

1.34 The average density of the Earth is 5.52 g/cm³.
 What is its density kg/m³? ...in lb/ft³?

$$\frac{5.52 \cancel{g}}{1 \cancel{\text{cm}}^3 \cancel{\text{cm}} \cancel{\text{cm}}} \times \frac{1 \text{ kg}}{1000 \cancel{g}} \times \frac{1 \cancel{\text{cm}}}{1 \times 10^{-2} \text{ m}} \times \frac{1 \cancel{\text{cm}}}{1 \times 10^{-2} \text{ m}} \times \frac{1 \cancel{\text{cm}}}{1 \times 10^{-2} \text{ m}} =$$

5.52 × 10³ kg/m³

Alternately....

$$\frac{5.52 \cancel{g}}{1 \cancel{\text{cm}}^3 \cancel{\text{cm}} \cancel{\text{cm}}} \times \frac{1 \text{ kg}}{1000 \cancel{g}} \times \left[\frac{1 \cancel{\text{cm}}}{1 \times 10^{-2} \text{ m}} \right]^3 = 5.52 \times 10^3 \text{ kg/m}^3$$

5 . 5 2 [?] 1 0 0 0 [?] 1 EE 2 +/- y^x 3 =

5520 kg/m³
 3 sig. figs

