

3. A sealed 2500 cm^3 flask is full to capacity with 0.36 g of a substance. Determine the density of the substance. Guess if the substance is a gas, a liquid, or a solid.

Known:

Unknown:

4. Different kinds of wood have different densities. The density of oak wood is generally 0.7 g/cm^3 . If a 35 cm^3 piece of wood has a mass of 25 g , is the wood likely to be oak?

Known:

Unknown:

5. The density of pine is generally about 0.5 g/cm^3 . What is the mass of a 800 cm^3 piece of pine?

Known:

Unknown:

6. What is the volume of 325 g of metal with a density of 9.0 g/cm^3 ?

Known:

Unknown:

7. Diamonds have a density of 3.5 g/cm^3 . How big is a diamond that has a mass of 0.10 g ?

Known:

Unknown:

8. What mass of water in grams will fill a tank 100 cm long, 50 cm wide, and 30 cm high?

Known:

Unknown:

9. A graduated cylinder is filled with water to a level of 40.0 mL . When a piece of copper is lowered into the cylinder, the water level rises to 63.4 mL . Find the volume of the copper sample. If the density of the copper is 8.9 g/cm^3 , what is its mass?

Known:

Unknown: