Measure  $1\frac{1}{2}$  cups of chocolate chips.)
- Have your child ask family members what is their favorite ice cream flavor. Make a bar graph to show the favorite ice cream flavor of family members. Extend the graph to include uncles, grandmas, grandpas, and cousins.
- Ask your child questions such as “Which is cheaper, this package of two tomatoes for \$1.50 or three of these tomatoes at 60 cents each?” Have child estimate and check their estimate with the calculator.

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[www.sdprn.org](http://www.sdprn.org)  
 and [www.psd401.net/math](http://www.psd401.net/math)

Additional information from  
<http://www.utdanacenter.org/wamathrevision/>  
 Washington State’s revised K-12 math standards

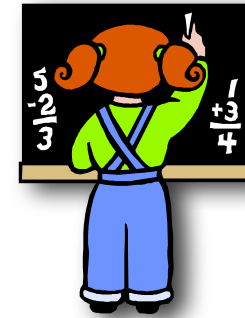
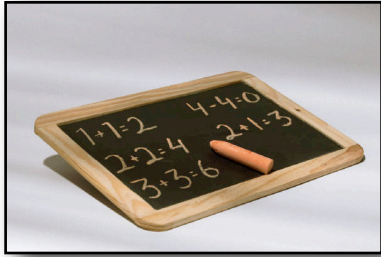
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# A PARENT’S GUIDE TO FIRST GRADE MATH



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



## BUILDING BLOCKS FOR MATH LEARNING

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

### Whole number relationships

- 1.1.A Count by ones forward and backward from 1 to at least 120, starting at any number, and count by twos, fives, and tens to at least 100.
- 1.1.B Name the number before or after any number given verbally up to at least 120.
- 1.1.C Read aloud numerals from 0 to 1,000.
- 1.1.D Order objects or events using ordinal numbers. (first, second, third, etc.)
- 1.1.E Write, compare, and order numbers to at least 120 using the words equal to, greater than, less than, greatest, and least when appropriate.
- 1.1.F Fluently compose and decompose numbers to at least 10.
- 1.1.G Group numbers into tens and ones in more than one way and demonstrate that the total remains the same.
- 1.1.H Group and count objects by tens, fives, and twos.
- 1.1.I Use words, objects, or pictures to demonstrate whether a given whole number is odd or even.

### Addition and Subtraction

- 1.2.A Represent addition and subtraction with physical objects and symbols, and connect the representations.

- 1.2.B Describe equivalent names for the same number using the word equals and the equal sign (=).
- 1.2.C Represent addition and subtraction using movement on the number line.
- 1.2.D Demonstrate the inverse relationship between addition and subtraction by undoing an addition problem with subtraction and vice versa.
- 1.2.E Add three or more one-digit numbers using the commutative and associative properties of addition and justify the solution.
- 1.2.F Explain and use strategies for remembering basic addition facts and related subtraction facts for sums equal to at least 10.
- 1.2.G Quickly recall addition facts and related subtraction facts for sums equal to at least 10.
- 1.2.H Solve and create story problems that match addition or subtraction expressions or equations using physical objects, pictures, or words.
- 1.2.I Recognize, extend, and create number patterns.

### Geometric Attributes

- 1.3.A Compare and sort a variety of two- and three-dimensional figures according to their geometric attributes.
- 1.3.B Identify and name two- and three-dimensional figures, including those in real-world contexts, regardless of size or orientation.
- 1.3.C Compose and decompose common two-dimensional figures.

### Concepts of Measurement

- 1.4.A Recognize that objects used to measure an attribute (length, weight, capacity) must have that attribute and must be consistent in size.

- 1.4.B Use a variety of non-standard units to measure length.
- 1.4.C Apply the transitive property when comparing lengths.
- 1.4.D Use non-standard units to compare objects according to their capacities or weights.
- 1.4.E Describe the relationship between the size of the measurement unit and the number of units needed to measure something.
- 1.4.F Name standard units of time: day, week, month.
- 1.5.A Represent data using tallies, tables, picture graphs, and bar-type graphs.
- 1.5.B Analyze information by asking and answering questions about data.

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

- 1.6.A Identify the question(s) asked in a problem and any other questions that need to be answered in order to solve the problem.
- 1.6.B Identify the given information that can be used to solve a problem.
- 1.6.C Recognize when additional information is required to solve a problem.
- 1.6.D Select from a variety of problem-solving strategies and use one or more strategies to solve a problem.
- 1.6.E Identify the answer(s) to the question(s) in a problem.
- 1.6.F Describe how a problem was solved.
- 1.6.G Determine whether a solution to a problem is reasonable.

