

Worksheet: Density Problems

(Frameworks Code)

Solve the following problems. Use correct four-step problem set-up. Label all numbers with the correct units.

1. A piece of aluminum has a mass of 810 g and a volume of 300 cm^3 . Find its density.
2. Find the volume of 100 g of platinum having a density of 21.4 g/cm^3 .
3. Find the mass of 30 mL of alcohol having a density of 0.79 g/mL .
4. Calculate the density of a rock sample if 25 cm^3 of it has a mass of 70 g.
5. A flask has a capacity of 130 mL. Find the mass of ether it can hold. The density of ether is 0.71 g/mL .
6. A block of wood has a mass of 180 g. Its volume is 240 cm^3 . Find its density.
7. The density of a piece of brass is 8.4 g/cm^3 . If the mass of the brass is 500 g, calculate its volume.
8. A piece of copper has a volume of 24.3 cm^3 and a density of 8.9 g/cm^3 . Find the mass of the copper.
9. A bar of gold has a mass of 1000 g and a volume of 51.8 cm^3 . Find the density of the bar of gold.
10. Find the volume of 20.6 g of zinc having a density of 7.1 g/cm^3 .