

Part 5: Practice all naming

Name the following formulas- Practice of ALL types of compounds we have covered.

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|---|----------------------------|---|---|
| 1. HCl(aq) | <u>hydrochloric acid</u> | 2. HNO ₃ (aq) | <u>nitric acid</u> |
| 3. H ₂ SO ₄ (aq) | <u>sulfuric acid</u> | 4. HgCl(s) | <u>mercury (I) chloride</u> |
| 5. CO(g) | <u>carbon monoxide</u> | 6. Hg(l) | <u>mercury</u> |
| 7. CH ₃ OH(l) | <u>methanol</u> | 8. CuSO ₄ •5H ₂ O(s) | <u>copper (II) sulfate pentahydrate</u> |
| 9. KOH(s) | <u>potassium hydroxide</u> | 10. HgO(s) | <u>mercury (II) oxide</u> |
| 11. CaCO ₃ (s) | <u>calcium carbonate</u> | 12. SiO ₂ (s) | <u>silicon dioxide</u> |
| 13. Na ₂ SO ₄ (s) | <u>sodium sulfate</u> | 14. CaCl ₂ (s) | <u>calcium chloride</u> |
| 15. NaOCl(s) | <u>sodium hypochlorite</u> | 16. NH ₄ NO ₃ (s) | <u>ammonium nitrate</u> |
| 17. SO ₃ (g) | <u>sulfur trioxide</u> | 18. CO ₂ | <u>carbon dioxide</u> |
| 19. HNO ₂ (aq) | <u>nitrous acid</u> | 20. CH ₃ COOH(aq) | <u>acetic acid</u> |
| 21. N ₂ (g) | <u>nitrogen</u> | 22. NaCl(s) | <u>sodium chloride</u> |
| 23. S ₈ (s) | <u>sulfur</u> | 24. H ₂ SO ₄ (aq) | <u>sulfuric acid</u> |
| 25. CaO(s) | <u>calcium oxide</u> | 26. (NH ₄) ₂ SO ₄ (s) | <u>ammonium sulfate</u> |

Part 6: Including States

Labeling the States Practice Give the formula for the following molecular and ionic compounds, include the states (s), (l), (g), (aq).

1. $\text{NH}_3(\text{g})$ ammonia
2. CCl_4 * carbon tetrachloride
3. $\text{CH}_4(\text{g})$ methane
4. $\text{H}_2\text{SO}_4(\text{aq})$ sulfuric acid
5. $\text{N}_2(\text{g})$ nitrogen
6. N_2O * dinitrogen monoxide
7. $\text{S}_8(\text{s})$ sulfur
8. $\text{HClO}_4(\text{aq})$ perchloric acid
9. $\text{CH}_3\text{OH}(\text{l})$ methanol
10. $\text{C}_{12}\text{H}_{22}\text{O}_{11}(\text{s})$ sucrose
11. $\text{HClO}(\text{aq})$ hypochlorous acid
12. SO_2 * sulfur dioxide
13. _____ sulfur dioxide
14. $\text{SrI}_2(\text{s})$ strontium iodide
15. As_2O_3 * diarsenic trioxide
16. $\text{Na}_2\text{SO}_4(\text{s})$ sodium sulfate
17. PH_3 * phosphorous trihydride
18. $\text{CaCl}_2 \cdot 6\text{H}_2\text{O}$ calcium chloride hexahydrate
19. $\text{CH}_4(\text{g})$ methane

* molecular compound
of unknown state
↓
you can look up
states but not
necessary to know;
can leave states
blank.

20. $\text{NaNO}_3 \cdot 6\text{H}_2\text{O} (s)$ sodium nitrate hexahydrate
21. $\text{H}_3\text{BO}_3 (aq)$ boric acid
22. $\text{H}_2\text{CO}_3 (aq)$ carbonic acid
23. $\text{SiO}_2 *$ silicon dioxide
24. $\text{KMnO}_4 (s)$ potassium permanganate
25. $\text{HF} (aq)$ hydrofluoric acid
26. $\text{NaOH} (s)$ sodium hydroxide \rightarrow or if base in solution $\text{NaOH} (aq)$
27. $\text{Na}_2\text{S}_2\text{O}_3 (s)$ sodium thiosulfate
28. $\text{MgSO}_4 \cdot 7\text{H}_2\text{O} (s)$ magnesium sulfate heptahydrate
29. $\text{P}_4 (s)$ phosphorous
30. $\text{NaClO}_3 (s)$ sodium chlorate
31. $\text{C}_2\text{H}_5\text{OH} (l)$ ethanol
32. $\text{CuSO}_4 \cdot 5\text{H}_2\text{O} (s)$ copper(II) sulfate pentahydrate
33. $\text{HClO}_2 (aq)$ chloric acid
34. $\text{PbSO}_4 (s)$ lead(II) sulfate
35. $\text{NCl}_3 *$ nitrogen trichloride
36. $\text{AlPO}_4 (s)$ aluminum phosphate
37. $\text{CS}_2 *$ carbon disulfide
38. $\text{N}_2\text{H}_4 *$ dinitrogen tetrahydride
39. $\text{SnI}_2 (s)$ tin(II) iodide