REGIONAL OFFICE OF CURRICULUM, INSTRUCTION, & ASSESSMENT Allendale ~ Ho-Ho-Kus ~ Northern Highlands ~ Upper Saddle River

Course Name: Mathematics Grade: Kindergarten

Course Description: Throughout Kindergarten, students are active participants in problem solving, reasoning, mathematical modeling, measuring tools, and communication when making sense of mathematics. Instruction will focus on two critical areas: representing and comparing whole numbers, initially with sets of objects, and describing shapes and space. Through hands-on learning and engaging games, students will explore various topics, including but not limited to counting and cardinality, operations and algebraic thinking, number and operations in base ten, measurement, data literacy, and geometry. Students will learn the importance of routines and daily practices that are needed to help guide their mathematical thinking and help them persevere through more challenging problems.

Course Proficiencies: The following is a list of the proficiencies that describe what students are expected to know and be able to do as a result of successfully completing this course. The proficiencies are the basis of assessment of student achievement. The learner will demonstrate the ability to:

- 1. Use number names to communicate value and count to tell the number of objects in a set (K.CC.B.4a; K.CC.B.4b; K.CC.B.4c; K.CC.B.5).
- 2. Know the number names and the count sequence (K.CC.A.1; K.CC.A.2; K.CC.A.3).
- 3. Compare numbers using counting and matching strategies (K.CC.C.6; K.CC.C.7).
- 4. Understand addition as putting together and adding to and understand subtraction as taking apart and taking from (K.OA.A.1; K.OA.A.2; K.OA.A.3; K.OA.A.4).
- 5. Work with teen numbers to gain foundations for place value (K.NBT.A.1).
- 6. Describe and compare measurable attributes, including length and weight (K.M.A.1; K.M.A.2).
- 7. Work with money and identify the values of coins and the one-dollar bill (K.M.B.3).
- 8. Classify objects and count the number of objects in categories (K.DL.A.1).
- 9. Identify and describe shapes, including squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres (K.G.A.1; K.G.A.2; K.G.A.3).
- 10. Analyze, compare, create, and compose shapes (K.G.B.4; K.G.B.5; K.G.B.6).
- 11. Accurately and efficiently add and subtract within five (K.OA.A.5).
- 12. Use mathematics to communicate and analyze different ways to find a solution in order to become successful problem solvers (MP 1-8).
- 13. Learn and apply key literacies surrounding technology and information media literacy, including innovation, creativity, critical thinking, and problem-solving while gaining a global/cultural awareness (NJSLS 9.4).
- 14. Develop and apply computational and design thinking to address real-world problems and design creative solutions (NJSLS 8.1 and 8.2).

Born On: June 2024

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Assessments:

- 1. Classroom participation
- 2. Teacher observation and anecdotal notes
- 3. Individual and group activities
- 4. Performance-based assessments
- 5. Formal and informal assessments

BOE Adopted Materials:

Everyday Mathematics 4, McGraw Hill Education 2016/2020

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