

**Quiz One**  
**Chemistry 121/100 FGH**

**Name**\_\_\_\_\_

1. Convert the following numbers to scientific notation:

a. 0.0005621

b. 7700.0

c. 800.

2. How many significant figures are in each of the following numbers?

a. 1405.0

b. 6,000

c. 7,196,800

d.  $9.00 \times 10^{-3}$

3. Round the following numbers to three significant figures:

a. 25,880,000

b. 245.8472934975

c. 130,000,000

4. Carry out the following calculations and express the answer with the correct number of significant figures:

a.  $34.9401 \times 2.07 \times 0.003189 =$

b.  $616.832 + 17.233 + 9198.6 =$

c.  $1.89 \times 10^7 \times 2.14 \times 10^3 =$

d.  $460.78 + 81.0 =$

Explain the difference between the word pairs below by giving short definitions of each term:

a. theory, hypothesis

b. compound, element

c. homogeneous, heterogeneous

d. law, theory

e. gas, solid

f. matter, mass