

## Detailed Classification Scheme

	Molecule Size	Type of Compound	Primary Force Intramolecular Force	Secondary Force Intermolecular Force	Examples
A L L M A T T E R	Macromolecules	Covalent Network Solid "Network Solid" (Three Dimensional)	→ Covalent (Intramolecular)	→ N.A.	→ diamond (C <sub>n</sub> ) → quartz (SiO <sub>2</sub> )
		Covalent Network Solid (Two Dimensional)	→ Covalent (Within Planes - Intraplanar)	→ van der Waals (Between Planes - Interplanar)	→ graphite (C <sub>n</sub> )
		Ionic Solid (Pure Ionic)	→ Ionic (Intramolecular)	→ N.A.	→ NaCl
		Ionic Solid (Polyatomic Covalent Ions)	→ Covalent Within Ions (Intraionic)	→ Ionic (Between Ions - Interionic)	→ NH <sub>4</sub> NO <sub>3</sub>
		Metallic Solid	→ Metallic (Intramolecular)	→ N.A.	→ Fe
	Discrete Covalent Molecules	Non-polar Molecules	→ Covalent (Intramolecular)	→ Hydrogen Bond → Dipole	→ H <sub>2</sub> O → CH <sub>3</sub> F
		Polar Molecules	→ Covalent (Intramolecular)	→ van der Waals	→ C <sub>6</sub> H <sub>12</sub>