

DRAYTON COMMUNITY INFANT SCHOOL



Calculation Policy - Multiplication

Multiplication

This policy should be followed in conjunction with the division policy so that children understand the relationship between the two calculations.

Pupils are taught to count in twos, fives and tens from 0, and then threes.

Children recall and use multiplication for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers.

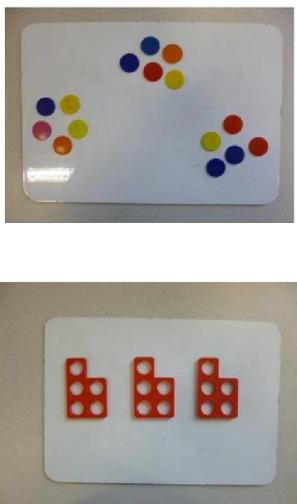
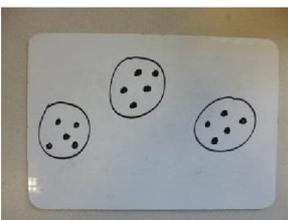
They calculate mathematical statements for multiplication within the multiplication tables and write them using the multiplication (\times) and equals (=) signs

Children are taught that multiplication of two numbers is commutative (it can be done in any order), for example $5 \times 3 = 3 \times 5$

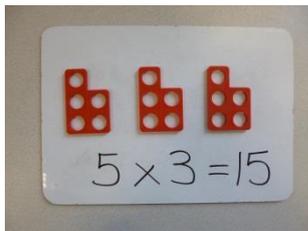
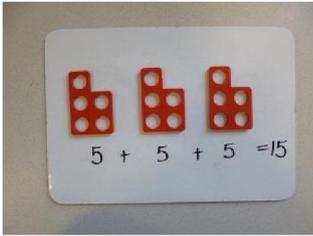
Children are given regular opportunities to solve problems involving multiplication using materials, arrays, repeated addition, mental methods, and multiplication, including problems in contexts.

- Grouping

Eg 5×3 (5 multiplied by 3). Children count the groups in 5s; 5,10,15

concrete	pictorial	abstract
		$5 \times 3 = 15$

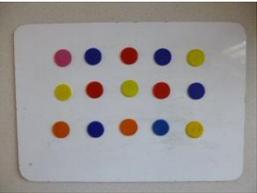
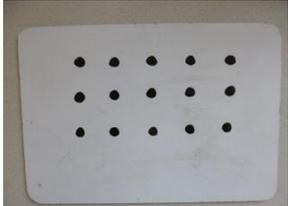
Children will be taught to relate grouping to repeated addition



- **Arrays**

Children place objects or pictures into equal rows

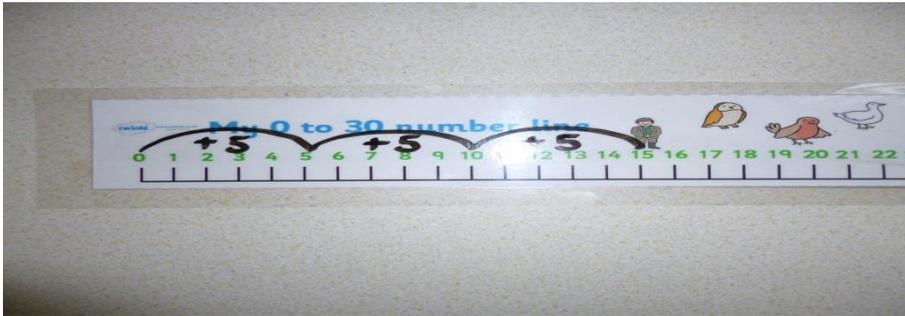
Eg 5×3 (5 multiplied by 3). Children count the rows in 5s; 5,10,15

concrete	pictorial	abstract
		$5 \times 3 = 15$

- **Repeated addition on a number line**

Eg 5×3

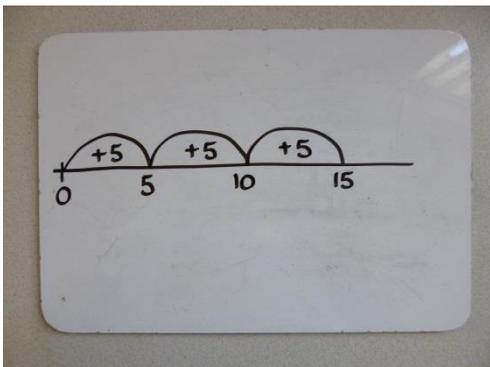
Start at 0. Add 5, then add another 5, then add another 5.



- **Repeated addition on an empty number line**

Eg 5×3

Start at 0. Add 5, then add another 5, then add another 5.



Children are encouraged to use multiplication facts to make deductions outside known multiplication facts (e.g. a pupil knows that multiples of 5 have one digit of 0 or 5 and uses this to reason that 18×5 cannot be 92 as it is not a multiple of 5).