**Name: Period: Seat#:**

**Worksheet #1**

**Directions:**  Indicate the strongest/dominant IMF holding together crystals of the following compounds.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **Molecular Crystal** | | | **Metal** | **Ionic** | **Network Covalent** |
|  |  | **London Forces** | **Dipole-Dipole** | **Hydrogen Bonding** | **Metallic  Bonds** | **Ionic  Bonds** | **Covalent  Bonds** |
| **1)** | NH3 |  |  |  |  |  |  |
| **2)** | Kr |  |  |  |  |  |  |
| **3)** | HCl |  |  |  |  |  |  |
| **4)** | F2 |  |  |  |  |  |  |
| **5)** | KMnO4 |  |  |  |  |  |  |
| **6)** | NaCl |  |  |  |  |  |  |
| **7)** | SO2 |  |  |  |  |  |  |
| **8)** | CO2 |  |  |  |  |  |  |
| **9)** | C3H8 |  |  |  |  |  |  |
| **10)** | CH4 |  |  |  |  |  |  |
| **11)** | CH3Cl |  |  |  |  |  |  |
| **12)** | HF |  |  |  |  |  |  |
| **13)** | C6H6 |  |  |  |  |  |  |
| **14)** | NO |  |  |  |  |  |  |
| **15)** | H2SO4 |  |  |  |  |  |  |
| **16)** | WC |  |  |  |  |  |  |
| **17)** | Si |  |  |  |  |  |  |
| **18)** | SiO2 |  |  |  |  |  |  |
| **19)** | Cgraphite |  |  |  |  |  |  |
| **20)** | N2 |  |  |  |  |  |  |
| **21)** | CH3OH |  |  |  |  |  |  |
| **22)** | NaOH |  |  |  |  |  |  |
| **23)** | Al |  |  |  |  |  |  |
| **24)** | PCl3 |  |  |  |  |  |  |
| **25)** | Ag |  |  |  |  |  |  |