

(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. $\text{Na}_2\text{CO}_3$      | <u>ionic</u> covalent | <u>sodium carbonate</u>       |
| 2. $\text{P}_2\text{O}_5$        | ionic <u>covalent</u> | <u>diphosphorus pentoxide</u> |
| 3. $\text{NH}_3$                 | ionic <u>covalent</u> | <u>nitrogen trihydride</u>    |
| 4. $\text{FeSO}_4$               | <u>ionic</u> covalent | <u>iron (II) sulfate</u>      |
| 5. $\text{SiO}_2$                | ionic <u>covalent</u> | <u>silicon dioxide</u>        |
| 6. $\text{BaCl}_2$               | <u>ionic</u> covalent | <u>barium chloride</u>        |
| 7. $\text{CoBr}_2$               | <u>ionic</u> covalent | <u>cobalt (II) bromide</u>    |
| 8. $\text{B}_2\text{H}_4$        | ionic <u>covalent</u> | <u>diboron tetrahydride</u>   |
| 9. $\text{CO}$                   | ionic <u>covalent</u> | <u>carbon monoxide</u>        |
| 10. $\text{Fe}_2(\text{SO}_4)_3$ | <u>ionic</u> covalent | <u>iron (III) sulfate</u>     |
| 11. $\text{BBr}_3$               | ionic <u>covalent</u> | <u>boron tribromide</u>       |
| 12. $\text{CaSO}_3$              | <u>ionic</u> covalent | <u>calcium sulfite</u>        |

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

- |                                |                                |
|--------------------------------|--------------------------------|
| 13. $\text{Cr}(\text{CO}_3)_3$ | <u>chromium (VI) carbonate</u> |
| 14. $\text{Ag}_3\text{P}$      | <u>silver phosphide</u>        |
| 15. $\text{IO}_2$              | <u>iodine dioxide</u>          |
| 16. $\text{VO}_2$              | <u>vanadium (IV) oxide</u>     |
| 17. $\text{PbS}$               | <u>lead (II) sulfide</u>       |
| 18. $\text{N}_2\text{O}_3$     | <u>dinitrogen trioxide</u>     |
| 19. $\text{LiNO}_2$            | <u>lithium nitrite</u>         |
| 20. $\text{Mg}(\text{CN})_2$   | <u>magnesium cyanide</u>       |

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 <u>covalent</u>	<u>N<sub>2</sub>O<sub>3</sub></u>
22. iron (III) sulfide	<u>ionic</u> covalent	<u>Fe<sub>2</sub>S<sub>3</sub></u>
23. nickel (II) iodide	<u>ionic</u> covalent	<u>NiI<sub>2</sub></u>
24. lithium acetate	<u>ionic</u> covalent	<u>LiC<sub>2</sub>H<sub>3</sub>O<sub>2</sub></u>
25. phosphorus trifluoride	ionic <u>covalent</u>	<u>PF<sub>3</sub></u>
26. vanadium (V) oxide <sup>charge is +5</sup>	<u>ionic</u> covalent	<u>V<sub>2</sub>O<sub>5</sub></u>
27. aluminum hydroxide	<u>ionic</u> covalent	<u>Al(OH)<sub>3</sub></u>
28. zinc sulfide	<u>ionic</u> covalent	<u>ZnS</u>
29. silicon tetrafluoride	ionic <u>covalent</u>	<u>SiF<sub>4</sub></u>
30. silver phosphate	<u>ionic</u> covalent	<u>Ag<sub>3</sub>PO<sub>4</sub></u>
31. tetraphosphorus triselenide	ionic <u>covalent</u>	<u>P<sub>4</sub>Se<sub>3</sub></u>
32. potassium acetate	<u>ionic</u> covalent	<u>KC<sub>2</sub>H<sub>3</sub>O<sub>2</sub></u>

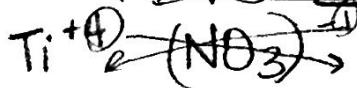
Write the appropriate chemical formula for each of the following.

33. iron (II) phosphide Fe<sub>3</sub>P<sub>2</sub>



34. disilicon hexabromide Si<sub>2</sub>Br<sub>6</sub>

35. titanium (IV) nitrate Ti(NO<sub>3</sub>)<sub>4</sub>

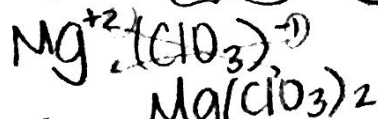


36. copper (I) phosphate Cu<sub>3</sub>PO<sub>4</sub>



37. tetrasulfur dinitride S<sub>4</sub>N<sub>2</sub>

38. magnesium chlorate Mg(ClO<sub>3</sub>)<sub>2</sub>



39. carbon monoxide CO

~~\*~~ We don't simplify molecular!