A Planning Guide of

INVESTIGATIONS 3
IN NUMBER, DATA, AND SPACE®

INVESTIGATIONS 3
IN NUMBER, DATA, AND SPACE®

STUDENT ACTIVITY BOOK

and the
Minnesota Academic Standards in Mathematics, Grade 1

Prepared by Savvas Learning Company, formerly Pearson K12 Learning

**A Planning Guide of Investigations in Number, Data, and Space, 3ʳᵈ Edition
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Session 1.6 - Fish Stories	**1.1.1.1:** Use place value to describe whole numbers between 10 and 100 in terms of tens and ones. **1.1.2.1:** Use words, pictures, objects, length-based models (connecting cubes), numerals and number lines to model and solve addition and subtraction problems in part-part-total, adding to, taking away from and comparing situations. **1.3.2.1:** Measure the length of an object in terms of multiple copies of another object.
Session 1.7 - How Long Is This Fish?	**1.1.2.1:** Use words, pictures, objects, length-based models (connecting cubes), numerals and number lines to model and solve addition and subtraction problems in part-part-total, adding to, taking away from and comparing situations. **1.3.2.1:** Measure the length of an object in terms of multiple copies of another object. **1.3.2.2:** Tell time to the hour and half-hour.
Session 1.8 - Comparison Problems	**1.2.2.1:** Represent real-world situations involving addition and subtraction basic facts, using objects and number sentences. **1.3.1.1:** Describe characteristics of two- and three-dimensional objects, such as triangles, squares, rectangles, circles, rectangular prisms, cylinders, cones and spheres. **1.3.2.1:** Measure the length of an object in terms of multiple copies of another object.
Investigation 2 Halves and Fourths	
Session 2.1 - Halves Circles and Hours	**1.3.1.1:** Describe characteristics of two- and three-dimensional objects, such as triangles, squares, rectangles, circles, rectangular prisms, cylinders, cones and spheres. **1.3.2.2:** Tell time to the hour and half-hour.
Session 2.2 - Halves Of Squares	**1.3.1.1:** Describe characteristics of two- and three-dimensional objects, such as triangles, squares, rectangles, circles, rectangular prisms, cylinders, cones and spheres. **1.3.1.2** Compose (combine) and decompose (take apart) two- and three-dimensional figures such as triangles, squares, rectangles, circles, rectangular prisms and cylinders.

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Session 2.3 - Halves Of Rectangles	**1.1.1.1:** Use place value to describe whole numbers between 10 and 100 in terms of tens and ones. **1.2.2.3:** Use number sense and models of addition and subtraction, such as objects and number lines, to identify the missing number in an equation such as: 2 + 4 = □; 3 + □ = 7; 5 = □ – 3. **1.3.1.2:** Compose (combine) and decompose (take apart) two- and three-dimensional figures such as triangles, squares, rectangles, circles, rectangular prisms and cylinders.
Session 2.4 - Fourths	**1.3.1.1:** Describe characteristics of two- and three-dimensional objects, such as triangles, squares, rectangles, circles, rectangular prisms, cylinders, cones and spheres. **1.3.1.2:** Compose (combine) and decompose (take apart) two- and three-dimensional figures such as triangles, squares, rectangles, circles, rectangular prisms and cylinders.
Session 2.5 - Would You Rather Have A Half or A Fourth?	**1.3.1.1:** Describe characteristics of two- and three-dimensional objects, such as triangles, squares, rectangles, circles, rectangular prisms, cylinders, cones and spheres. **1.3.1.2:** Compose (combine) and decompose (take apart) two- and three-dimensional figures such as triangles, squares, rectangles, circles, rectangular prisms and cylinders. **1.3.2.2:** Tell time to the hour and half-hour.
Session 2.6 - Fractions and Comparison Problems	**1.1.2.1:** Use words, pictures, objects, length-based models (connecting cubes), numerals and number lines to model and solve addition and subtraction problems in part-part-total, adding to, taking away from and comparing situations. **1.2.2.1:** Represent real-world situations involving addition and subtraction basic facts, using objects and number sentences. **1.3.1.1:** Describe characteristics of two- and three-dimensional objects, such as triangles, squares, rectangles, circles, rectangular prisms, cylinders, cones and spheres.

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Unit 5 Number Games and Crayon Problems Addition, Subtraction, and the Number System 3	
Investigation 1 Combinations Of 10	
Session 1.1 - Ten Crayons In All	**1.2.2.1:** Represent real-world situations involving addition and subtraction basic facts, using objects and number sentences. **1.1.2.1:** Use words, pictures, objects, length-based models (connecting cubes), numerals and number lines to model and solve addition and subtraction problems in part-part-total, adding to, taking away from and comparing situations. **1.3.2.2:** Tell time to the hour and half-hour.
Session 1.2 - Make 10	**1.1.2.2:** Compose and decompose numbers up to 12 with an emphasis on making ten. **1.2.2.1:** Represent real-world situations involving addition and subtraction basic facts, using objects and number sentences. **1.2.2.4:** Use addition or subtraction basic facts to represent a given problem situation using a number sentence.
Session 1.3 - Games About Unknown Change	**1.1.2.1:** Use words, pictures, objects, length-based models (connecting cubes), numerals and number lines to model and solve addition and subtraction problems in part-part-total, adding to, taking away from and comparing situations. **1.1.2.2:** Compose and decompose numbers up to 12 with an emphasis on making ten. **1.2.2.3:** Use number sense and models of addition and subtraction, such as objects and number lines, to identify the missing number in an equation such as: $2 + 4 = \square$; $3 + \square = 7$; $5 = \square - 3$.
Session 1.4 - Tens Go Fish	**1.1.1.1:** Use place value to describe whole numbers between 10 and 100 in terms of tens and ones. **1.1.2.2:** Compose and decompose numbers up to 12 with an emphasis on making ten. **1.2.2.3:** Use number sense and models of addition and subtraction, such as objects and number lines, to identify the missing number in an equation such as: $2 + 4 = \square$; $3 + \square = 7$; $5 = \square - 3$.

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Session 1.5 - Crayon Puzzles	**1.1.2.1:** Use words, pictures, objects, length-based models (connecting cubes), numerals and number lines to model and solve addition and subtraction problems in part-part-total, adding to, taking away from and comparing situations. **1.1.2.2:** Compose and decompose numbers up to 12 with an emphasis on making ten. **1.2.2.3:** Use number sense and models of addition and subtraction, such as objects and number lines, to identify the missing number in an equation such as: 2 + 4 = □; 3 + □ = 7; 5 = □ − 3.
Session 1.6 - Crayon Puzzles Sharing Strategies and Recording Solutions	**1.1.1.1:** Use place value to describe whole numbers between 10 and 100 in terms of tens and ones. **1.1.2.2:** Compose and decompose numbers up to 12 with an emphasis on making ten. **1.2.2.3:** Use number sense and models of addition and subtraction, such as objects and number lines, to identify the missing number in an equation such as: 2 + 4 = □; 3 + □ = 7; 5 = □ − 3.
Session 1.7 - More Crayon Puzzles and Games About 10	**1.1.1.2:** Read, write and represent whole numbers up to 120. Representations may include numerals, addition and subtraction, pictures, tally marks, number lines and manipulatives, such as bundles of sticks and base 10 blocks. **1.2.2.3:** Use number sense and models of addition and subtraction, such as objects and number lines, to identify the missing number in an equation such as: 2 + 4 = □; 3 + □ = 7; 5 = □ − 3. **1.3.2.2:** Tell time to the hour and half-hour.
Session 1.8 - A Crayon Puzzle About 10	**1.1.2.1:** Use words, pictures, objects, length-based models (connecting cubes), numerals and number lines to model and solve addition and subtraction problems in part-part-total, adding to, taking away from and comparing situations. **1.1.2.2:** Compose and decompose numbers up to 12 with an emphasis on making ten. **1.2.2.3:** Use number sense and models of addition and subtraction, such as objects and number lines, to identify the missing number in an equation such as: 2 + 4 = □; 3 + □ = 7; 5 = □ − 3.

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Investigation 2 Addition and Subtraction	
Session 2.1- Ten Plus	**1.1.2.1:** Use words, pictures, objects, length-based models (connecting cubes), numerals and number lines to model and solve addition and subtraction problems in part-part-total, adding to, taking away from and comparing situations. **1.2.2.1:** Represent real-world situations involving addition and subtraction basic facts, using objects and number sentences. **1.1.2.2:** Compose and decompose numbers up to 12 with an emphasis on making ten.
Session 2.2 - Five-in-a-Row with Three Cards	**1.1.1.1:** Use place value to describe whole numbers between 10 and 100 in terms of tens and ones. **1.2.1.1:** Create simple patterns using objects, pictures, numbers and rules. Identify possible rules to complete or extend patterns. Patterns may be repeating, growing or shrinking. Calculators can be used to create and explore patterns **1.2.2.1:** Represent real-world situations involving addition and subtraction basic facts, using objects and number sentences.
Session 2.3 - Equivalent Expressions **7 + 6 = 10 + 3**	**1.1.2.1:** Use words, pictures, objects, length-based models (connecting cubes), numerals and number lines to model and solve addition and subtraction problems in part-part-total, adding to, taking away from and comparing situations. **1.2.2.1:** Represent real-world situations involving addition and subtraction basic facts, using objects and number sentences. **1.1.2.2:** Compose and decompose numbers up to 12 with an emphasis on making ten.
Session 2.4 - Five-in-a-Row Subtraction, With Three Cubes	**1.1.2.1:** Use words, pictures, objects, length-based models (connecting cubes), numerals and number lines to model and solve addition and subtraction problems in part-part-total, adding to, taking away from and comparing situations. **1.2.2.1:** Represent real-world situations involving addition and subtraction basic facts, using objects and number sentences. **1.3.2.2:** Tell time to the hour and half-hour.

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Session 2.5 - Dot Addition	**1.1.2.1:** Use words, pictures, objects, length-based models (connecting cubes), numerals and number lines to model and solve addition and subtraction problems in part-part-total, adding to, taking away from and comparing situations. **1.1.2.2:** Compose and decompose numbers up to 12 with an emphasis on making ten. **1.2.2.2:** Determine if equations involving addition and subtraction are true.
Session 2.6 - Story Problems and Subtraction Strategies	**1.1.1.1:** Use place value to describe whole numbers between 10 and 100 in terms of tens and ones. **1.1.2.1:** Use words, pictures, objects, length-based models (connecting cubes), numerals and number lines to model and solve addition and subtraction problems in part-part-total, adding to, taking away from and comparing situations. **1.2.2.1:** Represent real-world situations involving addition and subtraction basic facts, using objects and number sentences.
Session 2.7 - Today's Number 10	**1.1.1.5:** Compare and order whole numbers up to 100. **1.1.2.2:** Compose and decompose numbers up to 12 with an emphasis on making ten. **1.2.2.4:** Use addition or subtraction basic facts to represent a given problem situation using a number sentence.
Session 2.8 - Fluency Within 10	**1.1.2.1:** Use words, pictures, objects, length-based models (connecting cubes), numerals and number lines to model and solve addition and subtraction problems in part-part-total, adding to, taking away from and comparing situations. **1.3.2.2:** Tell time to the hour and half-hour.
Investigation 3 Problems About Unknown Change	
Session 3.1 - Can You Make This True?	**1.2.2.2:** Determine if equations involving addition and subtraction are true. **1.2.2.3:** Use number sense and models of addition and subtraction, such as objects and number lines, to identify the missing number in an equation such as: $2 + 4 = \square$; $3 + \square = 7$; $5 = \square - 3$.

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Session 3.2 - The Penny Jar Stories About Unknown Change	**1.2.2.1:** Represent real-world situations involving addition and subtraction basic facts, using objects and number sentences. **1.1.2.1:** Use words, pictures, objects, length-based models (connecting cubes), numerals and number lines to model and solve addition and subtraction problems in part-part-total, adding to, taking away from and comparing situations. **1.3.2.2:** Tell time to the hour and half-hour.
Session 3.3 - Penny Jar Problems Sharing and Recording Strategies	**1.1.2.1:** Use words, pictures, objects, length-based models (connecting cubes), numerals and number lines to model and solve addition and subtraction problems in part-part-total, adding to, taking away from and comparing situations. **1.2.2.1:** Represent real-world situations involving addition and subtraction basic facts, using objects and number sentences. **1.2.2.2:** Determine if equations involving addition and subtraction are true.
Session 3.4 - The Penny Jar Game	**1.1.2.1:** Use words, pictures, objects, length-based models (connecting cubes), numerals and number lines to model and solve addition and subtraction problems in part-part-total, adding to, taking away from and comparing situations. **1.2.2.1:** Represent real-world situations involving addition and subtraction basic facts, using objects and number sentences. **1.2.2.2:** Determine if equations involving addition and subtraction are true.
Session 3.5 - Story Problems About Unknown Change	**1.1.2.1:** Use words, pictures, objects, length-based models (connecting cubes), numerals and number lines to model and solve addition and subtraction problems in part-part-total, adding to, taking away from and comparing situations. **1.2.2.1:** Represent real-world situations involving addition and subtraction basic facts, using objects and number sentences. **1.2.2.2:** Determine if equations involving addition and subtraction are true.

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Session 3.6 - Equations That Represent Unknown Change Situations	**1.1.2.1:** Use words, pictures, objects, length-based models (connecting cubes), numerals and number lines to model and solve addition and subtraction problems in part-part-total, adding to, taking away from and comparing situations. **1.2.2.2:** Determine if equations involving addition and subtraction are true. **1.2.2.3:** Use number sense and models of addition and subtraction, such as objects and number lines, to identify the missing number in an equation such as: $2 + 4 = \square$; $3 + \square = 7$; $5 = \square - 3$.
Session 3.7 - Problems About Unknown Change	**1.2.2.1:** Represent real-world situations involving addition and subtraction basic facts, using objects and number sentences. **1.1.2.1:** Use words, pictures, objects, length-based models (connecting cubes), numerals and number lines to model and solve addition and subtraction problems in part-part-total, adding to, taking away from and comparing situations.
Unit 6 Would You Rather Be an Eagle or a Whale? Modeling with Data	
Investigation 1 Collecting, Representing, And Solving Problems About Data in Two Categories	
Session 1.1 - Are You Wearing Buttons?	**1.1.1.7:** Use counting and comparison skills to create and analyze bar graphs and tally charts. **1.1.2.3:** Recognize the relationship between counting and addition and subtraction. Skip count by 2s, 5s, and 10s.
Session 1.2 - What Would You Rather Be?	**1.1.1.7:** Use counting and comparison skills to create and analyze bar graphs and tally charts. **1.1.2.3:** Recognize the relationship between counting and addition and subtraction. Skip count by 2s, 5s, and 10s. **1.2.2.1:** Represent real-world situations involving addition and subtraction basic facts, using objects and number sentences.
Session 1.3 - "Eagle or Whale?" Representations	**1.1.1.7:** Use counting and comparison skills to create and analyze bar graphs and tally charts. **1.1.2.1:** Use words, pictures, objects, length-based models (connecting cubes), numerals and number lines to model and solve addition and subtraction problems in part-part-total, adding to, taking away from and comparing situations. **1.2.2.1:** Represent real-world situations involving addition and subtraction basic facts, using objects and number sentences.

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Session 1.4 - Designing A Survey	**1.1.1.7:** Use counting and comparison skills to create and analyze bar graphs and tally charts. **1.1.2.3:** Recognize the relationship between counting and addition and subtraction. Skip count by 2s, 5s, and 10s.
Session 1.5 - Representing Survey Data	**1.1.1.7:** Use counting and comparison skills to create and analyze bar graphs and tally charts. **1.2.2.1:** Represent real-world situations involving addition and subtraction basic facts, using objects and number sentences.
Session 1.6 - "Deep Sea or Outer Space?" Representations	**1.1.1.7:** Use counting and comparison skills to create and analyze bar graphs and tally charts. **1.1.2.3:** Recognize the relationship between counting and addition and subtraction. Skip count by 2s, 5s, and 10s. **1.2.2.1:** Represent real-world situations involving addition and subtraction basic facts, using objects and number sentences.
Session 1.7 - Comparison Problems with The Bigger Amount Unknown	**1.1.1.7:** Use counting and comparison skills to create and analyze bar graphs and tally charts. **1.1.2.3:** Recognize the relationship between counting and addition and subtraction. Skip count by 2s, 5s, and 10s. **1.2.2.1:** Represent real-world situations involving addition and subtraction basic facts, using objects and number sentences.
Session 1.8 - Comparison Problems with The Smaller Amount Unknown	**1.1.1.7:** Use counting and comparison skills to create and analyze bar graphs and tally charts. **1.2.2.1:** Represent real-world situations involving addition and subtraction basic facts, using objects and number sentences. **1.3.2.2:** Tell time to the hour and half-hour.
Session 1.9 - Describing Data and Solving Comparison Problems	**1.1.1.7:** Use counting and comparison skills to create and analyze bar graphs and tally charts. **1.1.2.3:** Recognize the relationship between counting and addition and subtraction. Skip count by 2s, 5s, and 10s. **1.2.2.1:** Represent real-world situations involving addition and subtraction basic facts, using objects and number sentences.

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Investigation 2 Organizing and Analyzing Data In 3 Categories	
Session 2.1 - Does It Swim, Walk, Or Fly?	**1.1.1.7:** Use counting and comparison skills to create and analyze bar graphs and tally charts. **1.2.2.1:** Represent real-world situations involving addition and subtraction basic facts, using objects and number sentences. **1.3.2.2:** Tell time to the hour and half-hour.
Session 2.2 - Representing and Analyzing Data In Three Categories	**1.1.1.7:** Use counting and comparison skills to create and analyze bar graphs and tally charts. **1.2.2.1:** Represent real-world situations involving addition and subtraction basic facts, using objects and number sentences. **1.2.2.3:** Use number sense and models of addition and subtraction, such as objects and number lines, to identify the missing number in an equation such as: $2 + 4 = \square$; $3 + \square = 7$; $5 = \square - 3$.
Session 2.3 - Interpreting Data and Solving Story Problems	**1.1.1.7:** Use counting and comparison skills to create and analyze bar graphs and tally charts. **1.2.2.1:** Represent real-world situations involving addition and subtraction basic facts, using objects and number sentences. **1.1.2.1:** Use words, pictures, objects, length-based models (connecting cubes), numerals and number lines to model and solve addition and subtraction problems in part-part-total, adding to, taking away from and comparing situations.
Unit 7 How Many Tens? How Many Ones? Addition, Subtraction, and the Number System 4	
Investigation 1 Counting, Adding, And Subtracting Groups of 10	
Session 1.1 How Many People? How Many Hands?	**1.1.2.1:** Use words, pictures, objects, length-based models (connecting cubes), numerals and number lines to model and solve addition and subtraction problems in part-part-total, adding to, taking away from and comparing situations. **1.2.2.1:** Represent real-world situations involving addition and subtraction basic facts, using objects and number sentences.
Session 1.2 - How Many Hands? How Many Fingers?	**1.1.2.3:** Recognize the relationship between counting and addition and subtraction. Skip count by 2s, 5s, and 10s. **1.2.2.1:** Represent real-world situations involving addition and subtraction basic facts, using objects and number sentences. **1.2.2.4:** Use addition or subtraction basic facts to represent a given problem situation using a number sentence.

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Session 1.3 - Counting By Groups of 10	**1.1.1.2:** Read, write and represent whole numbers up to 120. Representations may include numerals, addition and subtraction, pictures, tally marks, number lines and manipulatives, such as bundles of sticks and base 10 blocks. **1.1.2.3:** Recognize the relationship between counting and addition and subtraction. Skip count by 2s, 5s, and 10s.
Session 1.4 - Working with Groups of Tens	**1.1.1.2:** Read, write and represent whole numbers up to 120. Representations may include numerals, addition and subtraction, pictures, tally marks, number lines and manipulatives, such as bundles of sticks and base 10 blocks. **1.1.2.3:** Recognize the relationship between counting and addition and subtraction. Skip count by 2s, 5s, and 10s. **1.2.2.1:** Represent real-world situations involving addition and subtraction basic facts, using objects and number sentences.
Session 1.5 - How Many Fingers? How Many People?	**1.1.1.1:** Use place value to describe whole numbers between 10 and 100 in terms of tens and ones. **1.1.2.3:** Recognize the relationship between counting and addition and subtraction. Skip count by 2s, 5s, and 10s.
Session 1.6 - How Many Now? With Cubes	**1.1.1.1:** Use place value to describe whole numbers between 10 and 100 in terms of tens and ones. **1.1.1.2:** Read, write and represent whole numbers up to 120. Representations may include numerals, addition and subtraction, pictures, tally marks, number lines and manipulatives, such as bundles of sticks and base 10 blocks. **1.1.2.3:** Recognize the relationship between counting and addition and subtraction. Skip count by 2s, 5s, and 10s.
Session 1.7 - How Many Now? With Ten Frame Cards	**1.1.1.1:** Use place value to describe whole numbers between 10 and 100 in terms of tens and ones. **1.1.2.1:** Use words, pictures, objects, length-based models (connecting cubes), numerals and number lines to model and solve addition and subtraction problems in part-part-total, adding to, taking away from and comparing situations. **1.2.2.4:** Use addition or subtraction basic facts to represent a given problem situation using a number sentence.

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Session 1.8 - Adding And Subtracting Multiples Of 10 To Or From Multiples Of 10	**1.1.1.1:** Use place value to describe whole numbers between 10 and 100 in terms of tens and ones. **1.1.2.1:** Use words, pictures, objects, length-based models (connecting cubes), numerals and number lines to model and solve addition and subtraction problems in part-part-total, adding to, taking away from and comparing situations. **1.2.2.4:** Use addition or subtraction basic facts to represent a given problem situation using a number sentence.
Investigation 2 Tens and Ones	
Session 2.1 - Roll Tens	**1.1.1.1:** Use place value to describe whole numbers between 10 and 100 in terms of tens and ones. **1.1.1.2:** Read, write and represent whole numbers up to 120. Representations may include numerals, addition and subtraction, pictures, tally marks, number lines and manipulatives, such as bundles of sticks and base 10 blocks. **1.3.2.2:** Tell time to the hour and half-hour.
Session 2.2 - How Many Cubes?	**1.1.1.1:** Use place value to describe whole numbers between 10 and 100 in terms of tens and ones. **1.1.1.2:** Read, write and represent whole numbers up to 120. Representations may include numerals, addition and subtraction, pictures, tally marks, number lines and manipulatives, such as bundles of sticks and base 10 blocks. **1.1.1.3:** Count, with and without objects, forward and backward from any given number up to 120.
Session 2.3 - Race to the Top: How Many Tens?	**1.1.1.1:** Use place value to describe whole numbers between 10 and 100 in terms of tens and ones. **1.1.1.2:** Read, write and represent whole numbers up to 120. Representations may include numerals, addition and subtraction, pictures, tally marks, number lines and manipulatives, such as bundles of sticks and base 10 blocks. **1.1.2.3:** Recognize the relationship between counting and addition and subtraction. Skip count by 2s, 5s, and 10s.

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Session 2.4 - Greater or Less Than?	**1.1.1.1:** Use place value to describe whole numbers between 10 and 100 in terms of tens and ones. **1.1.1.5:** Compare and order whole numbers up to 100. **1.1.1.6:** Use words to describe the relative size of numbers.
Session 2.5 - Adding and Subtracting 10 With Cubes	**1.1.1.1:** Use place value to describe whole numbers between 10 and 100 in terms of tens and ones. **1.1.1.4:** Find a number that is 10 more or 10 less than a given number.
Session 2.6 - Build It Plus or Minus 10	**1.1.1.1:** Use place value to describe whole numbers between 10 and 100 in terms of tens and ones. **1.1.1.4:** Find a number that is 10 more or 10 less than a given number.
Session 2.7 - Adding or Subtracting 10 What Changes?	**1.1.1.1:** Use place value to describe whole numbers between 10 and 100 in terms of tens and ones. **1.1.1.4:** Find a number that is 10 more or 10 less than a given number. **1.1.2.3:** Recognize the relationship between counting and addition and subtraction. Skip count by 2s, 5s, and 10s.
Session 2.8 - Adding and Subtracting 10	**1.1.1.4:** Find a number that is 10 more or 10 less than a given number. **1.1.1.6:** Use words to describe the relative size of numbers. **1.1.2.3:** Recognize the relationship between counting and addition and subtraction. Skip count by 2s, 5s, and 10s.
Investigation 3 Strategies for Adding Within 100	
Session 3.1 - Adding Tens	**1.1.1.1:** Use place value to describe whole numbers between 10 and 100 in terms of tens and ones. **1.1.1.2:** Read, write and represent whole numbers up to 120. Representations may include numerals, addition and subtraction, pictures, tally marks, number lines and manipulatives, such as bundles of sticks and base 10 blocks. **1.1.1.4:** Find a number that is 10 more or 10 less than a given number.

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Session 3.2 - Roll Tens 2	**1.1.1.1:** Use place value to describe whole numbers between 10 and 100 in terms of tens and ones. **1.1.2.1:** Use words, pictures, objects, length-based models (connecting cubes), numerals and number lines to model and solve addition and subtraction problems in part-part-total, adding to, taking away from and comparing situations. **1.2.2.4:** Use addition or subtraction basic facts to represent a given problem situation using a number sentence.
Session 3.3 - Adding Within 100	**1.1.2.1:** Use words, pictures, objects, length-based models (connecting cubes), numerals and number lines to model and solve addition and subtraction problems in part-part-total, adding to, taking away from and comparing situations. **1.3.2.2:** Tell time to the hour and half-hour.
Session 3.4 - Three-In-A-Row on the 100 Chart	**1.1.1.1:** Use place value to describe whole numbers between 10 and 100 in terms of tens and ones. **1.1.2.1:** Use words, pictures, objects, length-based models (connecting cubes), numerals and number lines to model and solve addition and subtraction problems in part-part-total, adding to, taking away from and comparing situations.
Session 3.5 - Race to the Top: How Many Tens?	**1.1.1.1:** Use place value to describe whole numbers between 10 and 100 in terms of tens and ones. **1.1.1.2:** Read, write and represent whole numbers up to 120. Representations may include numerals, addition and subtraction, pictures, tally marks, number lines and manipulatives, such as bundles of sticks and base 10 blocks. **1.1.2.1:** Use words, pictures, objects, length-based models (connecting cubes), numerals and number lines to model and solve addition and subtraction problems in part-part-total, adding to, taking away from and comparing situations.

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Session 3.6 – Strategies of Adding Tens and Ones	**1.1.1.1:** Use place value to describe whole numbers between 10 and 100 in terms of tens and ones. **1.1.2.1:** Use words, pictures, objects, length-based models (connecting cubes), numerals and number lines to model and solve addition and subtraction problems in part-part-total, adding to, taking away from and comparing situations. **1.2.2.1:** Represent real-world situations involving addition and subtraction basic facts, using objects and number sentences.
Session 3.7 - How Many Tens?	**1.1.1.1:** Use place value to describe whole numbers between 10 and 100 in terms of tens and ones. **1.1.2.1:** Use words, pictures, objects, length-based models (connecting cubes), numerals and number lines to model and solve addition and subtraction problems in part-part-total, adding to, taking away from and comparing situations. **1.3.2.2:** Tell time to the hour and half-hour.
Session 3.8: Adding 2-Digit Numbers	**1.1.1.1:** Use place value to describe whole numbers between 10 and 100 in terms of tens and ones. **1.1.2.1:** Use words, pictures, objects, length-based models (connecting cubes), numerals and number lines to model and solve addition and subtraction problems in part-part-total, adding to, taking away from and comparing situations. **1.2.2.1:** Represent real-world situations involving addition and subtraction basic facts, using objects and number sentences.
Unit 8 Blocks and Buildings 3-D Geometry	
Investigation 1 Blocks and Buildings	
Session 1.1 - A 3-D Shape Hunt	**1.3.1.1:** Describe characteristics of two- and three-dimensional objects, such as triangles, squares, rectangles, circles, rectangular prisms, cylinders, cones and spheres. **1.3.2.2:** Tell time to the hour and half-hour.
Session 1.2 - Describing and Comparing 3-D Shapes	**1.3.1.1:** Describe characteristics of two- and three-dimensional objects, such as triangles, squares, rectangles, circles, rectangular prisms, cylinders, cones and spheres. **1.3.2.2:** Tell time to the hour and half-hour.

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Session 1.3 - Build A Wall	**1.3.1.1:** Describe characteristics of two- and three-dimensional objects, such as triangles, squares, rectangles, circles, rectangular prisms, cylinders, cones and spheres. **1.3.1.2:** Compose (combine) and decompose (take apart) two- and three-dimensional figures such as triangles, squares, rectangles, circles, rectangular prisms and cylinders. **1.3.2.2:** Tell time to the hour and half-hour.
Session 1.4 - Matching Blocks to Pictures	**1.3.1.1:** Describe characteristics of two- and three-dimensional objects, such as triangles, squares, rectangles, circles, rectangular prisms, cylinders, cones and spheres. **1.3.2.2:** Tell time to the hour and half-hour.
Session 1.5 - Blocks In A Sock	**1.3.1.1:** Describe characteristics of two- and three-dimensional objects, such as triangles, squares, rectangles, circles, rectangular prisms, cylinders, cones and spheres. **1.3.1.2:** Compose (combine) and decompose (take apart) two- and three-dimensional figures such as triangles, squares, rectangles, circles, rectangular prisms and cylinders. **1.3.2.2:** Tell time to the hour and half-hour.
Session 1.6 - Attributes Of 3-D Shapes	**1.1.1.2:** Read, write and represent whole numbers up to 120. Representations may include numerals, addition and subtraction, pictures, tally marks, number lines and manipulatives, such as bundles of sticks and base 10 blocks. **1.3.1.1:** Describe characteristics of two- and three-dimensional objects, such as triangles, squares, rectangles, circles, rectangular prisms, cylinders, cones and spheres. **1.3.2.2:** Tell time to the hour and half-hour.
Session 1.7 - Drawing 3-D Shapes And Structures	**1.3.1.1:** Describe characteristics of two- and three-dimensional objects, such as triangles, squares, rectangles, circles, rectangular prisms, cylinders, cones and spheres. **1.3.1.2:** Compose (combine) and decompose (take apart) two- and three-dimensional figures such as triangles, squares, rectangles, circles, rectangular prisms and cylinders.

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Session 1.8 - Building And Representing A 3-D Structure	**1.3.1.1:** Describe characteristics of two- and three-dimensional objects, such as triangles, squares, rectangles, circles, rectangular prisms, cylinders, cones and spheres. **1.3.1.2:** Compose (combine) and decompose (take apart) two- and three-dimensional figures such as triangles, squares, rectangles, circles, rectangular prisms and cylinders.
Session 1.9 - Footprints and Buildings	**1.3.1.1:** Describe characteristics of two- and three-dimensional objects, such as triangles, squares, rectangles, circles, rectangular prisms, cylinders, cones and spheres. **1.3.1.2:** Compose (combine) and decompose (take apart) two- and three-dimensional figures such as triangles, squares, rectangles, circles, rectangular prisms and cylinders.