

Scientific Notation

- Rewrite these measurements in scientific notation.
 - 0.000758 _____
 - 4,573,217 _____
 - 0.3438 _____
- Give the number of significant figures in these measurements.
 - 0.42 L _____
 - 78.00 m _____
 - 320 g _____
- Round off the following numbers correctly and express in scientific notation.
 - Round off 8670 km to two significant figures _____
 - Round off 0.01025 m to three sig. figs. _____
 - Round off 7.013 g to three sig. figs. _____
 - Round off 0.003629 mm to three sig. figs. _____
- List and define the common SI base units for mass, volume, time, etc.

For the following problems show your work!

- Calculate the density of an 18.0g sample of a piece of metal that has a volume of 3.2 mL.
- The mass of an object known to be 1.25g was experimentally measured as 1.20g. Compute the percent error (pg 37).
- What is the mass of a cube of aluminum 5.0 cm on each edge if the density of aluminum is 2.7 g/cm^3 ?
- How many seconds are there in one week?
- (Extra Credit!) If a car goes 30.0 miles per gallon of gasoline, how many kilometers could it travel on 1 liter of gasoline? (1.61 km = 1 mile; 1 gal = 4 qt; and 1.06 qt = 1.0 L)**

