Grade: 1 **Subject: Mathematics**	**Unit of Study: Unit 1 – Early Number Activities**
Big Idea/Rationale	• Unit 1 reviews and builds upon children's knowledge of embedded numbers. The exploration of the specific components of a number allows children to recognize that each number has other numbers "hiding" inside it. By developing children's awareness of the ways in which numbers can be broken apart and put together, children learn what these "hidden" numbers are. This in turn provides a solid foundation for understanding basic addition and subtraction operations and equations.
Enduring Understanding	Students will understand that: • Numbers can be used for different purposes, and numbers can be classified and represented in different ways. • Doing mathematics involves a variety of processes including problem solving, reasoning, communication, connecting, and representing. • Using concrete materials and images to support learning abstract mathematical concepts is most effective when items and contexts are meaningful. • Patterns can be shapes, numbers, letter, etc. that are arranged in a predictable unit that repeats. • Patterns can be extended by identifying and repeating the unit.
Essential Questions	• Where do we find numbers? • Why do we count things • What are the different ways we can break-apart a number? • What is a pattern? • Where can we find patterns? • How can we make patterns? • Why do we need patterns?
Content (Subject Matter & Lesson Objectives):	• Establish links between math and the real world • Identify examples of 0, 1, and 2. • Identify and extend repeating patterns. • Write numerals 0, 1, and 2. • Identify and draw triangles • Identify groups of 3 • Write numerals 0 through 3 • Identify and extend repeating patterns • Identify and draw rectangles and squares • Identify groups of 4 • Write numerals 0 through 4 • Identify and extend repeating patterns. • Find the pairs of numbers embedded in 4

	• Tell sharing stories about sets of partners for 4 • Identify groups of five and sets of partners for 5 (5 – partners) • Write numerals 0 through 5. • Identify pentagons and attributes of plane shapes • Identify and extend repeating patterns • Develop spatial concepts. • Find pairs of numbers embedded in 5. • Order numbers 1 through 5 and give ordinal equivalents. • Find the number that is 1 more and 1 less. • Express 1-more and 1-less sequences for numbers 1-10. • Represent quantities as groups of 5 and extra ones. • Find pairs of numbers embedded in 7 • Write numerals 0 through 7 • Recognize and extend repeating patterns • Develop spatial concepts • Order numbers 1-8 and give ordinal equivalents. • Establish links between math and the real world • Develop spatial concepts • Order numbers 1-8 and give ordinal equivalents. • Establish links between math and the real world • Discover reversibility of addends and apply to break-apart partners. • Find pairs of numbers embedded in 8 • Recognize reversibility of addends • Identify and extend repeating patterns • Practice counting and writing numerals. • Find pairs of numbers embedded in 9. • Recognize reversibility of addends • Identify and extend repeating patterns. • Find pairs of numbers embedded in 10 • Recognize reversibility of addends • Write and find missing numbers through 10. • Visualize numbers from 6 through 10 as a group of 5 and extra ones. • Draw representations of 5-groups and create stories about them. • Find equal shares of even numbers through 10. • Identify odd and even numbers. • Determine numbers that are 1 more or 1 less. • Apply different methods of finding break-aparts for the number 10. • Develop spatial concepts. • Order numbers 1-10 and give ordinal equivalents. • Solve a variety of problems using mathematical concepts and skills. • Use mathematical processes in the context of problem solving, connections, reasoning and proof, communication and representation.

Standards	• **1.OA.B.3:** Apply properties of operations as strategies to add and subtract.2 Examples: If 8 + 3 = 11 is known, then 3 + 8 = 11 is also known. (Commutative property of addition.) To add 2 + 6 + 4, the second two numbers can be added to make a ten, so 2 + 6 + 4 = 2 + 10 = 12. (Associative property of addition.) • **1.OA.C.5:** Relate counting to addition and subtraction (e.g., by counting on 2 to add 2). • **1.OA.C.6:** Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a ten (e.g., 13 – 4 = 13 – 3 – 1 = 10 – 1 = 9); using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 – 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13). • **1.OA.D.7:** Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? 6 = 6, 7 = 8 - 1, 5 + 2 = 2 + 5, 4 + 1 = 5 + 2. • **1.NBT.A.1:** Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral. • **Mathematical Practices**
Materials and Resources	• First Grade Math Expressions, Math Journals, manipulatives, Math themed literature, IXL Mathematics