Course Description:
During the second semester, students will use place value to add and subtract within 1000. They will use place value to estimate and solve word problems to demonstrate skills. Students will use a number line to add and subtract. They will work with money and time to compare value. Students will collect data and represent it on graphs to discuss it. They will identify and add fractions. They will recognize common 2-dimensional and 3-dimensional shapes by specific characteristics. Finally, students will be introduced to various strategies in which to solve multiplication problems.

Module	Lesson Title	Objectives
Module 19: Number Lines	Sums Using a Number Line	• Show how sums can be represented as lengths on a number line. • Add two-digit numbers on a number line.
	Solve Word Problems by Adding	• Use number lines to solve addition word problems.
	Differences Using a Number Line	• Show how differences can be represented as lengths on a number line.
	Number Lines	• Create, use, and explain an open number line. • Add and subtract on a number line.
	Solve Word Problems by Subtracting	• Use number lines to solve subtraction word problems.
Module 20: Using Graphs to Measure	Using Graphs to Measure	• Use tally marks to collect and represent data. • Create simple bar graphs.
	Favorite Season Data Collection	• Create pictographs and bar graphs to represent class data. • Use tally marks to organize data.

Module	Lesson Title	Objectives
	Favorite Pizza Topping Data Collection	• Create pictographs and bar graphs to represent class data. • Use tally marks to organize data.
	Problem Solve: Read and Interpret Data	• Accurately read measurement data on the amount of rainfall in a year.
	Compare Measurement Data	• Measure, record, and compare data on a graph. • Review data on graphs by summarizing information.
Module 21: 3-Digit Addition	Add Hundreds	• Add multiples of 100 mentally.
	Break Apart 3-Digit Numbers to Add (Without Regrouping)	• Identify the ones, tens, and hundreds place of a 3-digit number. • Add 3-digit numbers by breaking apart each addend to represent each place value.
	Break Apart 3-Digit Numbers to Add (With Regrouping)	• Identify the ones, tens, and hundreds place a a 3-digit number. • Add 3-digit numbers by breaking apart the addends to represent each place value.
	Adding 3-Digit Numbers	• Add 3-Digit Numbers using a place-value chart.
	Problem Solving: 3-Digit Addition	• Solve word problems involving 3-digit addition.
Module 22: Subtract Hundreds	3-Digit Subtraction	• Subtract multiples of 100 mentally. • Subtract multiples of 100 using a 1000's chart.

Module	Lesson Title	Objectives
	Break Apart 3-Digit Numbers to Subtract (without Regrouping)	• Identify the place values of a 3-digit number. • Subtract a 3-digit number by breaking it apart into place values.
	Break Apart 3-Digit Numbers to Subtract (with Regrouping)	• Identify the ones, tens, and hundreds place of a 3-digit number. • Subtract 3-digit numbers by breaking apart the numbers.
	Subtract 3-Digit Numbers	• Subtract 3-digit numbers using a place-value chart.
	Problem Solving: 3-Digit Subtraction	• Solve word problems using 3-digit subtraction.
Module 23: Mixed Operations	Add and Subtract Numbers up to 100	• Add and subtract numbers up to 100.
	Add and Subtract Numbers up to 1,000	• Add and subtract numbers up to 1,000.
	What Operation?	• Identify whether a plus sign or minus sign makes an equation true.
	Ways to Make a Number	• Write addition and subtraction sentences to make a specific number.
	What's My Number	• Determine a number after clues are given about place value, ordinals, odd/even, and addition/subtraction.

Module	Lesson Title	Objectives
Module 24: Problem-Solving Strategy: Write a Number Sentence	Problem-Solving Strategy: Write a Number Sentence	• Problem solve by adding and subtracting. • Solve word problems by writing number sentences.
	Input/Output Tables: Add	• Add large numbers using input/output tables.
	Input/Output Tables: Subtract	• Subtract large numbers using input/output tables.
	Problem Solve Using Pictures	• Use pictures to solve word problems.
	Write Word Problems	• Create addition and subtraction word problems.
Module 25: Shapes	Two-Dimensional Shapes	• Identify two-dimensional shapes. • Describe shape attributes. • Define and calculate the perimeter of a shape.
	Angles and Vertices	• Explain how a shape can be identified by numbers of sides, vertices, and angles.
	Three-Dimensional Shapes	• Identify three-dimensional shapes and two-dimensional shapes. • Use attributes to classify three-dimensional shapes.

Module	Lesson Title	Objectives
	Faces, Edges, and Vertices	• Describe three-dimensional, or 3-D, shapes. • Use attributes to classify 3-D shapes.
	Relate Shapes and Solids	• Recognize 2-D and 3-D shapes. • Create a Venn Diagram comparing and describing shapes and attributes.
Module 26: Partitioning	What is a Whole?	• Identify whole shapes.
	Halves	• Identify halves as two parts of a whole. • Identify and make equal parts of a whole.
	Thirds	• Identify thirds as three parts of a whole. • Divide shapes into thirds.
	Fourths	• Identify fourths as four parts of a whole.
	Problem Solving: Finding a Pattern	• Review how to identify equal parts, halves, thirds, and fourths.

Module	Lesson Title	Objectives
Modules 27: Split the Shape	Make Halves	• Divide whole shapes into halves. • Identify and make equal parts of a whole. • Identify the line of symmetry in a two-dimensional figure.
	Make Thirds	• Partition whole shapes into thirds. • Identify and make equal parts of a whole.
	Make Fourths	• Divide whole shapes into fourths • Identify and make equal parts of a whole.
	Partition Shapes	• Partition shapes into halves, thirds, or fourths. • Create an object using partitioned shapes.
	Equal and Unequal Parts	• Identify shapes that are split equally and unequally.
Module 28: Fractions	Fractions 1/2	• Use an understanding of fractions to partition shapes into halves.
	Fractions 1/3	• Use an understanding of fractions to partition shapes into thirds.
	Fractions 1/4	• Use an understanding of fractions to partition shapes into fourths.
	Add Fractions	• Add partitioned pieces of shapes together.

Module	Lesson Title	Objectives
	Problem Solving	• Use fractions to solve word problems. • Identify partitioned parts.
Module 29: Time	Time to the Hour	• Practice counting by 1-minute intervals around the clock. • Count around the clock from 1:00 to 12:00 on an analog clock. • Show the times on a digital clock.
	Time to the Half Hour	• Tell and show time to the nearest half hour.
	Time to the Quarter Hour	• Tell how the hands on a clock can show time to the quarter hour.
	Time in Five-Minute Intervals	• Skip count by 5s. • Tell and show time on a clock in 5-minute intervals. • Understand how to tell time in five-minute intervals.
	Tell the Time	• Tell and show time on digital and analog clocks. • Calculate elapsed time.
Module 30: Compare Time	A.M and P.M.	• Identify A.M. and P.M. hours. • Practice how to write A.M. and P.M.
	Problem Solving: Find a Pattern Telling Time	• Describe patterns of time by 5, 15, 30, and 60 minutes.
	Word Problems: Time	• Solve word problems related to time. • Solve word problems by adding and subtracting time.

Module	Lesson Title	Objectives
	Compare Times	• Demonstrate how to compare time. • Calculate times that are earlier and later.
	Measuring Time	• Calculate time in days, weeks, months, and years. • Describe relationships in relation to time.
Module 31: Money	Pennies, Nickels, and Dimes	• Identify pennies, nickels, and dimes. • Identify the value of a penny, a nickel, and a dime. • Count coins to find the total. • Add the value of different coins. • Show the same amount of money with different coins.
	Quarters	• Identify a quarter. • Identify the value of a quarter. • Count coins to find their total value. • Add the value of different coins. • Show the same amount of money with different coins.
	Dollars	• Identify a dollar bill. • Identify the value of a dollar. • Use the $ and ¢ symbols appropriately. • Apply the strategy for skip counting to find the total value of coins. • Apply the strategy for counting up to find the total value of coins.
	Count Coins	• Calculate coin combinations. • Solve money problems to make change.
	Problem Solving	• Solve problems with combinations of money. • Calculate money problems. • Use the $ and ¢ symbols appropriately.

Module	Lesson Title	Objectives
Module 32: Data	Measurement Data	• Represent using tally marks. • Collect and convert tally mark data into a graph.
	Make and Analyze Line Plots	• Use line plots to interpret data. • Analyze data to create a line plot.
	Make and Analyze Picture Graphs	• Use tally charts to collect picture graph data. • Use picture graphs to read and analyze data.
	Make and Analyze Bar Graphs	• Create a bar graph. • Analyze bar graph data.
	Problem Solving with Graphs	• Solve problems using a graph. • Analyze data on a graph.
Module 33: Multiplication Intro	Multiplication	• Understand that the “x” symbol means multiplication. • Understand that multiplication means you have a certain number of groups the same size. • Use visuals to understand repeated addition. • Write an addition equation using repeated addition (e.g., 3 + 3 + 3 = 9) to express the total.
	Multiply by One	• Understand that one times a number (or group) is that number.
	Multiply with Arrays	• Define an array. • Use an array to multiply and relate it to repeated addition.

Module	Lesson Title	Objectives
	Multiply by Adding	• Understand that multiplication can be thought of as the repeated addition of equal groups.
	Multiplication Matching	• Identify and match pictures to the correct multiplication or repeated addition equation.
Module 34: Multiplication Practice	Skip Counting by 2s	• Determine whether a group of objects (up to 20) has an odd or even number of things. • Skip count by 2s. • Write an equation to express an even number as a sum of equal addends.
	Skip Counting by 5s	• Skip count by 5s. • Create arrays and add to multiply.
	Skip Counting by 10s	• Skip count by 10s. • Create arrays and add to multiply.
	Problem Solving	• Use repeated addition and/or arrays to solve problems.
	Multiplication Story Problems	• Use pictures to create multiplication story problems.
Module 35: Multiplication Review	Domino Multiplication	• Use dominos to create multiplication sentences. • Multiply two numbers using different multiplication strategies.
	Roll the Dice	• Create multiplication problems by rolling dice.

Module	Lesson Title	Objectives
	Flower Power	• Create multiplication facts/tables for products up to 25.
	Multiplication Bingo	• Multiply to create math facts up to 25. • Use a bingo board to practice multiplication facts.
	Math Facts	• Multiply numbers with products up to 20 to build fluency.
Module 36: Multiplication Application	Make Arrays	• Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns. • Write an equation to express the total as a sum of equal addends. • Write an equation to express the total as a product of two factors.
	Multiplication Fact Families	• Understand the relationship between multiplication and related division facts.
	Array City	• Use arrays to create a city. • Write the multiplication/repeated addition fact for each building.
	Multiplication Problems	• Solve word problems related to multiplication and repeated addition.
	Write to Solve	• Understand the steps to solve a multiplication problem. • Find key words and numbers in a word problem.