Math Expectations for 2nd Grade

In 2nd grade, your child will build on last year's work and gain important new skills. One of the most important outcomes for the year is to add and subtract two-digit numbers quickly and accurately (e.g., 77 – 28). Another important goal in 2nd grade is to understand what the digits mean in a three-digit number such as 463 (namely, 463 is four hundreds, six tens, and three ones). Your child also will build expertise with solving addition and subtraction word problems. Mastering addition and subtraction at the 2nd grade level is important so that your child will not have to review and repeat this material in 3rd grade, when the study of multiplication, division, and fractions will start.

Operations and Algebraic Thinking

By the end of second grade your student should be able to:

- ✓ Solve one and two step word problems
- ✓ Memorize addition facts of all sums of two one- digit numbers
- ✓ Memorize subtraction facts of all differences of two one-digit numbers
- ✓ Identify odd and even numbers up to 20
- ✓ Solve repeated addition problems using arrays
- ✓ Represent and identify a multiplication problem that matches a group of objects using an array
- ✓ Represent and identify a division problem that matches a group of objects
- ✓ Apply properties of operations as strategies to multiply (e.g. If 6x4=24 is known, then 4x6=24 is also known)

Number and Operations in Base Ten

By the end of second grade your student should be able to:

- ✓ Tell whether a number is in the ones, tens, or hundreds place
- ✓ Skip count by 5's, 10's, and 100's to 1,000
- ✓ Read and write numbers to 1000 using
    - o Base-ten numerals (425)
    - o Number names (four hundred twenty-five)
    - o Expanded form (400+20+5=425)
- ✓ Compare three-digit numbers using >, <, = symbols
- ✓ Add numbers within 100
- ✓ Subtract numbers within 100
- ✓ Add up to four 2-digit numbers
- ✓ Add numbers within 1000 using regrouping strategies
- ✓ Subtract numbers within 1000 using regrouping strategies

Number and Operations in Base Ten Continued...

- ✓ Mentally add and subtract by 10 or 100
- ✓ Explain why addition and subtraction work

Number and Operations Fractions

By the end of second grade your student should be able to:

- ✓ Identify equal parts of a whole as a fraction
- ✓ Compare fractions by their size
- ✓ Represent a whole number as a fraction

Measurement and Data

By the end of second grade your student should be able to:

- ✓ Measure the length of an object and choose the appropriate tool
- ✓ Measure the length of an object using two different units of measurement
- ✓ Estimate lengths using units of inches, feet, centimeters, and meters
- ✓ Measure two objects and compare them
- ✓ Solve word problems using measurement that include an unknown number
- ✓ Use a number line to add and subtract numbers within 100
- ✓ Tell and write the time to the nearest five minutes using a.m. and p.m.
- ✓ Solve word problems using money
- ✓ Collect data by measuring many times and show the data on a line plot
- ✓ Collect, organize, and solve problems using the bar graph or picture graph data

Geometry

By the end of second grade your student should be able to:

- ✓ Tell about triangles, quadrilaterals, pentagons, hexagons, and cubes
- ✓ Separate a rectangle into equal sized parts
- ✓ Separate circles and rectangles into halves, thirds, or fourths, and describe the wholes
- ✓ Identify the fractions of a whole group or shape (e.g. 3/4 , 9/10, 2/5, etc.)