

Name: _____

Quiz #4
CHEM 1411 — Fall 2009

1. Write a formula for the ionic compound that forms between each of the following pairs of elements, and name the resulting compound. (20 pts)

a. Ca and O _____

b. K and S _____

c. Mg and carbonate _____

2. Name each of the following compounds: (30 pts)

a. NaF _____

b. FeSO₄ _____

c. N₂O₃ _____

3. Write a formula for each of the following compounds: (30 pts)

a. aluminum sulfide _____

b. iron(II) nitrate _____

c. sulfur dichloride _____

4. Calculate the mass percent of each of the elements in the compound NO₂. (10 pts)

(a) 63.65% N 36.35% O

_____ (b) 46.68% N 53.32% O

(c) 30.45% N 69.55% O

(d) 56.77% N 43.23% O

5. How many moles of oxygen atoms are in 24.1 mol of CO₂? (10 pts)

(a) 48.2 mol O

_____ (b) 24.1 mol O

(c) 12.1 mol O

(d) 6.03 mol O