Key

Cumulative Nomenclature and Formula Writing Review

For each of the following questions, determine whether the compound is ionic or covalent, and name it appropriately.

1. Na_2CO_3	(ionic) covalent	sodium carbonate
2. P_2O_5	ionic (covalent)	diphosphorus pentoxide
3. NH_3	ionic (covalent)	nitrogen trihydride
4. $FeSO_4$	(ionic) covalent	iron (II) sulfate
5. SiO_2	ionic (covalent)	silicon dioxide
6. $BaCl_2$	(ionic) covalent	banum chloride
7. $CoBr_2$	(ionic) covalent	cobalt (II) bromide
8. B_2H_4	ionic (covalent)	diboron tetrahydride
9. CO	ionic (covalent)	carbon monoxide
10. $Fe_2(SO_4)_3$	(ionic) covalent	iron (III) sulfate
11. BBr_3	ionic (covalent)	boron tribromide
12. $CaSO_3$	(ionic) covalent	calcium sulfite

~~*Write the IUPAC name for each of the following chemical formulas.*~~

13. $Cr(CO_3)_3$	chromium (VI) carbonate
14. Ag_3P	silver phosphide
15. IO_2	iodine dioxide
16. VO_2	vanadium (IV) oxide
17. PbS	lead (II) sulfide
18. N_2O_3	dinitrogen trioxide
19. $LiNO_2$	lithium nitrite
20. $Mg(CN)_2$	magnesium cyanide

For each of the following questions, determine whether the compound is ionic, covalent, or acid and write the appropriate chemical formula on the line provided.

21. dinitrogen trioxide	ionic covalent	N_2O_3
22. iron (III) sulfide	ionic covalent	Fe_2S_3
23. nickel (II) iodide	ionic covalent	NiI_2
24. lithium acetate	ionic covalent	$LiC_2H_3O_2$
25. phosphorus trifluoride	ionic covalent	PF_3
26. vanadium (V) oxide ← charge is +5	ionic covalent	V_2O_5
27. aluminum hydroxide	ionic covalent	$Al(OH)_3$
28. zinc sulfide	ionic covalent	ZnS
29. silicon tetrafluoride	ionic covalent	SiF_4
30. silver phosphate	ionic covalent	Ag_3PO_4
31. tetraphosphorus triselenide	ionic covalent	P_4Se_3
32. potassium acetate	ionic covalent	$KC_2H_3O_2$

Write the appropriate chemical formula for each of the following.

33. iron (II) phosphide Fe_3P_2

Fe^{+2} P^{-3}

34. disilicon hexabromide Si_2Br_6

35. titanium (IV) nitrate $Ti(NO_3)_4$

Ti^{+4} $(NO_3)^{-1}$

36. copper (I) phosphate Cu_3PO_4

Cu^{+1} $(PO_4)^{-3}$ Cu_3PO_4

37. tetrasulfur dinitride S_4N_2

38. magnesium chlorate $Mg(ClO_3)_2$

Mg^{+2} $(ClO_3)^{-1}$ $Mg(ClO_3)_2$

39. carbon monoxide CO

* We don't simplify molecular!