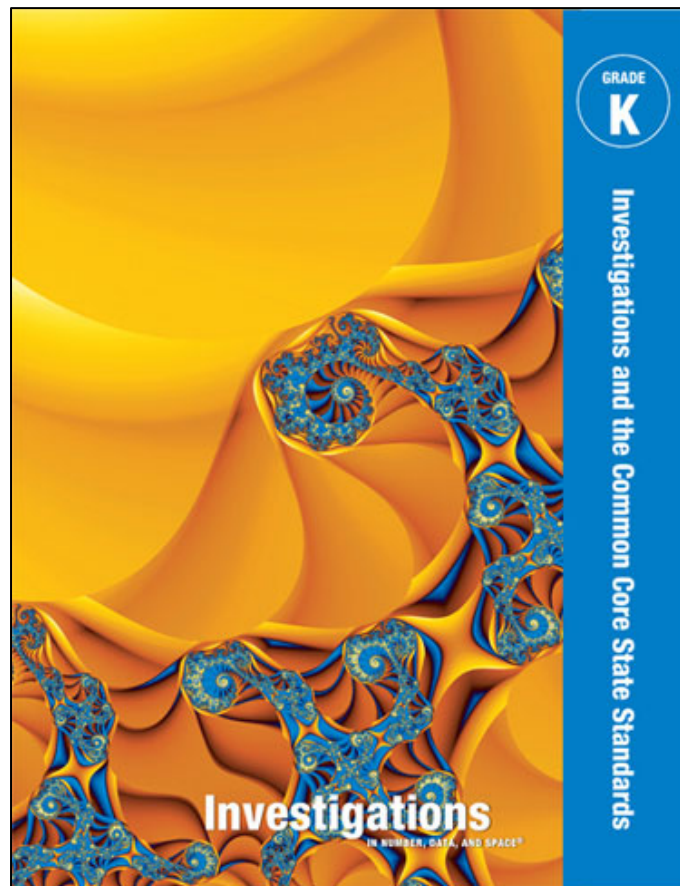


**A Planning Guide of
Investigations in
Number, Data, and Space
Kindergarten**



**and the
Minnesota Academic Standards in
Mathematics**

**A Planning Guide of Investigations in Number, Data, and Space
and the Minnesota Academic Standards in Mathematics
Kindergarten**

Table of Contents

Unit 1 Counting People, Sorting Buttons Classroom Routines and Materials.....	3
Unit 2 Counting Quantities, Comparing Lengths Counting and Measurement 1.....	6
Unit 3 Make A Shape, Fill A Hexagon 2-D Geometry	9
Unit 4 Collect, Count and Measure Counting and Measurement 2.....	11
Unit 5 Build A Block, Build A Wall 3-D Geometry.....	15
Unit 6 How Many Now? Addition, Subtraction, and the Number System 1	17
Unit 7 How Many Noses? How Many Eyes? Modeling with Data.....	20
Unit 8 Ten Frames and Teen Numbers Addition, Subtraction, and the Number System 2.....	23

**A Planning Guide of Investigations in Number, Data, and Space
and the Minnesota Academic Standards in Mathematics
Kindergarten**

Investigations in Number, Data, and Space Kindergarten	Minnesota Academic Standards in Mathematics, Kindergarten
Unit 1 Counting People, Sorting Buttons Classroom Routines and Materials	
Investigation 1 Counting and Exploring Math Materials	
Session 1.1 - The Attendance Routine: How Many Are We?	<p>K.1.1.1: Recognize that a number can be used to represent how many objects are in a set or to represent the position of an object in a sequence.</p> <p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.3.2.1: Use words to compare objects according to length, size, weight and position.</p>
Session 1.2 - Attendance: Counting Around the Circle	<p>K.1.1.1: Recognize that a number can be used to represent how many objects are in a set or to represent the position of an object in a sequence.</p> <p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.3.2.1: Use words to compare objects according to length, size, weight and position.</p>
Session 1.3 - The Calendar Routine	<p>K.1.1.1: Recognize that a number can be used to represent how many objects are in a set or to represent the position of an object in a sequence.</p> <p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.3.2.1: Use words to compare objects according to length, size, weight and position.</p>
Session 1.4 - Calendar: Counting on The Calendar	<p>K.1.1.1: Recognize that a number can be used to represent how many objects are in a set or to represent the position of an object in a sequence.</p> <p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.3.2.1: Use words to compare objects according to length, size, weight and position.</p>
Session 1.5 - Counting and Representing Attendance Data	<p>K.1.1.1: Recognize that a number can be used to represent how many objects are in a set or to represent the position of an object in a sequence.</p> <p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.3.2.1: Use words to compare objects according to length, size, weight and position.</p>

**A Planning Guide of Investigations in Number, Data, and Space
and the Minnesota Academic Standards in Mathematics
Kindergarten**

Investigations in Number, Data, and Space Kindergarten	Minnesota Academic Standards in Mathematics, Kindergarten
Investigation 2 Counting and Describing Attributes	
Session 2.1 - The Counting Jar	<p>K.1.1.1: Recognize that a number can be used to represent how many objects are in a set or to represent the position of an object in a sequence.</p> <p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.3.2.1: Use words to compare objects according to length, size, weight and position.</p>
Session 2.2 - Describing Attributes of Buttons	<p>K.1.1.1: Recognize that a number can be used to represent how many objects are in a set or to represent the position of an object in a sequence.</p> <p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.3.2.1: Use words to compare objects according to length, size, weight and position.</p>
Session 2.3 - Button Match-Up	<p>K.1.1.1: Recognize that a number can be used to represent how many objects are in a set or to represent the position of an object in a sequence.</p> <p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.3.2.1: Use words to compare objects according to length, size, weight and position.</p>
Session 2.4 - Attribute Block Match-Up	<p>K.1.1.1: Recognize that a number can be used to represent how many objects are in a set or to represent the position of an object in a sequence.</p> <p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.3.2.1: Use words to compare objects according to length, size, weight and position.</p>
Session 2.5 - Counting Jar: How Many Did You Find?	<p>K.1.1.1: Recognize that a number can be used to represent how many objects are in a set or to represent the position of an object in a sequence.</p> <p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.3.2.1: Use words to compare objects according to length, size, weight and position.</p>

**A Planning Guide of Investigations in Number, Data, and Space
and the Minnesota Academic Standards in Mathematics
Kindergarten**

Investigations in Number, Data, and Space Kindergarten	Minnesota Academic Standards in Mathematics, Kindergarten
Investigation 3 Collecting Data, Counting, and Sorting	
Session 3.1 - Today's Question	<p>K.1.1.1: Recognize that a number can be used to represent how many objects are in a set or to represent the position of an object in a sequence.</p> <p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p>
Session 3.2 - Counting Jar: Recording	<p>K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31.</p> <p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.3.2.1: Use words to compare objects according to length, size, weight and position.</p>
Session 3.3 - Sorting Students	<p>K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31.</p> <p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.3.2.1: Use words to compare objects according to length, size, weight and position.</p>
Session 3.4 - Sorting Attribute Blocks	<p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.3.1.2: Sort objects using characteristics such as shape, size, color and thickness.</p> <p>K.3.2.1: Use words to compare objects according to length, size, weight and position.</p>
Session 3.5 - Today's Question: Discussing the Data	<p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.3.2.1: Use words to compare objects according to length, size, weight and position.</p>
Session 3.6 - Counting Jar: How Did You Record?	<p>K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31</p> <p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.3.2.1: Use words to compare objects according to length, size, weight and position.</p>

**A Planning Guide of Investigations in Number, Data, and Space
and the Minnesota Academic Standards in Mathematics
Kindergarten**

Investigations in Number, Data, and Space Kindergarten	Minnesota Academic Standards in Mathematics, Kindergarten
Unit 2 Counting Quantities, Comparing Lengths Counting and Measurement 1	
Investigation 1 Counting and Representing Quantities	
Session 1.1 - A Counting Book	<p>K.1.1.1: Recognize that a number can be used to represent how many objects are in a set or to represent the position of an object in a sequence.</p> <p>K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31.</p> <p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p>
Session 1.2 - Grab and Count	<p>K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31.</p> <p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.1.5: Compare and order whole numbers, with and without objects, from 0 to 20.</p>
Session 1.3 - Counting Jar	<p>K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31.</p> <p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p>
Session 1.4 - Roll and Record	<p>K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31.</p> <p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.1.5: Compare and order whole numbers, with and without objects, from 0 to 20.</p>
Session 1.5 - How Did I Count?	<p>K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31.</p> <p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p>
Session 1.6 - Does Order Matter When You Count?	<p>K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31.</p> <p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p>
Session 1.7 - Build It	<p>K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31.</p> <p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p>

**A Planning Guide of Investigations in Number, Data, and Space
and the Minnesota Academic Standards in Mathematics
Kindergarten**

Investigations in Number, Data, and Space Kindergarten	Minnesota Academic Standards in Mathematics, Kindergarten
Session 1.8 - Counting Jar	K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31. K.1.1.3: Count, with and without objects, forward and backward to at least 20. K.3.2.1 Use words to compare objects according to length, size, weight and position.
Session 1.9 - Inventories	K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31. K.1.1.3: Count, with and without objects, forward and backward to at least 20.
Session 1.10 - Strategies for Accurate Counting	K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31. K.1.1.3: Count, with and without objects, forward and backward to at least 20. K.1.1.5: Compare and order whole numbers, with and without objects, from 0 to 20.
Investigation 2 Comparing Lengths and Quantities	
Session 2.1 - Measurement Collections	K.1.1.3: Count, with and without objects, forward and backward to at least 20. K.3.2.1: Use words to compare objects according to length, size, weight and position. K.3.2.2: Order 2 or 3 objects using measurable attributes, such as length and weight.
Session 2.2 - How Did You Compare Lengths?	K.3.2.1: Use words to compare objects according to length, size, weight and position. K.3.2.2: Order 2 or 3 objects using measurable attributes, such as length and weight.
Session 2.3 - Counting and Comparing	K.1.1.3: Count, with and without objects, forward and backward to at least 20.
Session 2.4 - Grab and Count: Compare	K.1.1.3: Count, with and without objects, forward and backward to at least 20. K.1.1.5: Compare and order whole numbers, with and without objects, from 0 to 20. K.3.2.1: Use words to compare objects according to length, size, weight and position.
Session 2.5 - Compare	K.1.1.3: Count, with and without objects, forward and backward to at least 20. K.1.1.5: Compare and order whole numbers, with and without objects, from 0 to 20.

**A Planning Guide of Investigations in Number, Data, and Space
and the Minnesota Academic Standards in Mathematics
Kindergarten**

Investigations in Number, Data, and Space Kindergarten	Minnesota Academic Standards in Mathematics, Kindergarten
Session 2.6 - Comparing Lengths and Quantities	<p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.1.5: Compare and order whole numbers, with and without objects, from 0 to 20.</p> <p>K.3.2.1: Use words to compare objects according to length, size, weight and position.</p>
Session 2.7 - How Many Letters in Your Name?	<p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.3.2.1: Use words to compare objects according to length, size, weight and position.</p>
Session 2.8 - Counting Jar	<p>K.1.1.1: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31.</p>
Session 2.9 - Comparing Name Lengths	<p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.1.5: Compare and order whole numbers, with and without objects, from 0 to 20.</p> <p>K.3.2.1: Use words to compare objects according to length, size, weight and position.</p>
Session 2.10 - Grab and Count: Ordering	<p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.1.5: Compare and order whole numbers, with and without objects, from 0 to 20.</p> <p>K.3.2.1: Use words to compare objects according to length, size, weight and position.</p>
Session 2.11 - Assessment and Comparing	<p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.1.5: Compare and order whole numbers, with and without objects, from 0 to 20.</p> <p>K.3.2.1: Use words to compare objects according to length, size, weight and position.</p>
Session 2.12 - Assessment and Ordering Our Names	<p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.1.5: Compare and order whole numbers, with and without objects, from 0 to 20.</p> <p>K.3.2.1: Use words to compare objects according to length, size, weight and position.</p>

**A Planning Guide of Investigations in Number, Data, and Space
and the Minnesota Academic Standards in Mathematics
Kindergarten**

Investigations in Number, Data, and Space Kindergarten	Minnesota Academic Standards in Mathematics, Kindergarten
Unit 3 Make A Shape, Fill A Hexagon 2-D Geometry	
Investigation 1 Describing and Making 2-D Shapes:	
Session 1.1 - Shape Pictures	<p>K.3.1.1: Recognize basic two- and three-dimensional shapes such as squares, circles, triangles, rectangles, trapezoids, hexagons, cubes, cones, cylinders and spheres.</p> <p>K.3.1.3: Use basic shapes and spatial reasoning to model objects in the real-world.</p>
Session 1.2 - Circles and Rectangles	<p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.3.1.3: Use basic shapes and spatial reasoning to model objects in the real-world.</p>
Session 1.3 - Making and Describing 2-D Shapes	<p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.3.1.1: Recognize basic two- and three-dimensional shapes such as squares, circles, triangles, rectangles, trapezoids, hexagons, cubes, cones, cylinders and spheres.</p>
Session 1.4 - Shapes on the Geoboard	<p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.3.1.1: Recognize basic two- and three-dimensional shapes such as squares, circles, triangles, rectangles, trapezoids, hexagons, cubes, cones, cylinders and spheres.</p> <p>K.3.1.3: Use basic shapes and spatial reasoning to model objects in the real-world.</p>
Session 1.5 - Our Book of Shapes	<p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.3.1.1: Recognize basic two- and three-dimensional shapes such as squares, circles, triangles, rectangles, trapezoids, hexagons, cubes, cones, cylinders and spheres.</p> <p>K.3.2.1: Use words to compare objects according to length, size, weight and position.</p>

**A Planning Guide of Investigations in Number, Data, and Space
and the Minnesota Academic Standards in Mathematics
Kindergarten**

Investigations in Number, Data, and Space Kindergarten	Minnesota Academic Standards in Mathematics, Kindergarten
Investigation 2 Making and Combining 2-D Shapes	
Session 2.1 - Shape Mural	<p>K.3.1.1: Recognize basic two- and three-dimensional shapes such as squares, circles, triangles, rectangles, trapezoids, hexagons, cubes, cones, cylinders and spheres.</p> <p>K.3.1.3: Use basic shapes and spatial reasoning to model objects in the real-world.</p> <p>K.3.2.1: Use words to compare objects according to length, size, weight and position.</p>
Session 2.2 - Pattern Block Puzzles: Combining Shapes	<p>K.2.1.1: Identify, create, complete, and extend simple patterns using shape, color, size, number, sounds and movements. Patterns may be repeating, growing or shrinking such as ABB, ABB, ABB or ●, ●●, ●●●.</p> <p>K.3.1.1: Recognize basic two- and three-dimensional shapes such as squares, circles, triangles, rectangles, trapezoids, hexagons, cubes, cones, cylinders and spheres.</p> <p>K.3.1.3: Use basic shapes and spatial reasoning to model objects in the real-world.</p>
Session 2.3 - Fill the Hexagons	<p>K.3.1.1: Recognize basic two- and three-dimensional shapes such as squares, circles, triangles, rectangles, trapezoids, hexagons, cubes, cones, cylinders and spheres.</p>
Session 2.4 - Combining Shapes	<p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.3.1.1: Recognize basic two- and three-dimensional shapes such as squares, circles, triangles, rectangles, trapezoids, hexagons, cubes, cones, cylinders and spheres.</p> <p>K.3.1.3: Use basic shapes and spatial reasoning to model objects in the real-world.</p>
Session 2.5 - Ways to Make A Hexagon	<p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.3.1.1: Recognize basic two- and three-dimensional shapes such as squares, circles, triangles, rectangles, trapezoids, hexagons, cubes, cones, cylinders and spheres.</p> <p>K.3.1.3: Use basic shapes and spatial reasoning to model objects in the real-world.</p>

**A Planning Guide of Investigations in Number, Data, and Space
and the Minnesota Academic Standards in Mathematics
Kindergarten**

Investigations in Number, Data, and Space Kindergarten	Minnesota Academic Standards in Mathematics, Kindergarten
Session 2.6 - Assessment and The Counting Jar	<p>K.3.1.1: Recognize basic two- and three-dimensional shapes such as squares, circles, triangles, rectangles, trapezoids, hexagons, cubes, cones, cylinders and spheres.</p> <p>K.3.1.3: Use basic shapes and spatial reasoning to model objects in the real-world.</p> <p>K.3.2.1: Use words to compare objects according to length, size, weight and position.</p>
Session 2.7 - Assessment and Ways to Make A Hexagon	<p>K.3.1.1: Recognize basic two- and three-dimensional shapes such as squares, circles, triangles, rectangles, trapezoids, hexagons, cubes, cones, cylinders and spheres.</p> <p>K.3.1.3: Use basic shapes and spatial reasoning to model objects in the real-world.</p> <p>K.3.2.1: Use words to compare objects according to length, size, weight and position.</p>
Unit 4 Collect, Count and Measure Counting and Measurement 2	
Investigation 1 Measuring and Counting	
Session 1.1 - Measuring Our Shoes	K.1.1.3: Count, with and without objects, forward and backward to at least 20.
Session 1.2 - Measuring Different Shoe Lengths	<p>K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31.</p> <p>K.3.2.1: Use words to compare objects according to length, size, weight and position.</p> <p>K.3.2.2: Order 2 or 3 objects using measurable attributes, such as length and weight.</p>
Session 1.3 - Measuring with Sticks	<p>K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31.</p> <p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p>
Session 1.4 - Comparing Lengths of Shoes	<p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.3.2.1: Use words to compare objects according to length, size, weight and position.</p> <p>K.3.2.2: Order 2 or 3 objects using measurable attributes, such as length and weight.</p>
Session 1.5 - Measuring with Cubes	<p>K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31.</p> <p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p>

**A Planning Guide of Investigations in Number, Data, and Space
and the Minnesota Academic Standards in Mathematics
Kindergarten**

Investigations in Number, Data, and Space Kindergarten	Minnesota Academic Standards in Mathematics, Kindergarten
Session 1.6 - Counting and Combining	K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31 K.1.1.3: Count, with and without objects, forward and backward to at least 20. K.1.2.1: Use objects and draw pictures to find the sums.
Session 1.7 - Collect 15 Together	K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31 K.1.1.3: Count, with and without objects, forward and backward to at least 20. K.1.2.1: Use objects and draw pictures to find the sums.
Session 1.8 - Build On	K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31 K.1.1.3: Count, with and without objects, forward and backward to at least 20. K.1.2.1: Use objects and draw pictures to find the sums.
Session 1.9 - Roll and Record 2	K.1.1.3: Count, with and without objects, forward and backward to at least 20. K.1.1.5: Compare and order whole numbers, with and without objects, from 0 to 20. K.1.2.1: Use objects and draw pictures to find the sums.
Session 1.10 - Quick Images: Ten Frames	K.1.1.3: Count, with and without objects, forward and backward to at least 20. K.1.2.1: Use objects and draw pictures to find the sums.
Investigation 2 Changing Quantities: How Many Now?	
Session 2.1 - Racing Bears	K.1.1.3: Count, with and without objects, forward and backward to at least 20. K.1.2.2: Compose and decompose numbers up to 10 with objects and pictures.
Session 2.2 - Introducing Story Problems	K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31. K.1.1.3: Count, with and without objects, forward and backward to at least 20. K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.

**A Planning Guide of Investigations in Number, Data, and Space
and the Minnesota Academic Standards in Mathematics
Kindergarten**

Investigations in Number, Data, and Space Kindergarten	Minnesota Academic Standards in Mathematics, Kindergarten
Session 2.3 - One More, One Less	<p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.1.4: Find a number that is 1 more or 1 less than a given number.</p> <p>K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.</p>
Session 2.4 - Double Compare	<p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.1.5: Compare and order whole numbers, with and without objects, from 0 to 20.</p> <p>K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.</p>
Session 2.5 - Counting, Combining, And Comparing	<p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.1.5: Compare and order whole numbers, with and without objects, from 0 to 20.</p> <p>K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.</p>
Session 2.6 - Build It/Change It	<p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.</p>
Session 2.7 - Who Has More?: Comparing Totals	<p>K.1.1.4: Find a number that is 1 more or 1 less than a given number.</p> <p>K.1.1.5: Compare and order whole numbers, with and without objects, from 0 to 20.</p> <p>K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.</p>

**A Planning Guide of Investigations in Number, Data, and Space
and the Minnesota Academic Standards in Mathematics
Kindergarten**

Investigations in Number, Data, and Space Kindergarten	Minnesota Academic Standards in Mathematics, Kindergarten
Investigation 3 Number of Tiles	
Session 3.1 – Ways to Make Six	<p>K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.</p> <p>K.1.2.2: Compose and decompose numbers up to 10 with objects and pictures.</p> <p>K.3.2.1: Use words to compare objects according to length, size, weight and position.</p>
Session 3.2 - Arrangements of Six: Numbers And Notation	<p>K.1.1.4: Find a number that is 1 more or 1 less than a given number.</p> <p>K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.</p> <p>K.1.2.2: Compose and decompose numbers up to 10 with objects and pictures.</p>
Session 3.3 - Arrangements with 5 To 10 Tiles	<p>K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.</p> <p>K.1.2.2: Compose and decompose numbers up to 10 with objects and pictures.</p>
Session 3.4 - Toss the Chips	<p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.</p> <p>K.1.2.2: Compose and decompose numbers up to 10 with objects and pictures.</p>
Session 3.5 - Assessment and Arrangements of Numbers	<p>K.1.1.4: Find a number that is 1 more or 1 less than a given number.</p> <p>K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.</p> <p>K.1.2.2: Compose and decompose numbers up to 10 with objects and pictures.</p>
Session 3.6 - Assessment and Tossing 6 Chips	<p>K.1.1.4: Find a number that is 1 more or 1 less than a given number.</p> <p>K.1.2.2: Compose and decompose numbers up to 10 with objects and pictures.</p>

**A Planning Guide of Investigations in Number, Data, and Space
and the Minnesota Academic Standards in Mathematics
Kindergarten**

Investigations in Number, Data, and Space Kindergarten	Minnesota Academic Standards in Mathematics, Kindergarten
Unit 5 Build A Block, Build A Wall 3-D Geometry	
Investigation 1 Describing, Making, and Combining 3-D Shapes	
Session 1.1 - 3-D Shape Hunt	<p>K.1.1.5: Compare and order whole numbers, with and without objects, from 0 to 20.</p> <p>K.2.1.3: Recognize basic two- and three-dimensional shapes such as squares, circles, triangles, rectangles, trapezoids, hexagons, cubes, cones, cylinders and spheres.</p> <p>K.3.2.1: Use words to compare objects according to length, size, weight and position.</p>
Session 1.2 - Describing Features of Geoblocks	<p>K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.</p> <p>K.2.1.3: Recognize basic two- and three-dimensional shapes such as squares, circles, triangles, rectangles, trapezoids, hexagons, cubes, cones, cylinders and spheres.</p> <p>K.3.1.3: Use basic shapes and spatial reasoning to model objects in the real-world.</p>
Session 1.3 - Copying Cubes and Matching Faces	<p>K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.</p> <p>K.2.1.3: Recognize basic two- and three-dimensional shapes such as squares, circles, triangles, rectangles, trapezoids, hexagons, cubes, cones, cylinders and spheres.</p> <p>K.3.1.3: Use basic shapes and spatial reasoning to model objects in the real-world.</p>
Session 1.4 - Making 3-D Shapes	<p>K.1.2.2: Compose and decompose numbers up to 10 with objects and pictures.</p> <p>K.2.1.3: Recognize basic two- and three-dimensional shapes such as squares, circles, triangles, rectangles, trapezoids, hexagons, cubes, cones, cylinders and spheres.</p> <p>K.3.1.3: Use basic shapes and spatial reasoning to model objects in the real-world.</p>
Session 1.5 - Faces of Geoblocks	<p>K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.</p> <p>K.1.2.2: Compose and decompose numbers up to 10 with objects and pictures.</p> <p>K.2.1.3: Recognize basic two- and three-dimensional shapes such as squares, circles, triangles, rectangles, trapezoids, hexagons, cubes, cones, cylinders and spheres.</p>

**A Planning Guide of Investigations in Number, Data, and Space
and the Minnesota Academic Standards in Mathematics
Kindergarten**

Investigations in Number, Data, and Space Kindergarten	Minnesota Academic Standards in Mathematics, Kindergarten
Session 1.6 - Build A Block	K.2.1.3: Recognize basic two- and three-dimensional shapes such as squares, circles, triangles, rectangles, trapezoids, hexagons, cubes, cones, cylinders and spheres.
Session 1.7 - Cubes	K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31. K.2.1.3: Recognize basic two- and three-dimensional shapes such as squares, circles, triangles, rectangles, trapezoids, hexagons, cubes, cones, cylinders and spheres. K.3.1.3: Use basic shapes and spatial reasoning to model objects in the real-world.
Session 1.8 - Comparing Cubes and Prisms	K.1.1.3: Count, with and without objects, forward and backward to at least 20. K.2.1.3: Recognize basic two- and three-dimensional shapes such as squares, circles, triangles, rectangles, trapezoids, hexagons, cubes, cones, cylinders and spheres. K.3.2.1: Use words to compare objects according to length, size, weight and position.
Session 1.9 - Assessment and Comparing 2-D And 3-D Shapes	K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10. K.2.1.3: Recognize basic two- and three-dimensional shapes such as squares, circles, triangles, rectangles, trapezoids, hexagons, cubes, cones, cylinders and spheres. K.3.2.1: Use words to compare objects according to length, size, weight and position.
Session 1.10 - Assessment and The Counting Jar	K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31. K.1.1.3: Count, with and without objects, forward and backward to at least 20. K.2.1.3: Recognize basic two- and three-dimensional shapes such as squares, circles, triangles, rectangles, trapezoids, hexagons, cubes, cones, cylinders and spheres.

**A Planning Guide of Investigations in Number, Data, and Space
and the Minnesota Academic Standards in Mathematics
Kindergarten**

Investigations in Number, Data, and Space Kindergarten	Minnesota Academic Standards in Mathematics, Kindergarten
Unit 6 How Many Now? Addition, Subtraction, and the Number System 1	
Investigation 1: Counting Larger Quantities	
Session 1.1 - Counting and Measuring	<p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.3.2.1: Use words to compare objects according to length, size, weight and position.</p> <p>K.3.2.2: Order 2 or 3 objects using measurable attributes, such as length and weight.</p>
Session 1.2 - Counting on the Number Line	<p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.</p> <p>K.3.2.1: Use words to compare objects according to length, size, weight and position.</p>
Session 1.3 - Collect 20 Together	<p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p>
Session 1.4 - Inventory Bags	<p>K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31.</p> <p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.2.2: Compose and decompose numbers up to 10 with objects and pictures.</p>
Session 1.5 - How Did You Count?	<p>K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31.</p> <p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.1.5: Compare and order whole numbers, with and without objects, from 0 to 20.</p>
Session 1.6 - Representing an Inventory	<p>K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31.</p> <p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.</p>

**A Planning Guide of Investigations in Number, Data, and Space
and the Minnesota Academic Standards in Mathematics
Kindergarten**

Investigations in Number, Data, and Space Kindergarten	Minnesota Academic Standards in Mathematics, Kindergarten
Investigation 2 How Many in All?:	
Session 2.1 - Roll and Record 3	<p>K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31.</p> <p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.</p>
Session 2.2 - Double Compare	<p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.1.5: Compare and order whole numbers, with and without objects, from 0 to 20.</p> <p>K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.</p>
Session 2.3 - Modeling Story Problems	<p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.1.5: Compare and order whole numbers, with and without objects, from 0 to 20.</p> <p>K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.</p>
Session 2.4 - Build and Remove	<p>K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31.</p> <p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.2.2: Compose and decompose numbers up to 10 with objects and pictures.</p>
Session 2.5 - Representing Story Problems With Cubes	<p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.1.5: Compare and order whole numbers, with and without objects, from 0 to 20.</p> <p>K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.</p>
Session 2.6 - How Many Blocks?	<p>K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31</p> <p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.</p>

**A Planning Guide of Investigations in Number, Data, and Space
and the Minnesota Academic Standards in Mathematics
Kindergarten**

Investigations in Number, Data, and Space Kindergarten	Minnesota Academic Standards in Mathematics, Kindergarten
Session 2.7 - How Do You Show the One That Is Gone?	<p>K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31</p> <p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.</p>
Session 2.8 - How Many Balls?	<p>K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31</p> <p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.</p>
Investigation 3 How Many of Each?	
Session 3.1 - Five Crayons in All	<p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.</p> <p>K.1.2.2: Compose and decompose numbers up to 10 with objects and pictures.</p>
Session 3.2 - Combinations of Six	<p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.</p> <p>K.1.2.2: Compose and decompose numbers up to 10 with objects and pictures.</p>
Session 3.3 - Total of Six	<p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.</p> <p>K.1.2.2: Compose and decompose numbers up to 10 with objects and pictures.</p>

**A Planning Guide of Investigations in Number, Data, and Space
and the Minnesota Academic Standards in Mathematics
Kindergarten**

Investigations in Number, Data, and Space Kindergarten	Minnesota Academic Standards in Mathematics, Kindergarten
Session 3.4 - Six Crayons in All	<p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.</p> <p>K.1.2.2: Compose and decompose numbers up to 10 with objects and pictures.</p>
Session 3.5 – Assessment and the Counting Jar: U6 S3.5	<p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.</p> <p>K.1.2.2: Compose and decompose numbers up to 10 with objects and pictures.</p>
Session 3.6 - Assessment and Combinations of Six: U6 S3.6	<p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.</p> <p>K.1.2.2: Compose and decompose numbers up to 10 with objects and pictures.</p>
Unit 7 How Many Noses? How Many Eyes? Modeling with Data	
Investigation 1 How Are They the Same? How Are They Different?	
Session 1.1 - Attribute Block and Button Match-Up	<p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.3.1.2: Sort objects using characteristics such as shape, size, color and thickness.</p>
Session 1.2 - Pattern Block Grab	<p>K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31.</p> <p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.3.1.2: Sort objects using characteristics such as shape, size, color and thickness.</p>
Session 1.3 - Attribute Dominoes	<p>K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31.</p> <p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.3.1.2: Sort objects using characteristics such as shape, size, color and thickness.</p>

**A Planning Guide of Investigations in Number, Data, and Space
and the Minnesota Academic Standards in Mathematics
Kindergarten**

Investigations in Number, Data, and Space Kindergarten	Minnesota Academic Standards in Mathematics, Kindergarten
Session 1.4 - Organizing Data: Favorite Lunch Foods	<p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.1.5: Compare and order whole numbers, with and without objects, from 0 to 20.</p> <p>K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.</p>
Investigation 2 Data Projects	
Session 2.1 - “Do You Like...?” Surveys	<p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.1.5: Compare and order whole numbers, with and without objects, from 0 to 20.</p> <p>K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.</p>
Session 2.2 - Collecting Data	<p>K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31.</p> <p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.1.5: Compare and order whole numbers, with and without objects, from 0 to 20.</p>
Session 2.3 - Sharing Survey Data	<p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.1.5: Compare and order whole numbers, with and without objects, from 0 to 20.</p> <p>K.3.1.2 Sort objects using characteristics such as shape, size, color and thickness.</p>
Investigation 3 How Many Noses? How Many Eyes?	
Session 3.1 - How Many Are We?	<p>K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31.</p> <p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p>
Session 3.2 - How Many Noses?	<p>K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31.</p> <p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.</p>

**A Planning Guide of Investigations in Number, Data, and Space
and the Minnesota Academic Standards in Mathematics
Kindergarten**

Investigations in Number, Data, and Space Kindergarten	Minnesota Academic Standards in Mathematics, Kindergarten
Session 3.3 - How Many Eyes?	<p>K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31.</p> <p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.</p>
Session 3.4 - Counting Chairs	<p>K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31.</p> <p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p>
Session 3.5 - Counting Groups of Ones and Twos	<p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.</p> <p>K.2.1.1: Identify, create, complete, and extend simple patterns using shape, color, size, number, sounds and movements. Patterns may be repeating, growing or shrinking such as ABB, ABB, ABB or ●, ●●, ●●●.</p>
Session 3.6 - Enough Chairs in The Class?	<p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.1.5: Compare and order whole numbers, with and without objects, from 0 to 20.</p> <p>K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.</p>
Session 3.7 - Counting Fingers	<p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.2.1.1: Identify, create, complete, and extend simple patterns using shape, color, size, number, sounds and movements. Patterns may be repeating, growing or shrinking such as ABB, ABB, ABB or ●, ●●, ●●●.</p>
Session 3.8 - Assessment: Solving A Problem Using Attendance Data	<p>K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31.</p> <p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.2.1.1: Identify, create, complete, and extend simple patterns using shape, color, size, number, sounds and movements. Patterns may be repeating, growing or shrinking such as ABB, ABB, ABB or ●, ●●, ●●●.</p>

**A Planning Guide of Investigations in Number, Data, and Space
and the Minnesota Academic Standards in Mathematics
Kindergarten**

Investigations in Number, Data, and Space Kindergarten	Minnesota Academic Standards in Mathematics, Kindergarten
Unit 8 Ten Frames and Teen Numbers Addition, Subtraction, and the Number System 2	
Investigation 1 Subtraction and Fluency Within 5	
Session 1.1 - Build and Remove	<p>K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31.</p> <p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.</p>
Session 1.2 - Revisiting Subtraction Story Problems	<p>K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31.</p> <p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.</p>
Session 1.3 - Making Up Story Problems	<p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.</p> <p>K.2.1.1: Identify, create, complete, and extend simple patterns using shape, color, size, number, sounds and movements. Patterns may be repeating, growing or shrinking such as ABB, ABB, ABB or ●, ●●, ●●●.</p>
Session 1.4 - Race to The Sun	<p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.</p>
Session 1.5 - Fill the Treasure Chest	<p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.</p> <p>K.2.1.1: Identify, create, complete, and extend simple patterns using shape, color, size, number, sounds and movements. Patterns may be repeating, growing or shrinking such as ABB, ABB, ABB or ●, ●●, ●●●.</p>

**A Planning Guide of Investigations in Number, Data, and Space
and the Minnesota Academic Standards in Mathematics
Kindergarten**

Investigations in Number, Data, and Space Kindergarten	Minnesota Academic Standards in Mathematics, Kindergarten
Session 1.6 - Assessment: Fluency Within Five	<p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.1.5: Compare and order whole numbers, with and without objects, from 0 to 20.</p> <p>K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.</p>
Session 1.7 - Assessment: Fluency Within Five Continued	<p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.1.5: Compare and order whole numbers, with and without objects, from 0 to 20.</p> <p>K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.</p>
Investigation 2 Complements of 10 and the Teen Numbers	
Session 2.1 - Toss 10 Chips	<p>K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.</p> <p>K.1.2.2: Compose and decompose numbers up to 10 with objects and pictures.</p> <p>K.2.1.1: Identify, create, complete, and extend simple patterns using shape, color, size, number, sounds and movements. Patterns may be repeating, growing or shrinking such as ABB, ABB, ABB or ●, ●●, ●●●.</p>
Session 2.2 - How Many To 10?	<p>K.1.1.5: Compare and order whole numbers, with and without objects, from 0 to 20.</p> <p>K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.</p> <p>K.1.2.2: Compose and decompose numbers up to 10 with objects and pictures.</p>
Session 2.3 - Counting Larger Quantities	<p>K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.</p> <p>K.3.2.1: Use words to compare objects according to length, size, weight and position.</p> <p>K.3.2.2: Order 2 or 3 objects using measurable attributes, such as length and weight.</p>
Session 2.4 - Race to The Top: Teen Numbers	<p>K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31.</p> <p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.1.5: Compare and order whole numbers, with and without objects, from 0 to 20.</p>

**A Planning Guide of Investigations in Number, Data, and Space
and the Minnesota Academic Standards in Mathematics
Kindergarten**

Investigations in Number, Data, and Space Kindergarten	Minnesota Academic Standards in Mathematics, Kindergarten
Session 2.5 - Build It: Teen Numbers	<p>K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31.</p> <p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.2.2: Compose and decompose numbers up to 10 with objects and pictures.</p>
Session 2.6 - Race to The Top: Ten Frames	<p>K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31.</p> <p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.2.2: Compose and decompose numbers up to 10 with objects and pictures.</p>
Session 2.7 - Quick Images: Teen Numbers	<p>K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31.</p> <p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.2.2: Compose and decompose numbers up to 10 with objects and pictures.</p>
Session 2.8 - Build It, Then Race to The Top	<p>K.1.1.5: Compare and order whole numbers, with and without objects, from 0 to 20.</p> <p>K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.</p> <p>K.1.2.2: Compose and decompose numbers up to 10 with objects and pictures.</p>
Session 2.9 - Race to The Top: Teen Numbers 2	<p>K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31...</p> <p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.</p>
Session 2.10 - The Teen Numbers	<p>K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31...</p> <p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.</p>

**A Planning Guide of Investigations in Number, Data, and Space
and the Minnesota Academic Standards in Mathematics
Kindergarten**

Investigations in Number, Data, and Space Kindergarten	Minnesota Academic Standards in Mathematics, Kindergarten
Investigation 3 Measuring and Comparing Weight:	
Session 3.1 - Weight: Heavier or Lighter?	<p>K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31.</p> <p>K.3.2.1: Use words to compare objects according to length, size, weight and position.</p> <p>K.3.2.2: Order 2 or 3 objects using measurable attributes, such as length and weight.</p>
Session 3.2 - Measuring and Comparing Weights with Cubes	<p>K.3.2.1: Use words to compare objects according to length, size, weight and position.</p> <p>K.3.2.2: Order 2 or 3 objects using measurable attributes, such as length and weight.</p>
Session 3.3 - Measuring and Comparing Weights with Pennies	<p>K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31.</p> <p>K.3.2.1: Use words to compare objects according to length, size, weight and position.</p> <p>K.3.2.2: Order 2 or 3 objects using measurable attributes, such as length and weight.</p>
Session 3.4 - Assessment, Weighing, And Teen Numbers	<p>K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31...</p> <p>K.1.1.3: Count, with and without objects, forward and backward to at least 20.</p> <p>K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.</p> <p>K.2.1.1: Identify, create, complete, and extend simple patterns using shape, color, size, number, sounds and movements. Patterns may be repeating, growing or shrinking such as ABB, ABB, ABB or ●, ●●, ●●●.</p>
Session 3.5 - Assessment and Using the Pan Balance to Discuss the Counting Jar	<p>K.1.1.2: Read, write, and represent whole numbers from 0 to at least 31</p> <p>K.1.2.1: Use objects and draw pictures to find the sums and differences of numbers between 0 and 10.</p> <p>K.3.2.1: Use words to compare objects according to length, size, weight and position.</p>