

MULTIPLICATION GUIDELINES

Year One

Multiplication is related to doubling and counting groups of the same size

Pictorial arrays & repeated addition



Looking at columns
 $2 + 2 + 2$
 3 groups of 2

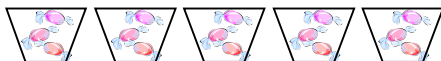
Looking at rows
 $3 + 3$
 2 groups of 3

Counting using a variety of practical resources

Counting in 2s e.g. counting socks, shoes, animal's legs...
 Counting in 5s e.g. counting fingers, fingers in gloves, toes...
 Counting in 10s e.g. fingers, toes...

Pictures / marks

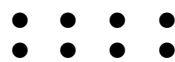
There are 3 sweets in one bag.
 How many sweets are there in 5 bags?



Application of counting patterns to solve one- step problems, calculating answers using concrete objects, pictorial representations and arrays

Year Two

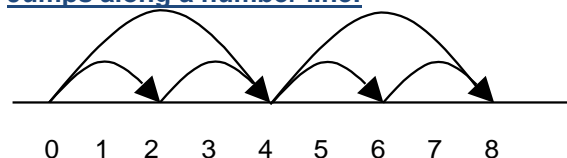
Arrays and repeated addition


 4×2 or $4 + 4$
 2×4 or $2 + 2 + 2 + 2$

Commutative rule: multiplication can be done in any order

2 groups of 4 2 lots of 4

Jumps along a number line:



x = signs and missing numbers

$7 \times 2 = \square$ $\square = 2 \times 7$
 $7 \times \square = 14$ $14 = \square \times 7$
 $\square \times 2 = 14$ $14 = 2 \times \square$
 $\square \times \nabla = 14$ $14 = \square \times \nabla$

Know 2, 5, 10 times tables facts: seeing the pattern in number/ making links between times tables

Doubling multiples of 5 up to 50

$15 \times 2 = 30$

Partition

Children need to be secure with partitioning numbers into 10s and 1s and partitioning in different ways: $6 = 5 + 1$ so
 e.g. Double 6 is the same as double five add double one.



AND double 15

$10 + 5$
 $\downarrow \quad \downarrow$
 $20 + 10 = 30$

X	10	5
2	20	10

 $= 30$

OR

Solve multiplication problems in contexts using arrays, repeated addition, mental methods, facts and inverse relationships

