

Question:

Calculate the density of a piece of bone with a mass of 8.8 grams and a volume of 2.0 cm³

Solution:

Density formula:

$$d = m/V,$$

m =mass, V =volume

$$m(\text{bone})=8.8 \text{ g}$$

$$V(\text{bone})=2.0 \text{ cm}^3$$

$$d(\text{bone})=8.8 \text{ g}/2.0 \text{ cm}^3=4.4 \text{ g} \cdot \text{cm}^{-3}$$

Answer: 4.4 g/cm⁻³