

## MULTIPLICATION GUIDELINES

### Year One

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



Looking at columns  
Looking at rows

$$2 + 2 + 2 \qquad 3 + 3$$

3 groups of 2                      2 groups of 3

Counting using a variety of practical resources

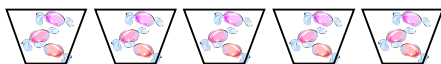
Counting in 2s e.g. counting socks, shoes, animal's legs...

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?



### Year Two

#### x = signs and missing numbers

$$7 \times 2 = \square \qquad \square = 2 \times 7$$

$$7 \times \square = 14 \qquad 14 = \square \times 7$$

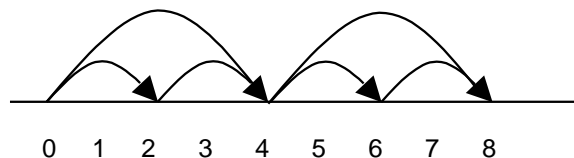
$$\square \times 2 = 14 \qquad 14 = 2 \times \square$$

$$\square \times \nabla = 14 \qquad 14 = \square \times \nabla$$

#### Arrays and repeated addition

$$4 \times 2 \text{ or } 4 + 4$$

$$2 \times 4 \text{ or } 2 + 2 + 2 + 2$$



#### 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

$$10 \quad + \quad 5$$

↓                      ↓

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

### Year Three

#### x = signs and missing numbers

Continue using a range of equations as in Year 2 but with appropriate numbers.

#### Arrays and repeated addition

Continue to understand multiplication as repeated addition and continue to use arrays (as in Year 2).

#### Doubling multiples of 5 up to 50

$$35 \times 2 = 70$$

#### Partition

AND double 35

$$\begin{array}{r} 30 \quad + \quad 5 \\ \downarrow \qquad \downarrow \\ 60 \quad + \quad 10 \quad = \quad 70 \end{array}$$

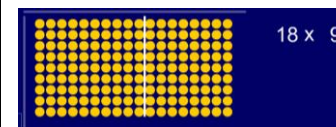
### YEAR 4

#### x = signs and missing numbers

Continue using a range of equations as in Year 2 but with appropriate numbers

#### Partition

Continue to use arrays:



162

$$18 \times 9 = 162$$

$$18 \times 9 = (10 \times 9) + (8 \times 9) =$$

