Students build on their knowledge of place value to hundreds to compare 3-digit numbers. They write comparisons using <, =, and >.

**COMMON CORE STANDARD(S)**

2.NBT.A.4 Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons.

**DURATION**

Two 45-minute classroom periods
Engage and Explore, Explain, Elaborate page 1—one 45-minute classroom period
Elaborate page 2, Evaluate—second 45-minute classroom period

**MATERIALS**

Base-10 blocks (optional)

In order to compare 3-digit numbers, students need familiarity with place value and with comparing 2-digit numbers.

Engage students by reviewing known place values. Write the number 45 on the board. Ask students how to break apart 45 using place value. Let students know that they can use base-10 blocks to help. Ask a few students to present their solutions. Some students may use base-10 blocks to show that 45 is 4 tens and 5 ones. Other students may identify that the digit in the tens place is 4, and the digit in the ones place is 5, so 45 is 4 tens and 5 ones.
If students do not seem comfortable identifying place values, repeat with another 2-digit number. Once students are confident with place value to the tens, continue with a 3-digit number.

Once students are confident with place value to both tens and hundreds, remind them that one situation they have used place value before is when comparing numbers.

Tell students that at a bake sale, Lily sold 72 cookies and 64 cupcakes. Write “72 cookies” and “64 cupcakes” on the board for students to refer to. Ask students how you can compare the two numbers to find whether Lily sold more cookies or more cupcakes.

Give students time to work out the problem. Remind students that they can use base-10 blocks to help.

When students have completed the problem, ask a few students to present their solutions. In each solution, highlight how place value is used to compare the two numbers. If any solutions use the less than or greater than symbols, highlight these as well. If not, write these symbols on the board. Remind students that < means less than and > means greater than, and that the symbol always opens toward the greater number. Ask students how to use one of these symbols to compare 72 and 64. Accept both $72 > 64$ and $64 < 72$. Students may conclude that Lily sold more cookies, or that she sold fewer cupcakes.

If students need more practice comparing 2-digit numbers, have them complete another problem with another pair of numbers. Include pairs of numbers where the tens digits are the same, such as 34 and 39, and where one number only has one digit, such as 26 and 9, since these require slightly different approaches. Move on when you think students are comfortable with comparing 2-digit numbers.

Tell students that they have reviewed how to compare 2-digit numbers because today they will learn how to compare 3-digit numbers.

**EXPLAIN**

**WATCH THE GENERATION GENIUS COMPARING 3-DIGIT NUMBERS VIDEO AS A GROUP**
Facilitate a conversation using the Discussion Questions.

**ELABORATE**

Direct students to use their new understanding to complete the practice problem worksheets. Page 1 contains bare mathematical problems to solidify understanding of the process. Page 2 contains application problems for students to apply the process to solve real-world problems.
Have students gather in groups of 2 or 4 to compare and discuss their answers to the problems. Allow students enough time to communicate with their peers about their process and their thinking. Encourage students to use correct mathematical language when discussing their process. Have each group choose two questions they want more information about, or they want to discuss as a class.

When groups are ready, take questions from students. Encourage groups to answer questions brought up by other groups.

Students can play the online Kahoot! quiz game located below the video. It provides downloadable scores at the end of the quiz game. Alternatively, you can use the paper quiz, or the exit ticket questions. All these resources are located below the video in the assessment section.