

# A Practical Introduction to Column Multiplication

To multiply numbers up to 4 digits by a 1-digit number.



1) Use the place value chart to complete the statements.

Th	H	T	O

The are  thousands.

The are  hundreds.

The are  tens.

The are  ones.

The calculation shown on the place value chart is:

$$\boxed{\phantom{000}} \times \boxed{\phantom{000}} = \boxed{\phantom{0000}}$$

2) Draw counters on the chart to represent and solve the calculation:

$$2212 \times 4 =$$

Th	H	T	O

## A Practical Introduction to Column Multiplication

- 3) An ice hockey rink has 4 rows. 1211 spectators can be seated in each row.  
If the ice rink is full, how many people are watching the game?  
Solve this problem using the place value chart below.

$$\boxed{\phantom{0000}} \times \boxed{\phantom{0000}} = \boxed{\phantom{0000000}}$$

Th	H	T	O

## A Practical Introduction to Column Multiplication

- 4) A coffee shop sells an average of 2324 cups of coffee a day.  
How many will they sell over 3 days?



×

=

Th	H	T	O

# A Practical Introduction to Column Multiplication

To multiply numbers up to 4 digits by a 1-digit number.



1) Draw counters on the chart to represent and solve the calculation:

$$2324 \times 3 =$$

Th	H	T	O

2)



Joshua

I just solved  $1234 \times 4$   
It was more challenging than  $2324 \times 3$

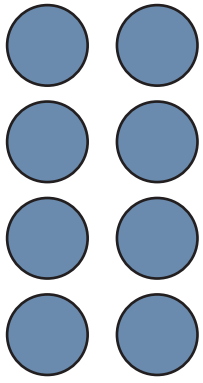
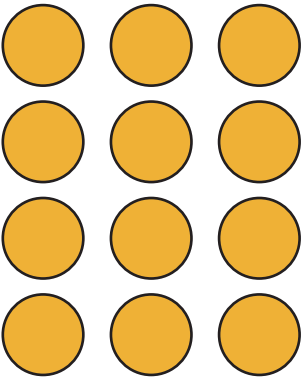
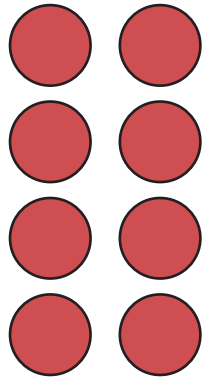
Solve the calculation and then explain why this is true.

$$1234 \times 4 =$$

Th	H	T	O

## A Practical Introduction to Column Multiplication

3) Write a word problem which could be solved by the calculation represented by the place counters shown below. Write the calculation and then solve your own problem.

Th	H	T	O
			

×=

4) Arthur has tried to solve  $3210 \times 3$  using counters and a place value chart.

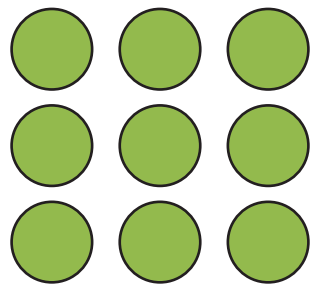
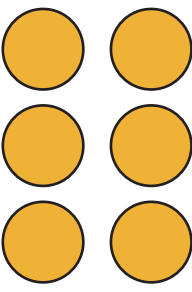
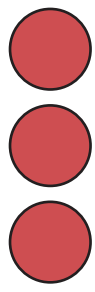


The answer is 963.

Arthur

Arthur is incorrect.

What advice would you give to him to ensure he is correct the next time?

Th	H	T	O
			

# A Practical Introduction to Column Multiplication Answers

To multiply numbers up to 4 digits by a 1-digit number.



1) Use the place value chart to complete the statements.

The are **9** thousands.

The are **6** hundreds.

The are **3** tens.

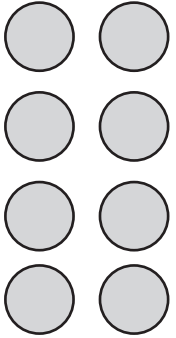
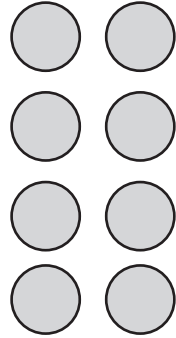

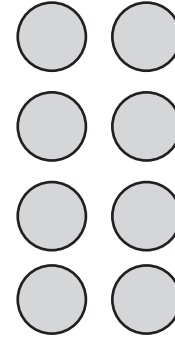
The are **6** ones.

The calculation shown on the place value chart is:

$$\boxed{3212} \times \boxed{3} = \boxed{9636}$$

2) Draw counters on the chart to represent and solve the calculation:


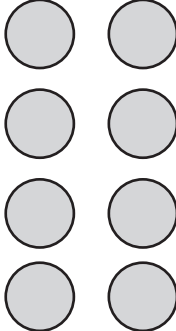


$$2212 \times 4 = \boxed{8848}$$

Th	H	T	O
			

## A Practical Introduction to Column Multiplication Answers

- 3) An ice hockey rink has 4 rows. 1211 spectators can be seated in each row.  
If the ice rink is full, how many people are watching the game?  
Solve this problem using the place value chart below.

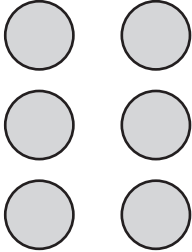
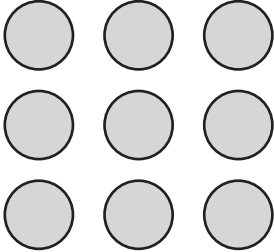
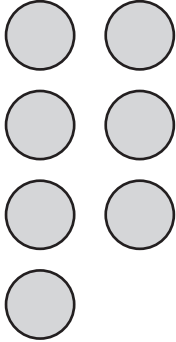
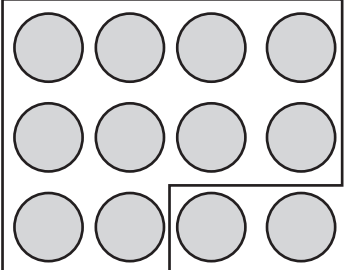
$$\boxed{1211} \times \boxed{4} = \boxed{4844}$$

Th	H	T	O
			

# A Practical Introduction to Column Multiplication Answers

- 4) A coffee shop sells an average of 2324 cups of coffee a day.  
How many will they sell over 3 days?

$$\boxed{2324} \times \boxed{3} = \boxed{6972}$$

Th	H	T	O
			



# A Practical Introduction to Column Multiplication Answers

To multiply numbers up to 4 digits by a 1-digit number.



1) Draw counters on the chart to represent and solve the calculation:

$$2324 \times 3 = \boxed{6972}$$

Th	H	T	O

2)



Joshua

I just solved  $1234 \times 4$   
It was more challenging than  $2324 \times 3$

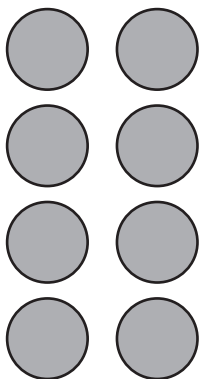

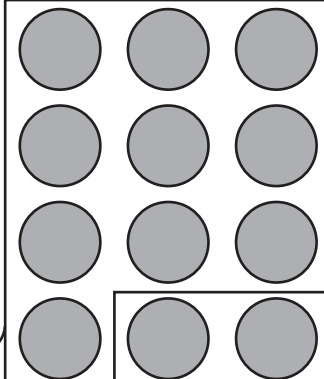
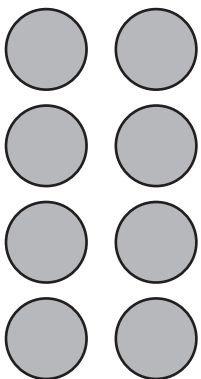
Solve the calculation and then explain why this is true.

$$1234 \times 4 = \boxed{4936}$$

Th	H	T	O

## A Practical Introduction to Column Multiplication Answers

3) Write a word problem which could be solved by the calculation represented by the place counters shown below. Write the calculation and then solve your own problem.

Th	H	T	O
			

The word problem will need to include the calculation  $2032 \times 4$ .

<b>2032</b>	×	<b>4</b>	=	<b>8128</b>
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4) Arthur has tried to solve  $3210 \times 3$  using counters and a place value chart.

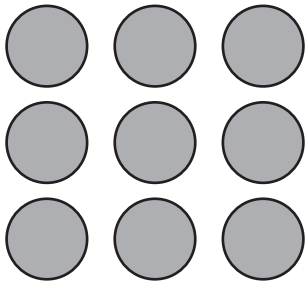
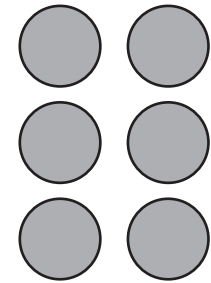
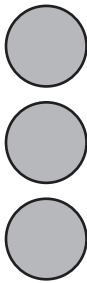


The answer is 963.

Arthur

Arthur is incorrect.

What advice would you give to him to ensure he is correct the next time?

Th	H	T	O
			

**Arthur has placed his counters in the incorrect columns. All of the counters need to be moved one column to the left and the ones column must be empty as 3210 has zero in the ones place.**