

# WORKSHEET 10

Chemistry 110

Name \_\_\_\_\_

(last)

(first)

Due date: \_\_\_\_\_

Complete, write and balance the equation for each of the following chemical reactions, using correct symbols and formulas, and giving correct physical states for all reactants and products.

On the line at the left, write the letter corresponding to the reaction type:

(A) combination    (B) decomposition    (C) single replacement    (D) double replacement    (E) combustion

\_\_\_\_\_ 1. Calcium and aqueous silver sulfate react to form silver plus calcium sulfate.

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\_\_\_\_\_ 2. Zinc reacts with oxygen to form zinc oxide.

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\_\_\_\_\_ 3. Gaseous hydrogen sulfide is bubbled through aqueous chromic nitrate to produce chromic sulfide and nitric acid.

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\_\_\_\_\_ 4. Sulfuric acid in aqueous solution produces liquid water and sulfur trioxide gas.

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\_\_\_\_\_ 5. Potassium and liquid water react to produce potassium hydroxide and hydrogen.

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\_\_\_\_\_ 6. Aluminum hydroxide is heated and it reacts to produce gaseous water and aluminum oxide.

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\_\_\_\_\_ 7. Gaseous methane,  $\text{CH}_4$ , is ignited in oxygen to produce carbon dioxide and gaseous water.

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\_\_\_\_\_ 8. Aqueous solutions of potassium carbonate and ferric bromide are mixed and produce ferric carbonate and potassium bromide.

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\_\_\_\_\_ 9. Liquid pentane,  $\text{C}_5\text{H}_{12}$ , reacts with oxygen in air to yield carbon dioxide and gaseous water.

\_\_\_\_\_

\_\_\_\_\_ 10. Strontium and nitrogen yield strontium nitride.

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- \_\_\_\_\_ 11. Aqueous solutions of lithium phosphate and stannous acetate are mixed, and the products are lithium acetate and stannous phosphate.
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- \_\_\_\_\_ 12. Chlorine and manganese (III) bromide yield bromine and manganese (III) chloride.
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- \_\_\_\_\_ 13. Gaseous nitrogen dioxide and aqueous hydrogen peroxide produce nitric acid.
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- \_\_\_\_\_ 14. Aqueous solutions of sodium hydroxide and phosphoric acid react to produce water and sodium phosphate.
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- \_\_\_\_\_ 15. Gaseous ethane,  $C_2H_6$ , reacts with oxygen to produce carbon dioxide and gaseous water.
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- \_\_\_\_\_ 16. Potassium iodide and chlorine yield iodine and potassium chloride.
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- \_\_\_\_\_ 17. Antimony (V) oxide produces antimony and oxygen.
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- \_\_\_\_\_ 18. Aqueous solutions of sulfuric acid and barium hydroxide are reacted to produce water and barium sulfate.
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- \_\_\_\_\_ 19. Antimony (V) oxide and liquid water produce antimony (V) hydroxide.
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- \_\_\_\_\_ 20. Aluminum and chlorine produce aluminum chloride.
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