

#### Vertical Progression:

<p><b>TS Gold</b></p>	<p><b>20a. Counts</b> 6. Verbally counts to 20; counts 10-20 objects accurately; knows the last number states how many in all; tells what number (1-10) comes next in order by counting.</p> <p><b>20b. Quantifies</b> 8. Uses a variety of strategies (counting objects or fingers, counting on, or counting back) to solve problems with more than 10 objects.</p> <p><b>20c. Connects numerals with their quantities</b> 6. Identifies numerals to 10 by name and connects each to counted objects</p>
<p><b>Kindergarten</b></p>	<p><b>K.CC.B Count to tell the number of objects.</b></p> <ul style="list-style-type: none"> <li>○ <b>K.CC.B.4</b> Understand the relationship between numbers and quantities; connect counting to cardinality.</li> <li>○ <b>K.CC.4a</b> When counting objects, say number names in standard order, pairing each object with one and only one number name and each number name with one and only one object.</li> <li>○ <b>K.CC.4b</b> Understand that last number name said tells number of objects counted. The number of objects is the same regardless of arrangement or the order in which they were counted.</li> <li>○ <b>K.CC.4c</b> Understand that each successive number name refers to a quantity that is one larger.</li> <li>○ <b>K.CC.B.5</b> 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.</li> </ul>
<p><b>1<sup>st</sup> Grade</b></p>	<p><b>1.NBT.A Extend the counting sequence.</b></p> <ul style="list-style-type: none"> <li>○ <b>1.NBT.A.1</b> Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.</li> </ul>

#### Students will demonstrate command of the ELG by:

- Touching and counting one object at a time while saying the number name.
- Count objects arranged differently in groups and justify that the last number said is how many there are in the group.
- Creating representations of numbers to demonstrate one more (e.g. unifix cube towers).
- Counting/touching up to 20 objects in order (line, rectangular array, and circle).
- Showing the correct number of objects after given a number from 1-20.
- Counting 10 or less objects visually and mentally (not touching them).

### Vocabulary:

- count
- larger
- line
- number
- number line
- number name
- one larger
- order
- pair
- rectangular array
- scattered

### Sample Instructional/Assessment Tasks:

#### 1) Standard(s): K.CC.4

**Item Prompt:** 0-20 Counting Assessment

**Student Materials:** pencil, Counting Assessment sheet

**Directions** (for teacher to administer assessment task): Teacher may choose whether to assess students in small groups or whole class.

- Hand out Drawing 0-20 Assessment Sheet (one per student). Go through one problem at a time.

**Prompt:**

- “Problem 1. Count the circles in the box. Write the number of circles on the line. If one more circle is added, then how many circles will there be? Write that number on the second line.”
- “Problem 2. Count the squares in the box. Write the number of squares on the line. If one more square is added, then how many squares will there be? Write that number on the second line.”
- “Problem 3. Count the triangles in the box. Write the number of triangles on the line. If one more triangle is added, then how many triangles will there be? Write that number on the second line.”
- “Problem 4. Count the rectangles in the box. Write the number of rectangles on the line. If one more rectangle is added, then how many rectangles will there be? Write that number on the second line.”

**Correct Answers:**

Problem 1: 15, 16

Problem 2: 12, 13

Problem 3: 16, 17

Problem 4: 20, 21

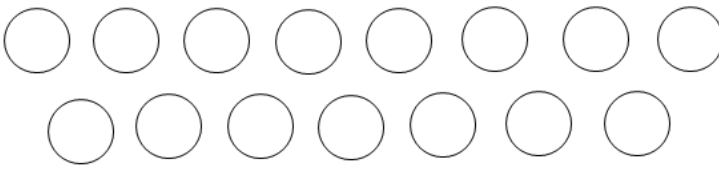
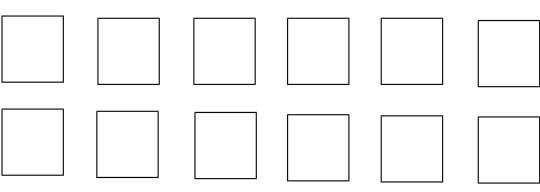
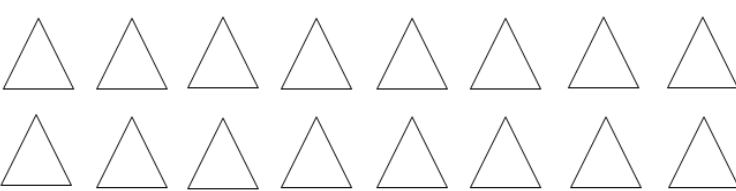
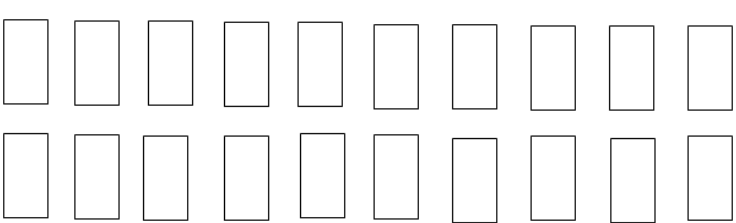
Numbers from 0-20: 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 5 16 17 18 19 20

# Kindergarten Grade Math

## ELG K.CC.B: Count to tell the number of objects

Name: \_\_\_\_\_ Date: \_\_\_\_\_

### 0-20 Counting Assessment Kindergarten Mathematics Assessment

Count the objects.	How many?	One more?
		
		
		
		
<p>Write all numbers from 0-20 in order:</p>          		

### 2) Standard(s): K.CC.5

**Source:** <https://gradekcommoncoremath.wikispaces.hcps.org/K.CC.5>

**Materials:** work map can be found in the link above.

**Directions:**

1. Gather containers for a small group of students with various numbers of objects: 5-20 counting bears, snap cubes, color tiles, etc...
2. Start with smaller amounts and differentiate the amount as needed.
3. Have students use the work map and empty the container.
4. Students should demonstrate organization of the objects and then count the objects. (Make note of how students organize the objects: line, array, circle, etc.)
5. On the work mat, have students identify how many were in their container with pictures, numbers, or words.

**Considerations:**

Watch how students recognize the amount they counted.

- Do students use the strategy one to one correspondence to find the value? Do they line the objects up? When counting, do they miss cubes or count cubes more than once? Are they stating the forward number sequence correctly when counting?
- Do students count by numbers other than one to find the total (such as two)? If they show this proficiency, create containers with a higher amount or show the different arrangements to count.
- Do students see the amount automatically? For example, if they have five objects on their work mat do they instantly say 5? If they show this proficiency, create containers with a higher amount or show the different arrangements to count.

**Collecting Data:**

Student performance can be scored with a provided task rubric or a rubric created by the teacher, Data can be recorded on a score sheet.