Name: _____ Date: _____ Period: _____

Ionic or Covalent Bond?

It is not difficult to tell if a compound is ionic or covalent from the chemical formula. The idea is simple, if a bond is ionic, then one of the atoms must be an atom that can form a positive ion. Therefore, in an ionic bond, one of the atoms must be a metal. Since nonmetals are more electronegative, they will not give up electrons easily. In a bond formed between two nonmetal atoms, neither will give up the electron, they will share. Bonds between two nonmetals are covalent.

State whether the following bonds are ionic or covalent. Write you answers in the line provided.

1. NaCl _____
2. CO_2 _____
3. HCl _____
4. $MgCl_2$ _____
5. CuF_2 _____
6. $Fe2O_3$ _____
7. PCl_5 _____
8. HCO_3 _____
9. H_2O _____
10. KBr _____
11. CaO _____
12. AgCl _____
13. CH_4 _____
14. SO_2 _____
15. $ZnCl_2$ _____
16. NH_4Cl _____

following table to summarize this section:

e	% Ionic Character	Electronegativity difference	Bonding electrons are...	Bond Typ