



the name of the cation differ from the name of the metal?

7. For metal ions from groups 1,2, or 13 in ionic compounds, how does the name of the cation differ from the name of the metal?

8. For nonmetals, how does the name of the anion differ from the name of the element?

9. Consider the formula for Magnesium fluoride,  $MgF_2$ .

- What is the charge on the magnesium ion? \_\_\_\_\_
- What is the charge on the fluoride ion? \_\_\_\_\_
- What is the overall (total) charge on the compound? \_\_\_\_\_

10. What is the overall charge on the compound sodium bromide ( $NaBr$ )? \_\_\_\_\_

11. In general, what is the overall charge on an ionic compound? \_\_\_\_\_

12. What is the charge on iron in  $FeS$ ? \_\_\_\_\_ In  $Fe_2S_3$ ? \_\_\_\_\_

13. Based on your answer to 12, what do the Roman numerals in Model 2 represent?

14. Complete the rules for naming ionic compounds:

- Naming metal ions: name the metal (example:  $Ba^{2+} =$  \_\_\_\_\_)
- If the metal is not in group 1,2, or 13, add a Roman numeral in parentheses that represents \_\_\_\_\_ (e.g.,  $Fe^{3+} =$  \_\_\_\_\_)
- Nonmetals: change ending of element name to \_\_\_\_\_ (e.g.,  $O^{2-} =$  \_\_\_\_\_)
- Naming ionic compounds: name the cation, then the anion (example:  $FeN =$  \_\_\_\_\_)

Complete the following chart

Cation (pos. ion)	Anion (neg. ion)	Formula	Name
		$NaCl$	15.
$Ba^{2+}$	$O^{2-}$		16.
			17. Calcium sulfide
$Al^{3+}$	$Br^{-1}$		18.
		$K_2S$	19.
			20. Magnesium oxide
$Sr^{2+}$	$N^{3-}$		21.
$Fe^{2+}$	$I^{-1}$		22.

$\text{Fe}^{3+}$	$\text{Br}^{-}$		23.
$\text{Cu}^{1+}$	$\text{O}^{2-}$		24.
$\text{Cu}^{2+}$	$\text{O}^{2-}$		25.