

## Chemistry Naming Hand-In Assignment

1. Jeremy states that nitrogen dioxide,  $\text{NO}_2$ , is not a binary compound because it contains three atoms in the molecule. Is Jeremy correct or incorrect? Explain your reasoning.
2. Fiona writes the formula for calcium chloride as  $\text{Ca}_1\text{Cl}_2$ . Is this correct? Explain why or why not.
3. Write the **names and chemical formulas** of the ionic compounds that form using the following elements:
  - (a) silver and chlorine
  - (b) oxygen and zinc
  - (c) beryllium and iodine
  - (d) fluorine and magnesium
4. A test question asks you to write the formula for iron oxide. What further information do you need to write the compound's formula, and how would this information be indicated in the question?

5. David states that the name of  $\text{CuCl}_2$  is copper(I) chloride while Terri states that the name is copper(II) chloride. Who is correct? Explain your answer.
6. Write the formulas for each of the following:
- (a) iron(II) nitride
  - (b) lead(II) oxide
  - (c) copper(I) sulfide
  - (d) tin(IV) fluoride
7. Write formulas for each of the following:
- (a) nitrogen dioxide
  - (b) sulfur trioxide
  - (c) dinitrogen tetroxide
  - (d) phosphorus pentachloride
  - (e) magnesium bromide
  - (f) aluminum oxide
  - (g) calcium iodide

8. Name each of the following compounds:

(a)  $\text{Li}_3\text{N}$

(b)  $\text{Ag}_2\text{O}$

(c)  $\text{MgBr}_2$

(d)  $\text{CaI}_2$

(e)  $\text{HCl}$

(f)  $\text{NO}_2$

(g)  $\text{CO}$