- 1. What is the chemical formula for the following ternary compounds given their constituent ions.
  - lead (IV) sulfate, Pb<sup>4+</sup> and SO<sub>4</sub> <sup>3--</sup>
    stannous chlorite, Sn<sup>2+</sup> and ClO<sub>2</sub> --

  - cobalt(II) hydroxide, CO<sup>2+</sup> and OH
  - d. mercurous phosphate,  $Hg_2^{2+}$  and  $PO_4^{3-}$
- 2. Provide the formula for each of the following binary ionic compounds
  - a. cuprous sulfide
  - b. ferrous phosphide
  - c. mercuric iodide
  - d. plumbic oxide
- 3. What is the formula for the following ternary ionic compounds?
  - a. cuprous chlorite
  - b. plumbic sulfite
  - c. mercuric chlorate
  - d. ferrous chromate
- 4. Complete the table below by combining cations and anions into chemical formulas. Give a systematic name for each compound. Use the Roman numeral naming system.

ION	CHLORIDE ION	SULFIDE ION	PHOSPHIDE ION
Silver ion	AgCl		
	Silver chloride		
Copper (II) ion			
Iron (III) ion			