WHAT IS COMPOUND INTEREST?

Compound interest is interest that is paid on both the principal and also on any interest from past years. So it is interest paid on previously earned interest. It's often used when someone reinvests any interest they gained back into the original investment. For example, if we got 15% interest on our $1000 investment, the first year and we reinvested the money back into the original investment, then in the second year, we would get 15% interest on $1000 and the $150 we reinvested.

The formula used to calculate compound interest is:

$$M = P(1 + i)^n$$

M is the final amount including the principal.

P is the principal amount.

i is the rate of interest per year.

n is the number of years invested.

Applying the Formula

Let's say that we have $1000.00 to invest for 3 years at rate of 5% compound interest.

$$M = 1000\ (1 + 0.05)^3 = \$1157.62.$$

You can see that our $1000.00 is worth $1157.62.