

Counting and Cardinality: Kindergarten

Stage 1 Desired Results

ESTABLISHED GOALS:

Competencies:

- **Students will demonstrate the ability to solve problems by counting with whole numbers.**

Content Standards:

- 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.4 Understand the relationship between numbers and quantities; connect counting to cardinality
- 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 two numbers between 1 and 10 presented as written numerals.
- MP2 Reason abstractly and quantitatively.
- MP4 Model with mathematics.
- MP6 Attend to precision.
- MP7 Look for and make use of structure.

Transfer

*Students will be able to independently use their learning to **describe and compare quantities.***

Meaning

ENDURING UNDERSTANDINGS

Students will understand that ...

- counting is a purposeful skill that assigns a number name to an object or set of objects.
- numbers can be used for different purposes, and numbers can be classified and represented in different ways.
- the set of real numbers is infinite and ordered, and whole numbers, integers, and fractions are real numbers.
- each real number can be associated with a unique point on the number line.

ESSENTIAL QUESTIONS

- **What is a number?**

Acquisition

Students will know...

- one to one correspondence to 20.
- number names and the count sequence.
- that whole numbers may be represented using manipulatives, pictures, and symbols.
- that a number represents a quantity.
- that the last number counted is the total number of objects.
- that each successive number name refers to a quantity that is one larger.

vocabulary:

less, more, fewer, same, equal to, numeral, digit

Students will be skilled at...

- counting to tell "how many" objects, regardless of arrangement.
- identifying whether a number of objects (0-20) in a group is greater than, less than, or equal to the number of objects in another group (0-20)).
- comparing two numbers between 1 and 10 presented as a written numeral.
- writing numbers from 0-20.
- representing a number of objects (0-20) with a written numeral.
- counting to tell "how many" objects (0-20) within a scattered configuration.
- counting out objects, when given a number 1-20.
- counting to 100 by ones and by tens.
- counting forward beginning at any given number up to and including 100.

<i>Content Area Literacy Standards</i>	<i>21st Century Skills</i>
not applicable	<i>solve problems</i>

Stage 2 - Evidence	
<i>Evaluative Criteria</i>	<i>Assessment Evidence</i>
	PERFORMANCE TASK(S):
	OTHER EVIDENCE:

Stage 3 – Learning Plan	
<i>Summary of Key Learning Events and Instruction</i>	
<i>Language Arts Integration</i>	<i>Mathematics Integration</i>
1.OA.1 Use	not applicable
<i>Technology Integration</i>	<i>District Materials</i>
1.OA.1 Use	