

Southmoreland School District Second Grade Mathematics Curriculum Overview

Second Grade Math Overview:

The second grade mathematics curriculum is divided into five general modules: (1) Numbers and Operations, (2) Algebraic Concepts, (3) Measurement, Data, and Probability, (4) Geometry, and (5) Problem Solving. Second grade students use place value concepts to use tens and ones to compare three digit numbers. They read, write, and skip count to 1000, and understand the properties of operations to add and subtract within 1000. Students represent and solve problems involving addition and subtraction within 100. In addition, students use mental strategies to add and subtract within 20, using equal groups to build the foundations of multiplication. The students analyze and draw two and three dimensional shapes with specified attributes and use fractions to partition shapes into halves, quarters, and thirds. They use appropriate tools to measure and estimate lengths and apply addition and subtraction properties to problems involving length. Students tell and write time to the nearest five minutes using analog and digital clocks. The students solve problems and make change using coins and bills with the appropriate symbols. Finally, students represent and interpret data using line plots, bar graphs, and picture graphs.

Module Titles:

Module 1: Numbers and Operations

Module 2: Algebraic Concepts

Module 3: Measurement, Data, and Probability

Module 4: Geometry

Module 5: Problem Solving

Module Overviews:

Module 1: Numbers and Operations

The goal of this module is for students to use and understand place value to add and subtract numbers. Second grade students use place value concepts to represent amounts of tens and ones to compare three-digit numbers. They use place value concepts to read, write, and skip count to 1,000. Finally, students use place value understanding and properties of operations to add and subtract within 1,000.

Module 2: Algebraic Concepts

The goal of this module is for students to represent and solve problems involving addition and subtraction as they work with equal groups of objects to understand multiplication. Second grade students use mental strategies to add and subtract within 20. Finally, students represent and solve problems involving addition and subtraction



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within 100, as they work with equal groups of objects to gain foundations for multiplication.

Module 3: Measurement, Data, and Probability

The goal of this module is for students to use strategies to count, add, and subtract money, tell time, estimate and measure length in standard units, and represent and interpret data. Second grade students measure and estimate lengths in standard units using appropriate tools. They extend the concepts of addition and subtraction to problems involving length. Students tell and write time to the nearest five minutes using both analog and digital clocks. In addition, students solve problems and make change using coins and paper currency with appropriate symbols. Finally, students represent and interpret data using line plots, picture graphs, and bar graphs.

Module 4: Geometry

The goal of this module is for students to use shapes and solids to describe, compare, and make other shapes. Second grade students analyze and draw two and three dimensional shapes having specified attributes. Finally, students use the understanding of fractions to partition shapes into halves, quarters, and thirds.

Module 5: Problem Solving

The goal of this module that is integrated through the year is for students to use strategies that enable us to solve problems. Second grade students develop problem solving and reasoning strategies that are essential in developing conceptual understanding of problem solving. Finally, students explore the following strategies and key concepts: using objects, drawing a picture, writing a number sentence, identifying two question problems, using data from a chart, looking for a pattern, identifying missing or extra information, using logical reasoning, using reasoning, making an organized list, using the process of trying, checking, and revising their solutions, and using a graph.