

Problem Solving Assignment: Names and Formulae of Compounds

GENERAL INSTRUCTIONS

For each substance whose name is given, write the formula, if the formula is given, provide the name. Use the Periodic Table as your main reference. If you encounter ions with which you are unfamiliar, you may look these up in your textbook.

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|--|---|
| 1. carbon dioxide_____ | 2. BaCl_2 _____ |
| 3. calcium hypochlorite_____ | 4. KMnO_4 _____ |
| 5. barium hydroxide_____ | 6. FePO_4 _____ |
| 7. cobalt (II) acetate_____ | 8. SnS _____ |
| 9. calcium fluoride_____ | 10. CBr_4 _____ |
| 11. mercury (II) chlorate_____ | 12. $\text{Al}_2(\text{Cr}_2\text{O}_7)_3$ _____ |
| 13. Ammonia_____ | 14. $\text{Al}_2(\text{SO}_4)_3$ _____ |
| 15. manganese (II) oxalate_____ | 16. CdCl_2 _____ |
| 17. sodium carbonate_____ | 18. KH_2PO_4 _____ |
| 19. mercury (I) chloride_____ | 20. $\text{Al}(\text{ClO}_2)_3$ _____ |
| 21. aluminium oxide_____ | 22. $\text{Zn}(\text{NO}_3)_2$ _____ |
| 23. gallium selenate_____ | 24. $\text{CaCl}_2 \cdot 6\text{H}_2\text{O}$ _____ |
| 25. iron (III) sulphide_____ | 26. NH_4NO_2 _____ |
| 27. iron (II) sulphate heptahydrate_____ | 28. H_3PO_3 (aq) _____ |
| 29. barium bromate_____ | 30. H_2O_2 _____ |
| 31. lead (II) iodide_____ | 32. $\text{Ca}(\text{OH})_2$ _____ |
| 33. carbonic acid_____ | 34. K_2SO_3 _____ |
| 35. sodium sulphite_____ | 36. $\text{Hg}(\text{BrO}_3)_2$ _____ |
| 37. periodic acid_____ | 38. HCN (aq) _____ |
| 39. magnesium hydrogen sulphate_____ | 40. Cr_2O_3 _____ |

Problem Solving Assignment: Names and Formulae of Compounds

ANSWERS

GENERAL INSTRUCTIONS

For each substance whose name is given, write the formula, if the formula is given, provide the name. Use the Periodic Table as your main reference. If you encounter ions with which you are unfamiliar, you may look these up in your textbook.

1. carbon dioxide _____ CO_2 _____
2. BaCl_2 _____ barium chloride _____
3. calcium hypochlorite _____ $\text{Ca}(\text{ClO})_2$ _____
4. KMnO_4 _____ potassium permanganate _____
5. barium hydroxide _____ $\text{Ba}(\text{OH})_2$ _____
6. FePO_4 _____ iron(III) phosphate _____
7. cobalt (II) acetate _____ $\text{Co}(\text{CH}_3\text{COO})_2$ _____
8. SnS _____ tin(II) sulfide _____
9. calcium fluoride _____ CaF_2 _____
10. CBr_4 _____ carbon tetrabromide _____
11. mercury (II) chlorate _____ $\text{Hg}(\text{ClO}_3)_2$ _____
12. $\text{Al}_2(\text{Cr}_2\text{O}_7)_3$ _____ aluminum dichromate _____
13. Ammonia _____ NH_3 _____
14. $\text{Al}_2(\text{SO}_4)_3$ _____ aluminum sulfate _____
15. manganese (II) oxalate _____ MnC_2O_4 _____
16. CdCl_2 _____ cadmium chloride _____
17. sodium carbonate _____ Na_2CO_3 _____
18. KH_2PO_4 _____ potassium dihydrogen phosphate _____
19. mercury (I) chloride _____ Hg_2Cl_2 _____
20. $\text{Al}(\text{ClO}_2)_3$ _____ aluminum chlorite _____
21. aluminium oxide _____ Al_2O_3 _____
22. $\text{Zn}(\text{NO}_3)_2$ _____ zinc nitrate _____
23. gallium selenate _____ $\text{Ga}_2(\text{SeO}_4)_3$ _____
24. $\text{CaCl}_2 \cdot 6\text{H}_2\text{O}$ _____ calcium chloride hexahydrate _____
25. iron (III) sulphide _____ Fe_2S_3 _____
26. NH_4NO_2 _____ ammonium nitrite _____
27. iron (II) sulphate heptahydrate _____ $\text{FeSO}_4 \cdot 7\text{H}_2\text{O}$ _____
28. H_3PO_3 (aq) _____ phosphorous acid _____
29. barium bromate _____ $\text{Ba}(\text{BrO}_3)_2$ _____
30. H_2O_2 _____ hydrogen peroxide _____
31. lead (II) iodide _____ PbI_2 _____
32. $\text{Ca}(\text{OH})_2$ _____ calcium hydroxide _____
33. carbonic acid _____ $\text{H}_2\text{CO}_3(\text{aq})$ _____
34. K_2SO_3 _____ potassium sulfite _____
35. sodium sulphite _____ Na_2SO_3 _____
36. $\text{Hg}(\text{BrO}_3)_2$ _____ mercury(II) bromate _____
37. periodic acid _____ $\text{HIO}_4(\text{aq})$ _____
38. HCN (aq) _____ hydrocyanic acid _____
39. magnesium hydrogen sulphate _____ $\text{Mg}(\text{HSO}_4)_2$ _____
40. Cr_2O_3 _____ chromium(III) oxide _____