Hillsborough Township Public Schools
Mathematics Department
Transitional Primary Curriculum Map

Essential Questions	Enduring Understandings	Domain	Cluster	Standard	Learning Targets	Assessment Formative and Summative	Inter-disciplinary Connections	21st Century Connections
Unit 1 **Pacing: 20 Days**						Unit Assessment		
How can measurements be used to solve problems? How do mathematical ideas interconnect and build on one another to produce a coherent whole?	Measurements can be used to describe, compare, and make sense of phenomena. What we measure affects how we measure it. One representation may sometimes be more helpful than another; used together, multiple representations give a fuller understanding of a problem.	Measurement and Data SMP 2 - Reason abstractly and quantitatively. SMP 4 - Model with mathematics. SMP 6 - Attend to precision. SMP 7 - Look for and make use of structure.	Describe and compare measurable attributes. Classify objects and count the number of objects in each category.	K.MD.1 - Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. K.MD.2 - Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference. *For example, directly compare the heights of two children and describe one child as taller/shorter.* K.MD.3 - Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.	Compare lengths of objects. Collect and display data. Answer questions about the data.	Draw objects that are shorter longer, and the same length. Create a class graph of student birthdays. Ask questions about the graph (ex: Which month has the most birthdays?)	RL.1.1 - Ask and answer questions about key details in a text. K.SL.1. - Participate in collaborative conversations with diverse partners about kindergarten topics and texts with peers and adults in small and larger groups. K.SL.1a. - Follow agreed-upon rules for discussions (e.g., listening to others and taking turns speaking about the topics and texts under discussion).	
How can spatial relationships be described by careful use of geometric language?	Geometric properties can be used to construct geometric figures. Patterns and relationships can be represented	Geometry SMP 6 - Attend to precision. SMP 7 - Look for and make	Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones,	K.G.1 - Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above,	Identify 2-dimensional shapes. Name basic attributes of 2 dimensional shapes (number of	Use pattern block templates to identify, draw and color shapes. Hold up objects from around the	RL.1.1 - Ask and answer questions about key details in a text.	

How are patterns of change related to the behavior of functions?	graphically, numerically, symbolically, or verbally.	use of structure.	cylinders, and spheres). Analyze, compare, create, and compose shapes.	below, beside, in front of, behind, and next to. K.G.2 - Correctly name shapes regardless of their orientations or overall size. K.G.4 - Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length). K.G.6 - Compose simple shapes to form larger shapes.	sides, etc.) Create and continue a pattern.	room that have the same shape as the ones that have been taught. Ask students to identify the shape of the object. (ex: point to the clock and elicit from students that it is a circle). Create and extend color patterns on paper.		
How do mathematical ideas interconnect and build on one another to produce a coherent whole?	A quantity can be represented numerically in various ways.	Counting and Cardinality SMP 1 - Make sense of problems and persevere in solving them. SMP 2 - Reason abstractly and quantitatively. SMP 4 - Model with	Count to tell the number of objects. Know number names and the count sequence. Compare numbers. Classify	K.CC.1 - Count to 100 by ones and by tens. K.CC.2 - Count forward beginning from a given number within the known sequence (instead of having to begin at 1). K.CC.3 - Write numbers from 0 to 20. Represent a	Read and write number words Count from 0 to 20 and backward from 10 to 1. Represent numbers in multiple ways. Tell different ways that numbers are used in daily life (ex: to tell time, in phone numbers,	Represent numbers in multiple ways Sequence number cards Count groups of objects to 20 Create number collections for each number from 0-9.		

		mathematics. SMP 6 - Attend to precision. SMP 7 - Look for and make use of structure.	objects and count the number of objects in each category.	number of objects with a written numeral 0-20 (with 0 representing a count of no objects). K.CC.4a - When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object. K.CC.4b - Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted. K.CC.4c - Understand that each successive number name refers to a quantity that is one larger. K.CC.5 Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered	etc.)	Write the numbers 0-9.		

				configuration; given a number from 1-20, count out that many objects. K.CC.6 Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.				
How do mathematical ideas interconnect and build on one another to produce a coherent whole? How do operations affect numbers?	A quantity can be represented numerically in various ways. Problem solving depends upon choosing wise ways. One representation may sometimes be more helpful than another; used together, multiple representations give a fuller understanding of a problem. Computational fluency includes understanding the meaning and the appropriate use of numerical operations.	Operations and Algebraic Thinking SMP 2 - Reason abstractly and quantitatively. . SMP 6 - Attend to precision. SMP 7 - Look for and make use of structure.	Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from. Count to tell the number of objects.	K.OA.1 - Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations. K.OA.3 - Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., 5 = 2 + 3 and 5 = 4 + 1). K.OA.5 - Fluently add and subtract within 5.	Count larger sets of objects by grouping the total amount into smaller groups instead of counting each individual object. (ex: If there are 10 dots, students may group them into 4 and 6 and put them together to make 10) Decompose the numbers 1, 2, 3, 4, 5.	Show cards with groups of 0-10 dots on them. Show each card for 2-3 seconds and then turn the card over. Tell the number of dots on the card. Pose word problems that require students to add 2 numbers up to sums of 5. Students may use a five-frame or other manipulatives to help them solve the problem.	K.SL.1. - Participate in collaborative conversations with diverse partners about kindergarten topics and texts with peers and adults in small and larger groups. K.SL.1a. - Follow agreed-upon rules for discussions (e.g., listening to others and taking turns speaking about the topics and texts under discussion).	

Unit 2 Pacing: 20 Days						Unit Assessment		
How do mathematical ideas interconnect and build on one another to produce a coherent whole?	One representation may sometimes be more helpful than another; used together, multiple representations give a fuller understanding of a problem. A quantity can be represented numerically in various ways. Problem solving depends upon choosing wise ways.	Counting and Cardinality SMP 2 - Reason abstractly and quantitatively. SMP 6 - Attend to precision. SMP 7 - Look for and make use of structure.	Count to tell the number of objects. Compare numbers. Know number names and count sequence.	K.CC.2 - Count forward beginning from a given number within the known sequence (instead of having to begin at 1). K.CC.3 - Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects). K.CC.4a - When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object. K.CC.4b - Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted. K.CC.4c - Understand that	Know that a written digit represents a quantity. Given a pair of numbers, determine which number is bigger and smaller.	Count to a target number Represent numbers 1 – 10 in four different ways Compare numbers of objects in groups	2.5.P.A.2 - Develop and refine fine motor skills (e.g., completes gradually more complex puzzles, uses smaller-sized manipulatives during play, and uses a variety of writing instruments in a conventional manner). K.SL.1. - Participate in collaborative conversations with diverse partners about kindergarten topics and texts with peers and adults in small and larger groups. K.SL.1a. - Follow agreed-upon rules for discussions (e.g., listening to others and taking turns speaking about the topics and texts under discussion).	

				each successive number name refers to a quantity that is one larger. K.CC.5 - Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1-20, count out that many objects. K.CC.6 - Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.				
How can measurements be used to solve problems?	Everyday objects have a variety of attributes, each of which can be measured in many ways.	Measurement and Data SMP 1 - Make sense of problems and persevere in solving them. SMP 7 - Look for and make use of structure.	Describe and compare measurable attributes. Classify objects and count the number of objects in each category.	K.MD.1 - Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. K.MD.3 - Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.	Sort a group of objects into categories based on attributes.	Given a collection of objects (ex: art supplies, buttons, rocks, etc.). Explain the attributes used to make the categories (ex: size, color, etc.)	K.SL.1. - Participate in collaborative conversations with diverse partners about kindergarten topics and texts with peers and adults in small and larger groups.	

| How do operations affect numbers? | Computational fluency includes understanding the meaning and the appropriate use of numerical operations. | Operations and Algebraic Thinking

SMP 1 - Make sense of problems and persevere in solving them.

SMP 2 - Reason abstractly and quantitatively.

SMP 4 - Model with mathematics.

SMP 6 - Attend to precision. | Understanding addition as putting together and adding to, and understanding subtraction as taking apart and taking from. | K.OA.1 - Represent addition and subtraction with objects, fingers, mental images, drawings, sounds, (e.g. claps), acting out situations, verbal explanations, expressions and equations.

K.OA.2 - Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.

K.OA.3 - Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., 5 = 2 + 3 and 5 = 4 + 1). | Create and solve problems with addition and subtraction number stories

Decompose the number 10 in multiple ways including a ten-frame as needed. | Solve these number stories: Sue has five invitations. She mails two invitations. How many invitations does Sue have yet to mail?
Joel made two goals yesterday. He made three today. How many goals did Joel make? | K.SL.1. - Participate in collaborative conversations with diverse partners about kindergarten topics and texts with peers and adults in small and larger groups.

K.SL.1a. - Follow agreed-upon rules for discussions (e.g., listening to others and taking turns speaking about the topics and texts under discussion). | |
| How can spatial relationships be described by careful use of geometric language? | Geometric properties can be used to construct geometric figures. | Geometry

SMP 6 - Attend to precision.

SMP 7 - Look for and make use of structure. | Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders and spheres). | K.G.2 - Correctly name shapes regardless of their orientations or overall size.

K.G.4 - Analyze and compare two- and three-dimensional shapes, in different sizes | Identify all different triangles and circles and rectangles regardless of size, orientation, or shape.

Describe the defining attributes of triangles and | Describe how rectangles and triangles are the same and how they are different.
Do this for other pairs of shapes as well.

Create a class | 5.2.P.A.1 - Observe, manipulate, sort, and describe objects and materials (e.g., water, sand, clay, paint, glue, various types of blocks, collections of objects, simple household items that can be taken apart, or objects made of | |

			Analyze, compare, create, and compose shapes.	and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length).	circles and rectangles. Compare and contrast shapes based on their attributes.	display of triangles. Explain how a shape is a triangle even though it may look different from other triangles. Complete the same activity for circles and rectangles.	wood, metal, or cloth) in the classroom and outdoor environment based on size, shape, color, texture, and weight. K.SL.1a. - Follow agreed-upon rules for discussions (e.g., listening to others and taking turns speaking about the topics and texts under discussion).	
Unit 3 **Pacing: 20 Days**						Unit Assessment		
How do mathematical ideas interconnect and build on one another to produce a coherent whole? How can we compare and contrast numbers?	A quantity can be represented numerically in various ways. Problem solving depends upon choosing wise ways. Numeric fluency includes both the understanding of and the ability to appropriately use numbers.	Counting and Cardinality SMP 1 - Make sense of problems and persevere in solving them. SMP 2 - Reason abstractly and quantitatively. . SMP 4 - Model with mathematics. . SMP 6 - Attend to precision. SMP 7 - Look for and make use of structure.	Know number names and the count sequence. Count to tell the number of objects. Compare numbers.	K.CC.3 - Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects). K.CC.6 - Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies. K.CC.7 - Compare two numbers between 1 and 10 presented as written numerals.	Write the numbers 0-10. Represent a number in four different ways. Sequence numbers from 0 to 20. Compare 2 numbers to determine which number is greater.	Create number books, writing each number (0-10) and drawing the correct number of objects. Represent the numbers 1 – 10 in four ways Create a "Human Number Line": Having been shown a "target" number and then shown a second number tell whether the number is greater than or less than the target number.	2.5.P.A.2 - Develop and refine fine motor skills (e.g., completes gradually more complex puzzles, uses smaller-sized manipulatives during play, and uses a variety of writing instruments in a conventional manner).	

How do operations affect numbers?	Computational fluency includes understanding the meaning and the appropriate use of numerical operations.	Operations and Algebraic Thinking SMP 2 - Reason abstractly and quantitatively. . SMP 6 - Attend to precision. SMP 7 - Look for and make use of structure.	Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from. Count and tell the number of objects.	K.OA.3 - Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., $5 = 2 + 3$ and $5 = 4 + 1$). K.OA.4 - For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.	Explore the combinations of 10.	Display a 10-frame on the board. Fill in the first 3 spaces. Ask, "How many more spaces need to be filled in to make 10?" Repeat this activity with different combinations of 10.	2.5.P.A.2 - Develop and refine fine motor skills (e.g., completes gradually more complex puzzles, uses smaller-sized manipulatives during play, and uses a variety of writing instruments in a conventional manner).	
How do mathematical ideas interconnect and build on one another to produce a coherent whole? How can measurements be used to solve problems?	Patterns and relationships can be represented graphically, numerically, symbolically, or verbally. Everyday objects have a variety of attributes, each of which can be measured in many ways Measurements can be used to describe, compare, and make sense of phenomena.	Measurement and Data SMP 2 - Reason abstractly and quantitatively. SMP 6 - Attend to precision. SMP 7 - Look for and make use of structure.	Classify objects and count the number of objects in each category. Describe and compare measureable attributes.	K.MD.1 - Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. K.MD.2 - Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference.	Sort shapes into categories based on attributes. Organize and display data in a bar graph. Compare objects by length and sort the objects into groups based on length.	Given pattern blocks, sort the blocks into groups based on shape. Create a bar graph that shows the number of shapes in each category. Given a collection of classroom objects, compare lengths and order from longest to shortest and vice-versa	L.K.4. - Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on kindergarten reading and content.	

How can spatial relationships be described by careful use of geometric language?	Geometric properties can be used to construct geometric figures.	Geometry SMP 1- Make sense of problems and persevere in solving them. SMP 2 - Reason abstractly and quantitatively. SMP 6 - Attend to precision.	Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders and spheres). Analyze, compare, create, and compose shapes.	K.G.1 - Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as *above, below, beside, in front of, behind, and next to.* K.G.2 - Correctly name shapes regardless of their orientations or overall size. K.G.4 - Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length).	Identify triangles and circles and rectangles regardless of size, orientation, or shape. Describe the defining attributes of triangles and circles and rectangles. Compare and contrast shapes based on their attributes. Use "position" words such as above, below, beside, correctly	Using rope and cooperation, construct shapes and state how the shape is accurate Follow oral directions for placing objects and moving around the room using the "position" words. Ex: "Place the book *on top of* your desk. Stand beside the easel." etc.	RL.1.1 - Ask and answer questions about key details in a text. 5.2.P.A.1 - Observe, manipulate, sort, and describe objects and materials (e.g., water, sand, clay, paint, glue, various types of blocks, collections of objects, simple household items that can be taken apart, or objects made of wood, metal, or cloth) in the classroom and outdoor environment based on size, shape, color, texture, and weight. K.SL.1. - Participate in collaborative conversations with diverse partners about kindergarten topics and texts with peers and adults in small and larger groups.	
Unit 4 **Pacing: 20 Days**						Unit Assessment	
How do operations affect numbers? How do mathematical ideas interconnect and build on	Numeric fluency includes both the understanding of and the ability to appropriately use numbers. Computational fluency includes understanding the	Operations and Algebraic Thinking SMP 2 - Reason abstractly and quantitatively. SMP 6 - Attend to precision.	Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.	K.OA.3 - Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a	Compose and decompose numbers up to 10.	Determine the number of objects on a quickly shown card or paper Create different combinations of target numbers less than ten	

one another to produce a coherent whole?	meaning and the appropriate use of numerical operations.	SMP 7 - Look for and make use of structure.		drawing or equation (e.g., 5 = 2 + 3 and 5 = 4 + 1).		using Unifix cubes in two different colors		
How can we compare and contrast numbers? How do mathematical ideas interconnect and build on one another to produce a coherent whole?	Numeric fluency includes both the understanding of and the ability to appropriately use numbers.	Counting and Cardinality SMP 2 - Reason abstractly and quantitatively. SMP 5 - Use appropriate tools strategically. SMP 6 - Attend to precision. SMP 7 - Look for and make use of structure.	Know number names and the count sequence. Count to tell the number of objects. Compare numbers.	K.CC.1 - Count to 100 by ones and by tens. K.CC.2 - Count forward beginning from a given number within the known sequence (instead of having to begin at 1). K.CC.7 - Compare two numbers between 1 and 10 presented as written numerals.	Use a calculator to count Count to 20. Skip count by 10. Compare two numbers to determine which number is greater. Count on a number grid.	Arrange number cards from 1 – 20 in order. Participate in a round robin count by 10s Given two numbers circle the larger number and underline the smaller number. Use a number grid to count on	2.5.P.A.2 - Develop and refine fine motor skills (e.g., completes gradually more complex puzzles, uses smaller-sized manipulatives during play, and uses a variety of writing instruments in a conventional manner).	
How can spatial relationships be described by careful use of geometric language?	Geometric properties can be used to construct geometric figures.	Geometry SMP 1 - Make sense of problems and persevere in solving them. SMP 6 - Attend to precision. SMP 7 - Look for and make use of structure. SMP 8 - Look for and express regularity in repeated reasoning.	Describe and compare measureable attributes. Classify and count the number of objects in each category. Identify and describe shapes. Analyze, compare, create and compose shapes.	K.G.6 - Compose simple shapes to form larger shapes. *From example, "Can you join these two triangles with full sides touching to make a rectangle?"*	Sort attribute blocks based on specific attributes. Describe shapes using the correct attributes of the shapes. Build a hexagon using other shapes (pattern blocks). Use shapes to create larger shapes and designs	Sort attribute the blocks based on different attributes Explain the attributes that they used to sort the blocks. Given an outline of a hexagon, use pattern blocks to create the hexagon in multiple ways	5.2.P.A.1 - Observe, manipulate, sort, and describe objects and materials (e.g., water, sand, clay, paint, glue, various types of blocks, collections of objects, simple household items that can be taken apart, or objects made of wood, metal, or cloth) in the classroom and outdoor environment based on size, shape, color, texture, and weight.	
How can measurements be used to solve problems?	Measurements can be used to describe, compare, and make sense of phenomena.	Measurement and Data SMP 1 - Make sense of	Classify objects and count the number of objects in each	K.MD.1 - Describe measurable attributes of objects, such as length or weight. Describe	Collect and organize to make a bar graph to display data.	Create a class bar graph of students' favorite animals. Ask questions to	K.SL.1. - Participate in collaborative conversations with diverse partners about kindergarten	

Hillsborough Township Public Schools
Mathematics Department
Transitional Primary Curriculum Map

How do mathematical ideas interconnect and build on one another to produce a coherent whole?	What we measure affects how we measure it. One representation may sometimes be more helpful than another; used together, multiple representations give a fuller understanding of a problem	problems and persevere in solving them. SMP 4 - Model with mathematics. SMP 6 - Attend to precision.	category. Compare numbers. Describe and compare measureable attributes.	several measurable attributes of a single object. K.MD.2 - Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference.	Compare the weight and capacity of objects.	encourage students to analyze the data (ex: Which animal had the most votes? etc.) Use a pan balance to compare the weight of objects Use a variety of containers to discuss the capacity of the containers	topics and texts with peers and adults in small and larger groups. K.SL.1a. - Follow agreed-upon rules for discussions (e.g., listening to others and taking turns speaking about the topics and texts under discussion).	
District Mid-Year Assessment Pacing: 1 Day						Mid-Year Assessment		
Unit 5 Pacing: 19 Days						Unit Assessment		
How do mathematical ideas interconnect and build on one another to produce a coherent whole? How can we compare and contrast numbers? How do numbers represent objects? How/why do we count?	One representation may sometimes be more helpful than another; used together, multiple representations give a fuller understanding of a problem. Numbers have names and we can use them to count.	Counting and Cardinality SMP 2 - Reason abstractly and quantitatively. SMP 4 - Model with mathematics. SMP 6 - Attend to precision. SMP 7 - Look for and make use of structure. SMP 8 - Look for and express regularity in repeated reasoning.	Know number names and the count sequence. Count to tell the number of objects.	K.CC.1- Count to 100 by ones and by tens. K.CC.2 - Count forward beginning from a given number within the known sequence (instead of having to begin at 1.) K.CC.3 - Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects). K.CC.5 - Count to answer "how	Model numbers with manipulatives Give equivalent names for numbers Read 2-digit numbers on the number grid. Count on by 1s. Count by 10's. Compare 2 numbers when written as numerals. Recognize teen numbers. Solve number	Note patterns on the number grid. Record numbers on a number scroll to 20 or higher. Do choral counts by 1s to 100. Use 2 ten frames to model a teen number. Given a collection of 100 items from home. Divide the group into groups of 10 and explain the	2.5.P.A.2 - Develop and refine fine motor skills (e.g., completes gradually more complex puzzles, uses smaller-sized manipulative during play and uses a variety of writing instruments in a conventional manner). K.SL.1a. - Follow agreed-upon rules for discussions (e.g., listening to others and taking turns speaking about the topics and texts under discussion).	

				many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1-20, count out that many objects.	stories and begin to use the addition (+) symbol. Use efficient counting strategies.	counting strategy.		
What is addition and what do the addition and equal symbols represent? What happens when we combine groups or take groups apart? In what ways can items be grouped? In what ways can numbers be composed and decomposed? What questions can be answered using addition and subtraction? How can relationships be expressed symbolically?	Grouping is a way to count, measure, and estimate. Different solutions and arguments can be made for the same solution.	Operations and Algebraic Thinking SMP 1 - Make sense of problems and persevere in solving them. SMP 2 - Reason abstractly and quantitatively. SMP 3 - Construct viable arguments and critique the reasoning of others. SMP 5 - Use appropriate tools strategically. SMP 6 - Attend to precision. SMP 7 - Look for and make use of structure.	Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.	K.OA.1 - Represent addition and subtraction with objects, fingers, mental images, drawings, sounds, (e.g. claps), acting out situations, verbal explanations, expressions and equations. K.OA.2 - Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem. K.OA.3 - Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., 5 = 2 + 3 and 5 = 4 + 1).	Solve number stories and use addition terminology and symbols. Break down numbers up to 12 into added pairs in two or more ways. Given any number from 1-9 show the number needed to make 10. Solve story problems by adding or subtracting within 10.	Construct a comparison number story and justify and prove the solutions. Roll 2 dice and find the sum of the dots on the dice. Create a bar graph of how many times they roll each sum. Model the process of addition using a ten frame.	2.5.P.A.2 - Develop and refine fine motor skills (e.g., completes gradually more complex puzzles, uses smaller-sized manipulative during play and uses a variety of writing instruments in a conventional manner). K.SL.1a. - Follow agreed-upon rules for discussions (e.g., listening to others and taking turns speaking about the topics and texts under discussion).	

				K.OA.4 - For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.				
How do mathematical ideas interconnect and build on one another to produce a coherent whole? Why do we break numbers apart into 10s and 1s?	Place value is based on groups of 10. Grouping is a way to count, measure, and estimate. We can break numbers apart into groups of 10s and 1s to help us understand large numbers.	Numbers and Operations in Base Ten SMP 2 - Reason abstractly and quantitatively. SMP 5 - Use appropriate tools strategically. SMP 6 - Attend to precision. SMP 7 - Look for and make use of structure.	Work with numbers 11-19 to gain foundation for place value.	K.NBT.1 - Compose and decompose numbers from 11 to 19 into tens ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., $18 - 10 + 8$); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.	Explain how to use groups of 10s and 1s to represent any number from 11-19.	Use fingers or manipulatives to "show" a number. Build teen numbers on the tens frame using a spinner to generate numbers. Add on with additional spins.	2.5.P.A.2 - Develop and refine fine motor skills (e.g., completes gradually more complex puzzles, uses smaller-sized manipulative during play and uses a variety of writing instruments in a conventional manner).	
How can measurements be used to solve problems? How can objects be classified?	What we measure affects how we measure it.	Measurement and Data SMP 1 - Make sense of problems and persevere in solving them. SMP 2 - Reason abstractly and quantitatively. SMP 6 - Attend	Describe and compare measurable attributes. Classify objects and count the number of objects in each category.	K.MD.1 - Describe measureable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. K.MD.2 - Directly compare two objects with a measurable attribute in common, to see	Use nonstandard tools and techniques to estimate and compare weight and length. Begin to use the equal symbol. (Use the phrase "equals" synonymously with "the same	Use a variety of objects to measure the lengths of other objects. Discuss whether objects are the same length, longer or shorter.	5.2.P.A.1 - Observe, manipulate, sort, and describe objects and materials (e.g., water, sand, clay, paint, glue, various types of blocks, collections of objects, simple household items that can be taken apart, or objects made of wood, metal, or cloth) in the classroom and	

				which object has "more of"/"less of" the attribute, and describe the difference. *For example, directly compare the heights of two children and describe one child as taller/shorter.*	as".)		outdoor environment based on size, shape, color, texture, and weight.	
		SMP 7 - Look for and make use of structure.						
What are the different shapes in our world? How are shapes the same and different? How are geometric properties used to solve problems in everyday life? How will a shape look when rotated, reflected, and/or translated? How are geometric figures constructed?	Objects can be described and compared using their attributes. Transforming an object does not affect its attributes. All objects have a shape with a specific name. Objects can be similar to others in one way and different in other ways.	Geometry SMP 1 - Make sense of problems and persevere in solving them. SMP 2 - Reason abstractly and quantitatively. SMP 6 - Attend to precision. SMP 7 - Look for and make use of structure.	Identify and describe shapes. Analyze, compare, create and compose shapes.	K.G.1 - Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to. K.G.2 - Correctly name shapes regardless of their orientations or overall size. K.G.5 - Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.	Identify 2-dimensional geometric shapes. Describe familiar objects using the names of shapes. Create models of shapes by building or drawing them. Identify shapes no matter what size or orientation.	Find and name shapes located in the room. Take a shape walk and use spatial vocabulary words to describe the position and/or location of the shape. Draw a shape when given the name of the shape.	5.2.P.A.1 - Observe, manipulate, sort, and describe objects and materials (e.g., water, sand, clay, paint, glue, various types of blocks, collections of objects, simple household items that can be taken apart, or objects made of wood, metal, or cloth) in the classroom and outdoor environment based on size, shape, color, texture, and weight. LA.K.CCSS.ELA-Literacy.L.K.5c - Identify real-life connections between words and their use (e.g., note places at school that are colorful).	
Unit 6 **Pacing: 20 Days**						Unit Assessment		
How do mathematical ideas interconnect and build on one another to produce a	Numeric fluency includes both the understanding of and the ability to appropriately use numbers.	Counting and Cardinality SMP 1 – Make sense of problems and persevere in	Know number names and the count sequence. Count to tell the number of	K.CC.3 - Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a	Model subtraction concretely and symbolically. Find combinations that add to 10.	Given a table of survey information (e.g. favorite lunch foods) create a bar graph.	2.5.P.A.2 - Develop and refine fine motor skills (e.g., completes gradually more complex puzzles, uses smaller-sized manipulative during	

coherent whole? What makes a computational strategy both effective and efficient? How do operations affect numbers?	A quantity can be represented numerically in various ways. One representation may sometimes be more helpful than another; used together, multiple representations give a fuller understanding of a problem. Problem solving depends upon choosing wise ways. Place value is based on groups of 10. Numbers have names and we can use them to count.	solving them. SMP 2 – Reason abstractly and quantitatively. SMP 4 – Model with mathematics SMP 6 – Attend to precision. SMP 7 – Look for and make use of structure SMP 8 – Look for and express regularity in repeated reasoning.	objects. Compare numbers.	count of no objects). K.CC.5 - Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1-20, count out that many objects. K.CC.6 - Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.	Practice simple addition and subtraction.	After completing a class graph, pose questions such as: Which has the most/fewest? Are there any that are the same? Is there any that have none? How many people liked __ or __? Students can sort attribute blocks in various ways and describe how they are sorted or peers can name the common attribute.	play and uses a variety of writing instruments in a conventional manner).	
How do we measure things? Why do we measure things? How can objects be classified? What are the tools of measurement and how are they used?	Measurements can be used to describe, compare, and make sense of phenomena. The message conveyed by the data depends on how the data is collected, represented, and summarized. Grouping by attributes (classification) can be used to answer mathematical	Measurement and Data SMP 1 - Make sense of problems and persevere in solving them. SMP 4 - Model with mathematics SMP 5 – Use appropriate tools strategically. SMP 6 – Attend	Describe and compare measurable attributes. Classify objects and count the number of objects in each category.	K.MD.1 - Describe measureable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. K.MD.2 - Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference. *For*	Make graphs based on survey information. Use graphs to answer simple questions. Sort, count, compare, make, and interpret a graph. Use a rule to sort objects. Use classroom objects (such as string or straws) to	Conduct surveys and then graph results working in small groups. Compare heights of students in the class using terms like *taller than, shorter than, just about the same as*. Uses measuring tools appropriately.	2.5.P.A.2 - Develop and refine fine motor skills (e.g., completes gradually more complex puzzles, uses smaller-sized manipulatives during play, and uses a variety of writing instruments in a conventional manner). 5.2.P.A.1 - Observe, manipulate, sort, and describe objects and materials (e.g., water, sand, clay, paint, glue, various types of	

	questions.	to precision. SMP 7 – Look for and make use of structure. SMP 8 – Look for and express regularity in repeated reasoning.		*example, directly compare the heights of two children and describe one child as taller/shorter.* K.MD.3 - Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.	compare length. Use multiple attributes to find and describe objects and apply sorting rules.		blocks, collections of objects, simple household items that can be taken apart, or objects made of wood, metal, or cloth) in the classroom and outdoor environment based on size, shape, color, texture, and weight.	
How can plane and solid shapes be described? How are geometric figures constructed? What are the different shapes in our world? How are shapes the same and different?	Geometric properties can be used to construct geometric figures. Geometric relationships provide a means to make sense of a variety of phenomena. All objects have a shape with a specific name. Objects can be similar to others in one way and different in other ways.	Geometry SMP 1 - Make sense of problems and persevere in solving them. SMP 3 – Construct viable arguments and critique the reasoning of others. SMP 6 – Attend to precision. SMP 7 – Look for and make use of structure.	Identify and describe shapes. Analyze, compare, create, and compose shapes.	K.G.1 - Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to. K.G.2 - Correctly name shapes regardless of their orientations or overall size. K.G.3 – Identify shapes as two-dimensional (lying in a plane "flat") or three-dimensional ("solid"). K.G.4 - Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe	Identify 3-dimensional geometric solids (cubes, spheres, cones, rectangular prisms and cylinders) Describe familiar objects using the names of shapes.	Name the number of sides on a "flat" (2-dimentional) shape. Identify the flat shapes on the faces of 3-dimensional shapes. Match real life shapes with 3-dimensional solids. When shown a solid, tell whether it is cube, sphere or cylinder.	5.2.P.A.1 - Observe, manipulate, sort, and describe objects and materials (e.g., water, sand, clay, paint, glue, various types of blocks, collections of objects, simple household items that can be taken apart, or objects made of wood, metal, or cloth) in the classroom and outdoor environment based on size, shape, color, texture, and weight.	

				their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length).				
How do operations affect numbers? How do mathematical ideas interconnect and build on one another to produce a coherent whole? What are different models of and for addition and subtraction? What are efficient methods for finding sums and differences? What questions can be answered using addition and/or subtraction?	The magnitude of numbers affects the outcome of operations on them. One representation may sometimes be more helpful than another; used together, multiple representations give a fuller understanding of a problem. Computational fluency includes understanding the meaning and the appropriate use of numerical operations. Computation involves taking apart and combining numbers using a variety of approaches. Flexible methods of computation involve grouping numbers in strategic ways.	Operations and Algebraic Thinking SMP 1 - Make sense of problems and persevere in solving them. SMP 2 – Reason abstractly and quantitatively. SMP 4 – Model with mathematics. SMP 7 – Look for and make use of structure.	Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.	K.OA1 - Represent addition and subtraction with objects, fingers, mental images, drawings, sounds, (e.g. claps), acting out situations, verbal explanations, expressions and equations. K.OA.2 - Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem. K.OA.4 - For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.	Model and solve comparison number stories with pictures and manipulatives.	Act out "subtraction songs/stories" like Six Little Ducks, Five Little Speckled frogs to represent subtraction. Illustrate and solve simple number stories like, "Jack had 5 blocks. He gave 2 away. How many are left?"		

Unit 7 Pacing: 20 Days						Unit Assessment		
How can objects be classified?

How do we measure things?

Why do we measure things?

What types of problems are solved with measuring?

What are the tools of measurement and how are they used? | The message conveyed by the data depends on how the data is collected, represented, and summarized.

The choice of measurement tool depends on the measureable attributes and the degree of precision desired.

The size of an object does not always tell you its weight. For ex. larger does not always mean heavier. | Measurement and Data

SMP 1 - Make sense of problems and persevere in solving them.

SMP 2 - Reason abstractly and quantitatively.

SMP 5 – Use appropriate tools strategically.

SMP 6 - Attend to precision.

SMP 7 - Look for and make use of structure.

SMP 8 – Look for and express regularity in repeated reasoning. | Describe and compare measurable attributes.

Classify objects and count the number of objects in each category. | K.MD.1 - Describe measureable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.

K.MD.2 - Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference. *For example, directly compare the heights of two children and describe one child as taller/shorter.*

K.MD.3 - Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. | Compare two objects by their measurements.

Sort objects into categories and put the categories in order by the number of objects. | Students use a pan balance to compare weights.

Conduct simple survey and analyze the data as a class. | LA.K.CCSS.ELA-Literacy.L.K.5a - Sort common objects into categories (e.g., shapes, foods) to gain a sense of the concepts the categories represent. | |
| How will a shape look when rotated, reflected, and/or translated? | Objects can be described and compared using their geometric attributes.

Transforming an object does not affect its attributes. | Geometry

SMP 3 – Construct viable arguments and critique the reasoning of others. | Identify and describe shapes.

Analyze, compare, create, and compose shapes. | K.G.2 - Correctly name shapes regardless of their orientations or overall size.

K.G.3 – Identify shapes as two-dimensional (lying in a plane "flat") or three-dimensional ("solid"). | Identify 2-dimensional geometric shapes.

Identify 3-dimensional geometric solids. | Identify 2-dimensional and 3- dimensional shapes when shown. | | |

| How do operations affect numbers?

What questions can be answered using addition and/or subtraction?

What makes a computational strategy both effective and efficient?

What happens when we combine groups or take groups away?

What is addition and subtraction and what are the addition, subtraction, and equal symbols? | Computation involves taking apart and combining numbers using a variety of approaches.

Flexible methods of computation involve grouping numbers in strategic ways.

Grouping is a way to count, measure, and estimate. | Operations and Algebraic Thinking

SMP 1 – Make sense of problems and persevere in solving them.

SMP 2 – Reason abstractly and quantitatively.

SMP 4 – Model make use of structure.

SMP 5 – Use appropriate tools strategically.

SMP 6 – Attend to precision.

SMP 7 – Look for and make use of structure. | Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from. | K.OA.1 - Represent addition and subtraction with objects, fingers, mental images, drawings, sounds, (e.g. claps), acting out situations, verbal explanations, expressions and equations.

K.OA.2 - Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.

K.OA.A5 - Fluently add and subtract within 5. | Solve number stories.

Identify join and take-away situations.

Model and solve comparison number stories with pictures and manipulatives.

Add and subtract on a number line.

Read and write expressions and number sentences using the symbols +, - and =.

Add the dots on dominoes and match the totals to written numerals and record the addition number sentences.

Develop fluency with addition facts within 5. | Create a page for a class number story book. (illustrate independently)

Students use number line to solve number stories in class book.

Play dice addition game with two dice. Use game to assess children's ability to add small numbers correctly. | | |
| How do mathematical ideas interconnect and build on one another to produce a coherent whole?

What is base ten and how | One representation may sometimes be more helpful than another; used together, multiple representations give a fuller understanding of a problem.

A quantity can be represented | Numbers and Operations in Base Ten

SMP 2 – Reason abstractly and quantitatively. | Work with numbers 11 - 19 to gain foundation for place value. | K.NBT.1 - Compose and decompose numbers from 11 to 19 into tens ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation | Represent numbers with manipulatives as 10s and 1s.

Explain how groups of 10s and 1s represent any number between 11 - 19. | Name each teen number created as "ten plus ___ more" | 2.5.P.A.2 - Develop and refine fine motor skills (e.g., completes gradually more complex puzzles, uses smaller-sized manipulative during play and uses a variety of writing instruments in a conventional manner). | |

can it be used? Why do we break numbers apart into 10s and 1s?	numerically in various ways. Problem solving depends upon choosing wise ways. Place value is based on groups of 10.			(e.g., 18-10+8); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.			
Unit 8 **Pacing: 20 Days**						Unit Assessment	
How do mathematical ideas interconnect and build on one another to produce a coherent whole? What is base ten and how can it be used? Why do we break numbers apart into 10s and 1s?	We can break numbers apart into groups of 10s and 1s to help us understand large numbers. Knowing the value of numbers in each place will help us.	Number and Operations in Base Ten SMP 3 – Construct viable arguments and critique the reasoning of others. SMP 8 – Look for and express regularity in repeated reasoning.	Work with numbers 11-19 to gain foundations for place value.	K.NBT.1 - Compose and decompose numbers from 11 to 19 into tens ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., 18=10+8); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.	Give equivalent names for numbers. Represent numbers with manipulatives as 10s and 1s.	Make bundles of 10 with the sticks and count the leftovers. Work on name collection posters for numbers 5-20 with a partner.	2.5.P.A.2 - Develop and refine fine motor skills (e.g., completes gradually more complex puzzles, uses smaller-sized manipulative during play and uses a variety of writing instruments in a conventional manner).
How and why do we measure things? What are the tools of measurement and how are they used?	Measurements can be used to describe, compare, and make sense of phenomena. What we measure affects how we measure it.	Measurement and Data SMP 3 - Construct viable arguments and critique the reasoning of others. SMP 6 – Attend to precision.	Describe and Compare Measurable Attributes.	K.MD.2 - Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference. *For example, directly compare the heights of two children and*	Use nonstandard tools and techniques to estimate and compare time.	Create and share comparison statements. (It takes longer to write a sentence than a word. It takes more time to watch a movie than a commercial.)	

				describe one child as taller/shorter.				
How do operations affect numbers? How do mathematical ideas interconnect and build on one another to produce a coherent whole? What are efficient methods for finding sums and differences? What questions can be answered using addition and/or subtraction? What makes a computational strategy both effective and efficient?	Computational fluency includes understanding the meaning and the appropriate use of numerical operations. A quantity can be represented numerically in various ways. Flexible methods of computation involve grouping numbers in strategic ways. Numeric fluency includes both the understanding of and the ability to appropriately use numbers.	Operations and Algebraic Thinking SMP 1 – Make sense of problems and persevere in solving them. SMP 2 - Reason abstractly and quantitatively. SMP 3 – Construct viable arguments and critique the reasoning of others. SMP 5 – Use appropriate tools strategically. SMP 6 – Attend to precision. SMP 7 – Look for and make use of structure. SMP 8 – Look for and express regularity in repeated reasoning.	Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.	K.OA.1 - Represent addition and subtraction with objects, fingers, mental images, drawings, sounds, (e.g. claps), acting out situations, verbal explanations, expressions and equations. K.OA.2 - Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem. K.OA.4 - For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation. K.OA.A5 - Fluently add and subtract within 5.	Develop fluency with subtraction facts within 5. Use mental strategies to add and subtract numbers. Model numbers with manipulative Add numbers using a counting on strategy. Identify join and take away situations Read and write expressions and number sentences using the symbols +, -, =. Give equivalent names for numbers Use calculators as a tool to add and subtract.	Use dice to subtract the smaller number from the larger. Use counting on as an addition strategy. Identify at least two equivalent expressions that equal 10.		
How do mathematical ideas interconnect and build on	Numeric fluency includes both the understanding of and the ability to appropriately use	Counting and Cardinality SMP 3 – Construct viable	Know number names and count sequence.	K.CC.2 - Count forward beginning from a given number within the known sequence	Count on by 1s. Add and subtract within 5.	Count forward from numbers other than 1 throughout the 1 - 100 sequence.	2.5.P.A.2 - Develop and refine fine motor skills (e.g., completes gradually more complex puzzles,	

one another to produce a coherent whole?	numbers. A quantity can be represented numerically in various ways. Place value is based on groups of 10.	arguments and critique the reasoning of others. SMP 6 – Attend to precision. SMP 7 – Look for and make use of structure.	Count to tell the number of objects.	(instead of having to begin at 1.) K.CC.3 - Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects). K.CC.7 - Compare 2 numbers between 1 and 10 written as numerals.	Compare and order numbers. Represent numbers greater than 10.	Use dice to add/subtract. Use number cards to put non-consecutive numbers in order from smallest to greatest. Bundle craft sticks in 10s and 1s and count the sticks	uses smaller-sized manipulative during play and uses a variety of writing instruments in a conventional manner).
How are geometric figures constructed? How are shapes the same and different?	Geometric properties can be used to construct geometric figures. Objects can be compared and described using their geometric attributes.	Geometry SMP 3 – Construct viable arguments and critique the reasoning of others. SMP 4 – Model with mathematics. SMP 6 – Attend to precision. SMP 7 – Look for and make use of structure.	Identify and describe shapes. Analyze, compare, create, and compose shapes.	K.G.2 - Correctly name shapes regardless of their orientations or overall size. K.G.3 – Identify shapes as two-dimensional (lying in a plane "flat") or three-dimensional ("solid"). K.G.5 - Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.	Identify 2-dimensional and 3-dimensional geometric shapes. Recognize, describe, analyze, and model 2-dimensional and 3-dimensional shapes.	Use a feely bag to identify shapes by touch. Construct 3-dimensional shapes using manipulatives.	5.2.P.A.1 - Observe, manipulate, sort, and describe objects and materials (e.g., water, sand, clay, paint, glue, various types of blocks, collections of objects, simple household items that can be taken apart, or objects made of wood, metal, or cloth) in the classroom and outdoor environment based on size, shape, color, texture, and weight.
Unit 9 **Pacing: 19 Days**						Unit Assessment	
How do mathematical ideas interconnect and build on one another to produce a coherent	A quantity can be represented numerically in various ways. One representation may sometimes be more helpful than	Counting and Cardinality SMP 1 – Make sense of problems and persevere in	Know number names and sequence. Count to tell the number of objects.	K.CC.1 - Count to 100 by ones and by tens. K.CC.2 - Count forward beginning from a given number within the	Count on by 1s. Count forward starting at any number. Count by 10s to 100.	Individual oral assessments for each learning target	2.5.P.A.2 - Develop and refine fine motor skills (e.g., completes gradually more complex puzzles, uses smaller-sized manipulative during play and uses a

whole? How do operations affect numbers? How can we compare and contrast numbers? How do numbers represent objects? How and why do we count?	another; used together, multiple representations give a fuller understanding of a problem. Problem solving depends upon choosing wise ways. Everything can be counted. Number names tell us how many objects are in groups and allow us to count in order and compare groups of objects.	solving them. SMP 2 – Reason abstractly and quantitatively. SMP 3 – Construct viable arguments and critique the reasoning of others. SMP 4 – Model with mathematics SMP 5 – Use appropriate tools strategically. SMP 6 – Attend to precision. SMP 7 – Look for and make use of structure.		known sequence (instead of having to begin at 1.) K.CC.3 - Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects). K.CC.5 - Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1-20, count out that many objects. K.CC.6 - Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies. K.CC.7 Compare 2 numbers between 1 and 10 written as numerals.	Read and write numbers from 0-20. Count objects in a group. Compare 2 numbers between 1 and 10. Compare groups of objects using the words greater than, less than, and equal to.		variety of writing instruments in a conventional manner).
How and why do we measure things?	Everyday objects have a variety of attributes, each of which can be	Measurement and Data SMP 1 – Make	Describe and compare measureable attributes.	K.MD.1 - Describe measureable attributes of objects, such as length or	Compare two objects using measurement vocabulary.	Compare two objects using vocabulary such as: longer,	LA.K.CCSS.ELA-Literacy.L.K.5a - Sort common objects into categories (e.g.,

What types of problems are solved with measuring? What are the tools of measurement and how are they used?	measured in many ways. Measurements can be used to describe, compare, and make sense of objects. The choice of measurement tool depends on the measureable attributes and the degree of precision desired. The size of an object does not always tell you its weight. For ex. larger does not always mean heavier.	sense of problems and persevere in solving them. SMP 2 – Reason abstractly and quantitatively. SMP 3 – Construct viable arguments and critique the reasoning of others. SMP 4 – Model with mathematics SMP 5 – Use appropriate tools strategically. SMP 6 – Attend to precision.	Classify objects and count the number of objects in each category.	weight. Describe several measurable attributes of a single object. K.MD.2 - Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference. *For example, directly compare the heights of two children and describe one child as taller/shorter.* K.MD.3 - Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.	Sort objects as heavier than/ lighter than, or longer than/shorter than. Use tools to measure and compare lengths of time in seconds.	shorter, heavier, lighter, etc. Sort blocks by various attributes. Use a stopwatch to time 2 events and compare.	shapes, foods) to gain a sense of the concepts the categories represent.	
How can spatial relationships be described by careful use of geometric language? How are geometric figures constructed?	Geometric properties can be used to construct geometric figures. Transforming an object does not affect its attributes.	Geometry SMP 1 – Make sense of problems and persevere in solving them. SMP 3 – Construct viable arguments and critique the reasoning of others.	Identify and describe shapes. Analyze, compare, create, and compose shapes.	K.G.2 - Correctly name shapes regardless of their orientations or overall size. K.G.3 – Identify shapes as two-dimensional (lying in a plane "flat") or three-dimensional ("solid"). K.G.6 - Compose simple shapes to form larger shapes	Use geometric terms to describe and recreate designs.	Identify 2-dimensional and 3-dimensional shapes. Draw 2-dimensional shapes. Build a 3-dimensional shape.	LA.K.CCSS.ELA-Literacy.L.K.5c - Identify real-life connections between words and their use (e.g., note places at school that are colorful).	

How do operations affect numbers? How do mathematical ideas interconnect and build on one another to produce a coherent whole? What are different models of and for addition and subtraction? What are efficient methods for finding sums and differences? What questions can be answered using addition and/or subtraction? What happens when we combine groups or take groups away? What is addition and what is the addition and equal symbols?	Computational fluency includes understanding the meaning and the appropriate use of numerical operations. Numeric fluency includes both the understanding of and the ability to appropriately use numbers. A quantity can be represented numerically in various ways. Computation involves taking apart and combining numbers using a variety of approaches. Flexible methods of computation involve grouping numbers in strategic ways. Proficiency with basic facts aids estimation and computation of larger and smaller numbers.	Operations and Algebraic Thinking SMP 1 – Make sense of problems and persevere in solving them. SMP 2 – Reason abstractly and quantitatively. SMP 3 – Construct viable arguments and critique the reasoning of others. SMP 4 – Model with mathematics SMP 5 – Use appropriate tools strategically. SMP 6 – Attend to precision. SMP 7 – Look for and make use of structure. SMP 8 – Look for and express regularity in repeated reasoning.	Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.	K.OA.1 - Represent addition and subtraction with objects, fingers, mental images, drawings, sounds, (e.g. claps), acting out situations, verbal explanations, expressions and equations. K.OA.2 - Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem. K.OA.3 - Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., 5 = 2 + 3 and 5 = 4 + 1). K.OA.4 - For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or	Identify join and take away situations Read and write expressions and number sentences using the symbols +, -, =. Use mental strategies to add and subtract numbers. Model numbers with manipulative Add and represent "doubles" addition facts.	Represent and solve addition and subtraction number stories using number sentences. Show at least 3 combinations for numbers between 6 and 10.		

				equation.				
				K.OA.A5 - Fluently add and subtract within 5.				
End- Year Assessment Pacing: 1 Day						District EOY Assessment		