

Name: Key

Hour: _____

CHEMISTRY – Acid Formulas and Nomenclature – Unit 8

I. Write the name of the anion in the acid and write the correct formula for each acid.

	<u>ANION NAME</u>	<u>ACID FORMULA</u>
1. sulfuric acid	<u>Sulfate</u>	<u>H_2SO_4 (aq)</u>
2. hydrobromic acid	<u>bromide</u>	<u>HBr (aq)</u>
3. hypochlorous acid	<u>hypochlorite</u>	<u>$HClO$ (aq)</u>
4. carbonic acid	<u>carbonate</u>	<u>H_2CO_3 (aq)</u>
5. permanganic acid	<u>permanganate</u>	<u>$HMnO_4$ (aq)</u>
6. sulfurous acid	<u>sulfite</u>	<u>H_2SO_3 (aq)</u>
7. acetic acid	<u>acetate</u>	<u>$HC_2H_3O_2$ (aq)</u>
8. nitrous acid	<u>nitrite</u>	<u>HNO_2 (aq)</u>
9. phosphoric acid	<u>phosphate</u>	<u>H_3PO_4 (aq)</u>
10. hydrosulfuric acid	<u>sulfide</u>	<u>H_2S (aq)</u>

II. Write the name of the acids whose formulas appear below. Write the formula and name of the sodium salt of the acid's anion.

	<u>ACID NAME</u>
11. H_3PO_4 (aq)	<u>Phosphoric Acid</u>
12. $HClO_2$ (aq)	<u>Chlorous Acid</u>
13. HI (aq)	<u>Hydroiodic Acid</u>
14. HNO_3 (aq)	<u>Nitric Acid</u>
* 15. H_2SO_2 (aq)	<u>Hyposulfurous acid</u>
16. H_2CrO_4 (aq)	<u>Chromic Acid</u>
17. $HClO_4$ (aq)	<u>Perchloric Acid</u>
18. HBr (aq)	<u>Hydrobromic Acid</u>
* 19. HNO_4 (aq)	<u>Per nitric Acid</u>
20. $HBrO_3$ (aq)	<u>Bromic Acid</u>

336
0013
α. 1134

Name: Key Hour: _____

CHEMISTRY - Names and Formulas Review - Unit 8

I. Write the names of each of the following compounds.

- | | |
|--|--|
| 1. <u>Sodium Sulfide</u> Na_2S I | 11. <u>Calcium chloride</u> CaCl_2 I |
| 2. <u>Ammonium Chloride</u> NH_4Cl I | 12. <u>Sodium Carbonate</u> Na_2CO_3 I |
| 3. <u>Copper(I) Fluoride</u> CuF I | 13. <u>Boron Chlorate</u> $\text{B}(\text{ClO}_3)_3$ I |
| 4. <u>Copper(II) Fluoride</u> CuF_2 I | 14. <u>Phosphorus trifluoride</u> PF_3 C |
| 5. <u>Lead(II) Sulfate</u> PbSO_4 I | 15. <u>Ammonium Phosphate</u> $(\text{NH}_4)_3\text{PO}_4$ I |
| 6. <u>Mercury(II) Nitrate</u> $\text{Hg}(\text{NO}_3)_2$ I | 16. <u>Iron(II) Sulfate</u> FeSO_4 I |
| 7. <u>Aluminum Oxide</u> Al_2O_3 I | 17. <u>Mercury(I) Nitrate</u> $\text{Hg}_2(\text{NO}_3)_2$ I |
| 8. <u>Dinitrogen tetroxide</u> N_2O_4 C | 18. <u>Mercury(II) Nitrate</u> $\text{Hg}(\text{NO}_3)_2$ I |
| 9. <u>Hydrosulfuric Acid</u> $\text{H}_2\text{S}(\text{aq})$ A | 19. <u>Ammonium Nitrate</u> NH_4NO_3 I |
| 10. <u>Chloric acid</u> $\text{HClO}_3(\text{aq})$ A | 20. <u>Hypochlorous acid</u> $\text{HClO}(\text{aq})$ A |

II. Write the formulas for the following compounds.

- | |
|---|
| 21. <u>NiCl_2</u> nickel (II) chloride $\text{Ni}^{2+} \text{Cl}^-$ |
| 22. <u>CuNO_3</u> copper (I) nitrate $\text{Cu}^+ \text{NO}_3^-$ |
| 23. <u>$(\text{NH}_4)_2\text{SO}_4$</u> ammonium sulfate $\text{NH}_4^+ \text{SO}_4^{2-}$ |
| 24. <u>Mg_3N_2</u> magnesium nitride $\text{Mg}^{2+} \text{N}^{3-}$ |
| 25. <u>Hg_2S_2</u> mercury (I) sulfide $\text{Hg}_2^{2+} \text{S}^{2-}$ |
| 26. <u>CO</u> carbon monoxide |
| 27. <u>N_2O</u> dinitrogen monoxide |
| 28. <u>P_2O_5</u> diphosphorus pentoxide |
| 29. <u>$\text{H}_2\text{SO}_3(\text{aq})$</u> sulfurous acid $\text{H}^+ \text{SO}_3^{2-}$ |
| 30. <u>$\text{HI}(\text{aq})$</u> hydroiodic acid $\text{H}^+ \text{I}^-$ |