

Lesson 3- Consolidation

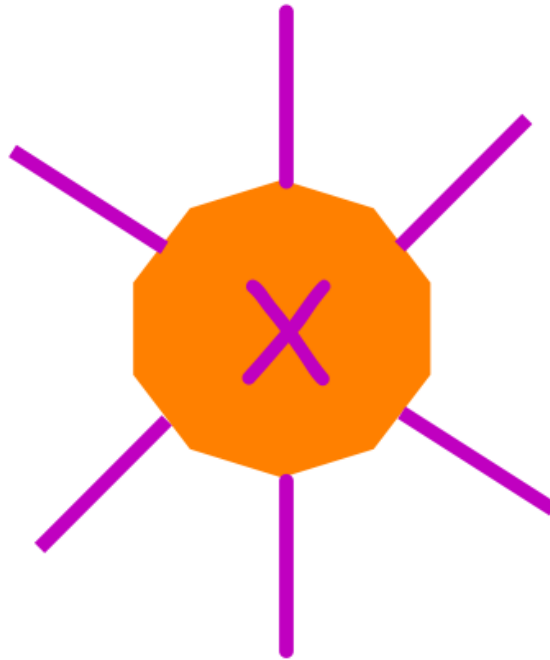
Multiplication

This week we will be consolidating the methods we use for the 4 operations (addition, subtraction, multiplication and division).

In today's work, you will focus on multiplication.

Starter

What words are used for multiplying?



Let's have a look at our school's calculation policy on multiplication- This is how we should be setting it out.

Short multiplication

$$3562 \times 8 =$$

$$\begin{array}{r} 3562 \\ \times 8 \\ \hline 28496 \\ 441 \end{array}$$

To follow the same short multiplication method for decimal numbers. NB – the amount of numbers after the decimal point in the question should be the same as the amount of numbers after the decimal point in the answer!!

Grid Method

$$74 \times 29 =$$

x	70	4	
20	1400	80	= 1480
9	630	36	= + 666
			2146

Long Multiplication

$$74 \times 29 =$$

$$\begin{array}{r} 74 \\ \times 29 \\ \hline 666 \quad (9 \times 74) \\ + 1480 \quad (20 \times 74) \\ \hline 2146 \end{array}$$

Numbers that are 'carried over' need to be re-grouped and placed as a smaller number under the total of each row.

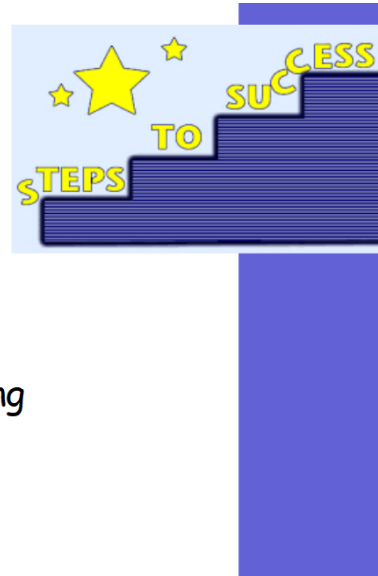
Steps to success

-Line up digit correct in the correct place value column and draw 4 lines horizontally.

-Start multiplying from the ones and then move onto the tens. Make sure you place a zero in the ones column.

-If your total exceeds 10 then regroup by making sure you carry it forward. Place this on the line!

-Make sure you add at the end!



Task 1

$$1) 47 \times 36 = \text{[blue box]}$$

$$2) 52 \times 60 = \text{[blue box]}$$

$$3) 375 \times 26 = \text{[blue box]}$$

$$4) 167 \times 34 = \text{[blue box]}$$

$$5) 690 \times 72 = \text{[blue box]}$$

$$6) 857 \times 64 = \text{[blue box]}$$

Task 2

Explain what is wrong with each of these calculations:

1) $34 \times 5 = 152$

$$\begin{array}{r} 34 \\ \times 5 \\ \hline 150 \end{array}$$

2) $74 \times 3 = 2112$

$$\begin{array}{r} 74 \\ \times 3 \\ \hline 2112 \end{array}$$

3) $73 \times 5 = 315$

$$\begin{array}{r} 73 \\ \times 5 \\ \hline 315 \end{array}$$

Task 3

- 1) Can you identify the missing digits in these calculations?



a)

<input type="text"/>	2	<input type="text"/>	2
×			3
9	<input type="text"/>	3	6

b)

	4	<input type="text"/>	1	<input type="text"/>
×				4
<input type="text"/>	6	0	6	0

c)

	<input type="text"/>	1	<input type="text"/>	<input type="text"/>
×				5
3	0	5	1	5

- 2) Replace the letters with numbers to make this multiplication calculation work.

- a) Find 3 possible solutions.

A	B	B	A
×			C
C	D	D	C



- b) Explain how you found solutions. For example, what can the letters be and what can they not be?