

Metric Conversion

Base Unit - This is the unit for which all other units are named as they are relative to it. There are three base units. They are:

Meter (m) – length

Liter (l) – capacity

Gram (g) – mass

Prefix	Number	Factor	Word name
Tera – (T)	1,000,000,000,000	10^{12}	Trillion
Giga – (G)	1,000,000,000	10^9	Billion
Mega – (M)	1,000,000	10^6	Million
Kilo – (k)	1,000	10^3	Thousand
Hecta – (h)	100	10^2	Hundred
Deka – (da)	10	10^1	Ten
Base unit – meter, liter, gram	1	10^0	One
Deci – (d)	.1	10^{-1}	Tenth
Centi – (c)	.01	10^{-2}	Hundredth
Milli – (m)	.001	10^{-3}	Thousandth
Micro – (μ)	.000001	10^{-6}	Millionth
Nano – (n)	.000000001	10^{-9}	Billionth
Pica – (p)	.000000000001	10^{-12}	Trillionth

- To change from one unit to another, you only need to move your decimal place.
- If you change from a lower unit to a higher unit, move your decimal point to the left the number of times you move on the chart.

<p>Example : <u>3</u> cm = ___ hm</p> <p>0.003 cm = .0003 hm</p>	<p>To change from cm to hm, you move UP on the chart 4 spaces, so you move your decimal point 4 times to the LEFT</p>
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- If you change from a higher unit to a lower unit, move your decimal point to the right the number of times you move on the chart.

<p>Example : <u>7</u> km = ___ cm</p> <p>700000 km = 700,000 cm</p>	<p>To change from km to cm, you move DOWN on the chart 5 spaces, so you move your decimal point 5 times to the RIGHT</p>
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