

## Ch-6 Factors and Multiples

### Terms related to Factors

\* The numbers that are multiplied to get a product are called the factors of the product.

Example:-  $2 \times 8 = 16$



\* We can also say , “ **Factors of a number divide the number completely (without leaving any remainder)**”.

Example:-  $16 \div 8 = 2$  and  $16 \div 2 = 8$  and there is no remainder in each case.

### Properties of Factors

1) 1 is a factor of every number. It is also the smallest factor of a number.

**Ex :- 1 is a factor of 1, 2, 3, 4, 5 , .....**

2) Every number (other than 1) has at least two factors – 1 and the number itself.

**Ex:- 2 has 2 factors, 1 and 2 whereas 6 has 4 factors, 1, 2, 3 and 6.**

3) All the factors of a number are either less than or equal to the number.

4) A number has limited number of factors.

**Ex:- 6 has 4 factors, 1, 2, 3 and 6. It has no more factors.**

5) A number itself is the largest factor.

### Common Factors

The numbers which are common among the factors of two or more numbers are called common factors.

**Example:-** Find the common factors of 9 and 15

**Solution:-** Factors of 9 = 1, 3, 9

Factors of 15 = 1, 3, 5, 15

∴ Common Factors of 9 and 15 are 1 and 3