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| ORdering and comparison of numbers. | 3.20.2019 |

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| Subject |  | Overview |
| |  | | --- | | Mathematics | | Prepared By | | [Instructor Name] | | Grade Level | | 3 | |  | This lesson plan covers teaching content for;   1. Order numbers up to 10000 using number chart 2. Understanding and using the <, >, and = symbols. 3. Writing of numbers in expanded form. |

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| Materials Required  * Access to a chalkboard or whiteboard * Chalk or dry erase markers (depending on the type of board being used * Number charts |
| Additional Resources  * <https://www.education.com/lesson-plan/lets-compare-whole-numbers/> * <http://www.edugains.ca/resourcesMath/CE/TIPS4Math/Grade4/4_Grade4_RepresentCompareandOrderNumbers0to10000_AODA.pdf> * <https://users.manchester.edu/Student/lehouser/ProfWeb/Modified%20Math%20Lesson.pdf> |
| Additional Notes |

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| **Objectives** Students should be able to;   1. Arrange numbers in numerical order with 80% accuracy, Given a set of 4 numbers. 2. Students will be able to compare two multi-digit numbers. 3. use ( >, <, = ) for comparing and ordering numbers seamlessly. |  | **Activity Starter/Instruction**  1. Review the symbols used for comparing numbers (>, <, =) with the class. 2. Explain to your students that the symbols would be used to compare numbers. Remind students that when we compare numbers we are looking at the difference in value between two (or more) numbers. 3. Ask the student what the biggest number that is not 1000 is. Write it on right hand side of the board. 4. Ask the student what the smallest number is. Write it on the left hand side of the board. 5. Ask the students to pick a number between 1 and 999. Write it in the middle. 6. Ask the students to pick a number that is smaller than the student choice from question 3 and larger than the student choice from question 4. 7. Write it between 1 and the student choice number written in the middle of the board.   **Guided Practice**  **Day 2/ Lesson 2: 15 Mins**   1. Make a chart with columns for each place value (thousands, hundreds, tens, and ones) and write one number in the first row and the other number in the second row. 2. Remind students that when comparing numbers, we compare the digits from left to right. Then, using the chart, compare each place value, pointing out that when we arrive at a place value in which one digit is greater, that number is greater. 3. Write "2,849 < 2,948" on the board. 4. Review the ways that you compared the numbers (word form, expanded form, and a place value chart). 5. Lead students through another example (i.e., 18,362 and 18,632) asking students for input as you compare. Give students two numbers to compare (e.g., 4,091 and 4,910). Have students work with a partner and instruct them to compare the numbers using all three strategies you reviewed (word form, expanded form, and a place value chart). |  | **Teacher Guide** **Day 1/ Lesson 1: 20 Mins**   1. Write two numbers on the board (i.e., 4,386 and 4,683). 2. Ask students to look at the numbers and share what they notice (i.e., the digits are the same but in a different order; both numbers start with two). 3. Read each number aloud and write them in word form.   Four thousand, three hundred eighty six  Four thousand, six hundred eighty three   1. Write each number in expanded form (4,000 + 300 + 80 + 6 **and** 4,000 + 600 + 80 + 3) and point out the value of each digit. 2. Show students that, although the value of the digit in the thousands place is the same (4,000), the value of the digit in the hundreds place is different (300 and 600), so the number with the greater value in the hundreds place is greater.  **Teacher Guide** **Day 3/ Lesson 3: 20 Mins**   1. Have a student volunteer from each group come up to the board and write three numbers on the board. Have the student volunteer read the numbers to the class. 2. Ask the class which number is the largest and circle it. 3. Ask the students why they think that number is the biggest. Have the students write down the biggest number on line one of their paper. 4. Ask the students which number is the second biggest number and why that number is the second biggest. Have students write the number from the board on line two of their papers. 5. Ask the students which line is the third biggest, why it is the third biggest, and have students record their choice on line three of their papers. 6. Repeat the process of figuring out the next biggest numbers with the remaining numbers on the board. |
| Assessment Activity |  | Assessment Activity  The students must compare their 3-digit and 4-digit numbers by looking at place value. The students start in the hundreds place to compare their numbers. The students write >, <, or =. . After comparing the numbers, the students must answer the 2 questions below:  1. Tim said that he has more money than David. Tim has $578 dollars in his savings account. David has $587. Is Tim correct? Why or why not? Write a number sentence comparing the two numbers. 2. Last year 8,976 people attended the fair. This year, 8,679 people attended the fair. Did more people attend the fair this year than last year? How do you know? |  | Assessment Activity  1. Write each strategy (symbol <,>, =) on a separate index card (word form, expanded form, and a place value chart). 2. Use a number generator to generate two numbers, each between 1,000 and 9,999. 3. Randomly pull a strategy card and instruct students to compare the two generated numbers using the strategy you pulled. 4. Repeat the exercise two or more times and observe student responses. |
| Summary |  | **Review and Closing**   1. Call the students attention to the front of the class. 2. Draw three new lines on the board. 3. Draw a tile and ask students where to place the number. Replace the number. 4. Draw a new number and ask students where to place the number. Replace the tile. 5. Draw the remaining tile and place the number on the remaining line. |  |  |