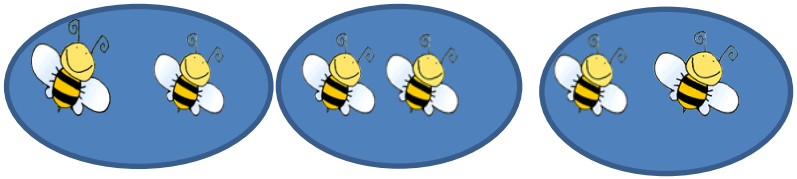
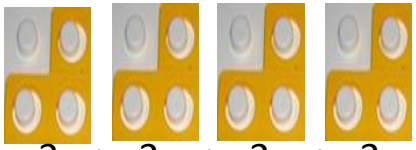
Multiplication x

Stage 1

Begin to understand the concept of 'multiplication' and recognise the' x' symbol.
Children use Numicon and visual representations to show groupings of amounts.



3 lots of 2



3 x 2 = 2
4 groups of 3
4 x 3 = 12

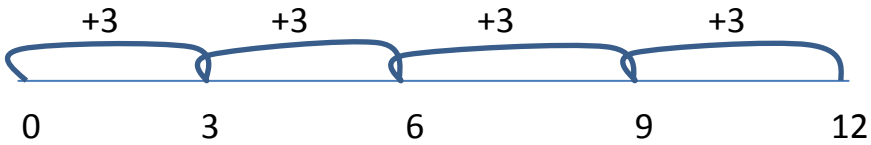
3 + 3 + 3 + 3

REPEATED ADDITION

Stage 2

To use a number line to show multiplication as repeated addition.

4 x 3 = 12 3 + 3 + 3 + 3



To use an **array** to represent multiplication and know multiplication can be done in any order. Use x symbol with confidence.

2 x 3= 6

3 x 2 = 6

Recommended by the end of year 2

Stage 3

To use '**grid method**' as an informal method to carry out multiplication calculations. Use numbers appropriate to current level of attainment.
Begin by using an array in a grid.
Using an array to leading to grid method

3 x 3

X	3
3	● ● ●

26 x 3

X	3	
20	60	60
6	18	+18
		78

372 x 4

x	4	
300	1200	1200
70	280	280
4	16	16
		1496

Recommended by the end of year 4

Stage 4

To use formal written methods to multiply by 1 or 2 digit numbers.

Short method leading to
(TU x U)
23 x 7

23
x 7
21
+ 140 (20 x 7)
161

23
x 7
161
2

Long Multiplication
(HTU x T U)
124 x 26

1 2
1 2 4
x 2 6
+ 7 4 4
2 4 8 0
3 2 2 4
1 1

Multiply a 4 digit number by a 1 digit number by the end of Year 5
Multiply a 4 digit number by a 2 digit number by the end of Year 6.