

π	pi	3
G	Newton's constant	$7 \cdot 10^{-11} \text{ kg}^{-1} \text{ m}^3 \text{ s}^{-1}$
c	speed of light	$3 \cdot 10^8 \text{ m s}^{-1}$
k_B	Boltzmann's constant	$10^{-4} \text{ eV K}^{-1}$
e	electron charge	$1.6 \cdot 10^{-19} \text{ C}$
σ	Stefan–Boltzmann constant	$6 \cdot 10^{-8} \text{ W m}^{-2} \text{ K}^{-4}$
m_{sun}	Solar mass	$2 \cdot 10^{30} \text{ kg}$
R_{earth}	Earth radius	$6 \cdot 10^6 \text{ m}$
$\theta_{\text{moon/sun}}$	angular diameter	10^{-2}
ρ_{air}	air density	1 kg m^{-3}
ρ_{rock}	rock density	5 g cm^{-3}
$\hbar c$		200 eV nm
$L_{\text{vap}}^{\text{water}}$	heat of vaporization	2 MJ kg $^{-1}$
γ_{water}	surface tension of water	10^{-1} N m^{-1}
a_0	Bohr radius	0.5 Å
a	typical interatomic spacing	3 Å
N_A	Avogadro's number	$6 \cdot 10^{23}$
\mathcal{E}_{fat}	combustion energy density	9 kcal g $^{-1}$
E_{bond}	typical bond energy	4 eV
$\frac{e^2}{4\pi\epsilon_0}$	fine-structure constant α	10^{-2}
p_0	air pressure	10^5 Pa
ν_{air}	kinematic viscosity of air	$1.5 \cdot 10^{-5} \text{ m}^2 \text{ s}^{-1}$
ν_{water}	kinematic viscosity of water	$10^{-6} \text{ m}^2 \text{ s}^{-1}$
day		10^5 s
year		$\pi \cdot 10^7 \text{ s}$
F	solar constant	1.3 kW m $^{-2}$
AU	distance to sun	$1.5 \cdot 10^{11} \text{ m}$
P_{basal}	human basal metabolic rate	100 W
K_{air}	thermal conductivity of air	$2 \cdot 10^{-2} \text{ W m}^{-1} \text{ K}^{-1}$
K	... of non-metallic solids/liquids	$1 \text{ W m}^{-1} \text{ K}^{-1}$
K_{metal}	... of metals	$10^2 \text{ W m}^{-1} \text{ K}^{-1}$
c_p^{air}	specific heat of air	1 J g $^{-1} \text{ K}^{-1}$
c_p	... of solids/liquids	25 J mole $^{-1} \text{ K}^{-1}$