Oct. 00
A. Lee

Name: _____ Period:_____ Date: _____

Chapter 2 Practice Worksheet

Balance the following chemical reactions by using coefficients.

1. __$NaNO_3$ → __$NaNO_2$ + __O_2

2. __Al + __H_2SO_4 → __$Al_2(SO_4)_3$ + __H_2

3. __Sb + __O_2 → __Sb_2O_5

4. __SiO_2 + __HF → __SiF_4 + __H_2O

5. __$(NH_4)_2Cr_2O_7$ → __N_2 + __H_2O + __ Cr_2O_3

Write formula for the ionic compounds

	Cl^{-1}	O^{-2}	S^{-2}	PO_4^{-3}	OH^-
Na^{+1}	6)	7)	8)	9)	10)
Mg^{+2}	11)	12)	13)	14)	15)

16. If a chemist wanted to create an ionic compound using Potassium and Bromine. What would be its formula? What would be its name? (hint: You first need to find the charges for these elements)

Formula of the compound: _____ Name of the compound:_____

17. Define "organic" compound.

Fill in the blank.

18. _____ are building blocks for carbohydrates.

19. Cellulose is one type of _____.

20. _____ and _____ are building block for lipids.

21. _____ _____ are building blocks for protein.

22. The molecular formula for glucose is _____.

Answer the following questions.

23. What is the function of carbohydrate in your body (in your cell)?

24. What is the function of lipid?

25. What is the function of an enzyme? How does it work (two hypotheses)?

26. What is DNA? What is its function in the cell?

27. Adenine always pairs up with _____ and Guanine always pairs up with _____.

28. Name the two scientists who discovered DNA.

29. What is the difference between saturated and unsaturated fat?

30. Write whether following molecules have covalent bonds or ionic bonds.

a) N_2 _____ b) CO_2 _____ c) O_2 _____

d) $NaNO_3$_____ e) Sb_2O_5 _____ f) HF _____

g) SiO_2_____ h) Cr_2O_3 _____ I) H_2O _____