



HELLENIC REPUBLIC
UNIVERSITY OF CRETE

Academic English

Section: Chemistry Practice Sheet #1: Writing Formulas

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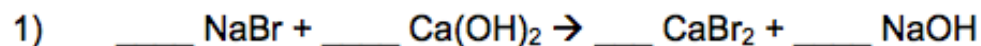
Chemistry Practice Sheet #1: Writing Formulas

Write the correct formula for each compound named below:

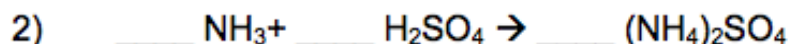
1. sodium bromide _____
2. zinc sulfide _____
3. copper(II) chloride _____
4. iron(III) oxide _____
5. sulfuric acid _____
6. copper(II) carbonate _____
7. lead(II) nitrate _____
8. sodium hydroxide _____
9. sodium acetate _____
10. barium chloride _____
11. ammonium chloride _____
12. silicon dioxide _____
13. antimony trichloride _____
14. sodium carbonate _____
15. sodium bisulfite _____
16. silver nitrate _____
17. carbon disulfide _____
18. cobalt (II) chloride _____
19. stannic chloride _____
20. lithium hydroxide _____
21. sodium oxalate _____
22. potassium permanganate _____
23. phosphoric acid _____
24. nickel(II) chlorate _____
25. copper(II) oxide _____
26. magnesium bromide _____
27. iron(II) nitrate _____
28. sulfur trioxide _____
29. ammonium dichromate _____
30. sodium cyanide _____
31. barium hydroxide _____
32. ammonium thiocyanate _____
33. zinc chloride _____
34. dinitrogen trioxide _____
35. cesium sulfate _____
36. chromium(II) nitrate _____
37. silver iodide _____
38. titanium(IV) chloride _____
39. lead(II) acetate _____
40. ammonia _____

Six Types of Chemical Reaction Worksheet

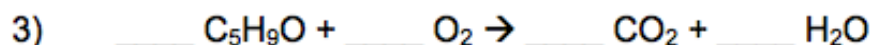
Balance the following reactions and indicate which of the six types of chemical reaction are being represented:



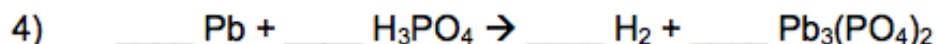
Type of reaction: _____



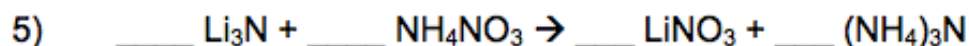
Type of reaction: _____



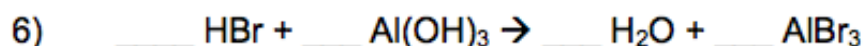
Type of reaction: _____



Type of reaction: _____



Type of reaction: _____



Type of reaction: _____

7) What's the main difference between a double displacement reaction and an acid-base reaction?

8) Combustion reactions always result in the formation of water. What other types of chemical reaction may result in the formation of water? Write examples of these reactions on the opposite side of this paper.

Word Equations

Write the word equations below as chemical equations and balance:

1) Zinc and lead (II) nitrate react to form zinc nitrate and lead.

2) Aluminum bromide and chlorine gas react to form aluminum chloride and bromine gas.

3) Sodium phosphate and calcium chloride react to form calcium phosphate and sodium chloride.

4) Potassium metal and chlorine gas combine to form potassium chloride.

5) Aluminum and hydrochloric acid react to form aluminum chloride and hydrogen gas.

6) Calcium hydroxide and phosphoric acid react to form calcium phosphate and water.

7) Copper and sulfuric acid react to form copper (II) sulfate and water and sulfur dioxide.

8) Hydrogen gas and nitrogen monoxide react to form water and nitrogen gas.

Writing Complete Equations Practice

For each of the following problems, write complete chemical equations to describe the chemical process taking place. Important note: There are a few physical processes on this sheet – remember, you can't write an equation for a physical process!

- 1) When lithium hydroxide pellets are added to a solution of sulfuric acid, lithium sulfate and water are formed.
- 2) When dirty water is boiled for purification purposes, the temperature is brought up to 100°C for 15 minutes.
- 3) If a copper coil is placed into a solution of silver nitrate, silver crystals form on the surface of the copper. Additionally, highly soluble copper (I) nitrate is generated.
- 4) When crystalline $\text{C}_6\text{H}_{12}\text{O}_6$ is burned in oxygen, carbon dioxide and water vapor are formed.
- 5) When a chunk of palladium metal is ground into a very fine powder and heated to drive off any atmospheric moisture, the resulting powder is an excellent catalyst for chemical reactions.

Notes

Reference Note

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