Grade: 3 Subject: Mathematics	Unit 5: Use Addition and Subtraction
Big Idea/Rationale	Provides experience with various representation and contexts for addition and subtraction, while continuing to develop and practice computation methods that are meaningful and easily used by students. Students apply their knowledge of place value to compare, order, and round numbers, and use rounding to estimate sums and differences. Students extend money skills to make change. More complex word problems are also introduced
Enduring Understanding (Mastery Objective)	 Students will understand that: Rounding is a process for finding the multiple of 10, 100, and so on, closest to a given number. Rounding gives one way to estimate sums by replacing numbers that are close and easy to compute with manually. Dollars, dimes, and pennies represent whole numbers, tenths, and hundredths in a decimal number system. Money can be used to model addition and subtraction of decimals. Information given in a problem can often be shown in a picture or diagram that can be used to understand and solve the problem. Some problems can be solved by writing and completing a number sentence or equation.
Essential Questions (Instructional Objective)	 How do you round numbers to the nearest ten? Hundred? How can we decide when to use an exact answer and when to use estimation? What are the different types of currency used in the U.S.? What is the value of each coin? How can you add and subtract money?
Content (Subject Matter)	 Round numbers to the nearest hundred. Round to estimate sums and differences and check calculations. Round numbers to the nearest ten. Use rounding to estimate sums and differences. Estimate quantities. Compare order whole numbers. Compare the value of expressions. Review the values of a penny, nickel, dine, and quarter. Determine and compare the values of collections of coins and bills. Represent amounts of money in various ways. Practice counting out the exact amount of money to make a purchase. Use the Counting-On strategy to make change from purchase. Round money amounts to the nearest dime or dollar. Make estimate in real-world situations involving money. Interpret information in tables.

- Write and solve problems based on tables with data.
- Use information in tables to create and solve word problems.
- Complete tables.
- Create a simple table.
- Practice completing tables in which there is a mathematical relationship between the columns.
- Represent and solve word problems with extra or hidden information.
- Identify word problems with not enough information to solve and identify the information's needed.
- Rewrite word problems with not enough information.
- Solve word problems requiring two steps.
- Solve multi-step word problems requiring two or more steps.
- Write and answer questions using horizontal and vertical bar graphs.
- Create bar graphs to represent data from tables. Find mode and range of data.
- Analyze data in horizontal and vertical bar graphs.
- Use information in a table to create horizontal and vertical bar graphs.
- Construct and analyze frequency tables and line plots.
- Match a set of data with a graph of the data and describe the important features. Solve a variety of problems using mathematical concepts and skills.
- Use the mathematical processes of problem solving, connections, reasoning and proof, communication, and representation.

Skills/ Benchmarks (CCSS Standards)

- **3.OA.D.8:** Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answering using metal computation and estimation strategies including rounding.
- **3.NBT.A.1:** Use place value understanding to round numbers to the nearest 10 or 100.
- **3.NBT.A.2:** Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.
- **3.MD.B.3:** Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two- step "how many more" and "how many less" problems using information presented in scaled bar graphs.
- Mathematical Practices

Materials and Resources

• Math Expressions, Student Journals, Manipulatives, Math themed literature, BrainPop, IXL Mathematics