

Writing Compound Formulas Worksheet

Write the correct formula for each of the following ionic compound names.

- | | |
|----------------------------------|--|
| 1. Copper (I) phosphate _____ | 16. Iron (III) sulfate _____ |
| 2. Magnesium nitrite _____ | 17. Silver (I) dichromate _____ |
| 3. Cobalt (II) hydroxide _____ | 18. Lead (II) nitride _____ |
| 4. Iron (III) chromate _____ | 19. Strontium hypochlorite _____ |
| 5. Chromium (II) chloride _____ | 20. Barium chlorate _____ |
| 6. Zinc (II) fluoride _____ | 21. Tin (IV) oxide _____ |
| 7. Mercury (II) acetate _____ | 22. Nickel (II) cyanide _____ |
| 8. Manganese (II) iodide _____ | 23. Aluminum sulfide _____ |
| 9. Copper (II) nitrate _____ | 24. Lead (IV) chromate _____ |
| 10. Aluminum hydroxide _____ | 25. Potassium permanganate _____ |
| 11. Iron (II) phosphate _____ | 26. Calcium dihydrogen phosphate _____ |
| 12. Magnesium sulfite _____ | 27. Barium hydrogen sulfate _____ |
| 13. Tin (II) bromide _____ | 28. Lithium monohydrogen phosphate _____ |
| 14. Sodium bicarbonate _____ | 29. Silver (I) bisulfite _____ |
| 15. Chromium (III) oxalate _____ | 30. Ammonium carbonate _____ |

Write the Compound formulas for the covalent molecules below:

- | | |
|----------------------------------|--------------------------------------|
| 31. Dinitrogen oxide _____ | 35. Tetraphosphorus trisulfide _____ |
| 32. Carbon tetraiodide _____ | 36. Sulfur hexafluoride _____ |
| 33. Dioxygen heptachloride _____ | 37. Dinitrogen pentoxide _____ |
| 34. Phosphorus tribromide _____ | 38. Tetrasulfur decanitride _____ |

Write the compound name for the following covalent molecules.

- | | |
|--|--|
| 39. CS ₂ _____ | 43. N ₂ S ₅ _____ |
| 40. PF ₅ _____ | 44. S ₂ F ₁₀ _____ |
| 41. CBr ₄ _____ | 45. Cl ₂ O ₇ _____ |
| 42. P ₄ S ₁₀ _____ | 46. I ₂ O ₅ _____ |

Write formulas for the following ternary ionic compounds.

1. sodium phosphate _____

2. magnesium nitrate _____

3. sodium hydroxide _____

4. potassium cyanide _____

5. ammonium bromide _____

6. potassium dichromate _____

7. cesium chlorate _____

8. iron (III) sulfate _____

Write formulas for compounds using these pairs of ions.

9. lithium, carbonate _____

10. nitride, tin (IV) _____

11. sulfide, potassium _____

12. hydroxide, chromium (III) _____

13. calcium, phosphide _____

14. chromate, ammonium _____

Write formulas for the following binary compounds.

15. nitrogen tribromide _____

16. dichlorine monoxide _____

17. dinitrogen tetrafluoride _____

18. xenon dichloride _____

19. lead (IV) sulfide _____

20. phosphorus pentafluoride _____

21. strontium bromide _____

22. aluminum nitrite _____

23. copper (II) iodide _____

24. hydrobromic acid _____

25. dihydrogen sulfide _____

26. dinitrogen difluoride _____

Give the charge on the following ions:

27. nitrate _____ 28. oxide _____ 29. phosphate _____ 30. nitride _____

Name the following compounds:

31. CuCN _____

32. SiO₂ _____

33. SeF₄ _____

34. HgI₂ _____

35. SO₃ _____

36. H₃PO₄ _____

37. SrBr₂ _____

38. NiCl₂ _____

39. K₂SO₄ _____

40. FeCO₃ _____

41. NH₄HCO₃ _____

42. NBr₃ _____

43. Cr(OH)₃ _____

44. NiI₂ _____

45. SnCl₄ _____

46. SF₆ _____

47. HCl _____

48. AlF₃ _____

49. Cl₂O₇ _____

50. MnSO₄ _____

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

a. _____

b. _____

c. _____

d. _____

e. _____

f. _____

g. _____