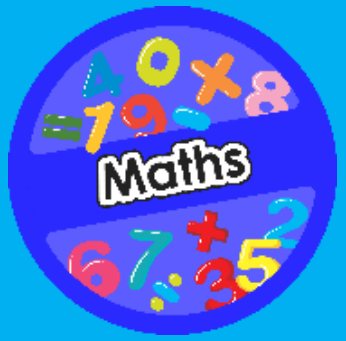
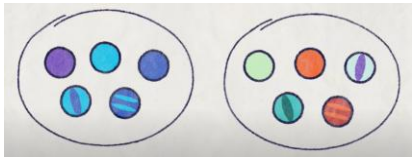
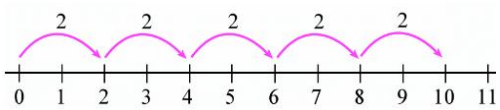
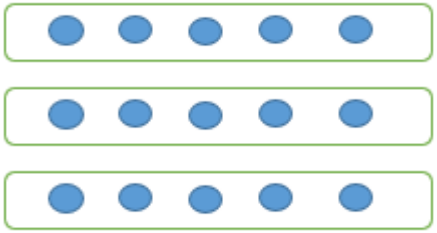
Written Methods for Multiplication.

times
equal groups of
lots of
multiply
factor
multiplier
product



EYFS	Year 1	Year 2
Counting in 1's forwards and backwards and beyond ten.	• Solve one step problems involving multiplication by calculating the answer using concrete objects, pictorial representations, and arrays with support of the teacher.	• Recall and use multiplication facts for the 2, 5 and 10 multiplication tables, including odd and even numbers. • Calculate mathematical statements. • Show that multiplication of two numbers can be done in any order (commutative) • Solve problems using materials, arrays, repeated addition, mental methods.
Strategies include:	**Strategies include:**	**Strategies include:**
N/A	Using objects 2 x 5 = 10  Drawing peas on a plate 2 x 3 = 6  3 x 4 = 12 Beginning to draw arrays (see year 2)	Use of number line 5 x 2 = 10  Arrays 3 x 5 =  Writing out multiples 6 x 5 = 30 **5, 10, 15, 20, 25, 30** By the end of year 2, children should know the 2, 5 and 10 x by heart.

Year 3	Year 4	Year 5	Year 6
• Recall and use the multiplication facts for 3, 4 and 8. • Write and calculate statements using the tables they know, two-digit x one-digit numbers, using mental and progressing to formal written methods.	• Recall and use the multiplication facts up to 12 x 12. • Multiply two and three-digit numbers by one-digit. • Solve problems including the use of distributive law.	• Identify multiples and facts. • Multiply numbers up to 4 digits by a one or two-digit number using a formal written method, including long multiplication and two-digit numbers. • Multiply and divide whole numbers and those involving decimals by 10. 100 and 1000. • Recognise and use square numbers and cube numbers.	Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method.

$5 \times 28 = \boxed{140}$

20 8

$5 \times 20 = 100$

$5 \times 8 = 40$

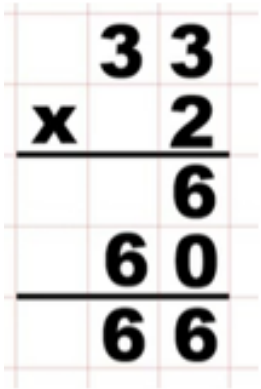
× 8 = 40

× 8 = 8

$100 + 40 = 140$

Expanded method

1 digit by 2 digit

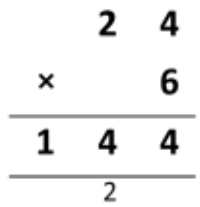


(2 x 3)

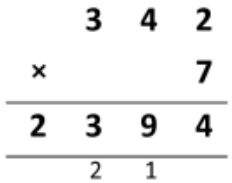
(2 x 30)

By the end of year 3, children should know the 2, 3, 4, 5, 8 and 10 x by heart.

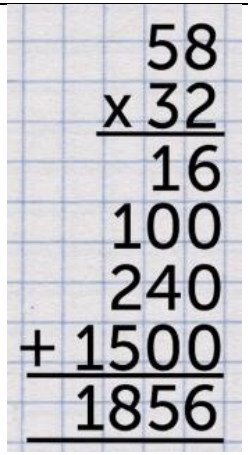
24 × 6 becomes

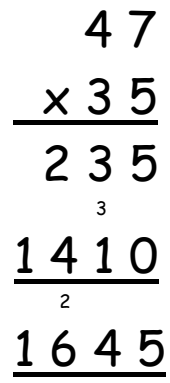


342 × 7 becomes



By the end of year 4, children should all times tables up to 12 x 12 by heart to support written calculations.





		1	4	7
×			6	2
+		2	9	4
+	8	8	2	**0**
=	9	1	1	4