

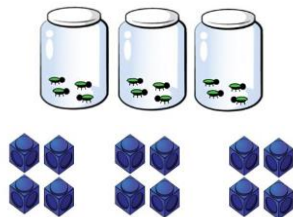
Progression in written multiplication methods

KS1

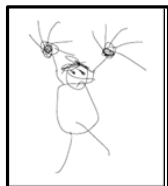
Reception

Children will be introduced to multiplication practically. There are 3 equal groups with 4 in each group. $4 + 4 + 4$

4



Children are encouraged to think of equal groups in real life situations.

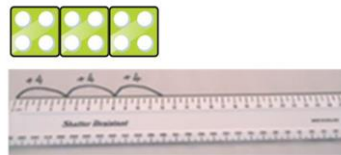


Year 1

Children will begin to understand multiplication as repeated addition.

$$3 \times 4$$

$$4 + 4 + 4$$

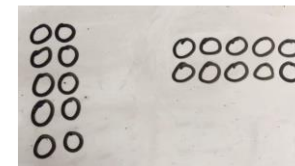


They will be encouraged to count in equal groups as a quicker way of finding the answer.



Year 2

Children will continue to use arrays, representing pictorially and using the arrays to create a range of calculations.



$$10 = 2 \times 5$$

$$5 \times 2 = 10$$

$$2 + 2 + 2 + 2 + 2 = 10$$

$$10 = 5 + 5$$

Children should progress from pictorial numberlines, to abstract.

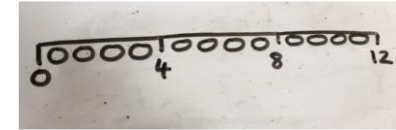
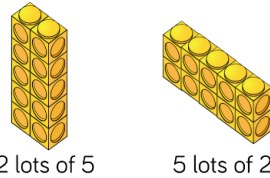
$$4 \times 3 = 12$$

A jotting of hands as doubles.



A jotting of 3 cookies on each plate.

Arrays will be used to illustrate commutivity.



Progression in written multiplication methods

KS2

Year 3

Children will be introduced to multiplying 2 and 3 digit numbers by a single number initially using the grid method with place value counters to support.

Year 4

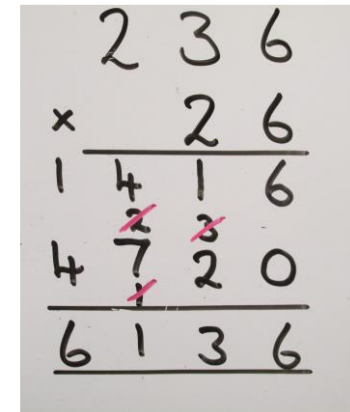
Children will multiply up to 4 digit numbers by 1 digit using 'short multiplication' method.

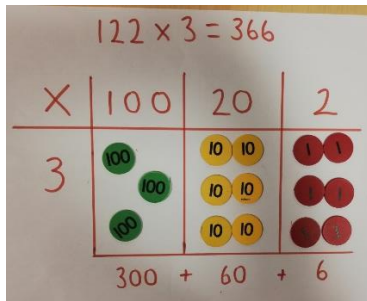
Year 5

Children will reconsolidate and refine the short multiplication method, progressing to calculations of up to 5 digits, including decimals.

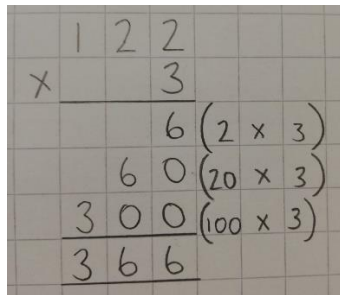
Year 6

Children will be introduced to 'long multiplication'





Children will progress to 'short multiplication' using the chunking method.



$$6 \times 23 =$$

$$\begin{array}{r} 23 \\ \times 6 \\ \hline 138 \\ 11 \end{array}$$

