Mid-Module Assessment Task Standards Addressed	Topics A–C

Generalize place value understanding for multi-digit whole numbers.

4.NBT.1 Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. *For example, recognize that 700 ÷ 70 = 10 by applying concepts of place value and division*.

4.NBT.2 Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.

4.NBT.3 Use place value understanding to round multi-digit whole numbers to any place.

Evaluating Student Learning Outcomes

A Progression Toward Mastery chart is provided to describe steps that illuminate the gradually increasing understandings that students develop *on their way to proficiency.* In this chart, this progress is presented from left (Step 1) to right (Step 4). The learning goal for students is to achieve Step 4 mastery. These steps are meant to help teachers and students identify and celebrate what the students CAN do now and what they need to work on next.

A Progression Toward Mastery

Assessment Task Item and Standards Assessed	STEP 1 Little evidence of reasoning without a correct answer. (1 Point)	STEP 2 Evidence of some reasoning without a correct answer. (2 Points)	STEP 3 Evidence of some reasoning with a correct answer or evidence of solid reasoning with an incorrect answer. (3 Points)	STEP 4 Evidence of solid reasoning with a correct answer. (4 Points)
1 4.NBT.1	The student arranged two numbers and provided no clear explanation for Part (b).	The student arranged two numbers in order or arranged the least and greatest numbers correctly. The student provided some explanation of *ten times*.	The student arranged three or four numbers correctly but was unable to articulate the relationship of the two smallest numbers using the words *ten times*.	The student correctly: ▪ Arranged the numbers in the following order: 4,450; 44,500; 504,054; 505,045. ▪ Used the words *ten times* to describe the relationship between 4,450 and 44,500.

A Progression Toward Mastery				
2 **4.NBT.2**	The student correctly answered one problem.	The student correctly answered two problems.	The student correctly answered three problems.	The student correctly answered all four problems: a. > b. < c. < d. =
3 **4.NBT.1** **4.NBT.2** **4.NBT.3**	The student correctly answered one part or was able to answer some parts with partial accuracy.	The student correctly answered two of the five parts.	The student correctly answered three or four of the five parts but was unable to reason in Part (e).	The student correctly answered all five problems: a. 925,420 b. 90,000 + 2,000 + 500 + 40 + 2. Ninety-two thousand, five hundred forty-two. c. Draws two number lines showing the number rounded to 90,000 and 93,000. d. 90,000 < 93,000 e. Explains rounding to the nearest thousand is more accurate because rounding to a smaller unit gives a more accurate estimate, so the difference will be closer to the exact number.

Name Jack Date _____

1.

a. Arrange the following numbers in order from least to greatest.

504,054 4,450 505,045 44,500

4,450 44,500 504,054 505,045

b. Use the words "ten times" to tell how you ordered the two smallest numbers using words, pictures and numbers.

44,500 is ten times 4,450 so it comes after 4,450 when going from smallest to greatest.

TTh	Th	H	T	O
	4	4	5	0
4	4	5	0	0

Because 44,500 is ten times 4,450, the digits shift left one place value.

2. Compare using >, <, or =. Write your answer inside the circle.

a. 1 hundred thousand (>) 10,000

100,000

b. 200 thousands 4 hundreds (<) 204,000

200,400

c. 7 hundreds + 4 thousands + 27ones (<) 6 thousands + 4 hundreds

4,727 6,400

d. 1,000,000 (=) 10 hundred thousands

3. The football stadium at Louisiana State University (LSU) has a seating capacity of 92,542.

a. According to the 2010 census, the population of San Jose, CA was approximately ten times the amount of people that LSU's stadium can seat. What was the population of San Jose in 2010?

100 Th	10 Th	Th	H	T	O
	9	2	5	4	2
9	2	5	4	2	0

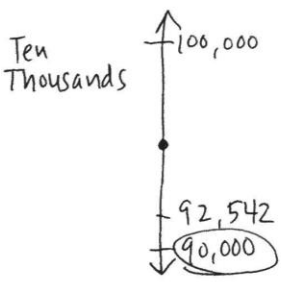
The population of San Jose is 925,420. because that is ten times 92,542.

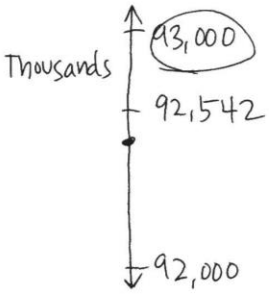
b. Write the seating capacity of the LSU stadium in words and in expanded form.

90,000 + 2,000 + 500 + 40 + 2

Ninety-two thousand five hundred forty-two.

c. Draw two separate number lines to round the LSU stadium's seating capacity to the nearest ten thousand and to the nearest thousand.





d. Compare the stadium's seating rounded to the nearest ten thousand and the seating rounded to the nearest thousand using >, <, or =.

90,000 < 93,000

e. Which estimate (rounding to the nearest ten thousand or nearest thousand) is more accurate? Use words and numbers to explain.

Rounding to the nearest thousands is more accurate because the actual number, 92,542, is closer to 93,000 than 90,000. Rounding to a smaller place value is more accurate because it will be closer to the actual number. That's why for this problem, rounding to the thousands gave me an estimate closer to the actual number than rounding to the ten thousands.