Second Grade Math

What is new to Second Grade:

Determine whether a group of objects is odd or even (2.OA.3)

Estimate lengths using units of inches, feet, centimeters and meters (2.MD.3)

Compare two measurements of the same object using different sized units (2.MD.2)

Use addition and subtraction within 100 to solve word problems involving lengths (2.MD.5)

Represent whole numbers as lengths from zero on a number line diagram and represent whole number sums and differences within 100 on a number line (2.MD.6)

Partition a rectangle into rows and columns of same-sized squares and count to find the total number of them (2.G.2)

What is no longer taught in Second Grade:

**Addition and Subtraction Algorithm

Multiplication and Division Facts

Division Concepts

Recognizing, naming, and comparing unit fractions

Decimal notation for dollar and cents

Duration of time (11:00 am to 4:00pm)

Put shapes together and take them apart to form other shapes

Range and Mode

Patterns

Mathematical Practice Standards:

Second Graders will:

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Critical Areas of Focus

In Grade 2, instructional time should focus on four critical areas: (1) extending understanding of base-ten notation; (2) building fluency with addition and subtraction; (3) using standard units of measure; and (4) describing and analyzing shapes.

1. Students extend their understanding of the base-ten system. This includes ideas of counting in fives, tens, and multiples of hundreds, tens, and ones, as well as number relationships involving these units, including comparing. Students understand multi-digit numbers (up to 1000) written in base-ten notation, recognizing that the digits in each place represent amounts of thousands, hundreds, tens, or ones (e.g., 853 is 8 hundreds + 5 tens + 3 ones).
2. Students use their understanding of addition to develop fluency with addition and subtraction within 100. They solve problems within 1000 by applying their understanding of models for addition and subtraction, and they develop, discuss, and use efficient, accurate, and generalizable methods to compute sums and differences of whole numbers in base-ten notation, using their understanding of place value and the properties of operations. They select and accurately apply methods that are appropriate for the context and the numbers involved to mentally calculate sums and differences for numbers with only tens or only hundreds.
3. Students recognize the need for standard units of measure (centimeter and inch) and they use rulers and other measurement tools with the understanding that linear measure involves an iteration of units. They recognize that the smaller the unit, the more iterations they need to cover a given length.
4. Students describe and analyze shapes by examining their sides and angles. Students investigate, describe, and reason about decomposing and combining shapes to make other shapes. Through building, drawing, and analyzing two- and three-dimensional shapes, students develop a foundation for understanding area, volume, congruence, similarity, and symmetry in later grades.