TOPIC: D E N S I T Y

1. Calculate the **density** of each of the following:
    a. 250 cm^3 of a solution with a mass of 500 g

    Density = $\dfrac{\text{Mass}}{\text{Volume}}$ = $\dfrac{500\text{ g}}{250\text{ cm}^3}$ = 2 g/cm^3

    b. A 6.75 g solid with a volume of 5 cm^3

    = _____ = _____$\dfrac{\text{g}}{\text{cm}^3}$ = _____ g/cm^3

    c. 50.0 g of a gas which occupies a volume of 8 cm^3

    = _____ = _____$\dfrac{\text{g}}{\text{cm}^3}$ = _____ g/cm^3

2. Calculate the **volume** of each of the following:
    a. 26.5 g of a solution with a density of 2 g/cm^3

    = _____ = _____$\dfrac{\text{g}}{\text{g/cm}^3}$ = _____ cm^3

    b. A 3.40 g solid with a density of 10 g/ cm^3

    = _____ = _____$\dfrac{\text{g}}{\text{g/cm}^3}$ = _____ cm^3

3. Calculate the **mass** of each of the following:
    a. A solid with a volume of 1.68 cm^3 and a density of 9.2 g/ cm^3

    = _____ x _____

    = _____ g/cm^3 x _____ cm^3

    = _____ g

b. An 80 cm³ of a solution with a density of 5.80 g/cm³

$=$ _____ x _____

$=$ _____ g/cm³ x _____ cm³

$=$ _____ g

a. A solid with a density of 4 g/cm³ and dimensions of 2.5 cm x 2.5 cm x 2.5 cm

$=$ _____ x _____

$=$ _____ g/cm³ x _____ cm³

$=$ _____ g