Grade: 1 **Subject: Mathematics**	**Unit of Study: Unit 8 – Money and 2-Digit Addition**
Big Idea/Rationale	• Understanding 2-digit addition and regrouping • Unit 8 reviews and builds on children's knowledge of tens and ones as they explore regrouping. As children engage in activities using coins, the packaging of objects, and sticks and circles, children begin to understand the concept behind what they do when they add and regroup numerically. Children first develop their own solution methods for adding 2-digit numbers with regrouping before being introduced to proven numeric methods. • 2-digit coin combinations • 2-digit addition • 2-digit addition in real life situations
Enduring Understanding	Students will understand that: • How can you use 10-groups to help exchange coins and find totals of mixed coin amounts? • How do we add with large 2-digit numbers? • What is the New Group Below method? • What is the New Group Above method? • How do the two methods compare and when would you use them?
Essential Questions	• Why is it faster to count by tens when counting large numbers? • Why would we want to count large numbers faster? • Whose job is made easier by knowing tens and ones? • Using 10-sticks and circles, explain how you solve 2-digit problem using regrouping. • What number does the ? in the tens place really stand for?
Content (Subject Matter)	• Represent 2-digit money amounts with nickels, dimes, and pennies. • Show different, but equivalent, coin combinations. • Draw sticks and circles to represent 2-digit numbers. • Show equivalent amounts with different coin combinations. • Solve story problems by converting coins to cents. • Determine the total number of cents by showing and adding coins. • Use grouping to make new tens and find the total of mixed coin amounts. • Add multi-digit money amounts by drawing sticks and circles. • Regroup tens and ones to add 2-digit numbers. • Develop and share strategies for a 2-digit addition. • Add 2-digit numbers in a vertical format by showing the extra ten. • Solve 2-digit addition exercises using the New Group Below and New Group Above methods. • Add 2-digit numbers by isolating tens from ones and adding them separately.

	• Practice numeric addition and verify solutions with proof drawings. • Revisit methods of 2-digit addition and regrouping. • Discuss and justify the advantages of various solution methods. • Explain the role of an extra ten in 2-digit addition. • Identify common errors and tell ways to resolve them. • Practice 2-digit addition by interpreting and solving story problems. • Solve 2-digit addition problems with a buyer-seller scenario. • Count on with coins or use a numeric method to add 2-digit money values. • Solve story problems to find unknown 2-digit partners. • Fine the unknown partner and convert the answer to coins. • Count on by tens and ones to find an unknown partner in an addition problem. • Solve story problems with unknown partners of a dollar. • Count on by tens and ones to find an unknown partner of 100. • Count on with pennies and dimes to make change for a dollar. • Practice "buying" and "selling" and making change for a dollar. • Count on by tens and ones to find an unknown partner of 100. • Count on with pennies and dimes to make change for a dollar. • Practice "buying" and "selling" and making change for a dollar.
Standards	• **1.OA.A5:** Relate counting to addition and subtraction (e.g., by counting on 2 to add 2). • **1.OA.A.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.OA.A.8:** Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. *For example, determine the unknown number that makes the equation true in each of the equations 8 + ? = 11, 5 = _ – 3, 6 + 6 = _.* • **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.
Materials and Resources	• First Grade Math Expressions, Math Journals, manipulatives, Math themed literature, IXL Mathematics