

# Metric System

kilo	hecto	deca	<b>Basic Unit</b> gram (g) liter (L) meter (m)	deci	centi	milli
(k)	(h)	(da)		(d)	(c)	(m)
1000	100	10		.1	.01	.001
$10^3$	$10^2$	$10^1$		$10^{-1}$	$10^{-2}$	$10^{-3}$

**TABLE 2-2 SI Prefixes**

Prefix	Unit abbreviation	Exponential factor	Meaning	Example
tera	T	$10^{12}$	1 000 000 000 000	1 terameter (Tm) = $1 \times 10^{12}$ m
giga	G	$10^9$	1 000 000 000	1 gigometer (Gm) = $1 \times 10^9$ m
mega	M	$10^6$	1 000 000	1 megameter (Mm) = $1 \times 10^6$ m
kilo	k	$10^3$	1000	1 kilometer (km) = 1000 m
hecto	h	$10^2$	100	1 hectometer (hm) = 100 m
deka	da	$10^1$	10	1 dekameter (dam) = 10 m
		<b><math>10^0</math></b>	<b>1</b>	<b>1 meter (m)</b>
deci	d	$10^{-1}$	1/10	1 decimeter (dm) = 0.1 m
centi	c	$10^{-2}$	1/100	1 centimeter (cm) = 0.01 m
milli	m	$10^{-3}$	1/1000	1 millimeter (mm) = 0.001 m
micro	$\mu$	$10^{-6}$	1/1 000 000	1 micrometer ( $\mu$ m) = $1 \times 10^{-6}$ m
nano	n	$10^{-9}$	1/1 000 000 000	1 nanometer (nm) = $1 \times 10^{-9}$ m
pico	p	$10^{-12}$	1/1 000 000 000 000	1 picometer (pm) = $1 \times 10^{-12}$ m
femto	f	$10^{-15}$	1/1 000 000 000 000 000	1 femtometer (fm) = $1 \times 10^{-15}$ m
atto	a	$10^{-18}$	1/1 000 000 000 000 000 000	1 attometer (am) = $1 \times 10^{-18}$ m