

CHEM 1100 Density and Significant Figures Worksheet

Practice putting your answers in the boxes, use correct significant figures, correct scientific notation and correct units.

Significant figures:

1. All non zero numbers are significant
2. Lone zeros before the decimal are not significant
3. Zeros after the decimal before digits are not significant
4. Zeros after the non zero numbers after the decimal are significant
5. Use scientific notation to avoid confusion

1. What is the density of a cylinder that has a mass of 37.422 g, a diameter of 2.05 cm and a length of 4.20 cm?

2. Calculate Density: A piece of metal is put into a graduated cylinder and the new volume is 120.25mL. The volume of water before the addition was 112.10mL. The mass of the metal is 56.75 g.

3. A metal has a density of 8.54 g/mL and it weighs 120.3 g. What is the volume?

4. The density of the white powder is 1.24 g/mL. The mass is 3.2220, what is the volume?