

Question:

calculate the density of a piece of bone with a mass of 8.8 grams and a volume of 2.0cm cube

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:  $4.4 \text{ g/cm}^{-3}$