



GRADE K					
Counting and Cardinality					
Know number names and the count sequence Major					
<u>K.CC.1</u> Count to 100 by ones	Desired Student Performance				
and by tens.	 A student should know Recite numbers 1 to 30 in the correct order. 	 A student should understand Numbers must be counted in the correct order. The patterns in counting (For example, ones are repeated each time a new decade or ten is reached as in 21, 22, 2331, 32, 33). 	 A stude Rote the coverbal Rote tens numl 50, 6 	ent should be able to do counting of numbers in correct order to 100 (only al counting). counting of numbers by (beginning at decade bers as in 10, 20, 30, 40, 50, 70).	





GRADE K						
Counting and Cardinality						
Know number names and the count sequence Major						
K.CC.2 Count forward	Desired Student Performance					
beginning from a given number within the known sequence (instead of having to begin at 1).	 A student should know Recite numbers 1 to 30 in the correct order. 	 A student should understand Numbers must be counted in the correct order. The counting sequence is the same, no matter where you begin counting. The patterns in counting (For example, ones are repeated each time a new decade or ten is reached as in 21, 22, 2331, 32. 33). 	A stud	ent should be able to do t rote counting at any ber between 1 and 100 continue to 100 (only al counting).		





GRADE K						
Counting and Cardinality						
Know number names and the count sequence Major						
K.CC.3 Write numbers from 0 to		Desired Student Performance				
20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).	 A student should know Recite numbers 1 to 30 in the correct order. Recognize, name, and attempt writing numerals 0 - 10. 1 to 1 correspondence. The last number said in the counting sequence is the number of objects. 	 A student should understand Numbers must be counted in the correct order. When counting a set of objects, begin with the number 1. A numeral is a symbol for a quantity. 0 represents none. 	 A stude Write mate object Court (0-20) 	ent should be able to do e a numeral (0-20) to th a set of counted cts. Int out a number of objects D) to match a numeral.		





GRADE K						
Counting and Cardinality						
Count to tell the number of objects Major						
K.CC.4 Understand the		Desired Student Performance				
relationship between	A student should know	A student should understand	A student should be able to do			
numbers and quantities; connect counting to cardinality. a. 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.	 Recite numbers 1 to 30 in the correct order. Count a group of 10 arranged objects and 7 scattered objects. 	 Numbers must be counted in the correct order. When counting a set of objects, begin with the number 1. 1 to 1 correspondence (each object represents a number name). Objects are only counted once. 	 Count a set of objects. Keep track of which objects have been counted and which object have not. Point to each object (one at a time) and say the counting sequence. 			





GRADE K						
	Counting and Cardinality					
	Count to tell the	number of objects		Major		
K.CC.4 Understand the		Desired Student Performance				
relationship between numbers and quantities; connect counting to cardinality. b. 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.	 A student should know Recite numbers 1 to 30 in the correct order. Count a group of 10 arranged objects and 7 scattered objects. 	 A student should understand Numbers must be counted in the correct order. When counting a set of objects, begin with the number 1. 1 to 1 correspondence (each object represents a number name). Objects are only counted once. The group of objects is the same quantity no matter the arrangement. 	 A stude Cour Keep have object Point time) seque Answ many the la answ 	ent should be able to do at a set of objects. b track of which objects b been counted and which ct have not. t to each object (one at a and say the counting ence. ver the question, "How y are there?" Knowing that ast number counted is the ver.		





GRADE K				
	Counting	and Cardinality		
	Count to tell the	number of objects	Major	
K.CC.4 Understand the		Desired Student Performance		
relationship between numbers and quantities; connect counting to cardinality. c. Understand that each successive number refers to a quantity that is one larger.	 A student should know Recite numbers 1 to 30 in the correct order. Count a group of 10 arranged objects and 7 scattered objects. 	 A student should understand Numbers must be counted in the correct order. When counting a set of objects, begin with the number 1. 1 to 1 correspondence (each object represents a number name). Objects are only counted once. The group of objects is the same quantity no matter the arrangement. The number name 15 is larger than the number name 14 and so forth. 	 A student should be able to do Count a set of objects. Keep track of which objects have been counted and which object have not. Point to each object (one at a time) and say the counting sequence. Answer the question, "How many are there?" (Knowing that the last number counted is the answer). Answer the question, "How many would there be if we added one more object?" 	





GRADE K						
	Counting and Cardinality					
Count to tell the number of objects Major						
K.CC.5 Count to answer "how		Desired Student Performance				
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.	 A student should know How to recite numbers 1 to 30 in the correct order. How to count a group of 10 arranged objects and 7 scattered objects. 1 to 1 correspondence (each object represents a number name). When counting a set of objects, begin with the number 1. 	 A student should understand Numbers must be counted in the correct order. Objects are only counted once. The group of objects is the same quantity no matter the arrangement. 	 A student should be able to do Count a set of objects (up to 20) and tell how many. Given a number, count out that number of objects (up to 20). Keep track of which objects have been counted and which object have not. Point to each object (one at a time) and say the counting sequence. Answer the question, "How many are there?" (Knowing that the last number counted is the answer). Explain counting strategy. 			





GRADE K							
	Counting	and Cardinality					
	Compare	numbers		Major			
K.CC.6 Identify whether the	Desired Student Performance						
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. ¹	 A student should know Comparative language such as more than, less than, equal to, and different to compare objects. 	 A student should understand The term "greater than" means more than (larger quantity). The term "less than" means fewer (smaller quantity). The term "equal" means the quantity is the same. 	 A stude Com objection Use Studie Use Studie One of another Circling Which Which partress Composition Explain 	ent should be able to do pare two groups of cts (with up to ten objects ch group). matching strategies (e.g. ents line up objects with characteristic (squares) to her row of objects with a rent characteristic es). Students can see h objects do not have a her). Use language greater less than, or equal to determining the parison. ain counting strategy.			





GRADE K						
Counting and Cardinality						
Compare numbers Major						
<u>K.CC.7</u> Compare two numbers	Desired Student Performance					
between 1 and 10	A student should know	A student should understand	A stud	A student should be able to do		
presented as written numerals.	 Comparative language such as more than, less than, equal to, and different to compare objects. Significance of each numeral through multiple experiences with tools such as ten frames, rekenreks, counters, etc. 	 The term "greater than" means more than (a larger quantity). The term "less than" means fewer (a smaller quantity). The term "equal" means the quantity is the same. A numeral is a symbol for a quantity of objects; a representation of a particular quantity. 	Com seeir the la less	pare two numbers (only ng the numeral) by using anguage "greater than, than, or equal to".		





	G	RADE K		
	Operations and	Algebraic Thinking		
Understand addition as putting together and adding to, and understand Major Subtraction as taking apart and taking from				
K.OA.1 Represent addition and		Desired Student Performance		
subtraction with objects, fingers, mental images, drawings ¹ , sounds (e.g. claps), acting out situations, verbal explanations, expressions, or equations. ¹ Drawings need not show details, but should show the mathematics in the problem.	 A student should know Rapid recognition of numbers to 5 on their fingers. When counting, to say the number names in order. Each object represents one number name (one to one correspondence). When counting a number of objects, the last number name tells the number of objects counted. 	 A student should understand There are multiple ways to solve addition and subtraction problems. How to represent addition and subtraction number sentences. The equal sign can mean "makes" or "results in", but always means "is the same number as". Addition means to add to or put together, and is noted with a "+" symbol. Subtraction means to take from or take apart, and is noted with a "-" symbol. 	 A student should be able to do Act out addition and subtraction situations given by the teacher. Model with mathematics by drawing (with no importance to detail of the pictures). Picture mental images (dot patterns, pictures of objects, ten frames) of number quantities (also known as subitization). Add to, with the result unknown (A + B = ?). Take from, with the result unknown (C - B = ?). Put together/take apart with total unknown (A + B = ?) and both addends unknown (C = ? + ?). 	





GRADE K					
	Operations and	d Algebraic Thinking			
Understand addition as putting together and adding to, and understand Major Subtraction as taking apart and taking from					
K.OA.2 Solve addition and		Desired Student Performance			
subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.	 A student should know Rapid recognition of numbers to 10 on their fingers. How to decompose and compose numbers up to 10 (using manipulatives such as ten-frames, ten wands, rekenreks, or dot patterns). When counting to say the number names in order, each object represents one number name (one to one correspondence). When counting a number of objects, the last number name tells the number of objects counted. 	 A student should understand There are multiple ways to solve addition and subtraction problems. How to represent addition and subtraction number sentences. The equal sign can mean "makes" or "results in", but always means "is the same number as." Addition means to add to or put together, and is noted with the "+" symbol. Subtraction means to take from or take apart, and is noted with the "-" symbol. 	 A student should be able to do Act out addition and subtraction word problems given by the teacher. Model with mathematics using various objects or tools (tenframes, ten wands, rekenreks, dot patterns, double sided counters, etc.) or through drawings. Add to, with the result unknown (A + B = ?). Take from, with the result unknown (C - B = ?). Put together/take apart with total unknown (A + B = ?) and both addends unknown (C = ? + ?). 		





GRADE K					
Operations and Algebraic Thinking					
Understand addition as putting together and adding to, and understand Major Subtraction as taking apart and taking from					
K.OA.3 Decompose numbers		Desired Student Performance			
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).	 A student should know Rapid recognition of numbers to 10 on their fingers. When counting, to say the number names in order, each object represents one number name (one to one correspondence). When counting a number of objects, the last number name tells the number of objects counted. 	 A student should understand The equal sign can mean "makes" or "results in", but always means "is the same number as." The plus sign (+) means to "put together" or "join." A whole can be separated into two or more parts. A pair, in this regards to this standard, means two numbers. How to represent the decomposition of number partners into an equation (e.g., 5 = 2 + 3 and 5 = 4 + 1). 	 A student should be able to do Break apart a number to find all of its pairs or partners using various objects or tools (e.g., ten-frames, ten wands, rekenreks, dot patterns, double sided counters, etc.). Model with mathematics. Reason abstractly and quantitatively. Record decomposition through drawings or an equation. 		





	GRADE K				
	Operations and	Algebraic Thinking			
U	nderstand addition as putting tog subtraction as taking apart and	ether and adding to, and understai d taking from	nd Major		
<u>K.OA.4</u> For any number from 1		Desired Student Performance			
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.	 A student should know Rapid recognition of numbers to 10 on their fingers. When counting, say the number names in order. Each object represents one number name (one to one correspondence). When counting a number of objects, the last number name tells the number of objects counted. 	 A student should understand The equal sign can mean "makes" or "results in," but always means "is the same number as." The plus sign (+) means "put together" or "join." Two parts (number partners) combine to make a whole (the number 10). How to represent the composition of number partners into an equation to represent 10 as the whole (e.g., 5 + ? = 10, 10 = 2 + ?). 	 A student should be able to do Make 10, when given a number 1-9, using various objects or tools (e.g., tenframes, ten wands, rekenreks, dot patterns, double sided counters, etc.). Model with mathematics. Reason abstractly and quantitatively. Record method for making 10 through drawings or an equation. 		





	GRADE K				
	Operations and	d Algebraic Thinking			
	Jnderstand addition as putting tog subtraction as taking apart and	ether and adding to, and understai d taking from	nd	Major	
K.OA.5 Fluently add and		Desired Student Performance			
subtract within 5.	A student should know	A student should understand	A stude	ent should be able to do	
	 Rapid recognition of numbers to 5 on their fingers. When counting, to say the number names in order. Each object represents one number name (one to one correspondence). When counting a number of objects, the last number name tells the number of objects counted. Addition means to add to or put together (noted by a "+" sign). Subtraction means to take from or take apart (noted by a "-" sign). The equals sign can mean "makes" or "results in," but always means "is the same number as." 	 To use visual images or representations of numbers (learned through dot patterns) to add or subtract - also known as subitization. That numbers can be added in any order (commutative property) and this is a strategy for solving facts such as 1 + 4 quicker by switching the addends to only have to count up 1. 	 Quic Use coun finge repre probl 	kly add and subtract up to strategies such as ting on, counting back, ers, mental esentations, etc. to solve lems.	





GRADE K				
	Numbers and O	perations in Base Ter		
	Work with numbers 11-19 to g	ain foundations for place value	Major	
<u>K.NBT.1</u> Compose and		Desired Student Performance		
decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects and 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.	 A student should know The counting sequence. 1 to 1 correspondence. How to write and read the numbers 11 to 19. 	 A student should understand The numbers 11 to 19 are created by using a ten and then adding ones. Numbers can be "put together" (composed) or "broken apart" (decomposed). The digit in the tens place describes the number of tens and the number in the ones place describes the number of ones. 	 A student should be able to do Model with mathematics by using tools such as a tenframe, drawings, or rekenreks to compose numbers 11 to 19. Describe that a ten frame can contain only ten ones and there will be some leftover when modeling counting numbers 11 to 19. Write an addition equation to match the model of tens and ones. Count on from ten (For example, when modeling the number 14 on a ten frame, the student would count "10, 11, 12, 13, 14" instead of beginning with 1.). 	





GRADE K					
	Measure	ment and Data			
Describe and compare measureable attributes Additional					
<u>K.MD.1</u> Describe measurable		Desired Student Performance			
attributes of objects, such as length or weight. Describe several measureable attributes of a single object.	 A student should know Vocabulary such as small, big, short, tall, empty, full, heavy, and light. Objects can be measured for different purposes. 	 A student should understand "Length" is the term used to measure how long an object is. "Weight" is the term used to measure how heavy an object is. An object's weight and length can be described. Length and weight are relative to other objects. 	 A stude Use objectiong, Know objection Know objection connection etc.) 	ent should be able to do words to describe an ct by stating if it is short, , heavy, light, etc. w how to determine an ct's weight or length using standard units of surement (balance scale, necting cubes, paper clips,	





GRADE K				
	Measure	ment and Data		-
	Describe and compare	measureable attributes		Additional
K.MD.2 Directly compare two		Desired Student Performance		
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.	 A student should know Terms bigger, longer, taller, heavier, same weight, same amount and be able to use them appropriately. To use nonstandard units of measurement. Length is the term used to measure how long an object is. Weight is the term used to measure how heavy an object is. An object's weight and length can be described. Length and weight are relative to other objects. 	 A student should understand The terms shorter/taller are used for comparing height. The terms heavier/lighter are used for comparing weight. When placing objects next to one another, they must be lined up evenly. 	A stud Mea then Use heig Use weig Mod usin mea conr etc.)	ent should be able to do sure objects by placing n next to one another. words to compare the ht of two objects. words to compare the ght of two objects. el with mathematics by g non-standard units of surement (balance scale, necting cubes, paper clips,





GRADE K					
	Measure	ment and Data			
	Classify objects and count the number of objects in each category Supporting				
K.MD.3 Classify objects into	K.MD.3 Desired Student Performance				
given categories; count the numbers of objects in each category and sort the categories by count. ¹ ¹ Limit category counts to be less than or equal to 10.	 A student should know How to count objects 1 to 10. How to compare and contrast objects by looking at their attributes. 1 to 1 correspondence. The last number said in the counting sequence is the number of objects in the group. 	 A student should understand Objects can be sorted by different categories. Sorting means to separate objects and put them together with other objects that have something in common (color, shape, etc.) A category is a group of similar objects. The count is the same when they both have the same number of objects. 	 A stude Sort (e.g. heightemp Cour each be lin catege Sort their catege Sort their catege Sort 	ent should be able to do objects into categories , color, size, length, ht, weight, area, berature). In how many objects are in a category (the count will mited to 10 objects in each gory). the categories based on counts (For example, all gories that had a count of jects will be placed ther.).	





	GRADE K				
	Ge	eometry			
Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres)					
<u>K.G.1</u> Describe objects in the		Desired Student Performance			
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.	 A student should know Names of shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres). Objects are in different shapes. 	 A student should understand A shape can change location and orientation without changing shape. Objects are located in relative positions. No matter the position of the object, the object is still the same. Objects around us are 3- dimensional shapes, and these shapes have a mathematical term (e.g., a ball should be called a sphere). 	 A stude Desc tellin Desc shap Use to de objec use p to de ball i 	ent should be able to do cribe every day objects by g the name of their shape. cribe non-examples of res. terms such as "in front of" escribe the location of an ct in relation to another; prepositions appropriately escribe objects (e.g., "The s in front of me").	





	GI	RADE K		
	Ge	eometry		
Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres)				
K.G.2 Correctly name shapes	K.G.2 Desired Student Performance			
regardless of their orientations or overall size.	 A student should know Names of shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres). Objects are in different shapes. Describe everyday objects by telling the name of their shape. Describe non-examples of shapes. Give attributes of each shape. 	 A student should understand A shape can change location, size, color, and orientation without changing shape (non-defining attributes). No matter the position of the object, the object is still the same. Objects around us are 3-dimensional shapes, and these shapes have a mathematical term (e.g., a ball should be called a sphere). 	 A stud Nam vario trian when Nam (e.g. ever anot 	ent should be able to do be shapes when turned in bus directions (e.g., A gle is a triangle, even in turned upside down). The a shape of various sizes the shape is a triangle in though it is larger than her triangle).





	GRADE K				
	Ge	eometry			
Identi	Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres)				
K.G.3 Identify shapes as two-		Desired Student Performance			
dimensional (lying in a plane "flat") or three- dimensional ("solid).	 A student should know Names of shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres). Objects are in different shapes. Describe everyday objects by telling the name of their shape. Describe non-examples of shapes. Give attributes (defining and non-defining) of each shape. 	 A student should understand Objects around us are three- dimensional shapes, and these shapes have a mathematical term (e.g., a ball should be called a sphere). Three-dimensional shapes are solid figures composed of two- dimensional shapes (faces) and have volume. Two-dimensional shapes are flat. 	A stude	ent should be able to do rmine whether a shape ares, circles, triangles, ngles, hexagons, cubes, s, cylinders, and spheres) o or three-dimensional.	





GRADE K				
	Ge	eometry		
	Analyze, compare, crea	te, and compose shapes		Supporting
K.G.4 Analyze and compare		Desired Student Performance		
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).	 A student should know Names of shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres). Objects are in different shapes. Describe everyday objects by telling the name of their shape. Describe non-examples of shapes. Attributes of each shape. Determine whether a shape is two- or three-dimensional. 	 A student should understand Three-dimensional shapes are solid figures composed of two-dimensional shapes (faces) and have volume. Two-dimensional shapes are flat. Shapes have different parts that we can describe informally (corners) or formally with math language (vertices). Shapes are alike and different. 	 A stud Com three desc (num etc.) Cont three desc (num etc.) Anal dime desc "This 	ent should be able to do apare two shapes (two- or e-dimensional) by cribing their similarities abber of sides, vertices, trast two shapes (two- and e-dimensional) by cribing their differences abber of sides, vertices, yze two- and three- ensional shapes by cription of their "parts" (e.g. s shape has no points").





GRADE K				
	Ge	eometry		
	Analyze, compare, crea	te, and compose shapes		Supporting
K.G.5 Model shapes in the		Desired Student Performance		
world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.	 A student should know Name of shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres). Objects are in different shapes. Describe everyday objects by telling the name of their shape. Describe non-examples of shapes. Give attributes of each shape. Determine whether a shape is two- or three-dimensional. Use pre-kindergarten materials such as Popsicle sticks, play dough, blocks, pipe cleaners, and pattern blocks to create shapes. 	 A student should understand Three-dimensional shapes are solid figures composed of two-dimensional shapes (faces) and have volume. Two-dimensional shapes are flat. Shapes have different parts that we can describe informally (corners) or formally with math language (vertices). Shapes have similarities and differences. 	A stud • Bu (e. • Mo dra	ent should be able to do ild shapes using objects g., sticks and clay balls). odel shapes through awing.





GRADE K				
	Ge	eometry		
Analyze, compare, create, and compose shapes Supporting				
<u>K.G.6</u> Compose simple		Desired Student Performance		
shapes to form larger shapes. For example, "Can you join these two triangles with full sides touching to make a rectangle?"	 A student should know Name of shapes (squares, circles, triangles, rectangles, and hexagons). How to compose simple shapes. Use pre-kindergarten materials such as Popsicle sticks, play dough, blocks, pipe cleaners, and pattern blocks to create shapes. 	 A student should understand A shape can change location and orientation without changing shape. Shapes can be reoriented by using flips, slides, and turns. Smaller shapes can be joined to create a new, larger shape. 	A stud Bu usi pa Na bui	ent should be able to do ild larger shapes from ng smaller shapes (e.g., ttern blocks). me the new shape that is ilt from smaller shapes.