Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Pd: \_\_\_\_\_ Ast: \_\_\_\_\_

**M/J Physical Science Adv. & Comp. Science 3 Adv.**

**CHEMICAL REACTIONS NOTES**

1. **CHEMICAL REACTIONS**
2. Chemical Reaction:
3. How does a chemical reaction affect chemical bonds?
4. What observations can provide evidence that a chemical reaction has occurred?
5. Reactants:
6. Products:
7. Chemical Equations:
8. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 🡪 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (shown as chemical formulas)
9. CaCO3 🡪 CaO + CO2
   * + 1. What do we notice about the elements that make up the reactants and the products in the above reaction?
10. **CONSERVATION OF MASS**
11. CaCO3 🡪 CaO +CO2
12. How many calcium atoms are in the reactant? \_\_\_\_\_ How many calcium atoms are in the products? \_\_\_\_\_
13. How many carbon atoms are in the reactant? \_\_\_\_\_ How many carbon atoms are in the products? \_\_\_\_\_
14. How many oxygen atoms are in the reactant? \_\_\_\_\_ How many oxygen atoms are in the products? \_\_\_\_\_
15. Law of Conservation of Mass:
16. What is another way to say the law of conservation of mass?
17. **CONTROLLING REACTIONS**
18. How can chemists use temperature to control the rate (speed) of a chemical reaction?
19. List three other variables chemists can use to control the rate of chemical reactions: