

CHEM-60 Assignment #1 (10 pt)

Workshop 1
Significant Figures, Scientific Notation

Name _____

Section Number _____

1. How many significant figures are there in each of the following measurements?

0.42 cm _____

523.6 ft _____

0.00237 cm³ _____

420.06 km _____

2.450 x 10⁵ s _____

0.20800 nm _____

2. Complete the following table.

Scientific notation	Decimal notation
3.40 x 10 ⁻³	
	250.0

3. Round off the following numbers to two, three, or four significant figures and write them in scientific notation.

a. 0.0047 _____ (2 sig fig)

b. 0.000055220 _____ (2 sig fig)

c. 0.00345796 _____ (3 sig fig)

d. 568.31 _____ (3 sig fig)

e. 0.00345796 _____ (4 sig fig)

f. 0.000055226 _____ (4 sig fig)

6. Sometimes numbers are expressed in non-standard notation with more than one digit to the left of the decimal place. Convert these to standard scientific notation preserving the same number of sig figs:

a. 124.50 x 10⁴ _____

b. 47.0 x 10⁻⁶ _____