

Density Problems: Show all work.

1. What is the mass of an object whose density is 12 g/mL and occupies a volume of 4 mL?
2. A piece of metal has a mass of 22.7 g. It occupies a volume of 2.00 cm³. What is the density of the lead?
3. What is the volume of an object whose density is 20 g/mL and has a mass of 10 g?
4. A piece of lead has a mass of 302 g. What volume does it occupy?
5. An aliquot of ethyl alcohol (density = 0.79 g/mL) occupies a volume of 30 mL. What is the mass of the ethyl alcohol?
6. The density of silver is 10.5 g/cm³. What mass would occupy a volume of 24.0 cm³?