## **Data sheet**

## **Data sheet: Table of physical parameters**

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Speed of light in vacuum	$c = 2.998 \times 10^8 \mathrm{m  s^{-1}}$
Planck's constant over $2\pi$	$\hbar = 1.055 \times 10^{-34} \mathrm{J s}$
Gravitational constant	$G = 6.67 \times 10^{-11} \mathrm{m}^3 \mathrm{kg}^{-1} \mathrm{s}^{-2}$
Gravitational acceleration	$g = 9.82 \text{ m s}^{-2}$
Elementary charge	$e = 1.602 \times 10^{-19} \mathrm{C}$
Electric permittivity of vacuum	$\varepsilon_0 = 8.854 \times 10^{-12} \mathrm{C^2  J^{-1}  m^{-1}}$
Electron mass	$m_e = 9.109 \times 10^{-31} \mathrm{kg}$
Avogadro constant	$N_{\rm A} = 6.022 \times 10^{23}  \rm mol^{-1}$
Boltzmann constant	$k_{\rm B} = 1.381 \times 10^{-23}  \rm J  K^{-1}$
Stony meteorite, specific heat	$c_{\rm sm} = 1.2 \times 10^3 \mathrm{Jkg^{-1}K^{-1}}$
Stony meteorite, thermal conductivity	$k_{\rm sm} = 2.0  {\rm W  m^{-1}  K^{-1}}$
Stony meteorite, density	$ \rho_{\rm sm} = 3.3 \times 10^3  \rm kg  m^{-3} $
Stony meteorite, melting point	$T_{\rm sm} = 1.7 \times 10^3 \mathrm{K}$
Stony meteorite, specific melting heat	$L_{\rm sm} = 2.6 \times 10^5  \rm J  kg^{-1}$
Silver, molar mass	$M_{\rm Ag} = 1.079 \times 10^{-1}  \rm kg  mol^{-1}$
Silver, density	$\rho_{\rm Ag} = 1.049 \times 10^4 \ {\rm kg \ m^{-3}}$
Silver, specific heat capacity	$c_{\rm Ag} = 2.40 \times 10^2 \mathrm{Jkg^{-1}K^{-1}}$
Water, molar mass	$M_{\rm wa} = 1.801 \times 10^{-2} \mathrm{kg  mol^{-1}}$
Water, density	$ \rho_{\rm wa} = 0.998 \times 10^3  \rm kg  m^{-3} $
Water, specific heat capacity	$c_{\rm wa} = 4.181 \times 10^3 \mathrm{J  kg^{-1} K^{-1}}$
Water, heat of vaporization	$L_{\rm wa} = 2.260 \times 10^6 \mathrm{Jkg^{-1}}$
Water, boiling temperature	$T_{100} = 100  ^{\circ}\text{C} = 373.15  \text{K}$
Ice, density of glacier	$ ho_{ m ice} = 0.917  imes 10^3 \ { m kg \ m^{-3}}$
Steam, specific heat capacity	$c_{\rm st} = 2.080 \times 10^3 \mathrm{J  kg^{-1}  K^{-1}}$
Earth, mass of the	$m_{\rm E} = 5.97 \times 10^{24}  \rm kg$
Earth, radius of the	$R_{\rm E} = 6.38 \times 10^6  \rm m$
Sun, mass of the	$m_{\rm S} = 1.99 \times 10^{30}  \rm kg$
Sun, radius of the	$R_{\rm S} = 6.96 \times 10^8 \mathrm{m}$
Average Sun-Earth distance	$a_{\rm E} = 1.50 \times 10^{11}  \rm m$