

Core Content

Cluster Title: Know number names and the count sequence.

Standard 3: Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with zero representing a count of no objects).

MASTERY Patterns of Reasoning:

Conceptual:

- Students will understand the last number counted in a set of 0 to 20 objects identifies the quantity.
- Students can count a number of objects 0 to 20 and associate with a written numeral.
- Students can write numerals from 0 to 20 in sequential order and random order.

Procedural:

- Students can count sets of objects 0 to 20 and associate with a numeral.
- Students can identify a quantity from 0 to 20 with a written numeral name.
- Students can write numerals from 0 to 20.

Representational:

- Students can count sets of objects in quantities from 0 to 20 using the last number counted to name the set.
- Students can count sets of objects in quantities from 0 to 20 using a written numeral to identify the quantity.
- Students will practice writing the numerals from 0 to 20 in sequential order and random order.

Supports for Teachers

Critical Background Knowledge

Conceptual:

- Students will understand that the last number counted in a set of 0 to 10 objects identifies the quantity.
- Students can count a number of objects 0 to 10 and associate with a written numeral.
- Students can write numerals from 0 to 10 in sequential order and random order.

<p>Procedural:</p> <p>Students can count sets of objects 0 to 10 and associate with a numeral. Students can identify a quantity from 0 to 10 with a written numeral name. Students can write numerals from 0 to 10. Students will practice writing the numerals from 0 to 10 in sequential order and random order.</p> <p>Representational:</p> <p>Students can count sets of objects in quantities from 0 to 10 using the last number counted to name the set. Students can count sets of objects in quantities from 0 to 10 using a written numeral to identify the quantity.</p>
<p>Academic Vocabulary and Notation</p> <p>set, numeral, number, number names zero to twenty, quantity, order</p>

Instructional Strategies Used	Resources Used
<p>Teacher models how to count sets of objects from 0 to 20, and shows how the last number named tells the number of the objects counted.</p> <p>Students practice counting sets of objects from 0 to 20 and identifying the quantity using the last number named.</p> <p>Teacher models how to count sets of objects from 0 to 20 and shows how to associate a written numeral to identify the quantity.</p> <p>Students practice counting sets of objects from 0 to 20 and associating a written numeral to identify the quantity.</p> <p>Teacher models how to use numeral cards to identify random quantities from 0 to 20.</p> <p>Students practice identifying random quantities from 0 to 20 and associating a numeral card to identify the set.</p> <p>Teacher models how to write the numerals from 0 to 20 in sequential and random order.</p>	<p>Variety of concrete manipulatives</p> <p>http://www.uen.org/k-2interactives/math.shtml</p> <p>Variety of pictorial representations</p> <p>Numeral cards from 0 to 20</p> <p>http://www.hubbardscupboard.org/math.html</p>

<p>Students practice writing the numerals from 0 to 20 in sequential and random order.</p>	
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Assessment Tasks Used	
<p>Skill-Based Task: Students will count sets of objects, identify the quantity, and associate a numeral card with the set.</p> <p>Students will begin at zero and write the numbers 0-20 in sequential order.</p>	<p>Problem Task: Students are given several sets of random quantities from 0-20. Students are asked to identify the quantity of each set and match a numeral card to show the value of each set.</p> <p>Students are given a 21-grid to write the numerals 0-20 in sequential order.</p>

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20