

Significant Figures, Density & Temperature

Show work, use formulas, use lots of paper (paper is cheap, knowledge is valuable).

measurement	How many significant figures in this
56.7 grams	
0.005 grams	
2.0 kJ	
6.02×10^{23} atoms	
5 fingers*	
100 liters	
100. liters	
100.0 liters	
99.99 mg	
99.9074 mg	
99.99907 mg	
2008 years	
the answer of $3.456\text{g} \times 2.83\text{cm}^3$	
the answer of $1.5\text{ kg} + 2.35\text{ kg}$	
the answer of 2.2234 divided by 6.996541	
88 keys on a piano*	

2. A piece of unknown metal is determined to have a volume of 84.60 mL and a total mass of 618.43 grams. Determine which metal it could be, choice of 2.

3. Do these temperature conversions, use formulas for each time.

Centigrade	Kelvin
-16.5°C	
28.0°C	
	370 K
	239 K