## **Introduction of Multiplication**

Multiplication is one of the four basic arithmetic operations, alongside addition, subtraction, and division. In math, means the repeated addition of groups of equal sizes.

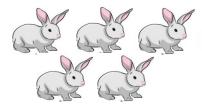
To understand more about multiplication let us look at these examples:

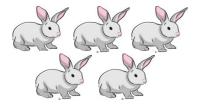
## **Addition by Grouping**

This is one group of 4 ducks.



These are two groups of 5 rabbits each.





These are three groups of 2 hen each.







## **Introduction of Multiplication**

## **Repeated Addition**

Observe the groups of pencil.







These are three groups of 4 pencils each. Let us count the total number of pencils.

$$4 + 4 + 4 = 12$$

In the above example, the same number is added over and over. This is repeated addition of the same number.

4 + 4 + 4 can also written as  $3 \times 4 = 12$ . The symbol 'x' is used as the multiplication sign. It is also read as 3 times 4 is equal to 12.

Let us now observe the groups of pencils.











There are five groups of 4 pencils.

5 times 4 is 20 or  $5 \times 4 = 20$ 

There are 20 pencil in all. 4+4+4+4+4=20 Repeated addition