Haddon Township Mathematics Kindergarten

The Kindergarten Mathematics Curriculum provides students with developmentally appropriate experiences and activities that reflect the Common Core Content Standards. As students in kindergarten experience mathematics through the Everyday Math Program, they develop skills in counting and cardinality, operations and algebraic thinking, numbers and operations in base ten, measurement and data, and geometry. The standards and these topics provide students with mathematical experiences and concrete problems, and they create college and career readiness for all students.

ESSENTIAL LEARNINGS: All kindergarten students will demonstrate an understanding of the following Common Core Content Standards:

Counting and Cardinality (CCSS.K.CC)

- Count to 100 by ones and by tens.
- Count forward beginning from a given number within the known sequence (instead of having to begin at 1).
- Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).
- Understand the relationship between numbers and quantities; connect counting to cardinality.
- Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects.
- Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.
- Compare two numbers between 1 and 10 presented as written numerals.

Operations and Algebraic Thinking (CCSS.K.OA)

- Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., 5 = 2 + 3 and 5 = 4 + 1).
- For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.
- Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.
- Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem..
- Fluently add and subtract within 5.

Number & Operations in Base Ten (CCSS.K.NBT)

• Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing a equation (such as 18 = 10 + 8); understand that these numbers are composed of ten ones and 1,2,3,4,5,6,7,8,9 ones.

Measurement and Data (CCSS.K.MD)

- Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.
- Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference. For example, directly compare the heights of two children and describe one child as taller/shorter.
- Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.

Geometry (CCSS.K.G)

- Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as *above*, *below*, *beside*, *in front of*, *behind*, and *next to*.
- Correctly name shapes regardless of their orientations or overall size.
- Analyze and compare two- and threedimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length).
- Compose simple shapes to form larger shapes.
- Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.
- Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid").

Standards in Mathematical Practices (SMP)

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