|  |
| --- |
| **Ionic** |
| Electrons are transferred |
| Forms a crystal lattice |
| Smallest part is called a formula unit |
| Metal + nonmetal |
| Metal + polyatomic ion |
| Polyatomic ion + nonmetal |
| Polyatomic ion + polyatomic ion |
| Brittle, not malleable |
| Lewis structure is depicted like so:  **A B** |
| High electronegativity difference between bonding elements |
| Formed from the coulombic attraction of oppositely charged ions |
| High ionic character |

|  |
| --- |
| **Covalent** |
| Electrons are shared |
| Smallest part is called a molecule |
| May be polar or nonpolar |
| Formed from all nonmetals |
| Lewis structure is depicted like so:  **A B** |
| May have single, double, or triple bonds |
| Low electronegativity difference between bonding partners |
| Bonding within polyatomic ions |
| Formed from the coulombic attraction of 2 nuclei for shared electrons |
| Low ionic character |