Write formulas for the following temary ionic compounds.

1. sodium phosphate Na_3PO_4
2. magnesium nitrate $Mg(NO_3)_2$
3. sodium hydroxide $NaOH$
4. potassium cyanide KCN
5. ammonium bromide NH_4Br
6. potassium dichromate K_2CrO_4
7. cesium chlorate $CsClO_3$
8. iron (III) sulfate $Fe_2(SO_4)_3$

Write formulas for compounds using these pairs of ions.

9. lithium, carbonate ~~$LiCO_3$~~ Li_2CO_3
10. nitride, tin (IV) Sn_3N_4
11. sulfide, potassium K_2S
12. hydroxide, chromium (III) $Cr(OH)_3$
13. calcium, phosphide Ca_3P_2
14. chromate, ammonium $(NH_4)_2CrO_4$

Write formulas for the following binary compounds.

15. nitrogen tribromide NBr_3
16. dichlorine monoxide Cl_2O
17. dinitrogen tetrafluoride N_2F_4
18. xenon dichloride $XeCl_2$
19. lead (IV) sulfide PbS_2
20. phosphorus pentafluoride PF_5
21. strontium bromide $SrBr_2$
22. aluminum nitrite $Al(NO_3)_3$
23. copper (II) iodide CuI_2
24. hydrobromic acid HBr
25. dihydrogen sulfide H_2S
26. dinitrogen difluoride N_2F_2

Give the charge on the following ions:

27. nitrate -1 28. oxide -2 29. phosphate -3 30. nitride -3

Name the following compounds:

31. $CuCN$ Copper (I) cyanide
32. SiO_2 Silicon dioxide
33. SeF_4 Selenium Tetrafluoride
34. HgI_2 Mercury (II) Iodide
35. SO_3 Sulfur trioxide
36. H_3PO_4 phosphoric acid
37. $SrBr_2$ strontium bromide
38. $NiCl_2$ Nickle (II) chloride
39. K_2SO_4 potassium sulfate
40. $FeCO_3$ Iron (II) carbonate
41. NH_4HCO_3 Ammonium bicarbonate
42. NBr_3 Nitrogen tribromide
43. $Cr(OH)_3$ Chromium (III) hydroxide
44. NiI_2 Nickle (II) Iodide
45. $SnCl_4$ Tin (IV) Chloride
46. SF_6 sulfur hexafluoride
47. HCl ~~hydrogen~~ hydrochloric acid
48. AlF_3 Aluminum fluoride
49. Cl_2O_7 dichlorine heptoxide
50. $MnSO_4$ Manganese (II) sulfate

51. Name and write symbols for all seven diatomic molecules:

a. H_2
b. N_2
c. O_2
d. Cl_2
e. Br_2
f. F_2
g. I_2