Southmoreland School District
Kindergarten Math Curriculum Overview

Overview:

At this level, it is expected that students will identify, write and count numbers 0-20, as well as compare sets of numbers to 20. Students will also use this foundation of numbers to compose and decompose sets of numbers to 20. Students will be introduced to the concepts of addition and subtraction. Students will distinguish between 2D and 3D shapes based on their attributes. Students will be introduced to the different types of measurement vocabulary to compare objects and/or situations.

Module Titles:

Module 1: Students will be able to identify, write and count numbers 0- 20.
Module 2: Students will compare numbers and sets of objects up to 20.
Module 3: Students will extend the concept of composing and decomposing sets of numbers up to 20.
Module 4: Students will add and subtract sets of numbers up to 10.
Module 5: Students will identify 2D and 3D shapes.
Module 6: Students will compare length, weight, capacity, area and temperature of objects and/or situations.

Module Overviews:

Module 1: Students will be able to identify, write and count numbers 0 - 20.
Like Pre-Kindergarten, kindergarten starts out realistically with solidifying the meaning of numbers to 20 with a focus on relationships to 10.

Module 2: Students will compare numbers and sets of objects up to 20.
The terms “more” and “less” are abstract later in kindergarten because of their context: “7 is 2 more than 5” is more abstract than “Nevaeh is taller than Juan.” “1 more, 2 more, 3 more” leads into addition fact fluency (+1, +2, +3). Comparing numbers leads to a study of the numbers that make up a number (e.g., “3 is less than 7” and later, “3 and 4 make 7.”). This, in turn, leads naturally to discussions of adding, subtracting, and solving word problems in Modules 3 and 4.

Module 3: Students will extend the concept of composing and decomposing sets of numbers up to 20.
When students have a firm grasp of numbers 1-10, they progress to Module 3. Module 3 explores numbers 10-20, which are parsed as “10 together with a number from 1-10.” For example, “12 is 2 more than 10.” In numbers 6-10, the role of 5 loses significance as those numbers are shown in different configurations other than “5 and a number.” In contrast, the

number 10 is special; it is the anchor that will eventually become the “ten” unit in the place value system.

Module 4: Students will add and subtract sets of numbers up to 10.
In Module 4, students use objects, fingers, mental images, drawings, acting out situations, verbal explanations, expressions, or equations to represent addition and subtraction situations. They will understand addition as putting together and adding to and subtractions as taking apart and taking from.

Module 5: Students will identify 2D and 3D shapes.
Students learn to identify and describe squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders and spheres in Module 5. Module 5 continues with an exploration of concepts of shapes. Students discover that shapes can be composed of smaller shapes. They begin to describe similarities and differences among shapes.

Module 6: Students will compare length, weight, capacity, area and temperature of objects and/or situations.
In Module 6, students begin to experiment with measurement, particularly with units and comparison of units. Students use different units to measure length, weight and capacity, and explore the measurable attributes of an object. Comparison begins with developing the meaning of the word “than” in the context of “taller than,” “shorter than,” “heavier than,” “longer than,” etc.