1. How many significant figures are in the following four measurements:
   a) 0.0001 cm   b) 500 kg   c) 3.40 x 10^4 m   d) 0.00004500 Mg

2. a) Convert this to scientific notation (where the coefficient is between 1 and 10): 40,600,000
   b) Convert this out of scientific notation and into decimal (standard) form: 3.40 x 10^4
   Remember to keep all significant figures.

3. Do the following arithmetic using the correct number of significant figures in your answer:
   a) 4.593 - 0.45 = 4.14
   b) 3.05 x 10^-6

4. a) What number (meaning) corresponds to the prefix micro- (μ)?
   b) What is the prefix for the number 10^3?

5. If the graduated cylinder you are using is marked by every 1 mL, how many decimal places should be in your measurement?

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