Chemistry Hour\_\_\_\_\_ Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
Dr. Wexler  
Stoichiometry Worksheet 2 (HS-PS1-7; HSN-Q.A.1)  
Date\_\_\_\_\_

32 points total

Answer the following questions based on the balanced chemical equation:

CaCl2 (aq) + 2AgNO3 (aq) 🡪 Ca(NO3)2 (aq) + 2AgCl (s)

1. (2 pts) Multiple choice: What kind of chemical reaction is this?  
A. single replacement  
B. double replacement  
C. decomposition  
D. synthesis

2. (4 pts) List the two reactants  
  
A.  
  
B.

3. (4pts) List the two products  
  
A.

B.

4. (2 pts) When the two reactants are combined, what will be the visible evidence for a chemical reaction?

5. (2 pts) If AgNO3 is in excess, the amount of which reactant determines how much of each product is made?

6. (4 pts) If one mole of CaCl2 reacts with an excess of AgNO3, how many moles of each product will be produced?

A. Ca(NO3)2

B. AgCl

7. (2 pts) If 0.5 mole of CaCl2 reacts with an excess of AgNO3, how many moles of AgCl will be produced?

8. (2 pts) If 10 moles of AgNO3 reacts with an excess of CaCl2, how many moles of Ca(NO3)2 will be produced?

Again, referring to: CaCl2 + 2AgNO3 🡪 Ca(NO3)2 + 2AgCl

9. (10 pts) How many grams of AgCl will be produced from 100g of CaCl2 in excess AgNO3?  
  
Neatly organize your calculations into three sections using the GMMG Plan. Be sure to write the unit after each number in this process (ex. 3.0g, not 3.0)