

Chapter E:

Scientific notation:

$$3.111 \cdot 10^n$$

$$z^a \cdot z^b = z^{a+b}$$

$$z^{-a} = \frac{1}{z^a}$$

SI base units

meter	m	length
kilogram	kg	mass
second	s	time
Kelvin	K	temperature
mole	mol	amount of substance
Ampere	A	electric current
candela	cd	luminous intensity

Speed is a compound unit

$$1 \text{ mL} = 1 \text{ cm}^3$$

$$1 \text{ L} = 1000 \text{ cm}^3$$

speed of light is $3.0 \cdot 10^8$ m/s

prefixes:

P	peta	10^{15}
T	tera	10^{12} trillion
G	giga	10^9 billion
M	mega	10^6 million
K	kilo	10^3 thousand
m	mili	10^{-3} 1/ thousand
μ	micro	10^{-6} 1/ million
n	nano	10^{-9} 1/ billion
p	pico	10^{-12} 1/ trillion
f	femto	10^{-15}

$W = \text{watt} = \text{power} = \text{J/s}$

energy used per second
J / s