Name:_____ Blk:____Date:_____

An introduction to STOICHIOMETRY

Together with a partner, complete the following activities using the packages of Rockets[®] provided:

1. One purple Rocket[®] (Pu) reacts with one pink Rocket[®] (Pi) to form a $PuPi_2$ compound, according to the following UNBALANCED equation:

___ Pu + ____ Pi 🛛 ____ PuPi₂

a. How many PuPi₂ molecules can you form?

b. What type of a reaction does this represent?

c. Did you use all the Purple and Pink's in your packages? If no, which ones are left over?

2. A compound composed of 1 White Rocket and 2 Green Rockets (WiGe₂) reacts with a compound composed of 2 Yellow Rockets (Ye₂) to form two different compounds as seen in this UNBALANCED equation:

_____WiGe₂ + _____Ye₂ ? _____WiYe₄ + _____Ge₂

a. How many WiYe₄ compounds can you form? How many Ge compounds?

b. What type of a reaction does this represent?

c. Did you use all the Rocket's in your package?If no, which ones are left ove

3. A compound made up of 1 Green and 1 Orange Rocket[®] reacts with a compound composed of 1 Purple and 2 Pink Rocket[®] and the following products form:

 $___GeO + ___PuPi_2 → ___GePi_2 + __PuO$

- a. How many GePi₂ molecules can you form? How many PuPi₂ molecules can you form?
- b. What type of a reaction does this represent?
- c. Did you use all the Rocket's in your package? If no, which ones are left over?

4. Now that you have completed the above 3 activities, what can you conclude from this experience? How do the candies represent chemicals in a chemical reaction? What do you now know that you did not consider before?