

NUMERATION AND NOTATION.

Arithmetic is the science which treats of numbers.

A Unit is a single thing.

A Number is a unit, or a group of units.

Numeration is the art of expressing numbers in words—orally, or in writing.

Notation is the art of expressing numbers by symbols—figures, or letters.

There are two systems of notation—Arabic, and Roman.

Arabic Notation.

Arabic Notation is a method of expressing numbers by means of ten figures—1, 2, 3, 4, 5, 6, 7, 8, 9, 0.

Figures are symbols used to represent numbers.

The Digits are the figures 1, 2, 3, 4, 5, 6, 7, 8, 9.

0 is called zero, cipher or naught. It has no value of its own, but is used to give the proper position and value to the other figures.

Arabic Notation is a decimal system—ten of each denomination making one of the higher denomination.

The Denomination of each figure is indicated by its position in the number.

A Period consists of three figures, named from the right, **units, tens and hundreds**, respectively.

Beginning at the right, the periods are named **units, thousands, millions, billions, trillions, quadrillions, quintillions, sextillions, septillions, octillions, nonillions, decillions**, etc.

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