Compound Interest

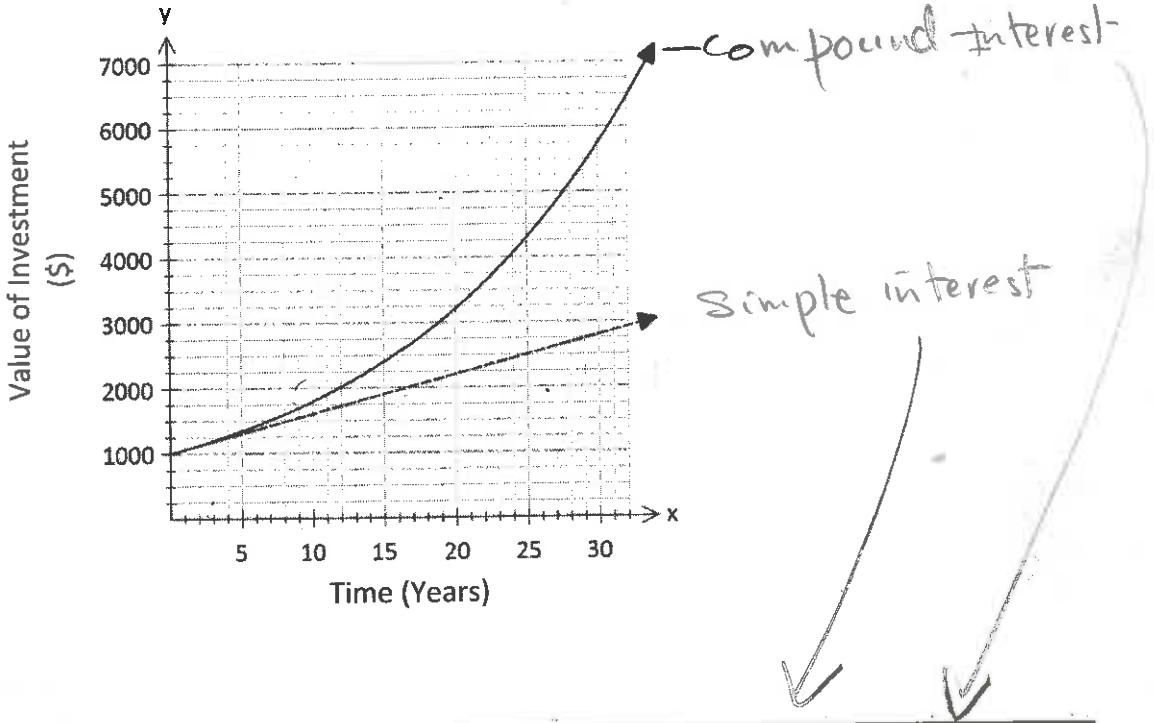
In compound interest, the interest earned during the first year is added to the original principal to form a new principal. This causes the principal to increase every year and since the principal amount increases every year, the amount of interest earned every year will also increase.

Example 2

Let's look at the same amount of money, $1000 deposited in a savings account earning 6% interest compounded annually.

$I = 1000 \times 0.06 \times 1$	$I = \$60$	Value at end of 1 year is $1060.00
$I = 1060 \times 0.06 \times 1$	$I = \$63.60$	Value at end of 2 years is $1123.60

Notice that with compound interest, the amount of interest earned during year 1 is added to the principal. This increases the principal, also increasing the amount of interest earned in year 2. Compound interest can be thought of as "earning interest on interest". This results in a larger value for the investment after 2 years. Although in this example, the difference is only $3.60, as time passes, the investment calculated with compound interest will grow quicker than the deposit at simple interest. In 30 years, the investment earning simple interest will be worth $2800 while the investment earning compound interest will be worth $5743.49!



In conclusion, over the long term, investments earning compound interest will grow quicker and increase in value faster that the same amount invested at simple interest.