5.NBT.A

Understand the place value system.

1. Write 10,000 as a power of 10.

2. Determine whether each expression is equivalent to 638.4. Select Yes or No for each expression.

|  | **Yes** | **No** |
| --- | --- | --- |
| 63 tens + 8 ones + 4 tenths |  |  |
| 63 hundreds + 8 ones + 4 tenths |  |  |
| 6 hundreds + 3 tens + 84 tenths |  |  |
| 6 hundreds + 38 ones + 4 tenths |  |  |

3. Select the symbol (>, <, or =) that correctly completes each comparison.

|  | **>** | **<** | **=** |
| --- | --- | --- | --- |
| 0.03 \_?\_ 0.3 |  |  |  |
| 187.36 \_?\_ 187.35 |  |  |  |

4. Round 45.643 to the nearest hundredth. Write your answer in the blank. \_\_\_\_\_\_\_\_\_\_

5. Shaunnie and Marlon missed the lesson on exponents. Shaunnie incorrectly wrote   
105 = 50 on her paper, and Marlon incorrectly wrote 2.5 × 102 = 2.500 on his paper.

* 1. What mistake has Shaunnie made? Explain using words, numbers, or pictures why her thinking is incorrect and what she needs to do to correct her answer.
  2. What mistake has Marlon made? Explain using words, numbers, or pictures why his thinking is incorrect and what he needs to do to correct his answer.

**Teacher Material**

5.NBT.A

Understand the place value system.

| **Question** | **Claim** | **Key/Suggested Rubric** |
| --- | --- | --- |
| 1[[1]](#footnote-1) | 1 | **1 point:** 10⁴ |
| 21 | 1 | **1 point:**  Y  N  Y  Y |
| 31 | 1 | **1 point:**  <  > |
| 41 | 1 | **1 point:** 45.64 |
| 5a[[2]](#footnote-2) | 3 | **1 point:** Shaunnie thought 105 is the same thing as 5 x 10 but it isn’t. It is 10 x 10 x 10 x 10 x 10 which would equal 100,000. |
| 5b² | 3 | **1 point:** Marlon doesn’t understand that he was supposed to multiply the number by 100 which is equal to 102. That would make the product 250. He probably heard that when you multiply by 100 you just add two zeros but that is not true for decimals. |

1. From Smarterbalanced.org. Grade 5, Claim 1, Target C 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 5 Mathematics Module 1, Topic A, Lesson 3. Internet. Available from <https://www.engageny.org/resource/grade-5-mathematics-module-1-topic-lesson-3>; accessed 11/2015. [↑](#footnote-ref-2)