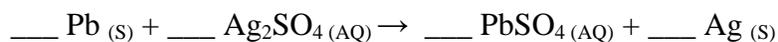


## PRACTICE Celebration REACTIONS

For each of these 10 reactions BALANCE THEM where possible, write in the phase symbols, and write the type of reaction it is.

$\text{N}_2\text{O}_{3(\text{G})} \rightarrow \text{N}_{2(\text{G})} + \text{O}_{2(\text{G})}$	$\text{Mg}_{(\text{S})} + \text{O}_{2(\text{G})} \rightarrow \text{MgO}_{(\text{S})}$
$\text{C}_4\text{H}_{8(\text{G})} + \text{O}_{2(\text{G})} \rightarrow \text{CO}_{2(\text{G})} + \text{H}_2\text{O}_{(\text{G})}$	$\text{Fe}_{(\text{S})} + \text{HCl}_{(\text{AQ})} \rightarrow \text{FeCl}_{3(\text{AQ})} + \text{H}_{2(\text{G})}$
$\text{H}_2\text{O}_{2(\text{L})} \rightarrow \text{H}_2\text{O}_{(\text{L})} + \text{O}_{2(\text{G})}$	$\text{C}_6\text{H}_{12}\text{O}_{6(\text{S})} + \text{O}_{2(\text{G})} \rightarrow \text{CO}_{2(\text{G})} + \text{H}_2\text{O}_{(\text{G})}$
$\text{Ca}(\text{NO}_3)_{2(\text{AQ})} + (\text{NH}_4)_2\text{SO}_{4(\text{AQ})} \rightarrow$	
$\text{Fe}_2\text{O}_{3(\text{S})} \rightarrow \text{O}_{2(\text{G})} + \text{Fe}_{(\text{S})}$	$\text{Ti}_{(\text{S})} + \text{CuHCO}_3(\text{AQ}) \rightarrow$
$\text{Al}(\text{OH})_{3(\text{AQ})} + \text{CaBr}_{2(\text{AQ})} \rightarrow$	

Given this unbalanced reaction:



11. When the equation is balanced using the smallest whole number coefficients, what is the coefficient of Ag?      A. 1      B. 2      C. 3      D. 4

12. When Lithium nitrate and Cobalt (III) hydrogen carbonate solutions combine, what is to be expected?  
A. a violent exothermic reaction      B. a mellow endothermic reaction  
C. nothing      D. cannot be determined from the information provided

For questions 14 and 15, use this given unbalanced reaction:



14. What type of reaction is represented by this equation? \_\_\_\_\_
15. What are the lowest coefficients for each of these reactants and products, in order?  
A. 1, 2, 2      B. 2, 1, 3      C. 2, 2, 3      D. 1, 1, 1
16. If you were to place tin into an aqueous solution of sodium (II) carbonate, what would you expect to happen?  
A. odor change      B. CO<sub>2</sub> bubbles      C. sodium precipitate      D. nothing at all
17. If you mix solutions of silver nitrate + potassium chloride, what precipitate will be one product?  
A. silver chloride      B. potassium nitrate      C. silver nitrate      D. potassium silveride
18. Name the solution formed as a product in question 17?  
A. silver nitrate      B. silver chloride      C. potassium nitrate      D. potassium chloride
19. Which of these four compounds makes an aqueous solution?  
A. CaCrO<sub>4</sub>      B. Mg(OH)<sub>2</sub>      C. PbCl<sub>2</sub>      D. AgCl
20. What is the product of this reaction:  $2\text{HCl}_{(\text{AQ})} + \text{F}_{2(\text{G})} \rightarrow$  \_\_\_\_\_  
A. nothing      B.  $\text{H}_{2(\text{G})} + \text{Cl}_{2(\text{G})} + \text{F}_{2(\text{AQ})}$       C.  $2\text{HF}_{(\text{G})} + \text{Cl}_{2(\text{G})}$       D.  $2\text{FCl}_{2(\text{AQ})} + 2\text{H}_{(\text{G})}$
20. If a compound is insoluble, that means it is  
A. dissolved in oil      B. dissolved in water      C. dissolved in alcohol      D. a solid in water