IntoChemistry | Writing Ionic Compound Formulas

STUDENT WORKSHEET

Name: _____ Date: _____

Directions: For each named compound, write a neutral ionic formula in the smallest whole-number ion ratio. Use parentheses for repeated polyatomic ions.

No atomic masses needed. Show ion-charge reasoning for each answer.

1. sodium chloride

Cation charge: _____ Anion charge: _____ Formula: _____

2. calcium chloride

Cation charge: _____ Anion charge: _____ Formula: _____

3. aluminum oxide

Cation charge: _____ Anion charge: _____ Formula: _____

4. magnesium nitride

Cation charge: _____ Anion charge: _____ Formula: _____

5. potassium sulfide

Cation charge: _____ Anion charge: _____ Formula: _____

6. lithium oxide

Cation charge: _____ Anion charge: _____ Formula: _____

7. sodium carbonate

Cation charge: _____ Anion charge: _____ Formula: _____

8. calcium nitrate

Cation charge: _____ Anion charge: _____ Formula: _____

9. ammonium sulfate

Cation charge: _____ Anion charge: _____ Formula: _____

10. barium hydroxide

Cation charge: _____ Anion charge: _____ Formula: _____

11. ammonium phosphate

Cation charge: _____ Anion charge: _____ Formula: _____

12. potassium permanganate

Cation charge: _____ Anion charge: _____ Formula: _____

13. iron(III) oxide

Cation charge: _____ Anion charge: _____ Formula: _____

14. iron(II) chloride

Cation charge: _____ Anion charge: _____ Formula: _____

15. copper(II) sulfate

Cation charge: _____ Anion charge: _____ Formula: _____

16. zinc phosphate

Cation charge: _____ Anion charge: _____ Formula: _____

17. chromium(III) chloride

Cation charge: _____ Anion charge: _____ Formula: _____

18. lead(II) nitrate

Cation charge: _____ Anion charge: _____ Formula: _____