MA.1.NSO.1.1

Overarching Standard: *MA.1.NSO.1 Extend counting sequences and understand the place value of two-digit numbers*

Benchmark of Focus

MA.1.NSO.1.1.: Starting at a given number, count forward and backwards within 120 by ones. Skip count by 2s to 20 and by 5s to 100.

Benchmark Clarifications

Clarification 1: Instruction focuses on the connection to addition as "counting on" and subtraction as "counting back."

Clarification 2: Instruction also focuses on the recognition of patterns within skip counting which helps build a foundation for multiplication in later grades.

Clarification 3: Instruction includes recognizing counting sequences using visual charts, such as a 120 chart, to emphasize base 10 place value.

Related Benchmark/Horizontal Alignment

- MA.1.NSO.2.1/2.2/2.3/2.4/2.5
- MA.1.M.2.3
- MA.1.DP.1.1/1.2

Vertical Alignment

Previous Benchmarks	Next Benchmarks
MA.K.NSO.2.1	MA.2.AR.3.2

Purpose and Instructional Strategies

The purpose of this benchmark is for students to interact with patterns found in counting. In Kindergarten, students recited number names to 100, counted forwards within 100 and backwards within 20. In Kindergarten, students also built the understanding that successive numbers refer to quantities one larger, and built the foundation for addition and subtraction. (MTR.5.1)

- Instruction builds the foundation for strategies of addition and subtraction throughcounting forwards and backwards. (MTR.5.1)
- Instruction includes skip counting within this benchmark which builds to repeated addition, the basis for multiplication. (MTR 3.1)

Common Misconceptions or Errors
- Students may omit numbers when counting in a sequence.
- Students may not understand how to use visual charts to answer questions.

Strategies to Support Tiered Instruction

- Instruction includes the use of a bottoms-up hundreds chart. Using the chart, the teacher asks students to find a number, like 8. Once they point or identify the number, students count forward by one until they reach 25. Student should locate and identify each number on the chart as they count.
  - o For example, the teacher asks the student what happens when they come to the number 10? 20? What do they notice? Repeat this activity counting backward starting at 57 and have them count by one until they reach 35.

91	92	93	94	95	96	97	98	99	100
81	82	83	84	85	86	87	88	89	90
71	72	73	74	75	76	77	78	79	80
61	62	63	64	65	66	67	68	69	70
51	52	53	54	55	56	57	58	59	60
41	42	43	44	45	46	47	48	49	50
31	32	33	34	35	36	37	38	39	40
21	22	23	24	25	26	27	28	29	30
11	12	13	14	15	16	17	18	19	20
1	2	3	4	5	6	7	8	9	10

- Instruction includes the use of a bottoms-up hundreds chart. Students identify specified numbers on the chart and understand that values increase as they move to the right and up on the chart, as well as decreasing or counting backward would require tracking left and down. Students may need additional instruction once they reach the end of a row, they start back on the left as they count up or back on the right as they count down.

91	92	93	94	95	96	97	98	99	100
81	82	83	84	85	86	87	88	89	90
71	72	73	74	75	76	77	78	79	80
61	62	63	64	65	66	67	68	69	70
51	52	53	54	55	56	57	58	59	60
41	42	43	44	45	46	47	48	49	50
31	32	33	34	35	36	37	38	39	40
21	22	23	24	25	26	27	28	29	30
11	12	13	14	15	16	17	18	19	20
1	2	3	4	5	6	7	8	9	10

Questions to ask students:

- Ask students to count on from a given number…for example, start at 24 and count on.
  - Sample answer that indicates understanding: "The next numbers after 24 are 25, 26, 27, 28 etc."
- Ask students to use the hundreds chart/120 chart and explain patterns…for example, describe the pattern in a column or row?
  - Sample answer that indicates understanding: "All the numbers in this column have the same number in the ones place." or "All the numbers in this row have the same number in the tens place."
- Ask students to describe a pattern they notice when skip counting by 5s.
  - Sample answer that indicates understanding: "I notice that when I skip count by 5s that that ones place goes 5, 0, 5, 0…"

Instructional Tasks

Instructional Task 1 (MTR.1.1, MTR.3.1, MTR.5.1, MTR.6.1)

Part A. In a small group, present students with the portion of the 120 chart below. Use the questions to facilitate discussion. Allow students time to independently think then share with the group. Encourage students to justify their thinking.

Part B. Provide students with a blank hundred-twenty chart and a highlighter and ask them to complete Emma's pattern, as shown below.

4	5	6	7	8	9	10
14	15	16	17	18	19	20

a. What pattern do you notice?
b. Should any other numbers be shaded on her chart?
c. What other numbers do you think she could shade on a 120 chart?
d. If Emma continues the pattern, would 75 be shaded or not shaded?

Instructional Task 2

Jeremiah and Michael are going to the store with these coins in their pocket. What is the total value of the coins?
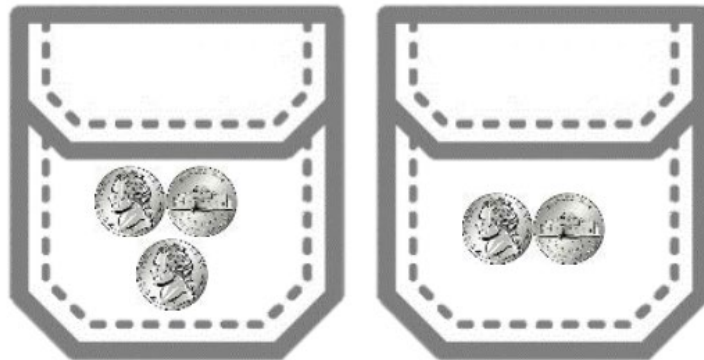
Instructional Items

Instructional Item 1
Count on from 5 until you reach 23.

Instructional Item 2
Count backward from 54 until you get to 32.

Instructional Item 3
What numbers come next when you count by 2s?

<div align="center">2, 4, 6,__,__,__</div>

Instructional Item 4
Ben is counting by 5s but he can't remember which numbers go in the missing blanks. Help him out by stating the numbers he needs to complete his task. 60, 65, 70,__,__,__, 90, 95, 100.

Additional Resources:
CPALMS Resources

Why is skip counting important?

Resources/Tasks to Support Your Child at Home:

Task: Choose a number and have your child count by ones starting at that number. Could use a 120s chart (https://p10cdn4static.sharpschool.com/UserFiles/Servers/Server_58422/File/2017-2018/120NumberChart.pdf) or a number line (https://goo.gl/G7EHV8) to practice. This could also be done as you are counting pennies/other objects, driving, waiting in line, taking a walk, etc.

Number Line Interactive Online Tool – Use an interactive online number line to count by ones from any given number. https://goo.gl/VHuKWy

 Task: Look for pictures of objects in the newspaper, magazines or books. Have your child practice counting how many there are by ones. Then have them re-count to group by 10s and count on by ones. (For example: There are 23 apples on the page. I made 2 groups of ten and counted on 3 ones. So 10, 20, 21, 22, 23).

Practice skip counting with music - Count By 5s Jack Hartman

Skip Count by 2s IXL - https://www.ixl.com/math/grade-2/skip-counting-by-twos - Try out this interactive practice for skip counting by 2.