

WKS 3-6 – Chem Honors
Balancing Equations

NAME _____
Period _____ **Date** _____

- 1) Why is it important that a chemical equation be balanced?

- 2) What is being *balanced* when one balances an equation?

- 3) When balancing an equation, why is it acceptable to change the coefficients, but not permissible to change the subscripts within the formulas? *To answer this question, complete these sentences:*
 - a) When one changes the coefficients, one is changing.....

 - b) When one changes the subscripts, one is changing.....

- 4) Balance the following equations:
 - a) $__ \text{N}_2 + __ \text{H}_2 \rightarrow __ \text{NH}_3$

 - b) $__ \text{AgI} + __ \text{Fe}_2(\text{CO}_3)_3 \rightarrow __ \text{FeI}_3 + __ \text{Ag}_2\text{CO}_3$

 - c) $__ \text{V}_2\text{O}_5 + __ \text{CaS} \rightarrow __ \text{CaO} + __ \text{V}_2\text{S}_5$

 - d) $__ \text{AgBr} + __ \text{GaPO}_4 \rightarrow __ \text{Ag}_3\text{PO}_4 + __ \text{GaBr}_3$

 - e) $__ \text{S}_8 + __ \text{O}_2 \rightarrow __ \text{SO}_2$

 - f) $__ \text{Fe} + __ \text{AgNO}_3 \rightarrow __ \text{Fe}(\text{NO}_3)_2 + __ \text{Ag}$

 - g) $__ \text{C}_3\text{H}_8 + __ \text{O}_2 \rightarrow __ \text{CO}_2 + __ \text{H}_2\text{O}$

