

Year 3 multiply 2-digit numbers by a single digit number

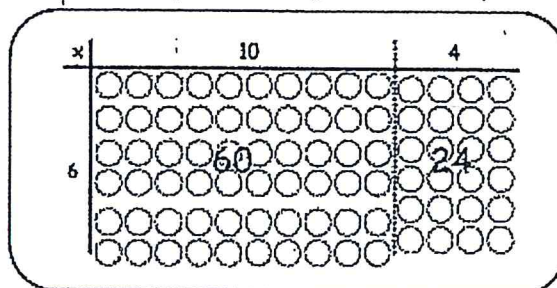
Introduce the grid method for multiplying 2 digits by 1 digit

Eg. $23 \times 8 = 184$

X	20	3
8	160	24

$$160 + 24 = 184$$

Link the layout of the grid to an array initially:



Demonstrate how the array links to the grid calculation

Children **MUST** be able to do the following before moving onto grid method:

- Partition numbers into tens and units
- Multiply multiples of ten by a single digit (Smile multiplication) using their knowledge of multiplication facts and times tables.
- Recall and work out multiplication facts in the 2,3,4,5,8 and 10 times tables

Smile Multiplication 😊

$$30 \times 80 = 2400$$

24

Do the tables bit,
Then make it 10, 100
or 1000 times bigger!

Key vocabulary groups of, lots of, times, array, altogether, multiply, count, multiplied by, repeated addition, column, row, sets of, equal groups, times as big as, once, twice, three times..., partition, grid method, multiple, product, tens, units, value

Key Skills for addition at Year 3

- Understand that multiplication is commutative, e.g. 4×8 is the same as 8×4 .
- Know the 2x, 3x, 5x and 10x times tables. All tables need to be learned to 12th multiple.
- Multiply any 2-digit number by 10 or a single-digit number by 100;
- Understand the effect of multiplying whole numbers by 10 and 100.
- Multiply a 1 digit number by a 2 digit number starting to use the grid
- Solve multiplication problems involving missing numbers