Grade: Kindergarten **Subject:** Mathematics	**Unit 5: Consolidation of Concepts**
Big Idea/Rationale	• Unit 5 reviews and builds on children's ability to add and subtract and to use these operations as they make up and solve story problems. Children work with numbers 1 through 20 on the 1-20 Boards, deepening understanding of teen numbers as one ten and some ones. They also continue working with pattern blocks and Attribute Cards to classify objects, extend repeating patterns, make shape pictures, and turn and flip shapes. • More Partners of 10 • Numbers 1-20 • More Teen numbers and Partners • More 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. • A region or set can be divided into equal sized parts in different ways. • Equal size parts may have the same area but not the same shape.

	• Data can be collected and represented using different types of graphs and can answer questions. • Some problems can be solved by making and analyzing a graph.
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? • What is a whole and how can it be represented in parts or halves? • How can you be sure parts are equal? • How does matching objects to groups of other objects help you know which group has more, fewer or as many as another group? • When collecting information how is it then recorded?
Content (Subject Matter)	• Math Stories and Scenes with Teen Numbers • Partners of 10: Stars in the Night Sky • More Partners of 10: Stars in the Night Sky • Solve and Retell Story Problems • Make Quantities 1-20 • Geometric Patterns and Rotations • More Solve and Retell Story Problems • Patterns in Numbers 1-20 • Review Partners of 2, 3, 4, 5, 6, and 10 • Partners of 6, 7, 8, and 9 • Tens in Teen Numbers: A Game • Partners of 10: Class Project • Tens in Teen Numbers Book

	• Introduction to Counting and Grouping Routines • Practice: Number and Body-in-Space Activities • Add partners to Find Totals • Story Problems: Totals Under 10 • Subtract to Make Equal Groups • More Vertical Graphs and Comparisons • Practice: Pattern Block and Attribute Card Activities • Teen Numbers, Partners, and Equations • More Horizontal Graphs and Comparisons • More Tens in Teen Numbers: A Game • Equal Parts Equal Share • Shapes in a Robot Scene
Standards	• **K.CC.A1:** Count to 100 by ones and by tens. • **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.B.3:** Classify objects into given categories; count the numbers of objects in each category and sort the categories by count • **K.G.A.2:** Correctly name shapes regardless of their orientations or overall size. • **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