The density of lead is 111.342 g/cm3. What would be the volume of a 200.0 g sample of this metal?

Solution:

The volume of the metal is

$$V(cm^3) = \frac{m(g)}{\rho(g/cm^3)}$$

V (cm^3) = 200/111.342 = 1.796 cm^3

Answer: V = 1.796 cm^3