Grade 5 Unit 1 quiz 1: Thousandths: reading, writing and expanded form, Rounding decimals, Powers of ten

Name _____ Date _____ Period _____

8 questions, 21 points

1. A science class has brass weights of 1 gram, 0.1 gram, 0.01 gram and 0.001 gram. To balance a key, they use 3 one-gram weights, 6 tenth-gram weights and 3 thousandth-gram weights. They use no hundredth-gram weights. How many grams does the key weigh? (2 points)

2. In science class, a scale shows that a smooth rock has a mass of 3.418 grams. The class chart lists every mass to the nearest hundredth of a gram. What mass goes on the chart? (2 points)

3. Omar rounds 0.35 to the nearest whole number. He says, "The last digit is 5, and 5 rounds up, so the answer is 1." Is Omar right? Explain. (2 points)

4. Round each number to the place named. (4 points)

(a) 9.274 to the nearest tenth

(b) 0.618 to the nearest whole number

(c) 5.096 to the nearest hundredth

(d) 31.45 to the nearest tenth

Free sample from math.wiki for classroom use. Do not post. math.wiki

5. What number goes in the box?

$\square \times 10^2 = 2{,}900$ (2 points)

6. (3 points)

(a) Write 40.073 in word form.

(b) Write sixty and eight hundred five thousandths in standard form.

(c) Write 0.016 in expanded form with fractions.

7. A strand of hair is about 0.07 mm thick. A thread of spider silk is about 0.007 mm thick. (3 points)

(a) Write each thickness in word form.

(b) How many silk threads side by side are as thick as one hair? Explain using place value.

8. A number has 4 ten thousands, 2 hundreds and 5 ones. All its other places hold 0. Write the number in expanded form using powers of ten. Then write it as a number. (3 points)

Free sample from math.wiki for classroom use. Do not post. math.wiki