

Prime and Composite Numbers

A *prime* number is a whole number (greater than one) that only has two factors which are itself and one.

For example the prime numbers up to 100 are 2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47, 53, 59, 61, 67, 71, 73, 79, 83, 89 and 97.

Any number (greater than one) that is not a prime number is said to be a *composite* number.

For example 4,6,8,9,10,12,14,15,... are composite.

Every whole number greater than one is either prime or is composite. A composite number is the product of primes.

For example $4 = 2 \times 2$, $6 = 3 \times 2$, $8 = 2 \times 2 \times 2$, $9 = 3 \times 3$, $10 = 2 \times 5$ and so on; every composite number can be written as the product of two or more prime numbers. This is also called the prime factorisation.

Two numbers that have no common factor except 1 are said to be *relatively prime*.

For example 10 and 21 are relatively prime since their prime factorisations are $10 = 2 \times 5$, $21 = 3 \times 7$; they have no common prime factor.

Other resources

[Online test on prime numbers at aaamath.com: http://www.aaamath.com/g8-72-prime-or-composite.html](http://www.aaamath.com/g8-72-prime-or-composite.html)

[Online Tutorial at mathsisfun.com: http://www.mathsisfun.com/prime-composite-number.html](http://www.mathsisfun.com/prime-composite-number.html)

[Prime Calculator from easycalculation.com: http://www.easycalculation.com/prime-number.php](http://www.easycalculation.com/prime-number.php)