Just In Time Quick Check

Standard of Learning (SOL) 1.2a

Strand: Number and Number Sense

Standard of Learning (SOL) 1.2a

The student, given up to 110 objects, will group a collection into tens and ones and write the corresponding numeral.

Grade Level Skills:

- Group a collection of up to 110 objects into sets of tens and ones.
- Write the numeral that corresponds to the total number of objects in a given collection of up to 110 objects that have been grouped into sets of tens and ones.
- Identify the place and value of each digit in a two-digit numeral (e.g., in the number 23, the 2 is in the tens place and the value of the 2 is 20).
- Identify the number of tens and ones that can be made from any number up to 100 (e.g., 47 is 47 ones or can also be grouped into 4 tens with 7 ones left over).

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Just in Time Quick Check Teacher Notes

Supporting Resources:

- VDOE Mathematics Instructional Plans (MIPS)
 - o <u>1.2a Grouping Tens and Ones</u> (Word) / <u>PDF Version</u>
 - o 1.2a Place Value Designs with Pattern Blocks (Word) / PDF Version
- VDOE Co-Teaching Mathematics Instruction Plans (MIPS)
 - 1.2a Grouping Tens and Ones (Word) / PDF Version
- VDOE Word Wall Cards: Grade 1 (Word) | (PDF)
 - Less than
 - o Greater than
 - Equal to
- VDOE Instructional Videos for Teachers
 - Developing Early Number Sense (grades K-2)
 - Using A Beaded Number Line (grades K-2)

Supporting and Prerequisite SOL: 1.1a, 1.1b, 1.1d, K.1a, K.1b, K.3a, K.3d

SOL 1.2a - Just in Time Quick Check

- 1) Give the student a pile of 42 cubes. Ask student to group them into sets of tens and ones.
 - a. If student correctly creates 4 piles of ten and 1 pile of two, go to task 2.
 - b. If student incorrectly groups the piles, go to task 3.
- 2) Ask the student to write the number that corresponds to the total number of cubes from task 1.
 - a. If student accurately writes and states the correct total, go to task 3.
 - b. If student miscounts or miswrites the total (42) ask the student to identify any of the numerals in 42 and then go to task 3.
- 3) If the student has not been able to correctly write the number 42, write the number 42 so the student can see it.
 - a. Ask the student to identify the place of the 4.
 - b. Ask the student to identify the value of the 4.
 - c. Ask the student to identify the place of the 2.
 - d. Ask the student to identify the value of the 2.
- 4) Show the student the number 37.
 - a. Ask the student how many groups of ten can be made from this number.
 - b. If successful, ask will there be any leftovers? How many leftovers will there be?

SOL 1.2a - Just in Time Quick Check Teacher Notes

Common Errors/Misconceptions and their Possible Indications

- 1) Give the student a pile of 42 cubes. Ask student to group them into sets of tens and ones.
 - a. If student correctly creates 4 piles of ten and 1 pile of two, go to task 2.
 - b. If student incorrectly groups the piles, go to task 3.

Students may miscount the pile of counters by counting an object more than once, or skipping an object altogether demonstrating that they may not have one-to-one correspondence. If this is the case, students would benefit from additional counting activities that emphasize moving and/or organizing objects as they are counted.

Students may also not know how to place the counters into groups of tens and ones. They do not yet recognize that 42 cubes is composed of four tens and two ones and are unable to reorganize the counters into tens and ones. Developing a deep understanding of the base-ten system takes time. These students need additional opportunities to distinguish between the number of groups and the value of each group as they work to develop an understanding of place value. Activities that include counting groups of objects (i.e., pumpkin seeds, cubes in a bag, etc.) and placing them into piles of tens, building trains of ten, and/or utilizing ten-frames will help students begin to see the relationship between the symbolic representation and the number of groups and leftovers.

- 2) Ask the student to write the number that corresponds to the total number of cubes from task 1.
 - a. If student accurately writes and states the correct total, go to task 3.
 - b. If student miscounts or miswrites the total (42), ask the student to identify any of the numerals in 42 and then go to task 3.

Students may be able to verbalize the number correctly, but may write the number 42 incorrectly. Number reversals are common at this age, so it is not uncommon for a student to write 24. This can indicate the student needs more practice matching the correct number to a set of objects. Providing a 110 chart may be helpful as students match the number to the quantity counted.

- 3) If the student has not been able to correctly write the number 42, write the number 42 so the student can see it.
 - a. Ask the student to identify the place of the 4.
 - b. Ask the student to identify the value of the 4.
 - c. Ask the student to identify the place of the 2.
 - d. Ask the student to identify the value of the 2.

Students at this age often confuse the meaning of place and value. This can indicate that students need additional time and opportunities to develop an understanding of the place names (i.e., tens, ones) and the value of a digit. The student generally makes these errors when they do not have a strong understanding of place value

and more time needs to be spent on vocabulary as well as counting and grouping concrete objects. It is critical that students work with models that clearly illustrate the relationships among tens and ones as physically proportional, where the tens piece is ten times larger than the ones piece (i.e., connecting cubes arranged into towers of ten and paired with single cubes). A place value mat or ten frames showing tens and ones may be helpful when grouping a quantity into groups of tens and ones, and may reinforce place value vocabulary.

- 4) Show the student the number 37.
 - a. Ask the student how many groups of ten can be made from this number.
 - b. If successful, ask will there be any leftovers? How many leftovers will there be?

Students may be able to read numbers correctly, but have not yet developed an understanding of the structure of the base-ten system and are unable to recognize that 37 is composed of 37 ones or 3 tens and 7 ones. If this is the case, students need more practice building numbers with proportional manipulatives and having opportunities to see the relationship between the number of tens and the number of ones in any given two-digit number.