

NAME: \_\_\_\_\_

Lab Section: 1(TuTh@3:30) 2(TuTh@6) 3(TuTh@9) 4(MW@1)

CHM 101  
25 points, 20 mins.

Fall 2008  
week 2

**Basic Competency Quiz #1**  
*Chemistry, 7<sup>th</sup> ed., Zumdahl & Zumdahl, ch 1*

Wallace

revised 9/28/2008

Unless otherwise specified, each question is worth 5 points.

1. Explain the difference between a *law* and a *theory*.

LAW = SUMMARY OF OBSERVATIONS

THEORY = EXPLANATION

2. Stainless steel is a form of matter that always contains the *elements* iron, chromium, manganese, silicon, carbon, phosphorus and sulfur. However, stainless steel is not a *compound*. Briefly explain how or why this can be true.

(APPARENTLY) THE COMPOSITION IS NOT FIXED.

(ALSO, THE PARTICLES (ATOMS) MUST NOT BE BONDED TO EACH OTHER.)

3. How many significant figures does each of the following measurements have?

a. 0.036653 m.....	<u>5</u>
b. $7.2100 \times 10^{-3}$ g.....	<u>5</u>
c. 72,100 km.....	<u>3</u>
d. \$25.03.....	<u>4</u>
e. 200 students.....	<u>1</u>

