The intended purpose of this document is to provide teachers with a tool to determine student understanding and suggest instructional moves that may help guide a student forward in their learning. It is not an exhaustive list of strategies.

|  |
| --- |
| **Counting On Within 150**  |
| Example Tasks: Part 1: Teacher: *Start at 88 and count for me please.*Student counts on. Teacher stops them at 102. Part 2: Teacher: *Start at 108 and count for me please*.Student counts. Teacher stops at 122. |
| **NUMBER AND OPERATIONS IN BASE TEN****Extend and recognize patterns in the counting sequence.** **NC.1.NBT.1** Count to 150, starting at any number less than 150.  |
| **Not Yet Proficient** | * Work with numbers within 20.
* Provide students with a 20 chart (hundreds chart only with numbers 1-20). Have students represent sets of numbers.
* Start-with, Get-to (directions below)
 |
| **Progressing**  | * Work with numbers within 100 at first.
* If students struggle crossing over the decade (e.g., 89 to 90) have students work with ten frame cards to visualize 89 as 8 groups of 10 and 9 ones and 90 as 9 groups of 10.
* Provide students with a hundreds board and have them count on using the hundreds board as a resource.
* Get the Goof Lesson on [Tools4NCTeachers.com](http://www.Tools4NCTeachers.com) (Grade 1, Cluster 1).
 |
| **Meets Expectations** | * Move on to other standards such as NC.1.NBT.7, representing a number of objects with a written numeral, and NC.1.NBT.2, modeling teen numbers with a group of 10 objects and some ones.
 |

**Start with/Get to**

Students pull a number card and make a pile or tower of that many multi-link (pop) cubes. Students then pull another number card and change their pile so that the new pile has as many multi-link (pop) cubes as the new number card. Students can record their start number and new number and how they changed it in their math journal. Example:

|  |  |  |
| --- | --- | --- |
| **Start number** | **New number** | **Change**  |
| 3 | 5 | Put 2 more in  |
| 8 | 7 | Took one out |
| 9 | 9 | No change |

The intended purpose of this document is to provide teachers with a tool to determine student understanding and suggest instructional moves that may help guide a student forward in their learning. It is not an exhaustive list of strategies.

|  |
| --- |
| **Represent a Number of Objects with a Written Number (within 20)** |
| Grab two handfuls of counters from the jar. Count all of them and write the number that matches the number of counters.  |
| **NUMBER AND OPERATIONS IN BASE TEN****Extend and recognize patterns in the counting sequence.** **NC.1.NBT.7** Read and write numerals, and represent a number of objects with a written numeral, to 100.  |
| **Not Yet Proficient** | * If students struggle to count numbers within 20, work with numbers within 10 or 20, based on student’s performance.
* Support students by having them move counters one at a time and count each one individually as it is moved.
* Numeral writing should not be done in isolation. Instead it should be incorporated into lessons as students count objects, solve word problems, and do math activities.
* Provide access to a number line 0-20 or number path to support students (see below).
 |
| **Progressing** | * Numeral writing should not be done in isolation. Instead it should be incorporated into lessons as students count objects, solve word problems, and do math activities.
* If students can accurately count the set but are unable to represent the number with a written numeral, provide ample experiences for them to represent quantitates within 20 and write the written numeral.
* Provide access to a number line 0-20 to support students.
* [How Many Cubes](https://tools4ncteachers.com/resources/1-first-grade/tasks/cluster-1/nbt7-how-many-cubes-version4.docx) task from [Tools4NCTeachers](http://www.tools4ncteachers.com) website.
 |
| **Meets Expectations** | * Cluster 1 focuses on numbers 1 to 20. For students who are ready, you may have them represent quantities within 50.
* Focus on other standards, such as NC.1.NBT.2, representing two-digit numbers with a group of ten objects and some ones.
 |

Number Line



Number Path

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

Twenty Board

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

The intended purpose of this document is to provide teachers with a tool to determine student understanding and suggest instructional moves that may help guide a student forward in their learning. It is not an exhaustive list of strategies.

|  |
| --- |
| **Place Value with Ten and Some More** |
| Is there enough candy to make a group of ten? \_\_\_\_\_\_\_ Show how you know. How many groups of ten? \_\_\_\_\_\_\_ Do you have any leftovers? \_\_\_\_\_\_ How many leftovers? \_\_\_\_\_\_\_ How many pieces of candy are there altogether? \_\_\_\_\_\_\_ |
| **NUMBER AND OPERATIONS IN BASE TEN****Understand place value.****NC.1.NBT.2** Understand that the two digits of a two-digit number represent amounts of tens and ones. • Unitize by making a ten from a collection of ten ones. • Model the numbers from 11 to 19 as composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones. • Demonstrate that the numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens, with 0 ones. |
| **Not Yet Proficient** | * Discuss with students the difference between tens and ones using counters and a ten frame to represent numbers 11-19. Focus on *what is a ten* and *what are ones*.
* Ask student to group a pile of manipulatives into a ten frame and describe it using the words tens and ones. (ex. 12- 1 ten 2 ones)
* Ask student to group a pile of unifix cubes into a tens stick and ones; using the numbers 11- 19. Have student describe it using the words tens and ones.

**Note:** Tens Frames can be found at: <http://www.mathwire.com/templates/double10framemat.pdf> |
| **Progressing** | * Provide opportunities for students to explore the differences between tens and ones with numbers through 50. An example is given in the bullets below. However, you may choose other numbers.
* Ask student to model the numbers 24 and 42. Have the student orally explain the difference between the two numbers. Student should state that 42 is greater because it has more tens.
* Ask student to write a statement about the two numbers. (ex. 42 is greater than 24 because it has 4 tens)
 |
| **Meets Expectations** | * Continue with more experiences to deepen understanding of NC.1.NBT.2.
* Provide experiences related to the conservation of a number (showing multiple representations) using only tens and ones (Example: 37 is 3 tens and 7 ones; 2 tens and 17 ones; 1 ten and 27 ones; 37 ones).

**Suggested Materials Set:** * unifix cubes
* tens frames

**Note 1:** Students should be given ample opportunities to compose and decompose tens before they are introduced to “pre-grouped” tens (ex. base ten blocks) that require trading. **Note 2:** Non-proportional materials (ex. money) should not be used. |

The intended purpose of this document is to provide teachers with a tool to determine student understanding and suggest instructional moves that may help guide a student forward in their learning. It is not an exhaustive list of strategies.

|  |
| --- |
| **How Many Less and How Many More Questions about Data** |
| Mrs. Sanchez’s class completed a survey where they shared their favorite sport.

|  |  |
| --- | --- |
| Basketball |  |
| Soccer |  |
| Gymnastics |  |

Based on the information: *How many more students like soccer than basketball?* *How many fewer students like gymnastics than soccer?* |
| **MEASUREMENT AND DATA****Represent and interpret data.** **NC.1.MD.4** Organize, represent, and interpret data with up to three categories. • Ask and answer questions about the total number of data points. • Ask and answer questions about how many in each category. • Ask and answer questions about how many more or less are in one category than in another. |
| **Not Yet Proficient** | * If students are unable to determine the number of votes in each individual category, have students collect data from surveys and have them make tallies to represent data.
 |
| **Progressing** | If students do not demonstrate understanding of the words more or fewer: * Show the student two towers (8 and 5). Ask: *Which tower has fewer cubes? How do you know? How many fewer?*
* Check to see if the student understands the word fewer. Show the student a tower of 8 cubes and ask: *Can you build a tower that has fewer cubes?*

If students choose the correct operation but make calculation errors:* Provide them with manipulatives and a ten frame to solve the questions.
* Provide them with paper and pencil to make their own representations of the problem.
 |
| **Meets Expectations** | * Pose follow up questions using numbers 1-20.
* Allow students to write their own questions based on a data set that they have either collected or that you provide.
 |