4.NBT.A

Generalize place value understanding for multi-digit whole numbers.

1. What digit can you put in the box to make the comparison true?

524,9□7 < 524,932 □ = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. Round 4108 to the nearest thousand. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. When rounding to the nearest thousand, what is the least whole number that rounds to

16,000? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. Check True or False for each comparison.

|  | **True** | **False** |
| --- | --- | --- |
| 5 hundreds + 4 tens > 50 + 400 |  |  |
| 524 < 50 + 200 + 4 |  |  |
| 50 tens + 20 ones = 520 |  |  |

5. Select the statement that explains how the values of the numbers 420 and 4200 are different.

 A. 4200 is 1000 times as large as 420.

 B. 4200 is 100 times as large as 420.

 C. 4200 is 10 times as large as 420.

 D. 4200 is 1 times as large as 420.

6. A company developed a student survey so that students could share their thoughts about school. In 2011, 78,234 students across the United States were administered the survey. In 2012, the company planned to administer the survey to 10 times as many students as were surveyed in 2011. About how many surveys should the company have printed in 2012? Explain how you found your answer.

7. Opening day at the New York State Fair in 2012 had an attendance of 46,753. Decide which place value to round 46,753 to if you were writing a newspaper article. Round the number and explain why it is an appropriate unit to round the attendance to.

**Teacher Material**

4.NBT.A

Generalize place value understanding for multi-digit whole numbers.

| **Question** | **Claim** | **Key/Suggested Rubric** |
| --- | --- | --- |
| 1[[1]](#footnote-1) | 1 | **1 point:** 0, 1, or 2 |
| 21 | 1 | **1 point:** 4000 |
| 31 | 1 | **1 point:** 15,500 |
| 41 | 1 | **1 point:** TFT |
| 51 | 1 | **1 point:** Selects C |
| 6[[2]](#footnote-2) | 3 | **1 point:** I think they should order 800,000 surveys. I would round 78,234 to 80,000 because usually number of people doing something increases each year. If I multiply 80,000 by 10, I would get 800,000.  |
| 7² | 3 | **1 point:** I would round the number to 50,000. Newspaper readers are not interested in exact numbers and this is an easy rounding to use. |

1. From Smarterbalanced.org. Grade 4, Claim 1, Target D Item Specifications. Internet. Available from <http://www.smarterbalanced.org/smarter-balanced-assessments/>; accessed 11/2015. [↑](#footnote-ref-1)
2. From EngageNY.org of the New York State Education Department. Grade 4 Mathematics Module 1, Topic C, Lesson 10. Internet. Available from <https://www.engageny.org/resource/grade-4-mathematics-module-1-topic-c-lesson-10>; accessed 11/2015. [↑](#footnote-ref-2)