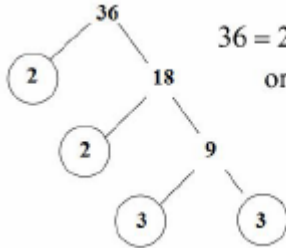


## KS3 Unit 6 Factors Multiples and Primes

Topic/Skill	Definition/Tips	Example
1. Multiple	The result of multiplying a number by an integer. The <b>times tables</b> of a number.	The first five multiples of 7 are:  7, 14, 21, 28, 35
2. Factor	A number that <b>divides exactly</b> into another number without a remainder.  It is useful to write factors in pairs	The factors of 18 are: 1, 2, 3, 6, 9, 18  The factor pairs of 18 are: 1, 18 2, 9 3, 6
3. Lowest Common Multiple (LCM)	The <b>smallest</b> number that is in the <b>times tables</b> of each of the numbers given.	The LCM of 3, 4 and 5 is 60 because it is the smallest number in the 3, 4 and 5 times tables.
4. Highest Common Factor (HCF)	The <b>biggest</b> number that <b>divides exactly</b> into two or more numbers.	The HCF of 6 and 9 is 3 because it is the biggest number that divides into 6 and 9 exactly.
5. Prime Number	A number with <b>exactly two factors</b> .  A number that can only be divided by itself and one.  The number <b>1 is not prime</b> , as it only has one factor, not two.	The first ten prime numbers are:  2, 3, 5, 7, 11, 13, 17, 19, 23, 29
6. Prime Factor	A factor which is a prime number.	The prime factors of 18 are:  2, 3
7. Product of Prime Factors	Finding out which <b>prime numbers multiply</b> together to make the <b>original</b> number.  Use a <b>prime factor tree</b> .  Also known as 'prime factorisation'.	 <p><math>36 = 2 \times 2 \times 3 \times 3</math> or <math>2^2 \times 3^2</math></p>