

WKS – 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) ___ N₂ + ___ H₂ → ___ NH₃

 - b) ___ AgI + ___ Fe₂(CO₃)₃ → ___ FeI₃ + ___ Ag₂CO₃

 - c) ___ V₂O₅ + ___ CaS → ___ CaO + ___ V₂S₅

 - d) ___ AgBr + ___ GaPO₄ → ___ Ag₃PO₄ + ___ GaBr₃

 - e) ___ S₈ + ___ O₂ → ___ SO₂

 - f) ___ Fe + ___ AgNO₃ → ___ Fe(NO₃)₂ + ___ Ag

 - g) ___ C₃H₈ + ___ O₂ → ___ CO₂ + ___ H₂O

