

January

12 Times tables

$$12 \times 0 = 0$$

$$12 \times 1 = 12$$

$$12 \times 2 = 24$$

$$12 \times 3 = 36$$

$$12 \times 4 = 48$$

$$12 \times 5 = 60$$

$$12 \times 6 = 72$$

$$12 \times 7 = 84$$

$$12 \times 8 = 96$$

$$12 \times 9 = 108$$

$$12 \times 10 = 120$$

$$12 \times 11 = 132$$

$$12 \times 12 = 144$$

Whiteboards - Arithmetic Subtraction

1.0

$$80 - 76$$

2.0

$$6695 - 3354$$

3.0

$$1 - 0.03$$

4.0

$$628.5 - 39.17$$

Finished? Do response to marking

4:00

Arithmetic Answers

1.0

4

2.0

3341

3.0

0.97

4.0

589.33

What do you need to practice?
How confident were you with answering these questions?

04.01.21

LO: To multiply up to 3 digits by 1 digit
(recap)

Key words: multiply, formal method, multiplicand, multiplier

**RESPONSE
TO MARKING**

5:00

Home learning support videos if needed. Please click link then go to these videos.

<https://whiterosemaths.com/homelearning/year-5/week-1-number-multiplication-division/>

Multiply 2-digits by 1-digit



Multiply 3-digits by 1-digit



In Years 3 and 4 you were introduced to formal methods of multiplication. Today we are going to recap this before moving onto year 5 multiplication objectives.

Parts of Multiplication

$$\begin{array}{r} 15 \\ \times 2 \\ \hline 30 \end{array}$$

multiplicand
multiplier
product

Quick Assessment - copy and complete in books

REMEMBER 1 digit per box as shown below

	T	O
	4	3
x		3
<hr/>		
<hr/>		

	T	O
	3	6
x		4
<hr/>		
<hr/>		

	T	O
	7	4
x		5
<hr/>		
<hr/>		

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

What are the steps in this calculation?

What was done
1st.2nd.3rd.....?

Parts of Multiplication

$$\begin{array}{r} 15 \\ \times 2 \\ \hline 30 \end{array}$$

15 multiplicand
x 2 multiplier
30 product

Strategy card

- Ensure the larger number is at the top
- Start from the ones column
- **Multiply** the **multiplicand** and **multiplier** together
- If **the product** is more than 9 then you will need to exchange to the next digit (this will be added to next column answer)

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

Thinking Deeper

Always, sometimes or never?

When multiplying a two-digit number by a one-digit number,
the product has 3 digits.

Try these in your books

7 2 5

x

3

9 7 3

x

2

Mark your answers

7 2 5	9 7 3
x 3	x 2
<hr/>	<hr/>
2 1 7 5	1 9 4 6

Reasoning and problem solving

	T	O
	6	1
x		5
<hr/>		
	3	5
<hr/>		

Explain the mistake this person made.

How can you avoid making the same mistake?

What is the correct answer?

04.01.21

LO: To multiply up to 3 digits by 1 digit
(recap)

Key words: multiply, formal method, multiplicand, multiplier

TASK: Use strategy card for support before asking teacher

- Complete sheet.
- You can decide where you start on the sheet. **mild , medium or hot.**
- Ensure you complete at least one thinking deeper question.
- If finished please do extension questions

Mild

Task 1: mental multiplication

- a) 11×5 b) 30×3 c) 44×2 d) 101×4

Task 2 : multiplying 2 digits by 1 digit

$$\begin{array}{r} 1. \quad 24 \\ \times 4 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 22 \\ \times 5 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 18 \\ \times 5 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 26 \\ \times 3 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 12 \\ \times 5 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 48 \\ \times 2 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad 41 \\ \times 9 \\ \hline \\ \hline \end{array}$$

Task 3: Reasoning R

	T	O
	7	4
\times		7
4	9	8

Copy out in your book. Underneath do the correct calculation then explain the mistake.

This person made a mistake by doing

Task 4: Thinking Deeper

Always, sometimes or never?

When multiplying a two-digit number by 8 the product is odd.

Show at least 4 examples to prove your answer and explanation.

Medium

Task 1: multiply 2 digits by 1 digit

$$\begin{array}{r} 9. \quad 44 \\ \times 7 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 10. \quad 32 \\ \times 7 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 11. \quad 62 \\ \times 3 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 12. \quad 66 \\ \times 4 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 575 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 897 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 919 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 843 \\ \times 5 \\ \hline \end{array}$$

Task 2: Reasoning R

Copy out in your book. Underneath do the correct calculation then explain the mistake.

This person made a mistake by doing

	T	O
	2	6
\times		4
8	2	4

Task 3: Thinking deeper

Always, sometimes or never?

When multiplying a two-digit number by 7 you need to exchange.

Show at least 4 examples to prove your answer and explanation.

Hot

Task 1: Multiply 3 digits by 1 digit

$$\begin{array}{r} 222 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 597 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 585 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 773 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 743 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 607 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 719 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 857 \\ \times 9 \\ \hline \end{array}$$

Task 2:

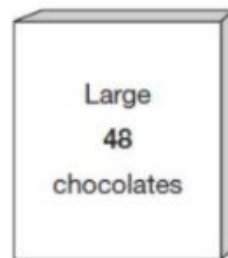
Do the thinking deeper question in medium.

Task 3: Problem solving and Reasoning PS/R

A

Ken buys 3 large boxes and 2 small boxes of chocolates.

Each large box has 48 chocolates. Each small box has 24 chocolates.



How many **chocolates** did Ken buy altogether?

B

Here are five digit cards.

0

1

4

5

8

Use **all** five digit cards to make this correct.

$\times 2 =$

Answers - Mild

Task 1

A - 55

B - 90

C - 88

D - 404

Task 2

1) 96

2) 110

3) 90

4) 78

5) 60

6) 96

7) 369

Task 3

The answer should be 518. The person made a mistake by not exchanging from the ones column into the tens, They should have added 2 to their answer of 7x7.

Task 4

This is never true because all multiples of 8 are even, therefore the ones column will always be even.

Answers Medium

Task 1

9. $\begin{array}{r} 44 \\ \times 7 \\ \hline 308 \end{array}$	10. $\begin{array}{r} 32 \\ \times 7 \\ \hline 224 \end{array}$	11. $\begin{array}{r} 62 \\ \times 3 \\ \hline 186 \end{array}$	12. $\begin{array}{r} 66 \\ \times 4 \\ \hline 264 \end{array}$
$\begin{array}{r} 575 \\ \times 2 \\ \hline 1150 \end{array}$	$\begin{array}{r} 897 \\ \times 4 \\ \hline 3588 \end{array}$	$\begin{array}{r} 919 \\ \times 3 \\ \hline 2757 \end{array}$	$\begin{array}{r} 843 \\ \times 5 \\ \hline 4215 \end{array}$

Task 2

The answer should be 104. The person made a mistake by not exchanging properly. They have put the exchange in the incorrect position.

Task 3

Sometimes: most two-digit numbers need exchanging, but not 10 or 11

Answers Hot

Hot

Task 1: Multiply 3 digits by 1 digit

$\begin{array}{r} 11 \\ 222 \\ \times 7 \\ \hline 1554 \end{array}$	$\begin{array}{r} 32 \\ 597 \\ \times 4 \\ \hline 2388 \end{array}$	$\begin{array}{r} 53 \\ 585 \\ \times 6 \\ \hline 3510 \end{array}$	$\begin{array}{r} 41 \\ 773 \\ \times 6 \\ \hline 4638 \end{array}$
$\begin{array}{r} 743 \\ \times 8 \\ \hline 5944 \end{array}$	$\begin{array}{r} 607 \\ \times 9 \\ \hline 5463 \end{array}$	$\begin{array}{r} 719 \\ \times 7 \\ \hline 5033 \end{array}$	$\begin{array}{r} 857 \\ \times 9 \\ \hline 7713 \end{array}$

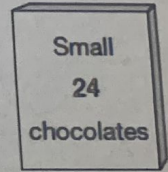
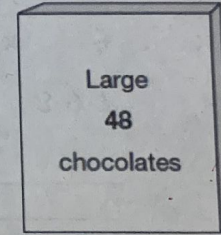
Task 3: Problem solving and Reasoning PS/R

A

Ken buys 3 large boxes and 2 small boxes of chocolates.

Each large box has 48 chocolates. Each small box has 24 chocolates.

192



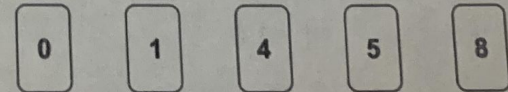
3 x 48

24 x 2

How many **chocolates** did Ken buy altogether?

B

Here are five digit cards.



Use **all** five digit cards to make this correct.

$$\boxed{54} \times 2 = \boxed{108}$$

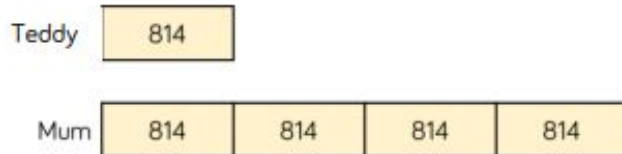
Teddy and his mum were having a reading competition.
In one month, Teddy read 814 pages.



His mum read 4 times as many pages as Teddy.

How many pages did they read altogether?

How many fewer pages did Teddy read?
Use the bar model to help.



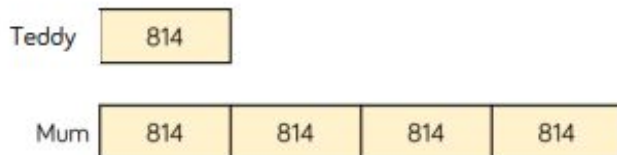
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How many fewer pages did Teddy read?
Use the bar model to help.



$$814 \times 5 = 4,070$$

They read 4,070 pages altogether.

$$814 \times 3 = 2,442$$

Teddy read 2,442 fewer pages than his mum.

Extra

Whitney uses place value counters to calculate 5×34



	H	T	O		
		3	4		
\times			5		
		2	0	(5×4)	
$+$	1	5	0	(5×30)	
	1	7	0		

Use Whitney's
method to solve

$$5 \times 42$$

$$23 \times 6$$

$$48 \times 3$$