

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 your answers in the line provided.

1. NaCl _____
2. CO₂ _____
3. HCl _____
4. MgCl₂ _____
5. CuF₂ _____
6. Fe₂O₃ _____
7. PCl₅ _____
8. HCO₃ _____
9. H₂O _____
10. KBr _____
11. CaO _____
12. AgCl _____
13. CH₄ _____
14. SO₂ _____
15. ZnCl₂ _____
16. NH₄Cl _____