

Children need to have a secure understanding of number before beginning to calculate. We spend time counting (encouraging accuracy), looking out for numerals and talking about numbers.

## How we Teach Multiplication in Reception

123

We use the language of multiplication in every day contexts in class, for example, "we all need two googly eyes, there are six of us. How many googly eyes do we need?"  
Or  
How can we arrange this group of objects to help us count them?

We teach the children to count in 2's 5's and 10's forwards AND backwards, we then encourage the children to use this knowledge to count repeated groups of objects such as pairs of socks, fingers or eggs in a box.



The children use number lines to help them jump in 2's 5's and 10's



I have three pairs of socks in my basket.  
How many socks are there?



## How We Teach Multiplication in Year

One

123

Children use practical equipment, such as 10ps or straws bundled in tens, to practice counting in 10's



There are 3 sweets in one bag.

How many sweets are there in 5 bags?



The children are taught to identify missing numbers in number sequences, this is linked to counting in steps of different sizes.

10 20 30  50 60

The children investigate natural multiples by grouping, arranging and sorting

Eggs in a box

Corners on squares

Fingers and gloves



The children are taught to link counting in twos, fives and tens to jumping along a number line.



Children continue to use pictures, marks and informal jottings to help them to calculate

## How We Teach Multiplication in Year

TWO

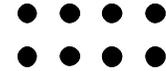
123

Children are taught to chant their times tables, they are supported by using counting sticks or number lines.

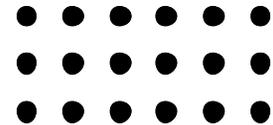
Children are encouraged to always explain their methods orally. "How did you work it out?"

The children are taught to use arrays to help them with multiplication. These can be drawn or made with peg boards.

$2 \times 4$  or  $4 \times 2$



$3 \times 6$  or  $6 \times 3$



Multiplication can be explained as repeated addition so

$3 \times 6$  is the same as  $3 + 3 + 3 + 3 + 3 + 3$

The children can then use their knowledge of addition

techniques to help i.e partitioning.  $15 \times 2$

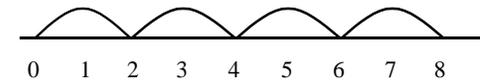
$$= 15 + 15$$

$$= 10 + 10 + 5 + 5$$

$$= 30$$

Number lines are used to support children's thinking, they draw the jumps onto prepared number lines and then move onto drawing their own number lines.

$2 \times 4$



Children record their own number sentences,

$$6 \times 5 = \square \quad \square = 5 \times 6 \quad 6 \times \square = 30 \quad 30 = \square \times 6$$

$$\square \times 5 = 30 \quad 30 = 5 \times \square \quad \square \times \square = 30 \quad 30 = \square \times \square$$

Extend to  $4 \times 3 = \square \times 2$

The children continue to use pictures to help where appropriate.

There are 4 apples in one box. How many apples in 6 boxes?

