

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

- a) potassium sulfate
- b) aluminum bromide
- c) calcium hydroxide

[1] _____

2. Which of the following are binary compounds?

- lithium oxide iron oxide
- calcium phosphate sodium 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) XBr_2
- b) X_2CO_3
- c) $(NH_4)_2X$

[3] _____

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

- a) LiI
- b) LiOH
- c) $\text{Ca}(\text{NO}_3)_2$

[4] _____

5. Give the name for the following molecular compounds.

- a) SF_6
- b) OF_2

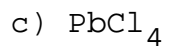
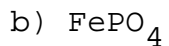
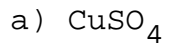
[5] _____

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

- a) diphosphorus trioxide
- b) dichlorine heptoxide

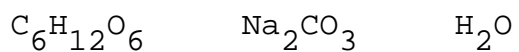
[6] _____

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



[7] _____

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



[8] _____

9. How many atoms of oxygen are represented by $4\text{NH}_4\text{NO}_3$?

[9] _____

10. How many total atoms are present in 9 molecules of sodium phosphate?

[10] _____

Key Sheet

- [1] a) K_2SO_4
b) $AlBr_3$
c) $Ca(OH)_2$
-

- [2] lithium oxide, iron oxide, sodium chloride

- [3] a) 2+
b) 1+
c) 2-
-

- [4] a) lithium iodide
b) lithium hydroxide
c) calcium nitrate
-

- [5] a) sulfur hexafluoride
b) oxygen difluoride
-

- [6] a) P_2O_3
b) Cl_2O_7
-

Key Sheet

- [7] a) copper(II) sulfate
b) iron(III) phosphate
c) lead(IV) chloride
-

- [8] $\text{Na}_2\text{CO}_3, \text{H}_2\text{O}$
-

- [9] 12
-

- [10] 72 atoms
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