



Multi-Digit Multiplication

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: When Grade 5 students multiply by 10, every digit shift one place to the left.

Rewrite: _____

2. Fix the sentence: Multiplying by 100 in Grade 5 add two zeros to a whole number.

Rewrite: _____

3. Fix the sentence: For Grade 5 work, 47 times 1000 equal 47,000 because three places shift.

Rewrite: _____

Part B: Fill in the Blank

Write the missing word or number on each line.

- In Grade 5, 56 times 10 equals _____.
- For Grade 5 patterns, 89 times 100 equals _____.
- Grade 5 magnitude check: 7 times 1000 equals _____.
- In Grade 5, 320 times 10 equals _____ because each digit slides one place left.

Part C: Short Answer

Answer each question in one or two complete sentences.

1. Explain why multiplying a whole number by 1000 is the same as shifting each digit three places to the left in Grade 5 place-value terms.

2. How can Grade 5 students use the zero pattern to quickly compute 64 times 100 without writing the standard algorithm?

Answer Key · Multi-Digit Multiplication · Grade: Grade 5

Part A: Fix the Sentence

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1. Fix the sentence: When Grade 5 students multiply by 10, every digit shift one place to the left.

Rewrite: **When Grade 5 students multiply by 10, every digit shifts one place to the left.**

2. Fix the sentence: Multiplying by 100 in Grade 5 add two zeros to a whole number.

Rewrite: **Multiplying by 100 in Grade 5 adds two zeros to a whole number.**

3. Fix the sentence: For Grade 5 work, 47 times 1000 equal 47,000 because three places shift.

Rewrite: **For Grade 5 work, 47 times 1000 equals 47,000 because three places shift.**

Part B: Fill in the Blank

Write the missing word or number on each line.

- In Grade 5, 56 times 10 equals 560.
- For Grade 5 patterns, 89 times 100 equals 8900.
- Grade 5 magnitude check: 7 times 1000 equals 7000.
- In Grade 5, 320 times 10 equals 3200 because each digit slides one place left.

Part C: Short Answer

Answer each question in one or two complete sentences.

1. Explain why multiplying a whole number by 1000 is the same as shifting each digit three places to the left in Grade 5 place-value terms.

Each place value is ten times the place to its right. Multiplying by 10 shifts once, by 100 shifts twice, and by 1000 shifts three times. So 1000 makes the magnitude one thousand times greater, which I show as a three-place left shift.

2. How can Grade 5 students use the zero pattern to quickly compute 64 times 100 without writing the standard algorithm?

I think of times 100 as two place value shifts. Sixty-four moves up two places so 64 ends in the
