## Introduction to Natural Science, Fall 2006 Chemistry Workshop – Week 4

- 1. Determine the ions formed by the following elements. Write their formulas, names, and determine the number of protons and electrons in each of the ions.
  - rubidium (Rb)
  - strontium (Sr)
  - phosphorus (P)
  - tin (Sn)
  - bromine (Br)
  - gallium (Ga)
  - cadmium (Cd)
- 2. Complete the following table by writing the name or formula of the compound. If the compound is ionic, write the anions and cations. If the compound is molecular, write "molecular". The first two are done for you.

name	formula	If ionic, write the ions, otherwise write "molecular"
sulfur difluoride	SF <sub>2</sub>	molecular
sodium oxide	Na <sub>2</sub> O	Na <sup>+</sup> and O <sup>2-</sup>
diboron trioxide		
sulfur hexafluoride		
	CaS	
	TiCl <sub>4</sub>	
carbon tetrachloride		
strontium bromide		
	Rb <sub>2</sub> O	
cobalt(II) sulfide		
aluminum carbonate		
	FeBr <sub>3</sub>	
copper(II) nitrate		
	AgCl	
potassium hydrogen		
sulfide		
manganese(IV) sulfide		
magnesium phosphide		
ammonium nitride		
	$Pb(NO_3)_2$	
diphophorus pentoxide		
	CrP	
sulfur dioxide		
iron(III) nitrate		
	Al(OH) <sub>3</sub>	
dinitrogen tetroxide		
	Hg <sub>2</sub> O	
cesium perchlorate		