Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Lab Day & Time: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_

## Data Sheet

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Species | Valence Electrons | Lewis Dot Structure | Electronic Geometry | Molecular Geometry | Sketch |
| CH4 |  C 4 4H 4 8 |  | tetrahedral | tetrahedral |  |
| ICl |  |  |  |  |  |
| CO2 |  |  |  |  |  |
| BF3 |  |  |  |  |  |
| SiI4 |  |  |  |  |  |
| NCl3 |  |  |  |  |  |
| H2O |  |  |  |  |  |
| HCl |  |  | No central atom, so skip this box. |  |  |
| SbCl5 |  |  |  |  |  |
| SF6 |  |  |  |  |  |
| XeF2 |  |  |  |  |  |
| XeF4 |  |  |  |  |  |
| BrF5 |  |  |  |  |  |
| CH2O (C is central atom) |  |  |  |  |  |
| ClF3 |  |  |  |  |  |
| SiO32- (Just 1 reson-ance form) |  |  |  |  |  |
| IO4– |  |  |  |  |  |
| H2O2 |  |  |  |  |  |
| NH4+ |  |  |  |  |  |
| H3O+ |  |  |  |  |  |
| NO2+ |  |  |  |  |  |
| O3(Just 1 reson-ance form) |  |  |  |  |  |