Chem 11 finals review. Naming, naming and more naming (Chapter 2)

Part 1: Use the periodic table to correctly guess the charge for the ion of:

1. Nitrogen-3
2. Sulphur -2
3. Strontium +2
4. Cesium +1
5. What logic did you use to get these answers? *Gain or lose the “easiest” number (i.e. fewest) electrons to get to a full outer shell. For example, the easiest way for Oxygen to get a full outer shell is to gain two electrons to become a -2 ion*

Part 1: Give the correct formula for the following ionic and covalent compounds.

1) Potassium Iodide KI

2) Magnesium Fluoride MgF2

3) Lithium Sulphide Li2S

4) Calcium Perchlorate Ca(ClO4)2

5) Aluminum Permanganate Al(MnO4)3

6) Iron (III) Sulphate Fe2(SO4)3

7) Osmium (IV) Phosphate Os3(PO4)4

8) Tin (IV) Acetate Sn(CH3COO)4

9) Ammonium Monohydrogen phosphate (NH4)2HPO4

10) Barium Hydroxide octahydrate Ba(OH)2 ∙ 8H2O

11) Carbon Monoxide CO

12) Dinitrogen Tetroxide N2O4

13) Diiodine Hexachloride I2Cl6

14) Xenon Heptafluoride XeF7

15) Nitrogen Tribromide NBr3

16) Phosphorus Pentachloride PCl5

17) Tricarbon Octahydride C3H8

Part 3: Give the correct name for the following compounds

1. RbCl Rubidium Chloride
2. BaI2 Barium Iodide
3. CuBr Copper (I) Bromide
4. CuBr2 Copper (II) Bromide
5. Pb(HSO4)2 Lead (II) Hydrogen Sulphate OR Lead (II) bisulphide
6. (NH4)2C2O4 Ammonium Oxalate
7. CuSO4 ∙ 5H2O Copper (II) Sulphate Pentahydrate
8. Na2SO4 ∙ 10H2O Sodium Sulphate Decahydrate
9. P4S10 Tetraphosphorous Decasulphide
10. NI3 Nitrogen Triiodide
11. CCl4 Carbon Tetrachloride
12. ClF Chlorine Monofluoride
13. SO2 Sulphur Dioxide
14. SF6 Sulphur Hexafluoride
15. IF7 Iodine Heptafluoride
16. SO3 Sulphur Trioxide
17. IBr5 Iodine Pentabromide

Part 3: Consider the compound Rhenium (VII) Dichromate:

1. What is the formula? Re2(Cr2O7)7
2. How many atoms of oxygen are there in one molecule? 7x7 = 49 O atoms
3. How many molecules of oxygen could you get out of one molecule? or 24.5 O2 molecules
4. How many chromium atoms are there in one molecule? 7x2 = 14 Cr atoms