Core Content

Cluster Title: Count to tell the number of objects.

Standard 4: Understand the relationship between numbers and quantities; connect counting to cardinality. 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. 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. Understand that each successive number name refers to a quantity that is one larger.

MASTERY Patterns of Reasoning:

Conceptual:

Students can develop strategies for keeping track of counted objects.
Students can accurately count objects with one-to-one correspondence up to 20.
Students can count various groupings and arrays up to 20.
Students can identify “how many” objects they counted.
Students can understand quantities of “one more” up to 20 (e.g., 7 is one more than 6).

Procedural:

Students can touch, slide, tap, drop, color, etc. to accurately count objects.
Students can identify the last number counted as the quantity of objects.
Students can create groups of 10 and some quantity for easier counting of teen numbers.
Students can create a given number of objects and one more.

Representational:

Students can color, slide, tap, drop, and move, objects as they count.
Students can use ten frames, dot cards, domino, dice, or other arrangements to assist counting.
Students can use cards, dice, dominoes, written numerals, etc. to name quantities.
Students can demonstrate an understanding of quantities of one more.

Supports for Teachers

Critical Background Knowledge
Conceptual: Students can orally count. Students can use one-to-one correspondence when counting object up to quantities of 10. Students can respond to the question “how many” after counting a set of objects. Students will understand that each number name in sequence from 0-10 means one more. **Procedural:** Students can touch and count quantities to 10. Students can count objects arranged on a number line. **Representational:** Students can orally state the number of objects counted.
Academic Vocabulary and Notation
numeral, number, number names, “how many,” count, “one more,” quantity, set, objects

Instructional Strategies Used	Resources Used
Teacher models counting and tracking one-to-one correspondence in various methods. “Make a group of _____. Now show me another way to make that number” (e.g., 2 sets of 3 or a set of 5 and 1 to represent 6). “Count these objects. How many objects are in that set?” (Students should use any of the procedures taught to accurately count the objects with one-to-one correspondence.) “Pick a card and count the correct number of objects.” “Color the correct number of shapes.”	Anno, Mitsumasa. *Anno’s Counting Book*. HarperCollins, 1986. Baratta-Lorton, Mary. *Mathematics Their Way*. Dale Seymour Publications, 1995. Copley, Juanita. *The Young Child and Mathematics*. MAEYC/NCTM, 2000. Hutchins, Pat. *One Hunter*. Greenwillow Books, 1986. Richardson, Kathy. *Developing Number*

"Draw the number of circles I say." "Grab a handful of objects." Students grab a handful of objects and count how many they have.	*Concepts, Book 1: Counting, Comparing, and Patterns, Grade K-3*. Dale Seymour Publications, 1998. Seuss, Dr. *10 Apples Up on Top*. Random House Books for Young Readers, 1998.

Assessment Tasks Used	
Skill-Based Task: Place a set of objects in front of the student. Ask them to count and tell you how many. Have the student make a group of 12. Then add one more and tell you how many.	**Problem Task:** I have this many pennies in my pocket. Please count and tell me how many pennies I have. (Teacher places 19 pennies before the students.) Mr. Lincoln needs to borrow 14 erasers. Count out 14 erasers for me to give to him.