

A. Define the following terms

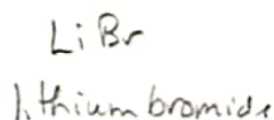
1. Oxidation state - charge of a stable ion
2. Cation - positive ion; formed by losing e^-
3. Anion - negative ion; formed by gaining e^-
4. Ionic Bond - electrostatic attraction between oppositely charged ions
5. Electronegativity - pull on bonded electrons

B. Identify the oxidative state of the following atoms/ions in their stable state (write the symbol and charge for each)

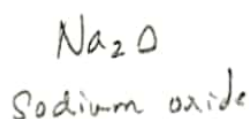
- | | | | | |
|-----------------------------|-------------------------|-------------------------|--------------------------|---------------------------|
| 6. Magnesium
Mg^{2+} | 7. Gallium
Ga^{3+} | 8. Sulfur
S^{2-} | 9. Bromine
Br^{1-} | 10. Argon
Ar^0 |
| 11. Iron (III)
Fe^{3+} | 12. Cupric
Cu^{2+} | 13. Aurous
Au^{1+} | 14. Nitrogen
N^{3-} | 15. Potassium
K^{1+} |

Write the correct formula and name the compounds for the following sets of atoms/ions

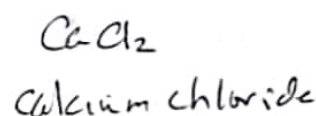
16. Lithium and Bromine



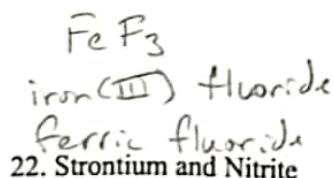
17. Sodium and Oxygen



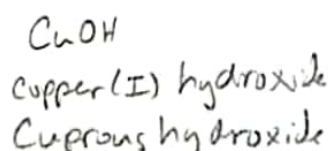
18. Chlorine and Calcium



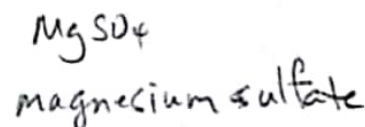
19. Iron (III) and Fluorine



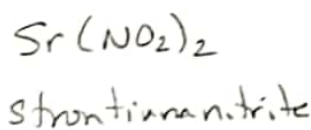
20. Cuprous and hydroxide



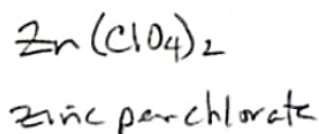
21. Sulfate and Magnesium



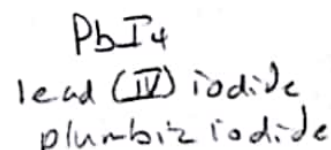
22. Strontium and Nitrite



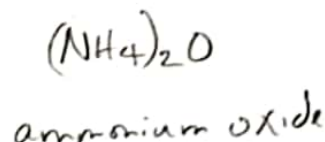
23. Zinc and Perchlorate



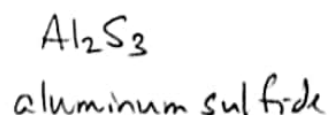
24. Iodine and Lead (IV)



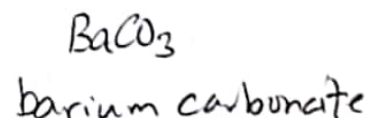
25. Ammonium and Oxygen



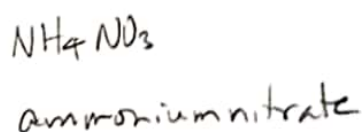
26. Aluminum and Sulfur



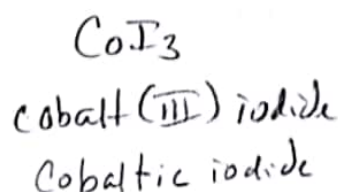
27. Barium and Carbonate



28. Nitrate and Ammonium



29. Cobalt(III) and Iodine



30. Sulfite and Gallium

