

# Concept Review

## Section: Compound Names and Formulas

1. **Explain** the difference between iron(II) nitrate and iron(III) nitrate. What is the significance of the Roman numerals?

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2. **Name** the following ionic compounds, keeping in mind that a transition metal cation must include its charge.

\_\_\_\_\_ a.  $\text{TiO}_2$

\_\_\_\_\_ b.  $\text{BaCl}_2$

\_\_\_\_\_ c.  $\text{CuCl}_3$

\_\_\_\_\_ d.  $\text{KI}$

\_\_\_\_\_ e.  $\text{SrCl}_2$

\_\_\_\_\_ f.  $\text{CuBr}_2$

3. **Describe** how covalent compounds are named.

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4. **Write** the chemical formulas for the following compounds:

\_\_\_\_\_ a. lithium oxide (ionic)

\_\_\_\_\_ b. carbon monoxide (covalent)

\_\_\_\_\_ c. carbon tetrachloride (covalent)

\_\_\_\_\_ d. nitrogen trifluoride (covalent)

\_\_\_\_\_ e. calcium chloride (ionic)

5. **Contrast** molecular formulas and empirical formulas.

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