Mountain Peeks Submission
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Gigahertz Vs. Megabytes

"We stand at the doorstep of a new computing era", is what was said when the first Pentium chip came out. They boasted fast processor speeds measured not with the x86 scale most of us knew of, but by sure processing speed measured in Megahertz, essentially the speed at which the power runs thru the soul of the computer. They were labeled the Pentium Processor and rated in a new scale that takes a more technical term, and quite possibly a more confusing term than the standard of the previous era. With all the Computer Lingo that has surfaced in the last few years what does all of it mean? Some of the most common Questions I hear from home users involve Megahertz, Megabytes, Gigabytes, Megabits and, Gigahertz.

We see Giga a lot in front of more commonly used words like bit, byte, and hertz. Also Mega is used in front of the same three words. And these two word prefixes Giga and Mega refer to the number of times the Root word either hertz, bytes, or bits is repeated or counted. Mega means essentially, One million (10^6 that's ten to the sixth power or 10 X 10 X 10 X10 X 10 X 10 = 1,000,000} and Giga is one billion (10^9).
What this measurement is used to calculate is a different story, there's bits, bytes, and hertz right? Each means different things, and although bits and bytes are almost the same, hertz is definitely not.

A bit is definitely the smallest amount of information a computer can process and is represented by either a 1 or a 0. This is called binary and is the only thing a computer can understand. Eight bits is a byte, and the user can interpret one byte as a character on the screen. Thus megabytes are one million bytes, and megabits would refer to one million bits. On the other hand hertz is a unit of frequency equal to one cycle per second, or one process per second in reference to computers. So if megabits are one million bits Megahertz is one million processes per second. And Gigahertz would be one billion processes per second. Thus determining a lot of how fast a computer can process a request by the user.