

Name: _____

Quiz #3

CHEM 1411 — Fall 2009

1. Match each of the following descriptions to the elements listed below: **alkali metal, halogen, alkaline earth metal, transition metal, noble gas, lanthanide, actinide.** (20 pts)

a. cobalt (Co) _____ c. uranium (U) _____

b. sodium (Na) _____ d. fluorine (F) _____

2. Classify each of the following compounds as **ionic** or **molecular.** (20 pts)

a. CuCl_2 _____ c. Na_2S _____

b. BrCl_3 _____ d. SCl_2 _____

3. How many moles of sulfur are in a sample containing 3.8×10^{22} atoms of sulfur? (20 pts)

4. How many moles of magnesium are in 25.9 g of magnesium? (20 pts)

5. How many platinum atoms are in a 12.5 g sample of platinum? (20 pts)