Grade: Kindergarten **Subject:** Mathematics	**Unit 4: Partners, Problems, Drawings and Tens**
Big Idea/Rationale	• Unit 4 Reviews and builds on children's understanding of addition and subtraction story problems. Children deepen their knowledge of problem solving as they create story problems for addition and subtraction numeric equations. They continue partner work for partners 2 through 6 and practice visualizing teen numbers as a ten and extra ones. Geometry concepts are extended as children make 2-dimsnsional patterns on triangular grids. • Partners of 10 • Story Problems and Equations
Enduring Understanding	Students will understand that: • Counting is cumulative no matter which order the objects are counted. • There is a unique symbol that goes with each number word. • There is more than one way to show and write a number. • In a pair of numbers, the number that shows more is greater and the number that shows fewer is less. • You can use numbers as benchmarks for comparison. • A quantity can be represented numerically in various ways. Problem solving depends upon choosing wise ways. • Joining groups or part of a whole is one way to interpret addition. • Joining groups and using the + and = signs can be used to show the parts of a whole. • Pictures and real life objects can be used with or without formal mathematical symbols to solve addition problems and relate a sum. • Separating or taking parts from a whole are ways of interpreting subtraction. • Comparing quantities for the purpose of stating more or less quantity is another way of demonstrating subtraction. • Subtraction number sentences can be relayed using the – and = symbols. • Pictures and real life objects can be used with or without formal mathematical symbols to solve subtraction problems and relate a sum.
Essential Questions	• How are numbers important and how do they relate to everyday life situations? • How do we use numbers when relating them to sets of objects? • How can you show a whole group of objects in different ways?

	• How do you know when a number is greater than another and what vocabulary do I use to convey this? • How can I use numbers as benchmarks for the purpose of comparing and finding another number that is 1 or 2 more or fewer? • How can we compare and contrast numbers? • When moving two groups of objects together or two parts of a whole, how does it help you know how many altogether? • What strategies can be used for finding sum? • Can I use more than pencil and paper to relate an addition problem? • How does moving an object or objects to the side of a group, help me know how many objects are left? • Can I use more than a paper and pencil to relate a subtraction problem?
Content (Subject Matter & Lesson Objectives):	• Numbers 1-10 and Math Stories: Grocery Store Scenario • Find Partners of 10 • Teen Numbers and Equations • Addition and Subtraction Stories: Grocery Store Scenario • Practice with Teen Numbers and Partners • Patterns with Shapes and Repeating Patterns • Count, Match, and Compare with Math Drawings • More Teen Numbers and Equations • More Patterns with Shapes • Break-Apart Numbers Through 10 • Numbers Through 30 • Addition and Subtraction Drawings: Grocery Store Scene • More Patterns with Shapes and Repeating Patterns • Partners of 10 with 5-Groups • Addition Equations • More Partners of 10 with 5-Groups • Introduction to the -1 Routine • 2- and 3-Dimensional Shapes: Triangles • Vertical Graphs and Comparisons • Equations: Partners of 3, 4, 5, 6, and 10 • Triangles and Addition and Subtraction Stores • Horizontal Graphs and Comparisons • Teen Number Book • Shapes in a Butterfly Scene

Standards	• **K.CC.A.1:** Count to 100 by ones and by tens. • **K.CC.A.2:** Count forward beginning from a given number within the known sequence (instead of having to begin at 1). • **K.CC.A.3:** 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). • **K.CC.B.4:** Understand the relationship between numbers and quantities; connect counting to cardinality. • **K.CC.B.5:** 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. • **K.CC.C.6:** 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. • **K.OA.A.1:** Represent addition and subtraction with objects, fingers, mental images, drawings[1], sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations. • **K.OA.A.2:** Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem. • **K.OA.A.3:** 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). • **K.OA.A.4:** 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. • **K.OA.A.5:** Fluently add and subtract within 5. • **K.NBT.A.1:** 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 or equation (such as 18 = 10 + 8); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones. • **K.MD.A.1:** Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. • **K.MD.B.3:** Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. • **K.G.A.1:** 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*.

	• **K.G.A.2:** Correctly name shapes regardless of their orientations or overall size. • **K.G.A.3:** Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid"). • **K.G.B.4:** Analyze and compare two- and three-dimensional 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). • **K.G.B.5:** Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes. • **K.G.B.6:** Compose simple shapes to form larger shapes. *For example, "Can you join these two triangles with full sides touching to make a rectangle?"* • **Mathematical Practices**
Materials and Resources	• Kindergarten Math Expressions, Math Journals, manipulatives, Math themed literature, IXL Mathematics