TABLE OF CONSTANTS

Acceleration due to gravity $g = 9.8\ m/s^2$

Velocity of sound in air v = 331 m/s at STP [*Note*: a different value applies to other conditions and may be given in problems as needed]

Velocity of light in air/vacuum $c = 3 \times 10^8$ m/s

Gravitational constant $G = 6.67 \times 10^{-11}\ N \cdot m^2/kg^2$

1 Angstrom = 10^{-10} m

1 Hertz (Hz) = 1 cycle/s

Density of water at STP = $10^3\ kg/m^3 = 1\ g/cm^3$

Atmospheric pressure = 1.01×10^5 Pa

Mass of electron $m_e = 9.1 \times 10^{-31}$ kg

Mass of proton $m_p = 1.67 \times 10^{-27}$ kg

Radius of Earth = 6.37×10^6 m Mass of Earth = 5.98×10^{24} kg

Radius of Moon = 1.74×10^6 m Mass of Moon = 7.36×10^{22} kg

Radius of Sun = 7×10^5 km Mass of Sun = 2×10^{30} kg

Average distance Earth to Sun = 1 AU = 1.5×10^8 km