Ch 6 Study Guide Name: _____ N.B. p. = _____

Single/Science

1. Compounds have _____ properties from the elements that make them up.
2. Properties of a compound are determined by the _____ in a compound & how they are _____.
3. Describe the difference in a molecule & a compound.

4. Describe the difference in a compound & a mixture.

5. Name & define 3 types of chemical bonds.
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6. An atom's _____electrons are involved in bonding.
7. What is the ratio of nitrogen to hydrogen in NH_3 ?

8. Predict the bonding in each compound:

NaCl	MgO
CaS	HCl
CH_4	N_2

9. In a <u>polar</u> covalent bond, 2 or more elements share electrons _____.
10. Predict whether the bonding in each compound is polar covalent or not.

NH_3	F_2
H_2o	NaCl

11. _____ represent compounds by showing the symbols & ratios of each element.
12. Compounds with ionic bonds are arranged into _____.
13. Compounds with covalent bonding are arranged into _____.

14. Two metals form _____ bonds. They share electrons _____ in _____ with other metal atoms. Electrons between these atoms also _____ freely.
15. List & describe 5 properties of metals.
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16. Categorize each property as ionic or covalent:

Characteristic	Ionic	Covalent
High melting point		
Hard & brittle		
Low melting point		
Low boiling point		
Not good conductors of electricity in the solid phase		
Breaks into ions when dissolved		
Stays intact when dissolved in liquid		
Good conductors of electricity In the liquid phase		

17. _____ are different forms of the same element & result from different arrangements of_____ bonds.
18. List 3 allotropes of carbon.
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19. Draw a Bohr model for sulfur:

20. Write a <u>chemical equation</u>, <u>chemical formula</u>, <u>chemical name</u>, & draw the <u>dot diagram</u> for each:
    Sodium & Phosphorus Calcium & Fluorine