# Summer Week 3 - Lesson 1

## Can I multiply by 10, 100 and 1000?

# Fast Five

800 - 443

7 x 3

Value of the underlined digits

6<u>7</u>43<u>9</u>

56 = 7 x ?

12864 + 37456

Answers on the next slide

# Fast Five

$7 \times 3 = 21$

$800 - 443 = 357$

Value of the underlined digits

6<u>7</u>43<u>9</u>

$56 = 7 \times 8$

7000        9

$12864 + 37456 = 50320$

We've looked before at how to multiply by 10, 100 and 1000.

It is important to practise the method.

When we see a number multiplied by 10, 100 or 1000 column method is not the quickest way to get the answer.

The next few slides show how to use our place value to help us.

We call this method the "move it move it" method.

When we multiply by 10, 100 or 1000 we always move our number to the left. We are making our number bigger which means moving place values to the left.

| Hth | Tth | H | T | O |
|-----|-----|---|---|---|

Our questions is 23 x 10

Steps to success:
First – put each number in its own square.
Second – look at how many zeros are in the number you are multiplying by, in this case 1. (10 has 1 zero)
Third- this is how many places to the left you are going to move.
Fourth- fill in with zeros as placeholders.

| H | T | O |
|---|---|---|
|   | 2 | 3 |
| 2 | 3 | 0 |

2 3 0 is the answer

Our questions is 983 x 100

Steps to success:
First – put each number in its own square.
Second – look at how many zeros are in the number you are multiplying by, in this case 2. (100 has 2 zeros)
Third- this is how many places to the left you are going to move.
Fourth- fill in with zeros as placeholders.

| Hth | Tth | H | T | O |
|-----|-----|---|---|---|
|     |     | 9 | 8 | 3 |
| 9   | 8   | 3 | 0 | 0 |

98300 is the answer

Our questions is 65 x 1000

Steps to success:
First – put each number in its own square.
Second – look at how many zeros are in the number you are multiplying by, in this case 3. (1000 has 3 zeros)
Third- this is how many places to the left you are going to move.
Fourth- fill in with zeros as placeholders.

| Hth | Tth | H | T | O |
|-----|-----|---|---|---|
|     |     |   | 6 | 5 |
| 6   | 5   | 0 | 0 | 0 |

Our questions is 12.4 x 100

Steps to success:
First – put each number in its own square. Remember your decimal needs its own space and won't move.
Second – look at how many zeros are in the number you are multiplying by, in this case 2. (100 has 2 zeros)
Third- this is how many places to the left you are going to move.
Fourth- fill in with a zero as a placeholder (not required after the decimal).

| Tth | H | T | O | . | t |
|-----|---|---|---|---|---|
|     |   | 1 | 2 | . | 4 |
| 1   | 2 | 4 | 0 | . | 0 |

1240 is the answer

We don't need the 0 after the decimal

76.2 x 100

| Hth | Tth | H | T | O | . | t |
|-----|-----|---|---|---|---|---|
|     |     |   | 7 | 6 | . | 2 |
| 7   | 6   | 2 | 0 | . | 0 |   |

7620 is the answer

8.1 x 1000

| Hth | Tth | H | T | O | . | t |
|-----|-----|---|---|---|---|---|
|     |     |   |   | 8 | . | 1 |
| 8   | 1   | 0 | 0 | . | 0 |   |

8100 is the
answer

13.7 x 10

| Hth | Tth | H | T | O | . | t |
|-----|-----|---|---|---|---|---|
|     |     |   | 1 | 3 | . | 7 |
|     |     | 1 | 3 | 7 | . | 0 |

137 is the answer