

**Remember your times tables. Use a TT square if you need to.**

Always start from the right. You are multiplying  $4 \times 6$  and  $20 \times 6$ .

Try it like this as well in your head to check your answer!

## Formal Written Columnar Methods

Year 4:

*Pupils should be taught multiply two-digit and three-digit numbers by a one-digit number using **formal written layout**.*

$24 \times 6$  becomes

$$\begin{array}{r} 24 \\ \times 6 \\ \hline 144 \\ \hline 2 \end{array}$$

Answer: 144

Text

$342 \times 7$  becomes

$$\begin{array}{r} 342 \\ \times 7 \\ \hline 2394 \\ \hline 21 \end{array}$$

Answer: 2394

All digits must live at home. So if you multiply  $2 \times 7$  you get 14.

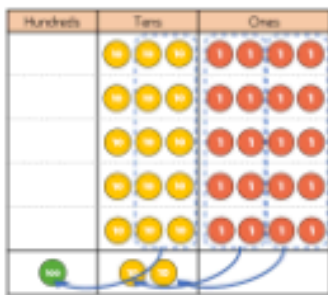
The '1' is a ten and must be included in the tens column.

By writing it below the 'equals' you can count it later when you multiply the tens.

# Bronze

## Varied Fluency

Whitney uses place value counters to calculate  $5 \times 34$



	H	T	O	
		3	4	
x			5	
		2	0	(5 × 4)
+	1	5	0	(5 × 30)
	1	7	0	

Use Whitney's method to solve

$$5 \times 42$$

$$23 \times 6$$

$$48 \times 3$$

Ron also uses place value counters to calculate  $5 \times 34$



	H	T	O	
		3	4	
x			5	
	1	7	0	
	1	2		

Use Ron's method to complete:

	T	O
	4	3
x		3
<hr/>		

	T	O
	3	6
x		4
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	T	O
	7	4
x		5
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# Silver

Complete the calculation.

Hundreds	Tens	Ones
100 100		1 1 1
100 100		1 1 1
100 100		1 1 1

	H	T	O
	2	0	3
x			3
<hr/>			

A school has 4 house teams.  
There are 245 children in each house team.  
How many children are there altogether?

Hundreds	Tens	Ones
100 100	10 10 10 10	1 1 1 1 1
100 100	10 10 10 10	1 1 1 1 1
100 100	10 10 10 10	1 1 1 1 1
100 100	10 10 10 10	1 1 1 1 1

	H	T	O
	2	4	5
x			4
<hr/>			

Write the multiplication represented by the counters and calculate the answer using the formal written method.

Hundreds	Tens	Ones
100 100 100	10 10 10 10 10 10 10	
100 100 100	10 10 10 10 10 10 10	

# Silver

$$\begin{array}{r} 1) \quad 493 \\ \times \quad 9 \\ \hline \end{array}$$

$$\begin{array}{r} 2) \quad 242 \\ \times \quad 8 \\ \hline \end{array}$$

$$\begin{array}{r} 3) \quad 242 \\ \times \quad 9 \\ \hline \end{array}$$

$$\begin{array}{r} 4) \quad 236 \\ \times \quad 9 \\ \hline \end{array}$$

$$\begin{array}{r} 5) \quad 442 \\ \times \quad 7 \\ \hline \end{array}$$

$$\begin{array}{r} 6) \quad 962 \\ \times \quad 2 \\ \hline \end{array}$$

$$\begin{array}{r} 7) \quad 401 \\ \times \quad 1 \\ \hline \end{array}$$

$$\begin{array}{r} 8) \quad 930 \\ \times \quad 7 \\ \hline \end{array}$$

$$\begin{array}{r} 9) \quad 527 \\ \times \quad 6 \\ \hline \end{array}$$

$$\begin{array}{r} 10) \quad 795 \\ \times \quad 6 \\ \hline \end{array}$$

$$\begin{array}{r} 11) \quad 889 \\ \times \quad 3 \\ \hline \end{array}$$

$$\begin{array}{r} 12) \quad 182 \\ \times \quad 6 \\ \hline \end{array}$$

# Gold

$$\begin{array}{r} 1) \ 6518 \\ \times \ 7 \\ \hline \end{array}$$

$$\begin{array}{r} 2) \ 3793 \\ \times \ 9 \\ \hline \end{array}$$

$$\begin{array}{r} 3) \ 1167 \\ \times \ 5 \\ \hline \end{array}$$

$$\begin{array}{r} 4) \ 3575 \\ \times \ 6 \\ \hline \end{array}$$

$$\begin{array}{r} 5) \ 7291 \\ \times \ 2 \\ \hline \end{array}$$

$$\begin{array}{r} 6) \ 3877 \\ \times \ 4 \\ \hline \end{array}$$

$$\begin{array}{r} 7) \ 1296 \\ \times \ 2 \\ \hline \end{array}$$

$$\begin{array}{r} 8) \ 8256 \\ \times \ 4 \\ \hline \end{array}$$

$$\begin{array}{r} 9) \ 6297 \\ \times \ 6 \\ \hline \end{array}$$

$$\begin{array}{r} 10) \ 7142 \\ \times \ 6 \\ \hline \end{array}$$

$$\begin{array}{r} 11) \ 5608 \\ \times \ 6 \\ \hline \end{array}$$

$$\begin{array}{r} 12) \ 4929 \\ \times \ 7 \\ \hline \end{array}$$

# Growth Mindset Challenge

Fill in the gaps (no missing number is zero)

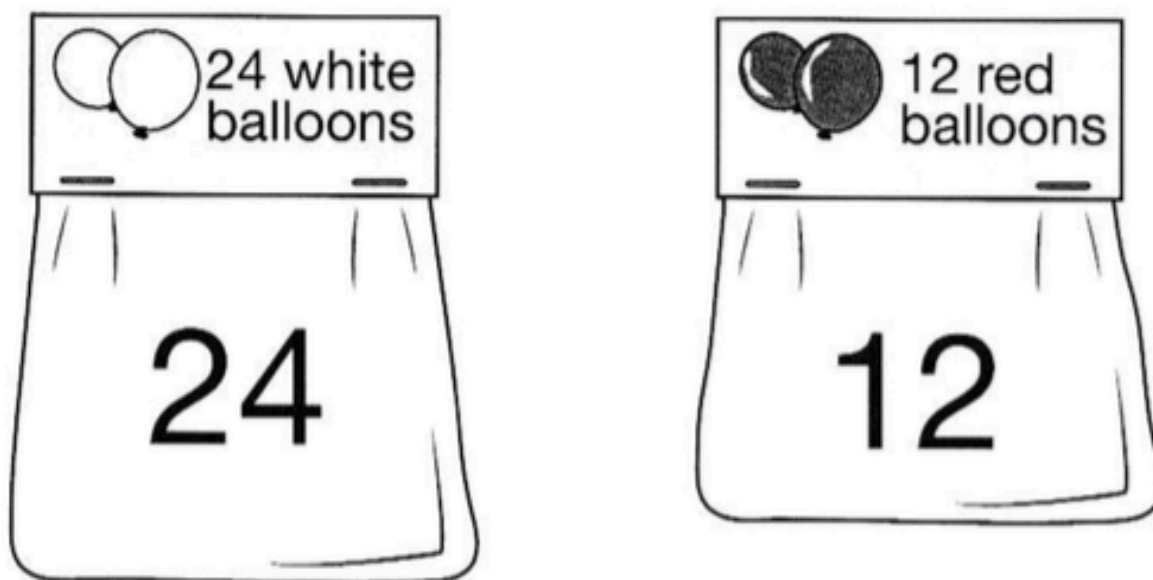
$$\begin{array}{r} \square 3 4 \\ \times \square \\ \hline 3 1 \square 0 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \square 3 \\ \times 3 \\ \hline \square \square 5 \square \\ \hline \end{array}$$

$$\begin{array}{r} \square 4 1 \\ 3 7 2 \square \\ \hline \end{array}$$

$$\begin{array}{r} 0 \square \square 3 \\ 2 \square 3 0 \square \\ \hline \end{array}$$

## Gold challenge



Adam buys **6** bags of white balloons.

Chen buys **3** bags of red balloons.

Adam says,

***'I have four times as many balloons as Chen.'***

Explain why Adam is correct.