Thinking Through a Lesson Protocol (TTLP) Template – Facilitator Guide 3-5 Task

Fifth Grade Standard # 6 [5-NBT3a], [5-NBT3b]	**Cluster Heading:** Understand the place value system. **Content Standard:** Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, [5-NBT3a] b. Compare two decimals to thousandths based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons. [5-NBT3b] **Practice Standard(s):**

Task: **Comparing is in the Cards**

Place the following cards into the blanks to make the greatest number and the smallest number. Write these two numbers on a piece of paper with a <, >, or = to make a true statement. (Cards are 8, 3, 5, 1, and 7)

_____ _____. _____ _____ _____

Differentiation **Supports** • Ask the student to first create the greatest possible two-digit whole number. Then, use the remaining three to find the greatest possible decimal number. • Give the students an additional problem that only compares numbers to the tenths. **Extensions** • What would be the second largest number with the same digits? • Write a number that would come between the two numbers.	**Questions to Guide Student Thinking** • What would the greatest number be with the same blanks and any cards? • Compare your answer to other students and decide if there is the possibility for a larger or smaller number with the same digits. Be prepared to justify your answer. **MP3** • What are the place values of each of the blanks and what **Vocabulary** • Tens, ones, tenths, hundredths, thousandths, decimal, decimal point do they mean?
Solutions: • 87.531 > 13.578 • 13.578 < 87.531 **Observation of Students:** • Do students realize that the digit farthest to the left affects the value of the number the most, and the number farthest to the right affects the value the least? • Are students able to correctly use <, >, and/or =?	**Misconceptions** Students may: • Put the numbers in reverse order for each. • Put the cards in whatever order they pick them up. • Believe that the digit after the decimal place is the most important, e.g., thinking 13.875 would be the greatest). • Misunderstand the numbers after the decimal place. (i.e. 87.135 would be the highest. • The student may put in his/her own numbers, e.g., creating a high number of 99.999.