SF Practice Indicate how many SF are in each measure or problem below

KEY

14.56 mL 4 SF	0.450 g 3 SF	1.0000008 cm 8 SF	0.0000008 cm 1 SF	0.45 g 2 SF	6.36×10^4 kg 3 SF	300 ounces 1 SF
6×10^{21} atoms 1 SF	100 yards 1 SF	100. yards 3 SF	100.0 yards 4 SF	4500.1 grams 5 SF	2.4000 meters 5 SF	2.4001 meters 5 SF
The quotient of 4.56 g & 0.23 cm^3 2 SF	4507 joules 4 SF	5.5556×10^2 kPa 5 SF	110 atm 2 SF	101 atm 3 SF	1.01 atm 3 SF	200.59 AMU UNLIMITED
0.457 joules 3 SF	4570 joules 3 SF	☺	0.11 atm 2 SF	0.110 atm 3 SF	15 meters 2 SF	1.5 meters 2 SF
0.4570 joules 4 SF	5.000×10^9 grams 4 SF	1.0 cm 2 SF	0.1 cm 1 SF	0.10 cm 2 SF	15.0 meters 3 SF	1.50 meters 3 SF
7 °C 1 SF	14 °C 2 SF	14.000°C 5 SF	14.000004°C 8 SF	7.00×10^3°C 3 SF	0.150 meters 3 SF	0.15 meters 2 SF
The density of a metal that has a mass of 333.55 g & 23.80 mL volume. 4 SF		The % Error when your measure is 234,560 cm^3 and the actual value is 225,000 cm^3 4 SF		The Percent Error when you measure 225 pounds but the teacher is 220. pounds 3 SF		0.1500 meters 4 SF
45,678,900.000 m 11 SF	2.394000000 cm 10 SF	25ºC 2 SF	0.25ºC 2 SF	25.0ºC 3 SF	25.99ºC 4 SF	1.0×10^{43} joules 2 SF

Calculate density of an unknown metal with 76.12462 g, with volume of 14.300 mL.

$$\frac{76.12462\ g}{14.300\ mL} = 5.3234\ g/cm^3$$

Remember: 1 mL = 1 cm^3

5 SF

What metal do you have there at left?

What is the name and symbol?
What is the atomic number?

Germanium, Ge

Atomic number is 32

What vol. does 239 grams of water have?

$$D = \frac{Mass}{volume}$$

$$1.000\ g/mL = \frac{239\ g}{volume}$$

volume = 239 mL

Which has a greater density, 20.0 grams of aluminum, or 14.0 grams of aluminum? Are you sure?

The different masses of the same element would also have different volumes. Density for aluminum is a constant. Density for any substance is a constant, no matter how much or how little you have! (I'm sure!)

Write the chemistry symbols for gold and for water. Label the proper one an element, and the other a compound.

Au is gold, it's an element

H_2O is water, that's the compound

What volume does 239 grams of gold have?

$$D = \frac{Mass}{volume}$$

$$19.3\ g/cm^3 = \frac{239\ g}{volume}$$

volume = 12.4 cm^3