

METRIC PREFIXES AND CONVERSIONS

	PREFIX	POWER OF TEN
	tera (T)	10^{12}
	-----	10^{11}
	-----	10^{10}
	giga (G)	10^9
	-----	10^8
	-----	10^7
Converting from a <u>larger to a smaller</u> metric unit means moving the decimal point to the right the same number of places as the prefixes or powers of 10 you move through on the chart.	mega (M)	10^6
	-----	10^5
	-----	10^4
	kilo (k)	10^3
	hecto (h)	10^2
	deka (da)	10^1
	Base Unit (m,g,s, mole, etc.)	10^0 (1)
	deci (d)	10^{-1}
	centi (c)	10^{-2}
	milli (m)	10^{-3}
	-----	10^{-4}
	-----	10^{-5}
	micro (μ)	10^{-6}
	-----	10^{-7}
	-----	10^{-8}
	nano (n)	10^{-9}
	-----	10^{-10}
	-----	10^{-11}
	pico (p)	10^{-12}

By combining the fundamental SI units, we obtain measurement units used to express other quantities. The measurements used to express measurements like velocity, area, volume, density, force, etc. are called **derived units**.

Example 1: Convert 6.5 Mg to micrograms (μg).

Example 2: Convert 7.8 nm to kilometers (km).