

Orders of magnitude

(Engineering Notation)

Metric prefixes								
Prefix	Symbol	1000^m	10^n	Decimal	Short scale	Long scale	Since ^[n 1]	
yotta	Y	1000^8	10^{24}	10000000000000000000000000000000	Septillion	Quadrillion	1991	
zetta	Z	1000^7	10^{21}	1000000000000000000000000000000	Sextillion	Trilliard	1991	
exa	E	1000^6	10^{18}	1000000000000000000000000000000	Quintillion	Trillion	1975	
peta	P	1000^5	10^{15}	1000000000000000000000000000000	Quadrillion	Billiard	1975	
tera	T	1000^4	10^{12}	1000000000000000000000000000000	Trillion	Billion	1960	
giga	G	1000^3	10^9	1000000000000000000000000000000	Billion	Milliard	1960	
mega	M	1000^2	10^6	1000000000000000000000000000000	Million		1960	
kilo	k	1000^1	10^3	1000000000000000000000000000000	1000	Thousand		1795
hecto	h	$1000^{2/3}$	10^2	1000000000000000000000000000000	100	Hundred		1795
deca	da	$1000^{1/3}$	10^1	1000000000000000000000000000000	10	Ten		1795
		1000^0	10^0	1000000000000000000000000000000	1	One		—
deci	d	$1000^{-1/3}$	10^{-1}	1000000000000000000000000000000	0.1	Tenth		1795
centi	c	$1000^{-2/3}$	10^{-2}	1000000000000000000000000000000	0.01	Hundredth		1795
milli	m	1000^{-1}	10^{-3}	1000000000000000000000000000000	0.001	Thousandth		1795
micro	μ	1000^{-2}	10^{-6}	1000000000000000000000000000000	0.000001	Millionth		1960
nano	n	1000^{-3}	10^{-9}	1000000000000000000000000000000	0.0000001	Billionth	Milliardth	1960
pico	p	1000^{-4}	10^{-12}	1000000000000000000000000000000	0.000000000001	Trillionth	Billionth	1960
femto	f	1000^{-5}	10^{-15}	1000000000000000000000000000000	0.000000000000001	Quadrillionth	Billiardth	1964
atto	a	1000^{-6}	10^{-18}	1000000000000000000000000000000	0.000000000000000001	Quintillionth	Trillionth	1964
zepto	z	1000^{-7}	10^{-21}	1000000000000000000000000000000	0.000000000000000000001	Sextillionth	Trilliardth	1991
yocto	y	1000^{-8}	10^{-24}	1000000000000000000000000000000	0.000000000000000000000001	Septillionth	Quadrillionth	1991

1. ^ The metric system was introduced in 1795 with six prefixes. The other dates relate to recognition by a resolution of the CGPM.