

A block of gold measures 2.5 cm x 1.5 cm x 6.5 cm the density of gold is 19.3 g/cm cubed.
calculate the mass of this block of gold

Solution:

$$1. V = S \times H;$$

$$V = 2.5 \times 1.5 \times 6.5 = 24.375 \text{ cm}^3;$$

$$2. 19.3 \text{ grams} - 1 \text{ cm}^3$$

$$x \text{ grams} - 24.375 \text{ cm}^3$$

$$x = 19.3 \times 24.375 = 470.44$$

$$m(\text{gold}) = 470.44 \text{ grams}$$

Answer: $m(\text{gold}) = 470.44 \text{ grams}$.

Answer provided by www.AssignmentExpert.com