



Grade K - Unit A - Working Through Five

Unit Focus

In Unit A, teachers establish a math workshop environment for the year. Routines center around structuring small groups and utilizing work places. Throughout the unit, students learn the structure of our number system with emphasis on the following skills:

- Understanding the number word sequence and answering "How many?"
- one-to-one correspondence
- cardinality
- recognize the quantity without counting (subitizing)

The five-frame, ten-frame, and finger patterns are key models featured in this unit to help students subitize quantities from 0 to 10.

Stage 1: Desired Results - Key Understandings

Standard(s)	Transfer	
Standards • Common Core ○ <i>Mathematics: K</i> ▪ Know number names and the count sequence. ▪ Count to 100 by ones and by tens. (CCSS.MATH.CONTENT.K.CC.A.1) ▪ 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.A.3) ▪ Understand the relationship between numbers and quantities; connect counting to cardinality. (CCSS.MATH.CONTENT.K.CC.B.4) ▪ 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.A) ▪ 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.4B) ▪ Count to tell the number of objects. ▪ 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.B.5)	<i>Students will be able to independently use their learning to...</i> T1 Represent situations using mathematical reasoning and symbols. T2 Apply models to solve problems.	
	Meaning	
	Understanding(s)	Essential Question(s)
	<i>Students will understand that...</i> U1 Mathematicians make sense of quantities to represent situations mathematically. U2 Mathematicians create or use models to generalize, represent, and solve problems. U3 Mathematicians see patterns to make generalizations about structures and relationships.	<i>Students will keep considering...</i> Q1 What do the quantities mean? Q2 What model best represents this problem? Q3 What patterns are present? Q4 How do I count to find out "how many"? Q5 How does counting help us in our everyday lives?
	Acquisition of Knowledge and Skill	
	Knowledge	Skill(s)
	<i>Students will know...</i> K1 When counting to find the total number of objects in a collection, you must count each object once and only once.	<i>Students will be skilled at...</i> S1 Rote counting to 20 S2 Subitizing to 10 S3 Counting a set of up to 10 objects

Stage 1: Desired Results - Key Understandings

- Compare numbers.
- 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.
(CCSS.MATH.CONTENT.K.CC.C.6)
- Mathematical Practices
- Reason abstractly and quantitatively. (CCSS.MATH.MP.2)
- Model with mathematics. (CCSS.MATH.MP.4)

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Analyzing: Examining information/data/evidence from multiple sources to identify possible underlying assumptions, patterns, and relationships in order to make inferences. (POG.1.2)

K2 The last number you say when counting a group of objects indicates the total number in the collection.

K3 Using models such as five frames, ten frames and standard finger patterns help visualize numbers, relationships and combinations.

K4 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

S4 Writing numerals 1 to 5

S5 Comparing sets of objects for which has more and which has less

S6 Classifying objects into categories and counting the number of objects in each category

S7 Using models to count