

- _____ 13. Which is true of binary ionic compounds?
- They consist of only two atoms.
 - They consist of atoms of only two elements.
 - They contain two different anions.
 - They have bonds that share two valence electrons.
- _____ 14. Which is the correct formula for the compound formed between beryllium and nitrogen?
- BeN
 - Be₃N
 - Be₃N₂
 - Be₂N₃
- _____ 15. What is the correct formula for the compound formed between magnesium and the phosphate ion?
- MgPO₄
 - Mg₃PO₂
 - Mg₃(PO₄)₂
 - MgP₂O₈
- _____ 16. Which is the correct formula for the compound Manganese (III) Fluoride?
- MnF
 - Mn₃F
 - MnF₃
 - Mn₃F₃
- _____ 17. Which is the correct formula for the compound Chromium (II) Nitrate?
- (Cr)₂NO₃
 - Cr₂NO₃
 - CrNO₂
 - Cr(NO₃)₂
- _____ 18. Which is the correct name for the compound FeS?
- Iron Sulfide
 - Iron (I) Sulfide
 - Iron (II) Sulfide
 - Iron (II) Sulfide (II)
- _____ 19. Which is the correct name for the compound CaClO₂?
- Calcium Chloride
 - Calcium Chloroxide
 - Calcium Chlorite
 - Calcium Chlorate
- _____ 20. Which is the correct name for the compound Na₃P?
- Sodium Phosphide
 - Sodium Phosphite
 - Sodium Phosphate
 - Sodium (III) Phosphide
- _____ 21. Which is the correct name for the compound CoCO₃?
- Carbon Oxygen Carbonate
 - Cobalt (II) Carbonate
 - Cobalt Carbonate
 - Cobalt Carbonoxide
- _____ 22. Which is the correct name for the compound NH₄SO₄?
- Nitrogen Hydrogen Sulfate
 - Nitrogen Hydrosulfate
 - Ammonium (II) Sulfate
 - Ammonium Sulfate
- _____ 23. A formula unit of calcium bromide has two bromide ions corresponding to each calcium ion in the compound. What is the formula of calcium bromide?
- CaBr
 - CaBr₂
 - Ca₂Br
 - Ca₂Br₂

Completion*Complete each statement.*

24. Chemical bond formation may take place due to the interaction between a(n) _____ and an anion.
25. An ionic bond results due to the _____ attraction between two oppositely charged ions.
26. The name of the anion ClO_4^- is _____.
27. In the electron sea model, it is proposed that all the metal atoms in a metallic solid contribute their _____ electrons to form a sea of electrons.
28. The name of the anion PO_4^{3-} is _____.

Part A. Name the following compounds

29. P_2O_5
30. AgClO_3
31. SnCl_4
32. $\text{Cu}(\text{HCO}_3)_2$
33. $\text{Pb}_3(\text{PO}_4)_4$
34. $\text{Mg}(\text{NO}_2)_2$
35. CaCO_3
36. $(\text{NH}_4)_2\text{SO}_4$

Part B. Write the formulas for the following compounds

37. Calcium nitrate
38. Silver Acetate
39. Ammonium Carbonate
40. Barium Hydrogen carbonate
41. Potassium Nitrate
42. Iron III hydroxide
43. Silver chlorate
44. Nickel II Oxalate
45. Chromium II phosphate
46. Sodium Sulfate

