

Just in Time Quick Check

Standard of Learning 3.NS.2

Strand: Number and Number Sense

Standard of Learning 3.NS.2

The student will demonstrate an understanding of the base 10 system to compare and order whole numbers up to 9,999.

Students will demonstrate the following Knowledge and Skills:

- a) Compare two whole numbers, each 9,999 or less, using symbols ($>$, $<$, $=$, \neq) and/or words (*greater than, less than, equal to, not equal to*), with and without models.
- b) Order up to three whole numbers, each 9,999 or less, represented with and without models, from least to greatest and greatest to least.

Just in Time Quick Check

Just in Time Quick Check Teacher Notes

Supporting and Prerequisite SOL: 2.NS.2, 3.NS.1

Just in Time Quick Check 3.NS.2

1. Order these numbers from least to greatest.

9,135

3,915

9,315

2. The chart shows two Virginia county populations.

Virginia County	Population
Richmond County	8,878
Mathews County	8,796

Use the $>$, $<$, $=$, or \neq symbols to write two different number sentences comparing these two county populations.

3. Write a number in each column to match the description.

Less Than 4,025	Equal to 4,025	Greater Than 4,025

3.NS.2 Just in Time Quick Check Teacher Notes

Common Errors/Misconceptions and their Possible Indications

1. Order these numbers from least to greatest.

9,135

3,915

9,315

The most common error when ordering numbers from least to greatest is ordering the numbers from greatest to least. Students making this mistake show an understanding of ordering, but they would benefit from strategies that focus attention on the type of ordering required.

When considering numbers that have the same digits but not the same values, students may not notice the order of the digits and believe 9,135 and 9,315 are the same number. Using concrete manipulatives (e.g., base 10 blocks) can help students develop conceptual understanding for comparing and a methodical approach based on the place value structure.

If students are struggling with numbers that have the same digits, using numbers that have different digits (368, 720, 981) may be beneficial. Some students may need additional practice with two-digit numbers. Again, experiences with place value manipulatives help students understand the magnitude of the number and allow for direct comparison of the values of the digits.

2. The chart shows two Virginia county populations.

Virginia County	Population
Richmond County	8,878
Mathews County	8,796

Use the $>$, $<$, $=$, or \neq symbols to write two different number sentences comparing these two county populations.

When comparing numbers, students frequently confuse the $>$ and $<$ symbols. Students will often know which number is greater and which number is less, but they may not know which symbol should be used to make the number sentence correct. Students may benefit from reading these comparisons aloud to make sure the correct vocabulary is used with the correct symbol.

3. Write a number in each column to match the description.

Less Than 4,025	Equal to 4,025	Greater Than 4,025

Students may struggle with understanding numbers that have a zero in a place value position. They may understand that the zero means the number has 0 ones, or 0 tens, or 0 hundreds, but they may not understand that the number that comes before that decade would have 9 ones or before that century would have 9 tens. Students who have difficulty crossing backwards over the decade numbers and century numbers would benefit from representing the given number with concrete and/or pictorial representations and then using those representations to generate a number is greater than or less than that number.