Name _____

Date _____ Pd ____

Chemistry – Unit 5 & 6 Review Extra Credit
Empirical Formula & Molar Mass Worksheet

Directions: Turn the following into balanced equations by filling in the blanks with the correct coefficients, formulas of ions or solids, and names.

	Cation	Anion	Formula	Name
1.	___ Na^+	+ ___ Br^-	→ _____	_____
2.	___ Cu^+	+ ___ SO_4^{2-}	→_____	_____
3.	___ Pb^{2+}	+ ___ Cl^-	→ _____	_____
4.	___ K^+	+ ___ S^{2-}	→ _____	_____
5.	___ Sn^{2+}	+ ___ F^-	→ _____	_____
6.	_____	+ _____	→ BaI_2	_____
7.	_____	+ _____	→ $AlCl_3$	_____
8.	_____	+ _____	→ $Mg(NO_3)_2$	_____
9.	_____	+ _____	→ $KC_2H_3O_2$	_____
10.	_____	+ _____	→ $(NH_4)_2SO_3$	_____
11.	_____	+ _____	→ _____	silver oxide
12.	_____	+ _____	→ _____	iron(III) sulfide
13.	_____	+ _____	→ _____	copper(II) nitrate
14.	_____	+ _____	→ _____	magnesium chloride
15.	_____	+ _____	→ _____	calcium carbonate
16.	___ Mg^{2+}	+ ___ NO_2^-	→ _____	_____
17.	___ Cu^{2+}	+ ___ OH^-	→ _____	_____
18.	_____	+ _____	→ K_2CrO_4	_____

Answer the following questions. Show all work, labeled, with units.

19. Calculate the molar mass of iron(III) sulfide (the compound in question #12)

20. Determine the mass of 2.4 moles of calcium carbonate (from #15).

21. How many grams of BaI_2 are in 3.9 moles? (from #6)

22. How many moles of $AlCl_3$ formula units are contained in a 20.0 g sample? (from #7)