Place Value & Powers of 10

Name: _____ Date: _____ Grade: Grade 5

Part A: Fix the Sentence

Each sentence has an error. Rewrite it correctly on the line.

1. Fix the sentence: *In 4.73 the digit 3 is in the tenths place.*

   Rewrite: _____

2. Fix the sentence: *When you divide 820 by 100 you get 82.*

   Rewrite: _____

3. Fix the sentence: *Multiplying 0.06 by 10 gives 6.*

   Rewrite: _____

Part B: Fill in the Blank

Write the missing word or number on each line.

1. In the number 12.58 the digit 5 is in the _____ place.
2. 0.4 × 100 = _____ .
3. 350 ÷ 1,000 = _____ .
4. The value of the 9 in 0.09 is nine _____ .

Part C: Short Answer

Answer each question in one or two complete sentences.

1. What happens to each digit in a number when you multiply by 10? Use the example 3.45 × 10 in your answer.

   _____

   _____

2. A student says 72 ÷ 10 = 7.02. Is the student correct? Explain the mistake.

   _____

   _____

Answer Key · Place Value & Powers of 10 · Grade: Grade 5

Part A: Fix the Sentence

Each sentence has an error. Rewrite it correctly on the line.

1. Fix the sentence: *In 4.73 the digit 3 is in the tenths place.*

   Rewrite: In 4.73 the digit 3 is in the hundredths place. The 7 is in the tenths place.

2. Fix the sentence: *When you divide 820 by 100 you get 82.*

   Rewrite: When you divide 820 by 100 you get 8.2, not 82. Each digit shifts two places to the right.

3. Fix the sentence: *Multiplying 0.06 by 10 gives 6.*

   Rewrite: Multiplying 0.06 by 10 gives 0.6. The decimal point moves one place to the right, not two.

Part B: Fill in the Blank

Write the missing word or number on each line.

1. In the number 12.58 the digit 5 is in the **tenths** place.

2. 0.4 × 100 = **40** .

3. 350 ÷ 1,000 = **0.35** .

4. The value of the 9 in 0.09 is nine **hundredths** .

Part C: Short Answer

Answer each question in one or two complete sentences.

1. What happens to each digit in a number when you multiply by 10? Use the example 3.45 × 10 in your answer.

> *Each digit shifts one place to the left. 3.45 × 10 = 34.5 because the 3 moves from the ones to the tens, the 4 moves from tenths to ones, and the 5 moves from hundredths to tenths.*

2. A student says 72 ÷ 10 = 7.02. Is the student correct? Explain the mistake.

> *The student is incorrect. 72 ÷ 10 = 7.2. The 7 moves to the ones place and the 2 moves to the tenths place. The student inserted a zero in the wrong position.*