Celestial Body Information

Sun:
  Mass = 329,390 x Mass of the Earth
  Diameter = 1,390,600 Km = 864,100 miles

Earth:
  Mass = 5.983 x 10^{24} Kg
  Diameter = 12,756 Km = 7,926 miles
  Centerline Distance from Sun = 149 x 10^6 Km = 92.9 x 10^6 miles

Moon:
  Mass = 0.01228 x Mass of the Earth
  Diameter = 3,476 Km = 2,160 miles