

Name_____

No.____

Period_____

Chemical Names and Formulas Worksheet 1

1. Circle the chemical formula that goes with the given name.

- | | | | | |
|------------------------|--|--|--|--|
| a) Barium chloride: | BaCl | BaCl ₂ | Ba ₂ Cl | Ba ₂ Cl ₂ |
| b) Iron(III) phosphate | FePO ₄ | Fe ₃ PO ₄ | Fe(PO ₄) ₃ | Fe(PO) ₄ |
| c) Selenium trioxide | Se(O ₂) ₃ | Se ₃ O ₂ | Se ₃ O | SeO ₃ |
| d) Aluminum hydroxide | AlOH | Al(OH) ₃ | Al ₃ OH | AlOH ₃ |
| e) Ammonium dichromate | (NH ₄) ₂ Cr ₂ O ₇ | NH ₄ (Cr ₂ O ₇) ₂ | NH ₄ Cr ₂ O ₇ | (NH ₄) ₂ CrO ₄ |

2. Circle the name that goes with the chemical formula.

- | | | | | |
|------------------------------------|---------------------|-------------------------|-----------------------|-------------------|
| a) CuSO ₄ | copper sulfate | copper sulfite | copper(II) sulfate | copper(I) sulfate |
| b) Na ₂ SO ₃ | sodium sulfate | sodium sulfide trioxide | sodium sulfite | |
| c) Al ₂ O ₃ | aluminum(III) oxide | aluminum(II) oxide | aluminum oxide | |
| d) NaHCO ₃ | sodium carbonate | sodium bicarbonate | sodium hydrocarbonate | |
| e) KMnO ₄ | potassium manganate | potassium permanganate | potassium manganite | |

3. Give the proper chemical names for each formula.

- a) BaO
- b) NaOH
- c) CaCO₃
- d) FeSO₄
- e) NO₂
- f) Cr(MnO₄)₃
- g) H₂S

4. Give the formulas for these compounds.

- | | |
|--------------------------------|-------------------------|
| a) lithium chloride | carbon dioxide |
| b) magnesium oxide | silver bromide |
| c) cobalt(III) chloride | zinc nitrate |
| d) nickel(II) sulfate | phosphorus pentabromide |
| e) ammonium hydrogen carbonate | water |
| f) mercury(II) sulfite | ammonia |

Chemical Names and Formulas

Worksheet 2

ALL THE COMPOUNDS IN **BOLD** SHOULD BE DONE WITHOUT USING THE CATION/ANION LIST

1. Determine the formula for the ionic compound formed by combining the ion pair.

(a) **Mercury(II) & Phosphate**

(b) **Chromium(III) & Fluoride**

(c) **Iron(III) & Sulfate**

2. Identify the following substances as IONIC (I) or MOLECULAR (M). Name each compound.

Mg(ClO)₂		
(NH₄)₂SO₃		
FePO₄		
P₂O₅		
PbO₂		
NiCO₃		
OF₂		
SF₆		
K₂SO₄		
SO₃		
Ag₂S		

3. Write formulas for the following compounds.

(a) aluminum oxalate	(b) strontium nitrite
(c) carbon tetrachloride	(d) lead(II) hydroxide
(e) ammonium chromate	(f) mercury(II) sulfate
(g) potassium perchlorate	(h) zinc sulfide
(i) copper(I) carbonate	(j) sodium permanganate
(k) tin(IV) oxide	(l) silver acetate
(m) xenon tetrafluoride	(n) dinitrogen pentoxide