

# K Numbers: A Novel Approach in the Study of Composite Numbers

Kumar, Adarsh (School: Delhi Public School)

Primes are the building blocks of composite numbers. One day I gifted a mathematical property of the birthdate (9) of one my friend as a birthday present, I observed a unique and interesting property of number 9. So 9 is the smallest composite number which is the product of 2 primes (3,3) and there sum (i.e. 6) also have 2 factors (2,3) whose further sum is a prime (i.e. 5). And those numbers which follow such type of conditions (rest are detailed described in my project) I called them 'K Numbers'. And 'K Function' which I myself introduced in my work is described as the sum of all prime factors of any particular composite number. So getting a prime after summing up the factors of that composite number have a unique property of K Numbers. And how the number of factors increases or decreases in sequence, non-sequence or constant manner with respect to the initial state of the number gives birth to different types of K Numbers. Later observing different conditions followed by different composite numbers I am able to set 9 types of 'K Numbers'. In short by all those types of K Numbers we can define all composite numbers by which we can study them with a novel approach and in a deep manner. My research deals to study composite numbers with respect to the primes. For the further aspect of the research, I used K Function in the loop formations of Primes which is another a new interesting observation.