## MA.K.NSO.2.1

Overarching Standard: MA.K.NSO. 2 Recite number names sequentially within 100 and develop an understanding for place value.

## Benchmark of Focus

MA.K.NSO.2.1: Recite the number names to 100 by ones and by tens. Starting at a given number, count forward within 100 and backward within 20.

## Benchmark Clarifications

Clarification 1:When counting forward by ones, students are to say the number names in the standard order and understand that each successive number refers to a quantity that is one larger. When counting backward, students are to understand that each succeeding number in the count sequence refers to a quantity that is one less.
Clarification 2: Within this benchmark, the expectation is to recognize and count to 100 by the end of kindergarten.

## Related Benchmark/Horizontal Alignment

- MA.K.NSO.1.1/1.2/1.3
- MA.K.NSO.3.1/3.2
- MA.K.AR.1.1/1.2/1.3


## Vertical Alignment

Previous Benchmarks<br>VPK

Next Benchmarks<br>MA.1.NSO.1.1<br>MA.1.NSO.2.3<br>MA.1.NSO.2.4<br>MA.1.NSO.2.5

## Purpose and Instructional Strategies

The purpose of this benchmark is to deepen student understanding of the counting sequence by 1 s and 10 s , both forwards and backwards, and to connect the counting sequence to place value. This benchmark will be a foundation as students begin to explore strategies for adding and subtracting. Developing fluency in counting (MTR.3.1) will allow students to use strategies to count on and count back, and fluency counting by 10 s will be a foundation in building place value and related addition and subtraction strategies.

- Instruction focuses on building understanding of numbers, not just their conventional names and sequence.
- For example, 11 can be described as 10 and $1 ; 20$ as 2 tens and 80 as 8 tens. (MTR.5.1)
- Instruction builds the foundation for students to develop the strategy of counting on and counting back in order to add and subtract. (MTR.5.1)
- Students will learn to recognize written numerals from 0 to 100.


## Common Misconceptions or Errors

- Students may have difficulty moving from one group of tens to the next.
- For example, knowing that 30 comes after 29 . Students may have to recount by tens to determine the next ten when counting through to 100 .
- Students may be confused by the different pattern of word names for the "teens."


## Strategies to Support Tiered Instruction

- Instruction includes an emphasis on connecting verbal counting with objects. Also counting to give purpose, meaning and to reciting the number sequence while attending to the strategies used to count objects.
- For example, the teacher provides number cards to reinforce the idea that the numbers we say can be represented with symbols and that numbers can be read to express a quantity.
- For example, counting collections of objects and using ten frames to group by tens can help students "see" and give meaning to the patterns found in counting by ones and by tens.



## Questions to ask students:

- Ask: What patterns do you notice as you count by ones to 100?
- Sample answer that indicates understanding: The ones place is increasing by one each time.
- Ask: What patterns do you notice as you count by tens to 100 ?
- Sample answer that indicates understanding: The tens place is increasing by one ten each time, while the ones place stays the same.


## Instructional Tasks

Instructional Task 1
Cut a hundred chart up into irregular shapes along the lines of the rows and columns and have students put it back together in pairs using what they know about place value, patterns, and the concept of one more and one less.

## Enrichment Task 1

Have students count pennies, both forwards and backwards, as they receive them or give them away.

## Enrichment Task 2

Looking ahead to MA.1.M.2.3, have students count by tens with dimes.

## Instructional Items

Instructional Item 1
Fill in the missing number or numbers below.

$$
48,49
$$

$\qquad$
$73,74, \ldots, \ldots, \ldots, 78$
19, 18, $\qquad$
_, __, 18, 19

Instructional Item 2
Start with 12 counters, then give them away one by one, stating each time how many you have left.

## Additional Resources:

- CPALMS: MA.K.NSO.2.1
- Khan Academy Tutorial Video: Number Grid
- Khan Academy Tutorial Video: Count by Tens (stop after 40 seconds)


## Resources/Tasks to Support Your Child at Home:

- Have the student count a set of objects (cereals, counters, pennies). While they are counting, have them place their items on a hundreds chart to count on.
- Give student a set number of objects within 20. Have them give one away, counting how many they have left each time until they get to zero.
- ABCya Online Game: Number Bubble
- Math Learning Center: Number Frames

