

CHM 1020

Homework Answers for Part IV

Memorize the names and symbols for elements 19-36

1. What are the ionic charges for each atom in the following substances?
2. Name the ionic substances listed in question #1

Formula	Cation	Anion	Name
NaCl	Na ⁺	Cl ⁻	Sodium chloride
KBr	K ⁺	Br ⁻	Potassium Bromide
MgS	Mg ²⁺	S ²⁻	Magnesium sulfide
Na ₂ S	Na ⁺	S ²⁻	Sodium sulfide
K ₂ O	K ⁺	O ²⁻	Potassium oxide
BeCl ₂	Be ²⁺	Cl ⁻	Beryllium chloride
BaF ₂	Ba ²⁺	F ⁻	Barium fluoride
FeCl ₃	Fe ³⁺	Cl ⁻	Iron(III)chloride
NiCl ₂	Ni ²⁺	Cl ⁻	Nickel(II) chloride
NaOH	Na ⁺	OH ⁻	Sodium hydroxide
KCN	K ⁺	CN ⁻	Potassium cyanide
Fe ₂ O ₃	Fe ³⁺	O ²⁻	Iron(III) oxide

3. What is the name of the compound with the chemical formula NH₄NO₃?
Ammonium nitrate
4. What is the name of the compound with the chemical formula Cr₂O₃?
Chromium(VI) oxide
5. What is the chemical formula for copper(II) cyanide? Cu(CN)₂

Fill in the formulas and names for the combinations of the following chart:

	CO ₃ ²⁻	O ²⁻	NO ₃ ⁻	Br ⁻
Li ⁺	Li ₂ CO ₃	Li ₂ O	LiNO ₃	LiBr
Cu ⁺	Cu ₂ CO ₃	Cu ₂ O	CuNO ₃	CuBr
Cu ²⁺	CuCO ₃	CuO	Cu(NO ₃) ₂	CuBr
Mn ³⁺	Mn ₂ (CO ₃) ₃	Mn ₂ O ₃	Mn(NO ₃) ₃	MnBr ₃