

Multiply 3-digits by 1-digit

Notes and Guidance

Children build on previous steps to represent a three-digit number multiplied by a one-digit number with concrete manipulatives.

Teachers should be aware of misconceptions arising from 0 in the tens or ones column.

Children continue to exchange groups of ten ones for tens and record this in a written method.

Mathematical Talk

How is multiplying a three-digit number by one-digit similar to multiplying a two-digit number by one-digit?

Would you use counters to represent 84 multiplied by 8? Why?

Varied Fluency

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

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	20 20 20 20	1 1 1 1 1 1 1 1
100 100	20 20 20 20	1 1 1 1 1 1 1 1
100 100	20 20 20 20	1 1 1 1 1 1 1 1
100 100	20 20 20 20	1 1 1 1 1 1 1 1

	H	T	O
	2	4	5
x			4

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

Hundreds	Tens	Ones
100 100 100	20 20 20 20 20 20 20 20	

Multiply 3-digits by 1-digit

Reasoning and Problem Solving

Spot the mistake

Alex and Dexter have both completed the same multiplication.



Alex

	H	T	O
	2	3	4
×			6
1	2	0	4

2 2



Dexter

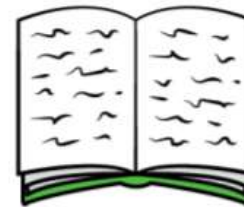
	H	T	O
	2	3	4
×			6
1	4	0	4

2 2

Who has the correct answer?

What mistake has been made by one of the children?

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.

Teddy

814

Mum

814

814

814

814