MA.1.NSO.2.3

Overarching Standard: *MA.1.NSO.2. Develop an understanding of addition and subtraction operations with one- and two-digit numbers.*

Benchmark of Focus

MA.1.NSO.2.3 Identify the number that is one more, one less, ten more and ten less than a given twodigit number.

Example: One less than 40 is 39. *Example*: Ten more than 23 is 33.

Related Benchmark/Horizontal Alignment

- MA.1.NSO.1.1/1.2/1.3/1.4
- MA.1.AR.1.2
- MA.1.M.1.1

Vertical Alignment	
Previous Benchmarks	Next Benchmarks
MA.K.NSO.2.1	MA.2.NSO.2.2

Purpose and Instructional Strategies

The purpose of this benchmark is to bring a focus on place value and patterns that are found innumbers. In Kindergarten students counted forward and backward by 1s and 10s.

- Instruction focuses on making the connection to the place value of digits.
- The expectation of the benchmark is not to focus on addition and subtraction strategies.
- Instruction includes use of a number line to reinforce the idea of one more, one less, and the use of a hundreds chart to focus students understanding about place value patterns.

Common Misconceptions or Errors

• Some students may confuse the place value when asked what is ten more or ten less and give a response that is only one more or one less. In these cases, using a hundreds chart may help students visually see what is ten more, ten less as well as one more, one less.

Strategies to Support Tiered Instruction

- Teacher provides a hundreds chart with the numbers identified with base ten blocks. Have students identify a specific number and ask them about the numbers that are 1 more, 1 less, 10 more, and 10 less.
 - For example, the teacher asks students to identify the number 47. Once they identify the number on the chart ask, "Which number is one more than 47? [48] How do you know? Which number is 10 more than 47? [57] How do you know? How are they like 47? How are they different from 47? What is the relationship between the numbers and their place

value?" Students provide other examples using any two-digit number they choose. (A portion of the chart is shown below.)

				1	1	I	I	I	1	
		1000	1	1	1	I	I	I	I	
				1	1	1	I	I	I	

Questions to ask students:

- Can you find 67 on the hundreds chart, how would you find 10 more? 10 less?
 - Sample answer that indicates understanding: Student points to the 67 and then says, "I can move down one row and find 10 more or move one row up and find 10 less"
- How do you know that 54 is 10 more than 44?
 - Sample answer that indicates understanding: "I know that 54 is 10 more because it has one more ten than 44."
- What number is one less than 78? How do you know?
 - Sample answer that indicates understanding: Student explains that one less than 78 is 77, because you are only looking for one less than 78, the ones place will change to 7.

Instructional Tasks

Instructional Task 1

What numbers should go in the blanks of the given equations below to make them true? Choose one statement and explain how you know you are correct.

$$22 - 10 = \square$$

 $\square = 1 + 62$
 $1 + \square = 70$
 $\square = 49 - 1$

Instructional Task 2 (MTR.4.1, MTR.5.1) Provide students with the chart below.

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

Part A. Have students complete the chart independently.

Part B. Facilitate a group discussion allowing students to explain the process or strategies they used to complete the chart. Below are possible questions and student responses.

- How did you know that 23 was the missing number?
 - o Student responses may include: I know 23 is one more than 22. I know23 is one less than 24. I know that 23 is 10 more than 13. I know that 23is 10 less than 33.
- How many ways can you prove that 42 is the missing number between 41 and 43? What are those ways? Can you think of additional strategies to use?

Instructional Task 3

Nevaeh has 33 blueberries. Jonathon has 10 more blueberries than Nevaeh. How many blueberries does Jonathon have?

Instructional Items

Instructional Item 1

Complete the chart below to show one more, one less, ten more and ten less than 57.



Instructional Item 2 What is one less than 98?

Additional Resources:

CPALMS Resources

Blog: <u>Hundred Chart Boot Camp - Math Coach's Corner</u>

Resources/Tasks to Support Your Child at Home:

Task: Use a deck of cards to practice counting on or back by 10. Flip over two digits to create a number. Have your child say the number ten more and the number ten less than the given number.

Task: Use a <u>120s chart</u> to explore patterns. Start at the 7 and go down the column. Ask your child, "What do you notice?" They should notice the ones place stays the same but the tens place is increasing by one ten each time. Then move to rows starting at 41, go across the row. Ask your child, "What do you notice?" They should notice the ones place is increasing by one 1 while the tens place stays the same.

Coin Connection: Count a collection of pennies and dimes. Ask your child how much you would have if you add a dime? What if you took a dime away? How much would you have if you added a penny or took away a penny? Repeat this with different values.