

1. Write the formula for each of the following compounds.

- a) lithium carbonate
- b) aluminum chloride
- c) barium hydroxide

[1] _____

2. Which of the following are binary compounds?

- calcium phosphate potassium chloride
- sodium phosphate silver chloride

[2] _____

3. In each of the following, assume that an element X forms an ionic compound. What is the charge on the X ion in each compound?

- a) XF_3
- b) XCO_3
- c) $(\text{NH}_4)_3\text{X}$

[3] _____

4. Write the name for each of the following compounds.

- a) LiI
- b) NH_4OH
- c) $\text{Ba}(\text{OH})_2$

[4] _____

5. Give the name for the following molecular compounds.

- a) PCl_3
- b) S_2Cl_5

[5] _____

6. Write the formula for each of the following molecular compounds.

- a) iodine monochloride
- b) dinitrogen tetrahydride

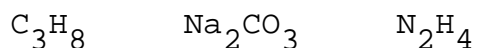
[6] _____

7. The metallic element in each of the following compounds has variable oxidation states. Write out the correct names of these compounds.

- a) CuNO_3
- b) FeBr_2
- c) PbCl_4

[7] _____

8. Which of the following compounds is/are already written in empirical form?



[8] _____

9. How many atoms of oxygen are represented by $6\text{H}_2\text{O}$?

[9] _____

10. How many total atoms are present in 3 molecules of ammonium nitrate?

[10] _____

Key Sheet

- [1] a) Li_2CO_3
b) AlCl_3
c) $\text{Ba}(\text{OH})_2$

- [2] potassium chloride, silver chloride

- [3] a) 3+
b) 2+
c) 3-

- [4] a) lithium iodide
b) ammonium hydroxide
c) barium hydroxide

- [5] a) phosphorus trichloride
b) disulfur dichloride

- [6] a) ICl
b) N_2H_4

- [7] a) copper(I) nitrate
b) iron(II) bromide
c) lead(IV) chloride

- [8] C_3H_8 , Na_2CO_3

- [9] 6

- [10] 27 atoms
