Molecular Geometry

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Formula/Name** | **Total Valence e-** | **Structural formula of molecule or ion** | **Molecular Geometry** | **Polarity** | **IMFs**  **(LDF, Dp-Dp, HB)** |
| **H2** | **H = 1e- \*2 = 2e-(Total)** | **H-H** | **Linear** | **Nonpolar** | **LDF** |
| **Cl2** |  |  |  |  |  |
| **O2** |  |  |  |  |  |
| **N2** |  |  |  |  |  |
| **HCl** |  |  |  |  |  |
| **BrCl** |  |  |  |  |  |
| **HBr** |  |  |  |  |  |
| **H2O** |  |  |  |  |  |
| **CO2** |  |  |  |  |  |
| **H2S** |  |  |  |  |  |
| **NH3** |  |  |  |  |  |
| **CH4** |  |  |  |  |  |
| **CCl4** |  |  |  |  |  |
| **CH3Cl** |  |  |  |  |  |
| **C2H6** |  |  |  |  |  |
| **C2H4** |  |  |  |  |  |
| **CH2O** |  |  |  |  |  |
| **SOCl2** |  |  |  |  |  |
| **NO3-1** |  |  |  | X | X |
| **PO3-3** |  |  |  | X | X |
| **SO3-2** |  |  |  | X | X |
| **NO2-1** |  |  |  | X | X |
| **ClO3-1** |  |  |  | X | X |
| **SO4-2** |  |  |  | X | X |