Review Exercise 4 - Answers

Here is a mix of all the kinds of binary compounds you have reviewed. Complete this exercise before you check your answers. Then make corrections as necessary.

1.

Atoms Combined	Formula of ions involved (if ionic)	Chemical Formula	Name of Compound
1. Ca and Cl	Ca^{2+} and Cl^{-}	$CaCl_2$	calcium chloride
2. K and Br	K^{+} and Br^{-}	KBr	potassium bromide
3. Mg and O	Mg^{2+} and O^{2-}	MgO	magnesium oxide
4. Al and O	Al^{3+} and O^{2-}	Al_2O_3	aluminum oxide
5. N and H	--	NH_3	nitrogen trihydride
6. Ga and S	Ga^{3+} and S^{2-}	Ga_2S_3	gallium sulfide
7. H and Br	--	$HBr_{(aq)}$	hydrobromic acid
8. Fe^{3+} and O	Fe^{3+} and O^{2-}	Fe_2O_3	iron(III) oxide
9. Sn^{2+} and F	Sn^{2+} and F^{-}	SnF_2	tin(II) fluoride
10. Cu^{+} and N	Cu^{+} and N^{3-}	Cu_3N	copper(I) nitride

2.

Name of Compound	Chemical Formula	Chemical Formula	Name of Compound
1. nitrogen trihydride	NH_3	16. $CaBr_2$	calcium bromide
2. aluminum sulfide	Al_2S_3	17. BaO_2	barium peroxide
3. hydrofluoric acid	$HF_{(aq)}$	18. CH_4	carbon tetrahydride
4. hydrogen sulfide gas	$H_2S_{(g)}$	19. $HI_{(aq)}$	hydroiodic acid
5. tin(IV) chloride	$SnCl_4$	20. P_4	phosphorus
6. boron tetrahydride	BH_4	21. Cr_2S_3	chromium(III) sulfide
7. hydrogen peroxide	H_2O_2	22. Hg_2O	mercury(I) oxide
8. lithium bromide	LiBr	23. $SnBr_2$	tin(II) bromide
9. calcium fluoride	CaF_2	24. $AlCl_3$	aluminum chloride
10. copper(II) nitride	Cu_3N_2	25. K_2Te	potassium telluride
11. antimony(V) oxide	Sb_2O_5	26. $H_2S_{(g)}$	hydrogen sulfide gas
12. hydroselenic acid	$H_2Se_{(aq)}$	27. N_2O_4	dinitrogen tetroxide
13. oxygen gas	O_2	28. CH_4	carbon tetrahydride
14. carbon tetrachloride	CCl_4	29. NaI	sodium iodide
15. lead(IV) sulfide	PbS_2	30. Sb_2O_3	antimony(III) oxide