Name _____

Answer Key: Chemical Bonds and Compounds

1. Chemical bonds are forces that hold atoms together in compounds and are important in chemistry because they determine how atoms combine to form substances with specific properties.

2. Covalent bonds involve the sharing of electrons between atoms. Example: Methane (CH_4), where carbon and hydrogen atoms share electrons.

3. Ionic bonds occur when one atom transfers electrons to another. Example: Sodium chloride (NaCl), where sodium loses an electron to become Na+ and chlorine gains an electron to become Cl-.

4. Chemical bonds influence the properties of compounds by determining how atoms are arranged and connected, which affects their chemical behavior and physical characteristics.

5. False