Task:

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 density formula is
$\rho(g/cm^3) = m(g) / V(cm^3)$

According to this formula the volume of the metal is
$V(cm^3) = m(g) / \rho\ (g/cm^3)$
$V(cm^3) = 200.0 / 111.342 = 1.796\ cm^3$

Answer: $V(cm^3) = 1.796\ cm^3$