

Skill: Multiply 4-digit numbers by 1-digit numbers

Year: 5



$$1,826 \times 3 = 5,478$$

	Th	H	T	O
	1	8	2	6
\times				3
	5	4	7	8
	2		1	

When multiplying 4-digit numbers, place value counters are the best manipulative to use to support children in their understanding of the formal written method. If children are multiplying larger numbers and struggling with their times tables, encourage the use of multiplication grids so children can focus on the use of the written method.

Skill: Multiply 3-digit numbers by 2-digit numbers

Year: 5



	Th	H	T	O
		2	3	4
x			3	2
		4	6	8
1	7	0	2	0
	7	4	8	8

Children can continue to use the area model when multiplying 3-digits by 2-digits. Place value counters become more efficient to use but Base 10 can be used to highlight the size of numbers.

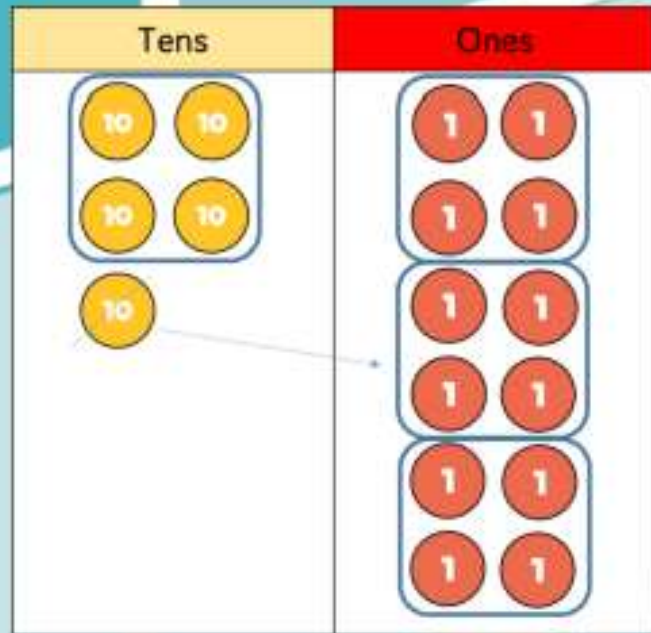
Children should now move towards the formal written method, seeing the links with the grid method.

$$234 \times 32 = 7,488$$

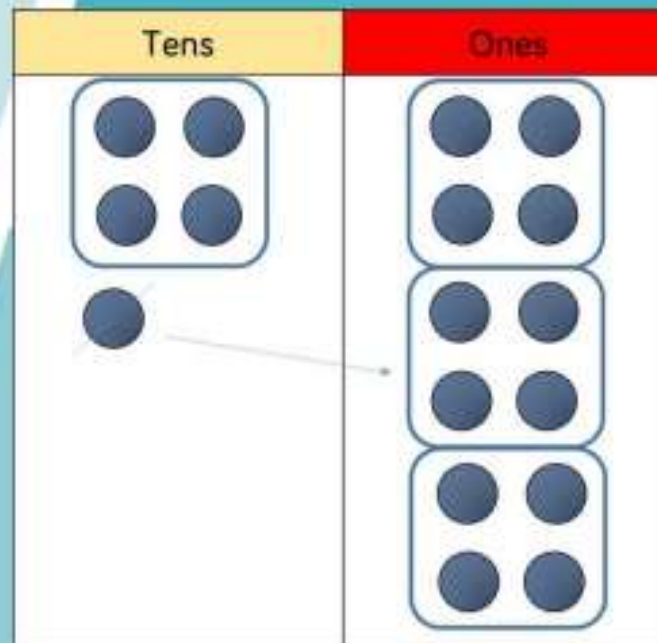
x	200	30	4
30	6,000	900	120
2	400	60	8

Skill: Divide 2-digits by 1-digit (grouping)

Year: 5



$$52 \div 4 = 13$$



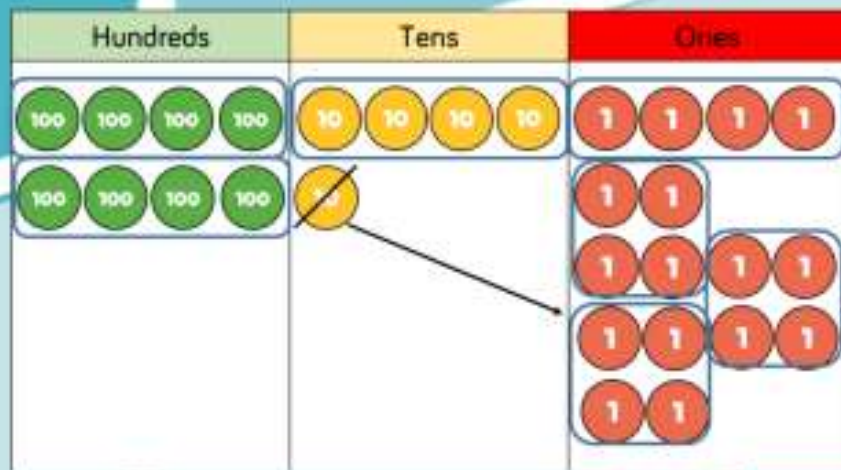
When using the short division method, children use grouping. Starting with the largest place value, they group by the divisor.

Language is important here. Children should consider 'How many groups of 4 tens can we make?' and 'How many groups of 4 ones can we make?'

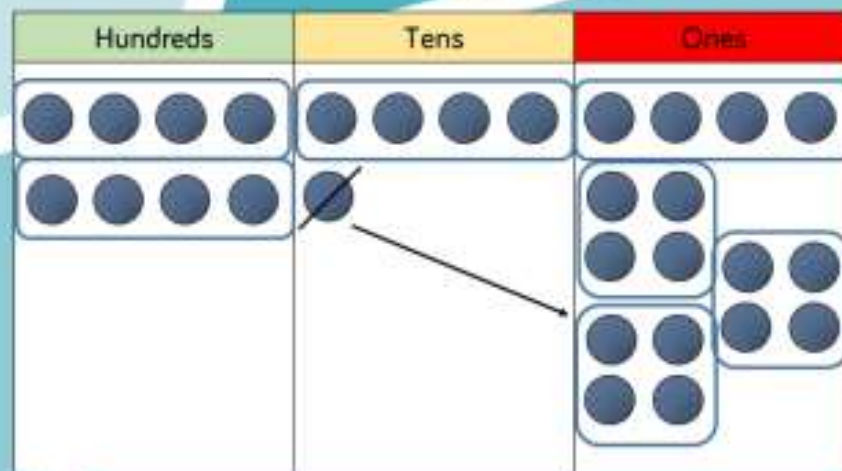
Remainders can also be seen as they are left ungrouped.

Skill: Divide 3-digits by 1-digit (grouping)

Year: 5



$$\begin{array}{r} 214 \\ 4 \overline{) 856} \\ \underline{8} \\ 0 \\ \underline{0} \\ 0 \\ \underline{0} \\ 0 \end{array}$$



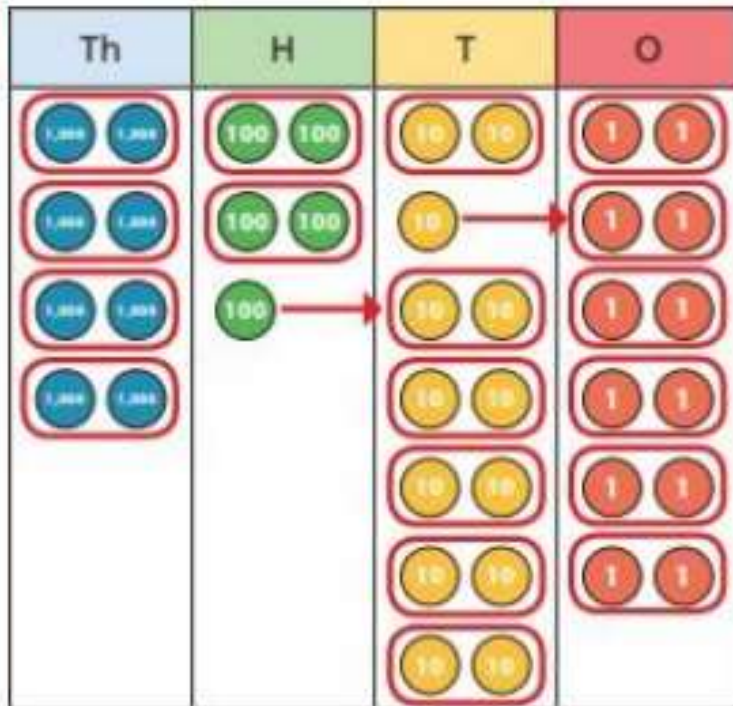
Children can continue to use grouping to support their understanding of short division when dividing a 3-digit number by a 1-digit number.

Place value counters or plain counters can be used on a place value grid to support this understanding. Children can also draw their own counters and group them through a more pictorial method.

$$856 \div 4 = 214$$

Skill: Divide 4-digits by 1-digit (grouping)

Year: 5



Place value counters or plain counters can be used on a place value grid to support children to divide 4-digits by 1-digit. Children can also draw their own counters and group them through a more pictorial method.

Children should be encouraged to move away from the concrete and pictorial when dividing numbers with multiple exchanges.

$$8,532 \div 2 = 4,266$$