## Assignment 8-1, 8-2

Name

1.	If we light a match and blow it out immediately, why can't we strike it again and have it re-light?	Class Period  Date? 1999 Sci-Ed Services
2.	What is the difference between <b>reactants</b> and <b>products</b> in a chemical reaction?	
3.	Describe the reactants and products of four chemical reactions.	
4.	. What are the two basic characteristics of all chemical reactions?	
5.	Which electrons are usually involved in chemical bonding?	
6.	Regarding electrons and energy levels, what is the most stable condition for an atom?	
7.	Explain why some atoms have a strong capacity to bond with other atoms, but some atoms have little or no bonding capacity.	
8.	Why is burning paper considered to be a chemical reaction, but shredding paper is not?	
9.	According to your science text, what do chemical equations describe?	
10	According to your science text, why do we use chemical equa	tions instead of words?
11	According to your science text, what does the horizontal arrow in a chemical equation mean?	
12	2. According to your science text, what is the horizontal arrow in a normal mathematical equation?	a chemical equation compared to

Please continue on the other side.

- 13. Why does the "law of conservation of mass" require that both sides of a chemical equation be "balanced"?
- 14. What is a **balanced** chemical equation?
- 15. What name is given to the numbers used to balance an equation?
- 16. What is "one thing you cannot do to balance an equation"?

## Balance the following equations.

17. 
$$BaCl_2 + H_2SO_4 \not \simeq BaSO_4 + HCI$$

18. 
$$P + O_2 \not \in P_4O_{10}$$

19. 
$$KCIO_3 \ll KCI + O_2$$

20. 
$$C_3H_8 + O_2 \not \in CO_2 + H_2O$$

21. 
$$Cu + AgNO_3 \angle Cu(NO_3)_2 + Ag$$

22. Na + 
$$O_2 \bowtie Na_2O$$

24. 
$$MgCO_3 + HCI \bowtie MgCl_2 + H_2CO_3$$