

Acceleration due to gravity on Earth g 9.8 m/s2

Radius of the Earth rE 6.38 x 106 m

Mass of the Earth mE 5.98 x 1024 kg

Newton’s Universal Gravitation Constant G 6.67 x 10-11 Nm2/kg2

Coulomb’s Constant k 9.0 x 109 Nm2/C2

Charge on an electron / proton qe 1.602 x 10-19 C

Coulomb C 6.242 x 1018 electrons

Permeability Constant µo 4π x 10-7 Tm/A

Speed of Light (in a vacuum) c 2.998 x 108 m/s

1 nm = 1 x 10-9 m 1 µm = 1 x 10-6 m