Kindergarten Mathematics

Standards Resources:

This document does not contain all of the Common Core Standards, but stresses the major clusters as identified by Achieve the Core. These priority standards require greater emphasis than the others based on the depth of the ideas, the time that it takes to master, and/or their importance to future mathematics or the demands of college and career readiness.*

However, it is important that the standards which are not deconstructed in this document continue to be part of your instruction. Neglecting those standards may leave gaps in student skill and understanding as well as not preparing students for the challenges of a later grade.

This project was funded from the nonprofit organization Student Achievement Partners. This organization assembles educators and researchers to design actions based on evidence that will improve student achievement.

***PPS Deconstructed Standards: Unpacked Content by Learning Progressions** is intended to clarify concepts inherent in the Common Core State Standards. These are an instructional resource that should be used to facilitate planning for units of study in Math, creating common assessments and general instructional support of CCSS.*

Resources from the following states were used to draft these documents: Arizona Dept. of Education; Kentucky Dept of Education Core Academic Standards with Targets; PPS CCSS Correlations; North Carolina Dept of Public Instruction Unpacked Content; Common Core Institute. Adjustments and modifications have been made to customize content for the PPS district.

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DECONSTRUCTED PRIORITY CCSS STANDARDS: Mathematics
Cluster: Know number names and the count sequence.
Standard: K.CC.1

Connecting Standard	Standard/Learning Outcome:	Connecting Standard
	CCSS.MATH.CONTENT.K.CC.A.1 Count to 100 by ones and by tens	**1.NBT.A.1**

Mathematical Practices
K.MP.7. Look for and make use of structure. K.MP.8. Look for and express regularity in repeated reasoning.

Guiding Questions	
● How high can I count?	
KNOW (Essential Concept)	**DO (Learning Targets/Essential Skills)**
● Count verbally to 100 by ones starting at 0 ● Count verbally to 100 by tens	

Academic Vocabulary	Explanations and Examples
Key Terms ● Zero - one hundred	The emphasis of this standard is on the counting sequence. When counting by ones, students need to understand that the next number in the sequence is one more. When counting by tens, the next number in the sequence is “ten more” (or one more group of ten). Instruction on the counting sequence should be scaffolded (e.g., 1-10, then 1-20, etc.). Counting should be reinforced throughout the day, not in isolation. Examples: • Count the number of chairs of the students who are absent. • Count the number of stairs, shoes, etc. • Counting groups of ten such as “fingers in the classroom” (ten fingers per student). When counting orally, students should recognize the patterns that exist from 1 to 100. They should also recognize the patterns that exist when counting by 10s.

DECONSTRUCTED PRIORITY CCSS STANDARDS: Mathematics
Cluster: Know number names and the count sequence.
Standard: K.CC.2

Connecting Standard	Standard/Learning Outcome:	Connecting Standard
	CCSS.MATH.CONTENT.K.CC.A.2 Count forward beginning from a given number within the known sequence (instead of having to begin at 1).	

Mathematical Practices
K.MP.7. Look for and make use of structure.

Guiding Questions	
● Where can I start counting from?	
KNOW (Essential Concept)	**DO (Learning Targets/Essential Skills)**
● Count forward verbally by ones beginning with another number other than 1	

Academic Vocabulary	Explanations and Examples
Key Terms ● Zero - one hundred	The emphasis of this standard is on the counting sequence to 100. Students should be able to count forward from any number, 1-99.

DECONSTRUCTED PRIORITY CCSS STANDARDS: Mathematics
Cluster: Know number names and the count sequence.
Standard: K.CC.3

Connecting Standard	Standard/Learning Outcome:	Connecting Standard
	CCSS.MATH.CONTENT.K.CC.A.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).	

Mathematical Practices
K.MP.2. Reason abstractly and quantitatively. K.MP.7. Look for and make use of structure. K.MP.8. Look for and express regularity in repeated reasoning.

Guiding Questions	
● How can I write how many objects there are?	
KNOW (Essential Concept)	**DO (Learning Targets/Essential Skills)**
● Write numbers 0 to 20. ● Write the number that represents a given number of objects from 0-20.	

Academic Vocabulary	Explanations and Examples
Key Terms ● Zero - one hundred	Students should be given multiple opportunities to count objects and recognize that a number represents a specific quantity. Once this is established, students begin to read and write numerals (numerals are the symbols for the quantities). The emphasis should first be on quantity and then connecting quantities to the written symbols. ● A sample unit sequence might include: 1. Counting up to 20 objects in many settings and situations over several weeks. 2. Beginning to recognize, identify, and read the written numerals, and match the numerals to given sets of objects. 3. Writing the numerals to represent counted objects. Since the teen numbers are not written as they are said, teaching the teen numbers as one group of ten and extra ones is foundational to understanding both the concept and the symbol that represents each teen number. For example, when focusing on the number “14,” students should count out fourteen objects using one-to-one correspondence and then use those objects to make one group of ten and four extra ones. Students should connect the representation to the symbol “14.”

DECONSTRUCTED PRIORITY CCSS STANDARDS: Mathematics
Cluster: Count to tell the number of objects.
Standard: K.CC.4

Connecting Standard	Standard/Learning Outcome:	Connecting Standards
	CCSS.MATH.CONTENT.K.CC.B.4 Understand the relationship between numbers and quantities; connect counting to cardinality. CCSS.MATH.CONTENT.K.CC.B.4.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. CCSS.MATH.CONTENT.K.CC.B.4.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. CCSS.MATH.CONTENT.K.CC.B.4.c Understand that each successive number name refers to a quantity that is one larger..	**K.CC.B.5** **1.OA.C.5**

Mathematical Practices
K.MP.2. Reason abstractly and quantitatively. K.MP.7. Look for and make use of structure. K.MP.8. Look for and express regularity in repeated reasoning.

Guiding Questions	
• How do I know how many objects there are?	
Substandard Deconstruction	**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**
KNOW (Essential Concept)	**DO (Learning Targets/Essential Skills)**
	• Match each object with one and only one number name and each number with one and only one object. • Say the number names in order while matching each object with a number when counting objects.
Substandard Deconstruction	**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.**
KNOW (Essential Concept)	**DO (Learning Targets/Essential Skills)**
	• Recognize the number of objects is the same regardless of their arrangement or the order in which they were counted. • Realize that the last number name said tells the number of objects counted.

Substandard Deconstruction	**K.CC.4C Understand that each successive number name refers to a quantity that is one larger.**
KNOW (Essential Concept)	**DO (Learning Targets/Essential Skills)**
	● Generalize that each successive number name refers to a quantity that is one larger .

Academic Vocabulary	Explanations and Examples
Key Terms ● Zero - one hundred ● Whole ● Group ● Pattern	This standard focuses on one-to-one correspondence and how cardinality connects with quantity. ● For example, when counting three bears, the student should use the counting sequence, “1-2-3,” to count the bears and recognize that “three” represents the group of bears, not just the third bear. A student may use an interactive whiteboard to count objects, cluster the objects, and state, “This is three”. In order to understand that each successive number name refers to a quantity that is one larger, students should have experience counting objects, placing one more object in the group at a time. ● For example, using cubes, the student should count the existing group, and then place another cube in the set. Some students may need to re-count from one, but the goal is that they would count on from the existing number of cubes. S/he should continue placing one more cube at a time and identify the total number in order to see that the counting sequence results in a quantity that is one larger each time one more cube is placed in the group. A student may use a clicker (electronic response system) to communicate his/her count to the teacher.

DECONSTRUCTED PRIORITY CCSS STANDARDS: Mathematics
Cluster: Count to tell the number of objects.
Standard: K.CC.5

Connecting Standard	Standard/Learning Outcome:	Connecting Standard
K.CC.B.4	CCSS.MATH.CONTENT.K.CC.B.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.	

Mathematical Practices
K.MP.2. Reason abstractly and quantitatively. K.MP.7. Look for and make use of structure. K.MP.8. Look for and express regularity in repeated reasoning.

Guiding Questions	
● What does a numeral represent?	
KNOW (Essential Concept)	**DO (Learning Targets/Essential Skills)**
● Count up to 20 objects that have been arranged in a line, rectangular array, or circle. ● Count as many as 10 items in a scattered configuration.	● Match each object with one and only one number name and each number with one and only one object. ● Conclude that the last number of the counted sequence signifies the quantity of the counted collection. ● Given a number from 1-20, count that many objects.

Academic Vocabulary	Explanations and Examples
Key Terms ● Pattern	Students should develop counting strategies to help them organize the counting process to avoid re-counting or skipping objects. Examples: ● If items are placed in a circle, the student may mark or identify the starting object. ● If items are in a scattered configuration, the student may move the objects into an organized pattern. ● Some students may choose to use grouping strategies such as placing objects in twos, fives, or tens (note: this is not a kindergarten expectation). ● Counting up to 20 objects should be reinforced when collecting data to create charts and graphs. A student may use a clicker (electronic response system) to communicate his/her count to the teacher.

DECONSTRUCTED PRIORITY CCSS STANDARDS: Mathematics
Cluster: Compare numbers.
Standard: K.CC.6

Connecting Standard	Standard/Learning Outcome:	Connecting Standards
	CCSS.MATH.CONTENT.K.CC.C.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.C.7** **K.MD.B.3**

Mathematical Practices
K.MP.2. Reason abstractly and quantitatively. K.MP.7. Look for and make use of structure. K.MP.8. Look for and express regularity in repeated reasoning.

Guiding Questions	
● How are these groups of objects alike and different?	
KNOW (Essential Concept)	**DO (Learning Targets/Essential Skills)**
● Describe greater than, less than, or equal to.	● Determine whether a group of 10 or fewer objects is greater than, less than, or equal to another group of 10 or fewer objects.

Academic Vocabulary	Explanations and Examples
Key Terms ● Greater ● More ● Less ● Fewer ● Equal ● Same amount	Students should develop a strong sense of the relationship between quantities and numerals before they begin comparing numbers. Other strategies: ● Matching: Students use one-to-one correspondence, repeatedly matching one object from one set with one object from the other set to determine which set has more objects. ● Counting: Students count the objects in each set, and then identify which set has more, less, or an equal number of objects. ● Observation: Students may use observation to compare two quantities (e.g., by looking at two sets of objects, they may be able to tell which set has more or less without counting). ● Observations in comparing two quantities can be accomplished through daily routines of collecting and organizing data in displays. Students create object graphs and pictographs using data relevant to their lives (e.g., favorite ice cream, eye color, pets, etc.). Graphs may be constructed by groups of students as well as by individual students. ● Benchmark Numbers: This would be the appropriate time to introduce the use of 0, 5 and 10 as benchmark numbers to help students further develop their sense of quantity as well as their ability to compare numbers. Students state whether the number of objects in a set is more, less, or equal to a set that has 0, 5, or 10 objects.

DECONSTRUCTED PRIORITY CCSS STANDARDS: Mathematics
Cluster: Compare numbers.
Standard: K.CC.7

Connecting Standard	Standard/Learning Outcome:	Connecting Standard
K.CC.C.6	CCSS.MATH.CONTENT.K.CC.C.7 Compare two numbers between 1 and 10 presented as written numerals.	**1.NBT.B.3**

Mathematical Practices
K.MP.2. Reason abstractly and quantitatively.

Guiding Questions	
● What do I know about these two numbers? ● How are these two numbers alike and different?	
KNOW (Essential Concept)	**DO (Learning Targets/Essential Skills)**
● Know the quantity of each numeral 1-10.	● Compare written numbers to determine if they are greater than, less than, or equal to each other. ● Given two numerals, students should determine which is greater or less than the other.

Academic Vocabulary	Explanations and Examples
Key Terms ● Greater ● More ● Less ● Fewer ● Equal ● Same amount	Given two numerals, students should determine which is greater or less than the other.

DECONSTRUCTED PRIORITY CCSS STANDARDS: Mathematics

Cluster: Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.

Standard: K.OA.1

Connecting Standard	Standard/Learning Outcome:	Connecting Standard
	CCSS.MATH.CONTENT.K.OA.A.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.A.2**

Mathematical Practices
K.MP.1. Make sense of problems and persevere in solving them. K.MP.2. Reason abstractly and quantitatively. K.MP.4. Model with mathematics. K.MP.5. Use appropriate tools strategically.

Guiding Questions
● What is addition? ● What is subtraction?

KNOW (Essential Concept)	**DO (Learning Targets/Essential Skills)**
● Describe greater than, less than, or equal to.	● Determine whether a group of 10 or fewer objects is greater than, less than, or equal to another group of 10 or fewer objects.

Academic Vocabulary	Explanations and Examples
Key Terms ● Join ● Add ● Separate ● Subtract ● And ● Same amount as ● Equal ● Less ● More ● Total	Using addition and subtraction in a word problem context allows students to develop their understanding of what it means to add and subtract. Students should use objects, fingers, mental images, drawing, sounds, acting out situations and verbal explanations in order to develop the concepts of addition and subtraction. Then, they should be introduced to writing expressions and equations using appropriate terminology and symbols which include “+,” “–,” and “=”. ● Addition terminology: add, join, put together, plus, combine, total ● Subtraction terminology: minus, take away, separate, difference, compare Students may use document cameras or interactive whiteboards to represent the concept of addition or subtraction. This gives them the opportunity to communicate their thinking.

DECONSTRUCTED PRIORITY CCSS STANDARDS: Mathematics

Cluster: Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.

Standard: K.OA.2

Connecting Standard	Standard/Learning Outcome:	Connecting Standards
K.OA.A.1	CCSS.MATH.CONTENT.K.OA.A.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.A.3** **1.OA.A.1** **1.OA.B.3** **1.OA.B.4** **1.OA.C.6**

Mathematical Practices
K.MP.1. Make sense of problems and persevere in solving them. K.MP.2. Reason abstractly and quantitatively. K.MP.3. Construct viable arguments and critique the reasoning of others. K.MP.4. Model with mathematics. K.MP.5. Use appropriate tools strategically.

Guiding Questions	
● How can I show addition? ● How can I show subtraction?	
KNOW (Essential Concept)	**DO (Learning Targets/Essential Skills)**
● Add and subtract within 10. (maximum sum and minuend is 10).	● Use objects/drawings to represent an addition and subtraction word problem. ● Solve addition and subtraction word problems within 10.

Academic Vocabulary	Explanations and Examples
Key Terms ● Join ● Add ● Separate ● Subtract ● And ● Same amount as ● Equal ● Less ● More ● Total	Understanding the concept of 10 is fundamental to understanding about what it means to add and subtract. Addition is putting together and adding to. Subtraction is taking apart and taking from. Kindergarteners develop the concept of addition/subtraction by modeling the actions in word problems using objects, fingers, mental images, drawings, sounds, acting out situations, and/or verbal explanations. Students may use different representations based on their experiences, preferences, etc. They may connect their conceptual representations of the situation using symbols, expressions, and/or equations. Students should experience the following addition and subtraction problem types. ● Add To word problems, such as: "Mia had 3 apples. Her friend gave her 2 more. How many does she have now?" A student's "think aloud" of this problem might be, "I know that Mia has some apples and she's getting some more. So she's going to end up with more apples than she started with." ● Take From problems such as: José had 8 markers and he gave 2 away. How many does he have now? When modeled, a student would begin with 8 objects and remove two to get the result.

	● Put Together/Take Apart problems with Total Unknown gives students opportunities to work with addition in another context such as: There are 2 red apples on the counter and 3 green apples on the counter. How many apples are on the counter? ● Solving Put Together/Take Apart problems with Both Addends Unknown provides students with experiences with finding all the decompositions of a number and investigating the patterns involved. There are 10 apples on the counter. Some are red and some are green. How many apples could be green? How many apples could be red? Students may use a document camera or interactive whiteboard to demonstrate addition or subtraction strategies. This gives them the opportunity to communicate and justify their thinking.

DECONSTRUCTED PRIORITY CCSS STANDARDS: Mathematics

Cluster: Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.

Standard: K.OA.3

Connecting Standard	Standard/Learning Outcome:	Connecting Standards
K.OA.A.2	CCSS.MATH.CONTENT.K.OA.A.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.NBT.A.1** **K.OA.A.4** **K.OA.A.5** **1.OA.C.6**

Mathematical Practices
K.MP.1. Make sense of problems and persevere in solving them. K.MP.2. Reason abstractly and quantitatively. K.MP.4. Model with mathematics. K.MP.7. Look for and make use of structure. K.MP.8. Look for and express regularity in repeated reasoning.

Guiding Questions
● How can addition help show a number in a different way?

KNOW (Essential Concept)	**DO (Learning Targets/Essential Skills)**
● Solve addition number sentences within 10.	● Decompose numbers less than or equal to 10 into pairs in more than one way. ● Record decomposition of a number within 10 by a drawing or written equation.

Academic Vocabulary	Explanations and Examples
Key Terms ● Join ● Add ● Separate ● Subtract ● And ● Same amount as ● Equal ● Less ● More ● Total	This standard focuses on number pairs which add to a specified total, 1-10. These number pairs may be examined either in or out of context. Students may use objects such as cubes, two-color counters, square tiles, etc. to show different number pairs for a given number. For example, for the number 5, students may split a set of 5 objects into 1 and 4, 2 and 3, etc. Students may also use drawings to show different number pairs for a given number. For example, students may draw 5 objects, showing how to decompose in several ways. x x x x x 5 objects [x x][x x x] 5 = 2 + 3 [x x x x][x] 5 = 4 + 1 Sample unit sequence: ● A contextual problem (word problem) is presented to the students such as, “Mia goes to Nan’s house. Nan tells her she may have 5 pieces of fruit

	to take home. There are lots of apples and bananas. How many of each can she take?” ● Students find related number pairs using objects (such as cubes or two-color counters), drawings, and/or equations. Students may use different representations based on their experiences, preferences, etc.

DECONSTRUCTED PRIORITY CCSS STANDARDS: Mathematics

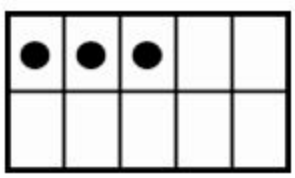
Cluster: Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.

Standard: K.OA.4

Connecting Standard	Standard/Learning Outcome:	Connecting Standard
K.OA.A.3	. CCSS.MATH.CONTENT.K.OA.A.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	**1.OA.C.6**

Mathematical Practices
K.MP.1. Make sense of problems and persevere in solving them. K.MP.2. Reason abstractly and quantitatively. K.MP.4. Model with mathematics. K.MP.7. Look for and make use of structure. K.MP.8. Look for and express regularity in repeated reasoning.

Guiding Questions	
● How many more will make 10?	
KNOW (Essential Concept)	**DO (Learning Targets/Essential Skills)**
● Know that two numbers can be added together to make ten.	● Using materials or representations, find the number that makes 10 when added to the given number for any number from 1 to 9, and record the answer using materials, representations, or equations.

Academic Vocabulary	Explanations and Examples
Key Terms ● Join ● Add ● Separate ● Subtract ● And ● Same amount as ● Equal ● Less ● More ● Total	The number pairs that total ten are foundational for students' ability to work fluently within base-ten numbers and operations. Different models, such as ten-frames, cubes, two-color counters, etc., assist students in visualizing these number pairs for ten. Example 1: Students place three objects on a ten frame and then determine how many more are needed to "make a ten." Students may use electronic versions of ten frames to develop this skill.  Example 2: The student snaps ten cubes together to make a "train." ● Student breaks the "train" into two parts. S/he counts how many are in each part and record the associated equation (10 = ___ + ___). ● Student breaks the "train into two parts. S/he counts how many are in one part and determines how many are in the other part without directly

	counting that part. Then s/he records the associated equation (if the counted part has 4 cubes, the equation would be 10 = 4 + ___). ● Student covers up part of the train, without counting the covered part. S/he counts the cubes that are showing and determines how many are covered up. Then s/he records the associated equation (if the counted part has 7 cubes, the equation would be 10 = 7 + ___). Example 3: The student tosses ten two-color counters on the table and records how many of each color are facing up.

DECONSTRUCTED PRIORITY CCSS STANDARDS: Mathematics

Cluster: Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.

Standard: K.OA.5

Connecting Standard	Standard/Learning Outcome:	Connecting Standard
K.OA.A.3	CCSS.MATH.CONTENT.K.OA.A.5 Fluently add and subtract within 5.	**1.OA.C.6**

Mathematical Practices
K.MP.2. Reason abstractly and quantitatively. K.MP.7. Look for and make use of structure. K.MP.8. Look for and express regularity in repeated reasoning.

Guiding Questions	
● What strategies can I use to add and subtract fluently?	
KNOW (Essential Concept)	**DO (Learning Targets/Essential Skills)**
● Fluently, with speed and accuracy, add and subtract within 5.	

Academic Vocabulary	Explanations and Examples
Key Terms ● Counting on ● Counting back ● Doubles	This standard focuses on students being able to add and subtract numbers within 5. Adding and subtracting fluently refers to knowledge of procedures, knowledge of when and how to use them appropriately, and skill in performing them flexibly, accurately, and efficiently. Strategies students may use to attain fluency include: ● Counting on (e.g., for 3+2, students will state, “3,” and then count on two more, “4, 5,” and state the solution is “5”) ● Counting back (e.g., for 4-3, students will state, “4,” and then count back three, “3, 2, 1” and state the solution is “1”) ● Counting up to subtract (e.g., for 5-3, students will say, “3,” and then count up until they get to 5, keeping track of how many they counted up, stating that the solution is “2”) ● Using doubles (e.g., for 2+3, students may say, “I know that 2+2 is 4, and 1 more is 5”) ● Using commutative property (e.g., students may say, “I know that 2+1=3, so 1+2=3”) ● Using fact families (e.g., students may say, “I know that 2+3=5, so 5-3=2”)

DECONSTRUCTED PRIORITY CCSS STANDARDS: Mathematics
Cluster: Work with numbers 11-19 to gain foundations for place value.
Standard: K.NBT.1

Connecting Standard	Standard/Learning Outcome:	Connecting Standard
K.OA.A.3	CCSS.MATH.CONTENT.K.NBT.A.1 Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (such as 18 = 10 + 8); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.	**1.NBT.B.2**

Mathematical Practices
K.MP.1. Make sense of problems and persevere in solving them. K.MP.2. Reason abstractly and quantitatively. K.MP.4. Model with mathematics. K.MP.7. Look for and make use of structure. K.MP.8. Look for and express regularity in repeated reasoning.

Guiding Questions
● How can I show a number (11-19)? ● What does a two-digit number (11-19) mean?

KNOW (Essential Concept)	**DO (Learning Targets/Essential Skills)**
● Know that the numbers 11-19 represents a quantity. ● Understand that numbers 11-19 are composed of 10 ones and one, two, three, four, ve, six, seven, eight, or nine ones.	● Represent compositions or decompositions of 11-19 by a drawing or equation. ● Compose numbers 11-19 into 10 ones and some further ones using objects and drawings. decompose numbers 11-19 into 10 ones and some further ones using objects and drawings.

Academic Vocabulary	**Explanations and Examples**
Key Terms ● One, two... thirteen, fourteen, ... nineteen ● Leftovers	Special attention needs to be paid to this set of numbers as they do not follow a consistent pattern in the verbal counting sequence. ● Eleven and twelve are special number words. ● "Teen" means one "ten" plus ones. ● The verbal counting sequence for teen numbers is backwards – we say the ones digit before the tens digit. For example "27" reads tens to ones (twenty-seven), but 17 reads ones to tens (seven-teen). ● In order for students to interpret the meaning of written teen numbers, they should read the number as well as describe the quantity. For example, for 15, the students should read "fifteen" and state that it is one group of ten and five ones and record that 15 = 10 + 5. Teaching the teen numbers as one group of ten and extra ones is foundational to understanding both the concept and the symbol that represent each teen number. For example, when focusing on the number "14," students should count out fourteen objects using one-to-one correspondence and then use those objects to make one group of ten ones and four additional ones. Students should connect the representation to the symbol "14." Students should recognize the pattern that exists in the teen numbers; every teen number is written with a 1 (representing one ten) and ends with the digit that is first stated.

Kindergarten Supporting Standards

Measurement and Data

Describe and compare measurable attributes.

K.MD.A.1
Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.

K.MD.A.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.*

Classify objects and count the number of objects in each category.

K.MD.B.3
Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.

Geometry

Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).

K.G.A.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.A.2
Correctly name shapes regardless of their orientations or overall size.

K.G.A.3
Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid").

Analyze, compare, create, and compose shapes.

K.G.B.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.B.5
Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.

K.G.B.6
Compose simple shapes to form larger shapes. *For example, "Can you join these two triangles with full sides touching to make a rectangle?"*