1(2) Number and operations. The student applies mathematical process standards to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value.	**1(2)(F)** The student is expected to order whole numbers up to 120 using place value and open number lines.

Materials

- Number cards to 120
- Paper and pencil

Procedure:
Choose three number cards for the students to put in order from least to great.
Prompt the student to use an open number line to prove the order.

Put these numbers in order from least to greatest.
Draw an open number line. Order these numbers on the open number line.

Repeat using three additional numbers as needed.

Check Student's Responses:	**Check Student's Strategies:**
Numbers _____, _____, _____ □ Correct □ Incorrect □ Used the magnitude of the numbers to place numbers on the open number line □ Placed the numbers at the beginning, middle, and end of the open number line	The student: □ Used place value to order the numbers □ Referred to the digit instead of the place value □ Used the relationship among the numbers to place numbers on the open number line □ Other:
Numbers _____, _____, _____ □ Correct □ Incorrect □ Used the magnitude of the numbers to place numbers on the open number line □ Placed the numbers at the beginning, middle, and end of the open number line	The student: □ Used place value to order the numbers □ Referred to the digit instead of the place value □ Used the relationship among the numbers to place numbers on the open number line □ Other:

Notes:

1(2)(F) The student is expected to order whole numbers up to 120 using place value and open number lines.	**Possible interpretations, issues to follow up on, and implications for teaching**

What did you observe?

- The student had **difficulty ordering numbers**. Determine if the student had difficulty ordering the numbers based on the numbers chosen. It may be necessary to choose three numbers easier to compare such as numbers with different digits in the tens place and ones place or by allowing the student to use concrete models to represent and order the numbers.

- The student **consistently produced errors with numbers that had the same digit in the tens place**.

  A teaching strategy might include practicing ordering numbers using those that vary by tens digit only (e.g., 40, 50, 60).

- The student **did not verbalize a strategy for ordering the numbers.** Ask the student to explain how he or she ordered the three numbers. Prompt the student to use place value to compare and order the given numbers using questions such as, "Which number has the greatest value in the tens place?"

- The student **did not use magnitude to place the numbers on the open number line.** Consider whether or not the student simply placed the three numbers on the open number line without considering the relationship among the numbers.

  A teaching strategy might include creating benchmarks on the open number line for the students such as labeling all the tens on the number line to help the student use the relationship between the number and the given decade to place the numbers on the open number lines.