Unit A - *Working Through Five*

Overview

In the first unit, we are establishing our math workshop environment for the year. Routines of Think-Pair-Share and choral counting develop the number word sequence to 20. Three major concepts make it possible for students to answer the question, "How many?" To do so, students must be able to apply the number word sequence, and possess both one-to-one correspondence and cardinality. Arranging objects in an orderly way before counting fosters students' ability to recognize the quantity without counting.. The five-frame, ten-frame, and finger patterns are key models featured in this unit to help students subitize quantities from 0 to 10. This unit sets a solid foundation in learning combinations to 10. In Number Talks and Daily Workouts, students will also learn to recognize and name two-dimensional shapes in various contexts, practice numeral recognition and counting forward and backward to 10, and begin learning combinations of 5 through activities surrounding five-frames.

21st Century Capacities: Product Creation

Stage 1 - Desired Results

ESTABLISHED GOALS/ STANDARDS

MP4 Model with mathematics
MP6 Attend to precision
CCSS.MATH.CONTENT.K.CC.A.1   Count to 100 by ones and by tens.
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).
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,

Transfer:

Students will be able to independently use their learning in new situations to...

1. Understand the relationship between numbers and quantities; connect counting to cardinality for numbers to ten.
2. Build models in order to visualize numbers to 10. (Product Creation)

Meaning:

UNDERSTANDINGS: *Students will understand that:*	ESSENTIAL QUESTIONS: *Students will explore & address these recurring questions:*
1. Organizing items into groups can help with counting 2. Models help us to visualize numbers with ease 3. Numbers represent quantities 4. Patterns help us understand what comes next	A. What does counting look, sound, and feel like? B. How do I know how many I have? C. How can understanding patterns help me know what comes next? D. How can I represent this number? E. What are numbers for?

	Acquisition:	
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.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. 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.[1] 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 $5 = 4 + 1$). CCSS.MATH.CONTENT.K.MD.B.3 Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.[1] CCSS.MATH.CONTENT.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*. CCSS.MATH.CONTENT.K.G.A.2 Correctly name shapes regardless of their orientations or overall size.	*Students will know…* 1. How to use daily routines for math classroom. 2. When counting to find the total number of objects in a collection, you must count each object once and only once. 3. The last number you say when counting a group of objects indicates the total number in the collection. 4. Using models such as five frames, ten frames and standard finger patterns help visualize numbers, relationships and combinations. 5. Vocabulary:, one, two , three, four, five, six, seven, eight, nine, ten, attribute, sort, different, greater than, less than, same, create, five(ten)-frame, number, numeral, (repeating) pattern, extend. NC: circle, triangle, rectangle, square, corners, curved, different, Friday, length, Monday, same, Saturday, September, sides, straight, Sunday, Thursday, Tuesday, Wednesday, day, week, collection, count, estimate, ones, tens, sum/total, finger patterns, set, row, after, backward, before, between, digit, forward, identify	*Students will be skilled at…* 1. Rote counting to 20 2. Subitizing to 10 3. How to count a set of up to 10 objects 4. Writing numerals 1 to 5 5. Comparing sets of objects for which has more and which has less 6. Copying, extending and creating patterns 7. Classifying objects into categories and counting the number of objects in each category 8. Using models to count