

Just In Time Quick Check
Standard of Learning (SOL) 2.1b

Strand: Number and Number Sense

Standard of Learning (SOL) 2.1b

The student will identify the number that is 10 more, 10 less, 100 more, and 100 less than a given number up to 999.

Grade Level Skills:

- Use place value understanding to identify the number that is 10 more, 10 less, 100 more, or 100 less than a given number, up to 999.

Just in Time Quick Check

Just in Time Quick Check Teacher Notes

Supporting Resources:

- VDOE Mathematics Instructional Plans (MIPS)
 - [2.1b - Counting Rope 20](#) (Word) / ([PDF](#))
 - [2.1ab - What's My Number?](#) (Word) / ([PDF](#))
- VDOE Word Wall Cards: Grade 2 ([Word](#)) / ([PDF](#))
 - Place value
 - Ten More and Ten Less
- VDOE Rich Mathematical Tasks: Sticker Sets Task
 - [2.1b Sticker Sets Task Template](#) (Word) / ([PDF](#))
 - [2.1b Sticker Sets Student Version of Task](#) ([Word](#)) / ([PDF](#))
 - [2.1b Sticker Sets Anchor Papers](#) ([Word](#)) / ([PDF](#))
 - [2.1b Sticker Sets Anchor Papers Scoring Rationales](#) (Word) / ([PDF](#))
- VDOE Instructional Videos for Teachers: [Using a Beaded Number Line \(K-2\)](#)

Supporting and Prerequisite SOL: [2.1a](#), [1.1a](#), [1.1d](#), [1.5a](#), [1.5b](#), [K.1a](#), [K.1b](#), [K.3a](#), [K.3c](#), [K.3d](#)

SOL 2.1b - Just in Time Quick Check Teacher Directions

As the student is working on the following tasks, take note of the student level of sophistication with this concept as indicated by whether the student is counting by ones or by tens/hundreds to find the number ± 10 or ± 100 .

1. Give student a 120 chart and a counter or dry erase marker to use during the activity. Read the following sentences aloud and check to see what the student marks.

Say:

- "Use the number chart to mark the numbers."
- "Start on the number 5."
- "What number is ten more?" (15)
- "What number is 100 more than that?" (115)
- "Now start on the number 117."
- "What number is 100 less?" (17)
- "What number is 10 less than that?" (7)

2. Give the student base-10 blocks for the following activity.

Say:

- "Using base-10 blocks, build the number 53."
- "Now build the number that is 10 more than 53."
- "What is the number you built?" (63) "Can you count it for me?"
- "Now build the number that is 10 more than that number."
- "What is the number you built?" (73)

3. Give the student base-10 blocks for the following activity.

Say:

- "Using the base-10 blocks, build the number 82."
- "Now show the number that is 10 less than 82."
- "What is the number?" (72) "Can you show how you know?"
- "Now show the number that is 10 less than that number."
- "What is that number?" (62)

SOL 2.1b - Just in Time Quick Check Teacher Notes

Common Errors/Misconceptions and their Possible Indications

1. Give student a 120 chart and a counter or dry erase marker to use during the activity. Read the following sentences aloud and check to see what the student marks.

Say:

- "Use the number chart to mark the numbers."
- "Start on the number 5."
- "What number is ten more?" (15)
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- "Now start on the number 117."
- "What number is 100 less?" (17)
- "What number is 10 less than that?" (7)

A student who only moves the marker +1 instead of +10 to get an answer of 6 lacks understanding that adding ten would change the number in the tens place only. They may need to use base-10 blocks or other manipulatives to show the number concretely. The same would hold true for adding 100.

A student who needs to count on by ones to find 10 more (i.e., by counting the spaces on the board) may get the correct answer but will benefit from additional practice with concrete resources, such as a hundred chart, counters, base-10 blocks.

A student who arrives at 14 as 10 more than 5 is recounting the starting number (e.g., 5) rather than counting on beginning with the next number (e.g., 6). A student making this mistake may need more practice with counting on using a beaded number line or other manipulatives.

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Say:

- "Using base-10 blocks, build the number 53."
- "Now build the number that is 10 more than 53."
- "What is the number you built?" (63) "Can you count it for me?"
- "Now build the number that is 10 more than that number."
- "What is the number you built?" (73)

When asked to build the number that is 10 more than 53, a student may add a single one to get the number 54 instead of 63. A student making this mistake may benefit from more experience counting forward by tens from a variety of numbers using a hundred chart and base-10 manipulatives.

A student may count by ones to add 10 to the number, arriving at the correct number but not demonstrating the ability to count forward by tens. If a student adds 10 ones, ask, "Is there is another way to make 63?" The student who has a strong sense of place value will be able to show that 63 is also 5 tens and 13 ones. A student who is not able to show another way may benefit from concrete practice with cups of ten counters and leftovers, base-ten blocks, or other tens and ones representations with which they can trade ten ones for a ten. Understanding place value in this way provides a foundation for strategies used to solve addition and subtraction problems.

3. Give the student base-10 blocks for the following activity.

Say:

- "Using the base-10 blocks, build the number 82."
- "Now show the number that is 10 less than 82."
- "What is the number?" (72) "Can you show how you know?"

- “Now show the number that is 10 less than that number.”
- “What is that number?” (62)

Students without an understanding of place value and/or representations of place value may remove 1 unit (one) instead of 1 ten, saying that 10 less than 82 is 81. When asked to show a number that is ten less, the student should be able to remove one ten (rod) or ten ones (units) from the mat. Asked if there is another way to show ten less, the student may remove ten ones (units) for the correct result. Students with fragile understanding of place value or inability to unitize the base-ten rod may not understand that the rod represents the same quantity as the ten ones. Students who have difficulty with the concept of 10 less may benefit from practice using a number chart in company with towers of ten and single cubes before moving to base-ten blocks, to become more secure with the idea that ten ones together can be unitized into one ten representation. Being able to physically construct the ten (using linking cubes to make towers of ten) helps students transfer the representation to a single ten rod. Understanding place value in this way provides a foundation for strategies used to solve addition and subtraction problems.