

Metric System + SI Units

A measurement has two parts:

A number value & a unit

Example: 9.6 cm MUST HAVE BOTH!
number value unit

Metric system is a base 10 system and used in all countries except three: U.S., Liberia, Myanmar.

Metric system is easy to convert values because all numbers are related by a factor of ten.

Example conversions:

1) 1000.m = 10 hm Going from smaller → larger, you move decimal place to the left.
or

$$1000\cancel{m} \times \frac{1\text{hm}}{100\cancel{m}} = 10\text{hm}$$

2) 1L = 1000 mL Going from larger → smaller, you move decimal place to the right.
1,000

or $1\cancel{K} \times \frac{1000\text{mL}}{1\cancel{K}} = 1000\text{mL}$

SI units of measurement

<u>What is being measured</u>	<u>SI unit</u>	<u>symbol for unit</u>
Mass	Kilogram	Kg
Length	meter	m
Volume	liter	L
Force	Newton	N
Temperature	Kelvin	K
Time	second	s